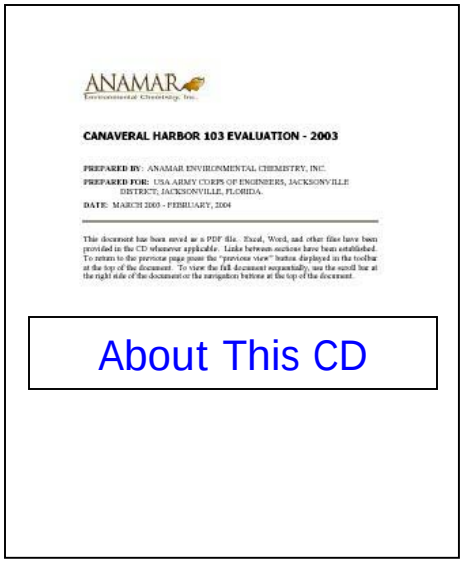
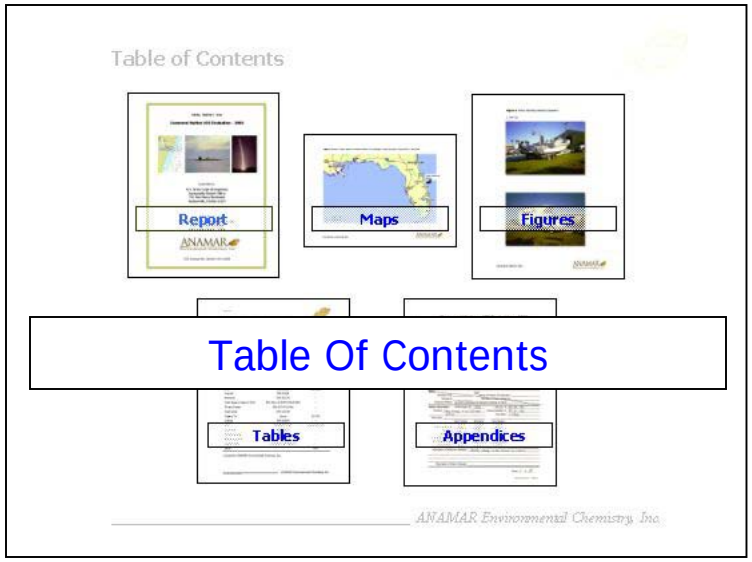
Canaveral Harbor 103 Evaluation - 2003



About This CD



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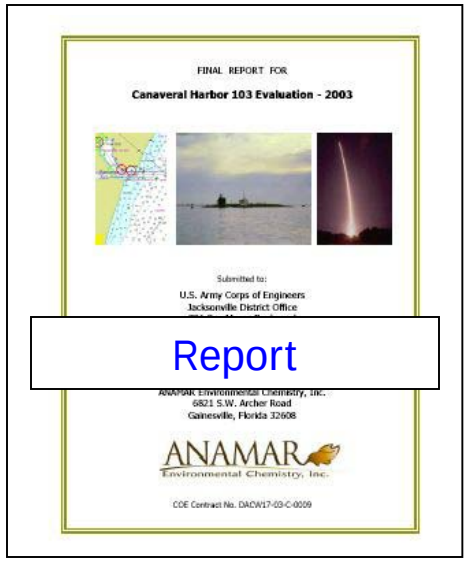

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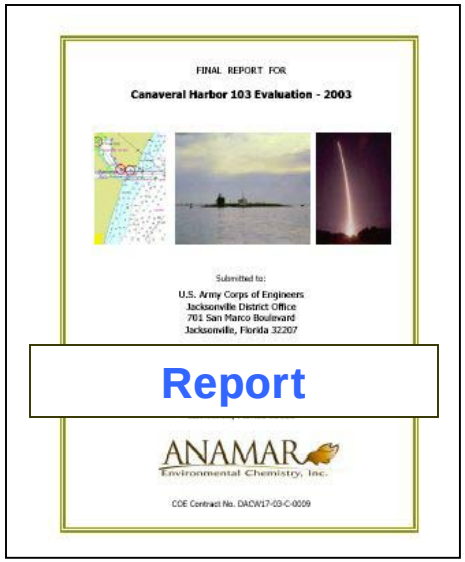

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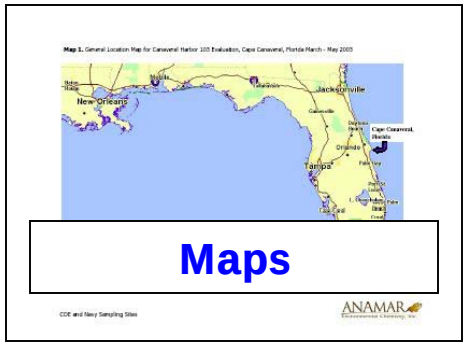
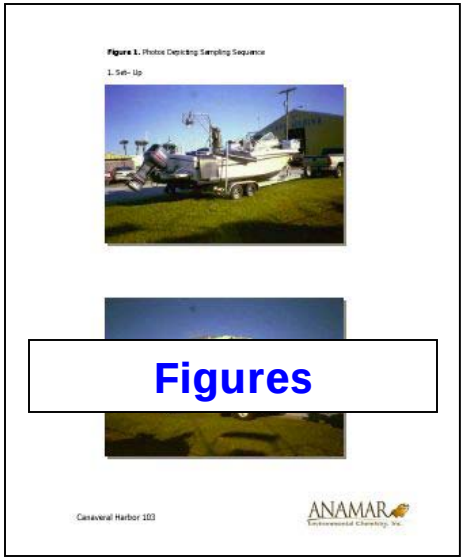


Maps



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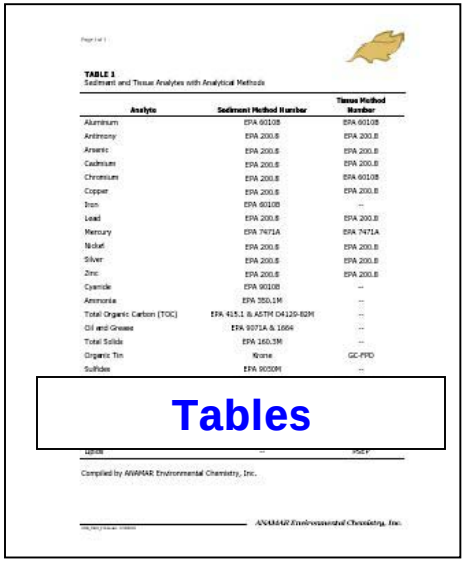

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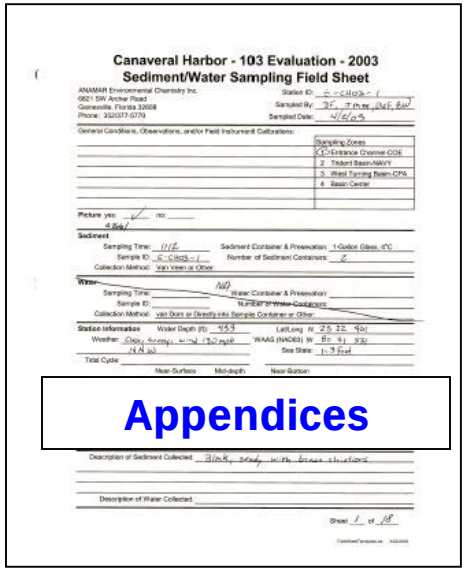
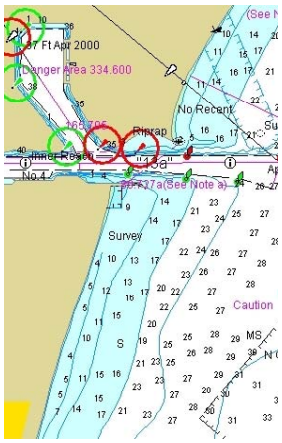


Appendices

FINAL REPORT FOR

Canaveral Harbor 103 Evaluation - 2003



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COE Contract No. DACW17-03-C-0009

CANAVERAL HARBOR 103 EVALUATION - 2003

PREPARED BY: ANAMAR ENVIRONMENTAL CHEMISTRY, INC.

PREPARED FOR: USA ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT; JACKSONVILLE, FLORIDA.

DATE: MARCH 2003 - FEBRUARY, 2004

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Executive Summary

During the period of March 31 through May 14, 2003, twenty stations, two duplicates, and a reference station were sampled in Canaveral Harbor, Cape Canaveral, Florida, as part of the 103 Evaluation of Dredged Material for Ocean Disposal. This evaluation considered potential dredge material from maintenance dredging of the harbor and the berthing areas.

Field water column measurements and physical testing of sediments for all sample stations yielded values consistent with earlier studies of Canaveral Harbor.

Results of sediment metal analyses show that aluminum, antimony, arsenic, cadmium, chromium, copper, iron, lead, nickel, and zinc were detected in all samples. Low levels of mercury and silver were present in some of the samples. At all sample stations (except Stations E-CH03-8 and E-CH03-19), levels of aluminum, arsenic, chromium, copper, iron, lead, nickel and zinc were higher than at the reference station. Based on dry-weight calculations, ammonia levels ranged from 2.0 (Control Sediment) to 412 mg/Kg (E-CH03-10). Percent Total Organic Carbon (TOC) ranged from 0.66 (Control Sediment) to 3.36% (E-CH03-4). Oil and Grease (O&G) results varied from 71 mg/Kg (less than the MRL but greater than or equal to the MDL) for the reference station to 610 mg/Kg for sample E-CH03-14. Trace levels of Polynuclear Aromatic Hydrocarbons (PAHs) were found in all the samples. Sample E-CH03-12 contained 2-Methylnaphthalene and Naphthalene. Samples E-CH03-20 and E-CH03-21/22 had low concentrations of Pyrene and sample E-CH03-20 showed low concentrations of Fluoranthene. Small amounts of TriButyl Tin were found in samples E-CH03-9, 10, 12-16, 19, 20, and 21/22. Amounts just above the method reporting limit for DiButyl Tin were found in samples E-CH03-12 and E-CH03-14.

Metals analysis of elutriates and site water chemistry show that arsenic and nickel were present in all the samples. Antimony, cadmium, chromium, copper, lead, and zinc were present in some samples. Arsenic levels in sample E-CH03-20 were slightly elevated in comparison with the National Recommended Water Quality Criteria for Priority Toxic Pollutants, Criteria Maximum Concentration (CMC). Ammonia levels ranged from below 0.30 mg/L for the Control Sediment elutriate to 27.6 mg/L for sample E-CH03-14 DUP. TOC ranged from 3.6 mg/L in sample E-CH03-5 to 9.2 mg/L in sample E-CH03-14 DUP. All samples had cyanide levels below method detection limits. O&G levels ranged from below MDL (1.2 mg/L) to 17 mg/L for sample E-CH03-14 DUP. Sulfides ranged from below MDL (0.05 mg/L) to 15 mg/L for sample E-CH03-13. No PAHs were found above MRL in any of the samples except for Naphthalene, which was found in small amounts on samples E-CH03-9, 13, 14 DUP, 15, 19, 20, 21/22, and the Control Sediment elutriate. No organic tins were found above MDL levels in any of the samples.

The 100% elutriate survival bioassay test of *Mysidopsis bahia* was found to be both normal and with homogeneity of variance. Analysis of variance followed by Dunnett's comparison indicated that the survival of *M. bahia* in the laboratory control seawater was not significantly different from the 100% control sediment elutriate exposure or the site samples, with the exception of E-CH03-14. Results for the ANOVA followed by Dunnett's between the 100% elutriate exposures for the control sediment and the site samples showed a statistically significant difference only with sample E-CH03-14.

The 100% elutriate survival bioassay test of *Menidia beryllina* did not meet the assumptions for a parametric test, and a suitable transformation was not found. The nonparametric comparison showed a statistically significant difference between the survival in the control seawater and the 100% elutriate for samples E-CH03-14 and E-CH03-17. Survival in these samples was also found to be statistically different from the 100% control sediment elutriate survival in this comparison.

There were no significant differences (P=0.05) in the fertilization of *Arbacia punctulata* between the control water (0% elutriate) or control sediment (100% elutriate) when compared to the Canaveral sample stations, although Dunnett's comparison identified E-CH03-14 as statistically different.

Statistical analysis indicated that the survival of *Mysidopsis bahia* in the laboratory control sediment bioassay test was not significantly different (P=0.05) from survival in the reference sample. Survival was significantly different from the control sediment in several site samples. Survival of *M. bahia* in the reference sediment was not significantly different (p=0.05) from survival in the site samples, with the exception of sample E-CH03-14.

Statistical analysis using ANOVA with Dunnett's test indicated that the survival of *Leptocheirus plumulosus* in the laboratory control sediment bioassays was not significantly different (P=0.05) from survival in the reference sediment or any of the Canaveral Harbor samples. In addition, survival of *L. plumulosus* in the reference sediment was not statistically different from any of the site samples.

Macoma nasuta survivorships in the laboratory control sediments were 92% and 90%, based on 100 organisms per run. Survival in controls was at acceptable levels and reference toxicant performance was within laboratory control levels. Survival of *M. nasuta* in the site sediments ranged from 75% (E-CH03-14) to 94% (E-CH03-20). Survival of *M. nasuta* in the reference sediment was 90%.

Nereis virens survivorships in the laboratory control sediments were 97% and 95%. Survival in controls was at acceptable levels, and reference toxicant performance was within laboratory control levels. Survival of *N. virens* in the site sediments ranged from 89% (E-CH03-14) to 96% (E-CH03-09 and E-CH03-20). Survival of *N. virens* in the reference sediment was 90%.

Statistical analyses of bioaccumulation data were run for all *Macoma nasuta* and *Nereis virens* replicates, and a detailed discussion of the findings has been included in this report.

Tables summarizing tissue chemistry results and percent value calculations of the five-replicate average of each station compared to the five-replicate average of the Reference Station are included in the report. Additionally, these tables highlight in bold the tissue concentration values of analytes of concern that are considered statistically different from the reference station.

Evaluation of the data from Canaveral Harbor sediments was broken down in the following way: evaluation of contaminants in the sediment suspected of bioaccumulation (Theoretical Bioaccumulation Potential [TBP]) and evaluation of the elutriate portion of the sediment (ADDAMS Model).

Sample E-CH03-20 had the highest concentration of PAHs in the sediment (29 µg/Kg of 2-Methylnapthalene and 140 µg/Kg for Naphthalene) and the highest TBP concentrations when compared to the Reference station.

Simulations of the STFATE module of the ADDAMS model were run for samples E-CH03-20 and E-CH03-14. Based on the results of the analytical and toxicological tests, these samples were selected for modeling because they showed elevated levels of arsenic and elutriate bioassay toxicity. Neither water quality nor toxicity criteria were violated during the Tier II elutriate chemistry and Tier III toxicity simulations.

1 Introduction

Canaveral Harbor, a man-made harbor facility, is located on the Atlantic Coast of the Florida peninsula and is a major deepwater port of entry with berthing facilities, a marine commercial park, and a foreign trade zone. Canaveral Harbor also supports the cruise and cargo industries. Port Canaveral serves all of Central Florida from its coastal location in Brevard County. It is the closest deep-water port to the nearby Orlando-area attractions and neighboring Cape Canaveral Air Force Station, Patrick Air Force Base, Kennedy Space Center, and Cocoa Beach. See http://www.portcanaveral.org/business/ftzmap.gif

Port Canaveral is composed of three primary turning basins and facilities located along the east/west-oriented Inner Reach of the Entrance Channel (Maps 1-10). The port is a multiple-use facility composed of cruise ship berths, cargo berths, and U.S. Navy and Military Sealift Command (MSC) berths. The West Turning Basin is used by cruise ships and the U.S. Coast Guard. The Central Turning Basin is jointly used by commercial, U.S. Navy, and MSC vessels. The Trident Turning Basin is used by U.S. Navy Fleet Ballistic Missile submarine forces. The berths situated on the Inner Reach of the Entrance Channel are used primarily by cruise ships, cargo ships, and tankers. Port Canaveral Entrance Channel becomes the Canaveral Barge Canal west of the West Turning Basin. Pleasure craft and other small boat traffic use Canaveral Barge Canal to reach the Banana River Safe Haven for small craft.

The primary U.S. Navy facilities at Port Canaveral consist of the Trident Wharf on the east side of the Trident (East) Turning Basin, the Poseidon Wharf on the southeast side of the Central Turning Basin, and the Military Traffic Management Command (MTMC) Wharf on the north side of the Central Turning Basin.

Trident Wharf, constructed from 1975 to 1977, is an operational facility in support of the U.S. Navy Fleet Ballistic Missile Submarine Program. The wharf is 1,220 feet (372 m) long and 68 feet (21 m) wide. The wharf deck is 14 feet (4.25 m) above mean low water (MLW). Project depth at the wharf is 41 feet (12.5 m) at MLW. The wharf has three 60-foot-wide (18.3 m) accesses and a rail-mounted 120-ton portal crane. The wharf is fitted with 18-inch double bitts at 15 locations and 42-inch cleats at 27 locations along the face of the wharf. An H-pile fender system is installed at 9-foot (2.75 m) intervals along the face of the wharf. Four mooring dolphins are located behind the wharf next to the bulkhead wall. Each dolphin contains an 18-inch double-bitt fixture. See http://www.globalsecurity.org/military/facility/port-canaveral.htm

Shoaling is a continuous problem in the entire harbor. The U.S. Army Corps of Engineers (USACE) states that shoaling occurs throughout the channel beginning approximately 1 nautical mile seaward of Buoys 3 and 4 and continues to the junction of the Trident (East) Turning Basin access channel. Local harbor authorities state that depths in the Port Canaveral Entrance Channel are as follows based on a November 1997 survey: Outer Reach - 44 feet, Middle Reach - 44 feet, Trident (East) Turning Basin - 41 feet, and Middle Turning Basin - 39 feet.

The purpose of the project is to determine if sediment dredged from Canaveral Harbor can be disposed under open water disposal conditions in the Canaveral ODMDS (Ocean Dredged Material Disposal Site) without causing significant adverse environmental impacts.

This report presents the results of the physical, chemical, and biological analysis of sediment and water samples from Canaveral Harbor, Cape Canaveral, Florida as part of the 2003 - 103 Evaluation of Dredged Material for Ocean Disposal.

Sediment samples were collected at 19 sample stations by ANAMAR Environmental Chemistry, Inc. (ANAMAR) under contract to the U.S. Army Corps of Engineers, Jacksonville District during the period of March 31 through May 14, 2003. The project was divided into two zones, the entrance channel and the Navy Trident Basin. One duplicate sample station was collected for each project zone. Additionally, a reference sample was collected on April 3, 2003 as part of the USACE 103 Evaluation for dredging the Canaveral Channel, and was used concurrently with the Canaveral Port Authority bioassay tests.

ANAMAR coordinated and directed all operations for this project and worked closely with its subcontractors to organize security issues, schedules, sample collection, preparation, delivery, and analysis. ANAMAR also reviewed all results and produced the final report. Sediments, water, and water quality data were collected at various harbor points and offshore stations by an ANAMAR team.

Sediment and water samples were properly labeled and iced, and then transported in a refrigerated truck to Gainesville, Florida by the ANAMAR team. The samples were thoroughly homogenized and then divided for physical, chemical, and biological analysis in accordance with the 1991 "Green Book." Elutriate preparation procedures were performed by ANAMAR and PPB Environmental Laboratories, Inc. (PPB) personnel. Sample portions were delivered/shipped to MACTEC Engineering and Consulting/Gainesville (MEC-Gainesville) (formerly Harding ESE) for bioassay testing, MACTEC Engineering and Consulting/Jacksonville (MEC-Jacksonville) (formerly LAW Engineering, Inc.) for physical testing, and Columbia Analytical Services, Inc. (CAS) in Kelso, Washington for analysis of organic and inorganic parameters. All testing was performed in accordance with published procedures.

Tier II and III evaluations of chemical, toxicological, and physical characteristics of the sediments were performed. Various laboratories tested the site water, elutriates, sediments, and tissues. All resulting data were reviewed by ANAMAR. Data to provide information for contaminant fate modeling was compiled and the ADDAMS model as well as bioaccumulation statistics were run by ANAMAR.

2 Methods and Materials

2.1 General

General methodologies and procedures followed those outlined in the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers standard testing manual, Evaluation of Dredged Material Proposed for Ocean Disposal – Testing Manual (USEPA-503/8-91/001, February 1991), commonly referred to as the "Green Book."

Prior to sampling, ANAMAR prepared a Quality Assurance Plan (QAP) tailored to this specific project. The QAP described quality control procedures for all sample handling and storage as well as laboratory analytical procedures. This plan was submitted and approved by USACE personnel prior to initiation of sampling events.

2.2 Sample Collection Techniques

Twenty pre-established stations in two harbor zones, the Cape Canaveral Entrance Channel and the Trident (East) Turning Basin were selected for sampling. Sixteen samples were collected between March 31 and April 3, 2003. After additional review of the scope of work by EPA Region 4 and the USACE office, ANAMAR was contracted to take four additional samples, which were collected on May 14, 2003. Two duplicate stations and a reference station (consisting of two substations) were also collected. As specified in the Scope of Work (SOW), Stations E-CH03-21 and 22 were composited into one sample (E-CH03-21/22). Similarly, the two reference substations were composited into one sample (RS-CH03). Details are as follows:

Pre-Established Station/Zone	Sediment Collection Technique
E-CH03-1 / Entrance Channel	Van Veen Grabs
E-CH03-1 DUP* / Entrance Channel	Van Veen Grabs
E-CH03-2 / Entrance Channel	Van Veen Grabs
E-CH03-3 / Entrance Channel	Van Veen Grabs
E-CH03-4 / Entrance Channel	Van Veen Grabs
E-CH03-5 / Entrance Channel	Van Veen Grabs
E-CH03-6 / Entrance Channel	Van Veen Grabs
E-CH03-7 / Entrance Channel	Van Veen Grabs

(continued on next page)

Pre-Established Station/Zone	Sediment Collection Technique
E-CH03-8 / Entrance Channel	Van Veen Grabs
E-CH03-9 / Trident Turning Basin	Van Veen Grabs
E-CH03-10 / Trident Turning Basin	Van Veen Grabs
E-CH03-11 / Trident Turning Basin	Van Veen Grabs
E-CH03-12 / Trident Turning Basin	Van Veen Grabs
E-CH03-13 / Trident Turning Basin	Van Veen Grabs
E-CH03-14 / Trident Turning Basin	Van Veen Grabs
E-CH03-14 DUP* / Trident Turning Basin	Van Veen Grabs
E-CH03-15 / Trident Turning Basin	Van Veen Grabs
E-CH03-16 / Trident Turning Basin	Van Veen Grabs
E-CH03-19 / Trident Turning Basin	Van Veen Grabs
E-CH03-20 / Trident Turning Basin	Van Veen Grabs
E-CH03-21 / Trident Turning Basin	Van Veen Grabs
E-CH03-22 / Trident Turning Basin	Van Veen Grabs
RS-CH03-A / Offshore Reference Station	Van Veen Grabs
RS-CH03-B / Offshore Reference Station	Van Veen Grabs

*Duplicate sample collected at these stations for QA/QC purposes

Sufficient sediment (at least 24 gallons per station) and water samples were collected to run sediment and water chemistry as well as bioassays for five species, bioaccumulation for two species, and to run a re-test of the reference station if required. Sufficient water for elutriate preparation was collected from three points in the approximate center of the Canaveral Harbor basin.

Information documented on the field sheets included date and time, water depth, weather, sea state, station, tidal cycle, and coordinates, all of which are summarized in Table 3. Also documented on the field sheets is the number of containers, sample physical description, field team members, and comments. Copies of the field sheets have been included in Appendix A. Water for elutriate preparation was collected directly into certified pre-cleaned 1-gallon amber glass jars. Water for chemical analysis was collected in properly pre-cleaned and preserved containers. All samples were placed in coolers after collection and were immediately iced and then transferred to a refrigerated truck. Samples were kept between 2˚C and 4˚C at all times, and then transported to Gainesville, Florida via surface transportation.

2.2.1 Van Veen Sampling

A Van Veen sediment-sampling device was lowered and raised by an electric winch connected to hoisting equipment on the side of a 24-foot surveying vessel. A captain maintained the boat in position while one person operated the winch and one technician guided the sampling equipment.

Sediment samples were transferred from the Van Veen into certified pre-cleaned 1-gallon glass containers using stainless steel spoons and new disposable laboratory gloves. All containers were properly labeled and sampling information was recorded on individual project-specific field sheets.

Before sampling at each zone, the stainless steel sampling equipment was cleaned and rinsed by hosing down with salt water, brushing with clean soapy water (Liquinox®), rinsing with fresh water, and then performing a final rinse with pesticide-grade isopropyl alcohol.

2.2.2 Station Coordinates

Station locations were marked on surveying maps by the USACE technical contact. Northing and Easting coordinates were extracted from the maps. These coordinates were converted to latitude and longitude using Corpscon for Windows version 5.11.08. Station locations were located using a Lowrance LCX-16®. Its measurements were confirmed with a WAAS Garmin Map 182C GPS unit linked to BlueCharts Map Source Software. The depth finder used was a Lowrance LCX-16® fathometer, and its measurements were confirmed with a Raytheon L470 fathometer. The fathometers were used to confirm the shoaling areas. Horizontal coordinates were based on the North American Datum of 1983 (NAD83). The Northing and Easting coordinates system was based on State Plane Coordinates, Florida East (0901) and were presented as feet.

Site maps appear as Maps 1 through 10.

2.3 *In Situ* Field Measurements

Hydrographic measurements for water temperature, pH, water depth, turbidity, dissolved oxygen, turbidity, salinity, and conductivity were made at each station using a properly calibrated Hydrolab Multi Probe Datasonde®. *In situ* field measurements were recorded in project-specific field sheets, copies of which have been included in Appendix A. Hydrographic measurements have been summarized in Table 4.

2.4 Sediment Analyses

The samples were thoroughly homogenized and divided for physical, chemical and biological analysis, and elutriate preparation. Homogenization of all sub-samples for each individual station was performed by PPB and ANAMAR personnel in a clean environment using properly decontaminated stainless steel mixing equipment. Sample portions were placed in certified, method-specific, pre-cleaned and pre-labeled containers and delivered/shipped to MEC-Gainesville for bioassay testing, MEC-Jacksonville for physical testing, and to CAS for analysis

of organic and inorganic parameters. All testing was performed in accordance with published procedures. Specific analytical methods for sediment analyses are listed in Table 1.

2.5 Elutriate Analysis

Waters and elutriates were prepared and analyzed in accordance with the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers standard testing manual, Evaluation of Dredged Material Proposed for Ocean Disposal – Testing Manual (USEPA-503/8-91/001, February 1991), commonly referred to as the "Green Book." Specific water and elutriate analyses and analytical methods are listed in Table 2.

2.6 Tissue Analysis

The tissue samples (*Macoma nasuta* and *Nereis virens*) were sent from MEC-Gainesville to CAS for homogenization, sample distribution, and analysis. Once received at CAS, homogenization of all replicate samples for each individual station was performed in a clean environment using properly decontaminated stainless steel mixing equipment. Sample portions were placed in certified, method-specific, pre-cleaned, and pre-labeled containers for analysis of percent lipids, total solids, metals, and PAHs. All testing was performed in accordance with published procedures. Specific analytical methods for tissue analyses are listed in Table 1.

2.7 Bioassays

2.7.1 General Procedures

A suite of bioassays was conducted in accordance with USEPA and USACE guidance. Elutriate bioassays were conducted on sediments collected from the Canaveral Harbor area to determine the potential impact of dissolved and suspended contaminants on organisms exposed to the elutriate after conducting an initial mixing period. The test organisms used for the elutriate tests included the inland silverside, *Menidia beryllina*, the mysid shrimp, *Mysidopsis bahia* (a crustacean), and gametes of the sea urchin, *Arbacia punctulata*. Sediment bioassays were conducted to determine the effects of site contaminants on the infaunal amphipod, *Leptocheirus plumulosus* and the mysid shrimp, *Mysidopsis bahia*. Sediment bioaccumulation tests were also conducted with the polychaete, *Nereis virens* and the bivalve, *Macoma nasuta*. General procedures are summarized below.

The test samples were collected on March 31, 2003 (samples E-CH03-09, E-CH03-14, E-CH03-15, and E-CH03-17), April 1, 2003 (samples E-CH03-10, E-CH03-11, E-CH03-12, E-CH03-13, and E-CH03-16), April 3, 2003 (sample RS-CH03), and on May 14, 2003 (sample E-CH03-20). Test samples were received at the MEC Toxicology Laboratory in Gainesville on April 8, 2003 (samples E-CH03-09, E-CH03-10, E-CH03-11, E-CH03-12, E-CH03-13, E-CH03-14, E-CH03-15, E-CH03-16, E-CH03-17, and RS-CH03) and on May 16, 2003 (sample E-CH03-20). Additionally, approximately 46 gallons of site water, labeled as Site Water, was received at MEC Toxicology Laboratory on April 17, 2003 and an additional 3 gallons on May 21, 2003. Control sediment (Ctrl-CH03) was collected by MEC personnel from the Atlantic Ocean near Marineland, Florida, on April 16, 2003 and May 20, 2003 for use in the control exposures of the bioassay tests. The same source for control sediment was used for all the bioassay tests. All samples

were stored in a refrigerator at 4˚C ± 2˚C until test initiation, and unused portions of test samples were stored similarly during the testing period. Sample chains-of-custody and other traffic information are provided in Appendix D.

Prior to use in testing, sediments were thoroughly homogenized in their original containers and sifted or hand-sorted to remove any organic debris, small rocks, and indigenous organisms. Prior to initiating sediment tests, porewater ammonia concentrations were measured for the site samples, the reference sample, and the control sediment. The sediment samples were centrifuged and the porewater decanted off to obtain sufficient volume for the ammonia analyses. Ammonia porewater data are included with the sediment bioassay data (see Section 3.4).

2.7.2 Elutriate Bioassay Procedures

Two of the test species used for the elutriate bioassays, *Mysidopsis bahia* and *Menidia beryllina*, were received on May 14 and 16, 2003, respectively, from Aquatic Indicators, Inc., St. Augustine, Florida. *M. beryllina* were 9 days old and *M. bahia* were 2 days old at test initiation. Gravid adult sea urchins, *Arbacia punctulata*, were received on June 6, 2003 from Aquatic Research Organisms, Hampton, New Hampshire.

Laboratory control sediment and sediments from the sample stations were used to conduct elutriate bioassays at the MEC Toxicology Laboratory from May 14 through May 18, 2003 for *M. bahia* and from May 16 through May 20, 2003 for *M. beryllina*. Sample E-CH03-20 was not received until May 16, 2003; therefore, elutriate testing for this sample did not take place until May 29 through June 2, 2003 for both *M. bahia* and *M. beryllina*. Testing for *A. punctulata* took place June 12, 2003.

Elutriates were prepared by mixing 1 part sediment to 4 parts site water to achieve a sediment-to-water ratio of 1:4 by volume. The mixtures were mechanically stirred for 30 minutes at room temperature on a magnetic stirrer, with additional mixing by hand every 10 minutes. The mixtures were allowed to settle for at least 1 hour and then the supernatant was siphoned off as the 100% elutriate. Dilutions of the 100% elutriate were made to obtain the 50% and 10% elutriates on a volume-to-volume basis.

Natural filtered seawater collected from the Atlantic Ocean near Marineland, Florida, was used as dilution and laboratory control water. The seawater was adjusted to a salinity of 20 parts per thousand (ppt) prior to use in preparing the three different elutriate concentrations for the *M. beryllina* and *M. bahia* tests. The salinity for *A. punctulata* was maintained at required test salinity. Five replicates (three replicates for *A. punctulata*) each of the three elutriate concentrations (10%, 50%, and 100%) and of the ten site sediments (E-CH03-09, E-CH03-10, E-CH03-11, E-CH03-12, E-CH03-13, E-CH03-14, E-CH03-15, E-CH03-16, E-CH03-17, and E-CH03-20) and laboratory control sediment were tested. Sample E-CH03-20 was tested separately (with controls) for *M. beryllina* and *M. bahia*, as it was added to the other samples at a later date, following initiation of these elutriate bioassays. The laboratory control water was tested as 0% elutriate. The *M. beryllina* tests were conducted in 600-ml beakers containing 250 ml of elutriate or control solution, and the *M. bahia* tests were conducted in crystallizing dishes containing 200 ml of elutriate or control solution. Twenty organisms were placed in each of the five replicate test chambers for *M. bahia*. Twenty *M. bahia* were loaded into each vessel. Ten organisms were placed in each *M. beryllina* test vessel. *M. bahia* and *M. beryllina* were fed

brine shrimp *nauplii* (Artemia sp.) daily. The *A. punctulata* gamete elutriate test was conducted in 20-ml glass scintillation vials. All tests were performed at a temperature of 20˚C ± 1˚C and under ambient laboratory illumination (approximately 740 lux).

Water quality parameters were measured daily during the 96-hour *M. bahia*, and *M. beryllina* tests, and at test initiation of the sea urchin test. Water quality parameters include dissolved oxygen, pH, temperature, and salinity. Dissolved oxygen (DO) was measured with a YSI Model 55 DO meter, temperature was measured with a VWR thermocouple, pH was measured with an Orion Model SA 290A pH meter, and salinity was measured with an Aquatic Eco-systems CL893 refractometer. All instruments were calibrated daily before use and at the end of each day. Survival counts were performed daily and at test conclusion for the *M. beryllina* and *M. bahia* elutriate tests.

A. punctulata eggs and sperm were obtained from adults by injecting approximately 1.0 ml of 0.5-molar KCl solution into the mouth region. Sperm were collected neat and the eggs were collected in dilution water. The eggs were washed three times with seawater, allowing the eggs to settle for 30 minutes between rinses. Sufficient sperm cells were added to 5 ml of elutriate and incubated for 60 minutes at 20˚C. Approximately 2,000 eggs were then added to each vial, allowing fertilization to take place. Development was halted after 20 minutes by the addition of 2 ml 10% buffered formalin. Fertilization was then quantified by the presence or absence of a fertilization membrane using a Sedgwick-Rafter counting chamber and a compound microscope. The fertilization membrane appeared as a "halo" around the sea urchin egg. For each test replicate, a total of 100 eggs were counted and any damaged eggs were not included in the counts.

ANOVAs (or nonparametric equivalent for data which did not meet the assumptions for the parametric test) were used to compare mean survivorship or fertilization in the control sediment (100% elutriate) or the control elutriate (0% elutriate) versus the 100% elutriate from each of the Canaveral Harbor site sediments. Data were first checked for normality and homogeneity of variance. If either of these assumptions was not met, the data were transformed in an attempt to normalization prior to analysis by Dunnett's procedure. When data could not be normalized by transformation, the data were analyzed by an equivalent nonparametric test. Median lethal concentration (LC_{50}) values for survival of *M. bahia* and *M. beryllina* and exposure concentration (EC_{50}) values for larval development for *A. punctulata* were calculated, if necessary. The LC_{50} and EC_{50} are defined as the concentration of elutriate or reference toxicant that kills or inhibits 50% of the exposed test organisms under the specified conditions of exposure. The LC_{50} and EC_{50} values for all of the sediment elutriates with less than 50% mortality (or development) were estimated as greater than 100% in accordance with EPA guidelines (EPA/503/8-91/001).

2.7.3 Sediment Bioassay Procedures

Two test species were used for the sediment bioassays, *Leptocheirus plumulosus* and *M. bahia*. Juvenile *L. plumulosus* (3-5 mm in length, with no mature males) were obtained from Aquatic Research Organisms, Hampton, New Hampshire. *M. bahia* (3 days old at test initiation) were obtained from Aquatic Indicators Inc., St. Augustine, Florida on June 13, 2003.

The *M. bahia* had a daily photoperiod cycle of 16-hours light and 8-hours dark and the *L. plumulosus* were under continuous light throughout the test. Both tests were conducted under fluorescent lighting conditions (approximately 840 lux).

The sediment tests were conducted at the MEC Toxicology Laboratory using five replicates each for the laboratory control sediment, ten site sediments (E-CH03-09, E-CH03-10, E-CH03-11, E-CH03-12, E-CH03-13, E-CH03-14, E-CH03-15, E-CH03-16, E-CH03-17, and E-CH03-20), and one reference sediment from the Canaveral Harbor area. Test chambers were 2-quart glass jars for the *L. plumulosus* test and 1.6-liter glass Carolina bowls for the *M. bahia* test. Twenty *M. bahia* or *L. plumulosus* were loaded in each of the five replicate test chambers at test initiation. All test chambers were aerated at approximately 60-80 bubbles per minute. During testing, *M. bahia* were fed 0.5 ml per replicate of brine shrimp nauplii (*Artemia* sp.) daily to prevent cannibalism, and *L. plumulosus* were not fed for the duration of the 10-day exposure period.

Water quality parameters measured daily during the 10-day *M. bahia* and *L. plumulosus* sediment tests were dissolved oxygen, pH, temperature, and salinity. Dissolved oxygen was measured with a YSI Model 55 DO meter, temperature was measured with a VWR thermocouple, pH was measured with an Orion Model SA 290A pH meter, and salinity was measured with an Aquatic Eco Systems CL893 refractometer. Total ammonia in porewater and overlying water samples was determined utilizing an Orion Model SA290A meter with an Orion 95-12 ammonia probe. Unionized ammonia was calculated. Porewater samples were collected up to 3 days before test initiation and on Day 0 from control, reference, and client sediments. Total ammonia was also determined. Before the tests were initiated, sediment (and overlying water) were in accordance with guidance to purge ammonia and hydrogen sulfide. Overlying water was collected on renewal days from *M. bahia* and *L. plumulosus* test vessels for the determination of total ammonia levels. Test water was renewed every other day beginning on Day 0 for *L. plumulosus*, and every day for *M. bahia.* All instruments were calibrated daily before use and at the end of each day. Survival counts for *L. plumulosus* and *M. bahia* were performed at termination of the sediment tests.

Prior to test initiation (Day 0), natural seawater (salinity of 25 ppt for *M. bahia* and 28 ppt for *L. plumulosus*) and sediments were introduced to each test chamber at a ratio of 1 part sediment to 4 parts seawater and allowed to settle overnight. The overlying water was siphoned from each of the replicate test chambers after 24 hours and new overlying water was added. Water quality parameters were measured prior to adding the test organisms. Water renewals were performed. Water was siphoned from each test chamber and viewed in a glass beaker to ensure removal of test organisms had not occurred. Any test organisms inadvertently siphoned out were immediately returned to the appropriate test chamber. Fresh seawater was

added back into the test chambers, taking care not to resuspend the sediment. Dead brine shrimp were removed from the *M. bahia* test chambers on a daily basis.

Sediment bioassay data were evaluated by a statistical comparison of mean survivorship in the sample station sediment relative to the field reference or laboratory control average survivorship using parametric procedures (EPA/600/4-89/001). Data were first checked for normality and homogeneity of variance. If either of these assumptions was not met, the data were transformed in an attempt to normalization prior to analysis by parametric procedures. When data could not be normalized by transformation, the data were analyzed by an equivalent nonparametric test.

2.8 Bioaccumulation Procedures

The polychaete, *Nereis virens*, and the bivalve, *Macoma nasuta* used in the bioaccumulation study were obtained from Aquatic Research Organisms, Hampton, New Hampshire.

The bioaccumulation tests were performed for 28 days. Ten-gallon test aquaria were used for the *N. virens* and *M. nasuta* tests, with each aquaria representing an exposure replicate for a total of five replicates for each sample. The laboratory control sediment sample, site sediment samples, and one reference sediment sample were tested without dilution. Approximately 5 centimeters of sediment were added to each replicate test chamber, and the aquaria were filled with at least 20 liters of natural seawater with a salinity of 25 ± 2 ppt. Prior to test initiation, *M. nasuta* were held for two to four days in natural filtered seawater and were fed Algae Spat Formula (Innovative Aquaculture Products Ltd., British Columbia, Canada) once or twice daily. At test initiation, 20 *N. virens* and 20 *M. nasuta* were placed in each test chamber (the two species were tested in separate tanks). Test organisms were not fed at any time during the testing period.

The tests were performed in a temperature-controlled room. Ambient laboratory illumination was set on a timer, 16 hours light and 8 hours dark. Aeration was provided to all the test chambers at approximately 100-120 bubbles per minute.

Water quality parameters measured daily during the 28-day sediment bioaccumulation tests were dissolved oxygen, pH, temperature, and salinity. Dissolved oxygen was measured with a YSI Model 55 DO meter, temperature was measured with a VWR thermocouple, pH was measured with an Orion Model SA 290A pH meter, and salinity was measured with an Aquatic Eco Systems CL893 refractometer. All instruments were calibrated daily before use and at the end of each day. Observations were made daily for organism behavior and mortality. Survival counts were performed at test termination for all of the bioaccumulation tests.

After 28 days of exposure, survival and mortality of test organisms were determined and recorded. Test organisms from each replicate were removed from the aquaria and allowed to depurate in clean seawater for 24 hours. After depuration, organisms from each replicate were rinsed in deionized water, placed into Ziploc® bags, and stored in a freezer at -10˚C ± 2°C. Frozen *N. virens* and *M. nasuta* tissues were archived for shipment to an analytical laboratory, if required.

3 Results and Discussion

3.1 Field Data

In situ field measurements were taken at all stations collected from March 31 to April 3, 2003 at surface level (1 foot below water surface), mid-depth, and 3 feet above bottom. Water temperatures ranged from 18.53°C to 20.92°C. Dissolved oxygen ranged from 3.31 to 7.15 parts per million (ppm), while the range for pH was 7.77 to 8.18 standard units. Turbidity ranged from 0.1 to 22.5 nephelometric turbidity units (NTU). Salinity and conductivity ranged from 32.39 to 37.73 parts per thousand (ppt) and from 49.51 to 50.96 mmhos/cm, respectively. Weather conditions varied from warm, clear and sunny to cold, overcast and rainy. Winds ranged from 0.6 to 21.6 miles per hour (mph). Sea state varied from calm to 3-foot waves. Results of water column measurements, field observations, and tidal information are presented in Tables 3 and 4. Copies of field sheets are included in Appendix A.

3.2 Physical Testing Data

Results of physical testing for specific gravity, percent solids, grain size analysis, Atterberg limits, and settling rates are presented in Tables 5, 6, 6A, 7, and Appendix B. Specific gravity ranged from 2.528 to 2.665. The plasticity index varied from Non Plastic (NP) to 135 and the percent solids varied from 22.1 to 68.5. Particle size analysis indicated that all the samples contained mostly silt/clay or sand and very small concentrations, if any, of gravel. Station E-CH03-19 contained the highest percentage of sand and Station E-CH03-11 contained the highest percentage of silt/clay.

3.3 Chemistry Data

3.3.1 Sediment Chemistry Data

Analytical results for sediments are presented in Tables 8 through 11A. All tables reporting dry-weight values have the letter “A” after the table number. Results of metals analyses show that aluminum, antimony, arsenic, cadmium, chromium, copper, iron, lead, nickel, and zinc were detected in all samples. Low levels of mercury and silver were present in some of the samples. At all sample stations except Stations E-CH03-8 and 19, levels of aluminum, arsenic, chromium, copper, iron, lead, nickel, and zinc were higher than the reference station. Based on dry-weight calculations, ammonia levels ranged from 2.0 (Control Sediment) to 412 mg/Kg (E-CH03-10). Percent Total Organic Carbon (TOC) ranged from 0.66 (Control Sediment) to 3.36% (E-CH03-4). Oil and Grease (O&G) results varied from 71 mg/Kg (less than the MRL but greater than or equal to the MDL) for the reference station to 610 mg/Kg for sample E-CH03-14. Trace levels of Polynuclear Aromatic Hydrocarbons (PAHs) were found in all the samples. Sample E-CH03-12 contained 2-Methylnaphthalene and Naphthalene. Samples E-CH03-20 and 21/22 had low concentrations of Pyrene, and sample E-CH03-20 showed low concentrations of Fluoranthene. Low levels of TriButyl Tin were found in samples E-CH03-9, 10, 12-16, 19, 20, and 21/22. Amounts just above the method reporting limit for DiButyl Tin were found in samples E-CH03-12 and 14.

Partial laboratory data pertaining to sediment chemistry analysis have been included in Appendix C1. To conserve space, pages have been copied double-sided and QC information has been included only in Appendix C1 on the accompanying CD.

3.3.2 Elutriate Chemistry Data

Analytical results for elutriates and water chemistry are presented in Tables 12 through 15. Results of metals analyses show that arsenic and nickel were present in all the samples. Antimony, cadmium, chromium, copper, lead, and zinc were present in some samples. Arsenic levels in sample E-CH03-20 were slightly elevated in comparison with the National Recommended Water Quality Criteria for Priority Toxic Pollutants, Criteria Maximum Concentration (CMC). Ammonia levels ranged from below 0.30 mg/L for the control sediment elutriate to 27.6 mg/L for sample E-CH03-14 DUP. TOC ranged from 3.6 mg/L in sample E-CH03-5 to 9.2 mg/L in sample E-CH03-14 DUP. Cyanide levels were below method detection limits in all samples. O&G levels ranged from below MDL (1.2 mg/L) to 17 mg/L for sample E-CH03-14 DUP. Sulfides ranged from below MDL (0.05 mg/L) to 15 mg/L for sample E-CH03-13. No PAHs were found above MRL in any of the samples except for Naphthalene, which was found in small amounts on samples E-CH03-9, 13, 14 DUP, 15, 19, 20, 21/22, and the Control Sediment elutriate. No organic tins were found above MDL levels in any of the samples. Results that are reported between the MRL and the MDL should be considered estimates.

Partial laboratory data pertaining to elutriate chemistry analysis have been included in Appendix C1. To conserve space, pages have been copied double-sided and QC information has been included only in Appendix C1 of the accompanying CD.

3.3.3 Tissue Chemistry Data

Chemistry and toxicology results were reviewed by representatives of the EPA Region 4, USACE-Jacksonville, and ANAMAR on September 26, 2003. Due to sample similarity (i.e. physical, chemistry, toxicology, and proximity) among some stations, and the need to minimize analysis costs without sacrificing the quality of the evaluation, it was decided that like-replicates from each sample groups were to be combined as follows:

- Stations E-CH03-12 and 15
- Stations E-CH03-13 and 16
- Stations E-CH03-9, 10, 11, and 20

The samples were homogenized and one sample was derived from each composite replicate and analyzed according to the table below. Samples 14 and 14 DUP were left out of the analysis entirely because these two samples failed toxicity tests. Because of the low level of PAHs detected and the results of the Theoretical Bioaccumulation Potential (TBP) calculations (Section 3.7.1 and Tables 38 and 39), tissues from sample E-CH03-12 and the Reference Station were chosen for the PAH analysis. Organic tins and metals were analyzed in all combined samples. Iron was not analyzed for due to its low BCF.

Stations to be Analyzed Directly and/or Combined Before Analysis	New Composited Sample Name^	Analyses Requested
E-CH03-12	E-CH03-12-T	PAH
E-CH03-12 and 15	E-CH03-12,15-T	Total Solids, %Lipids, Metals* and Organic Tin
E-CH02-13 and 16	E-CH03-13,16-T	Total Solids, %Lipids, Metals* and Organic Tin
E-CH02-9, 10, 11, and 20	E-CH03-9,10,11,20-T	Total Solids, %Lipids, Metals* and Organic Tin
RS-CH03	RS-CH03-T	Total Solids, %Lipids, PAH, Metals* and Organic Tin
N. virens Tissue Pre-Test	*N. virens* Tissue Pre-Test	Total Solids, %Lipids, PAH, Metals* and Organic Tin
M. nasuta Tissue Pre-Test	*M. nasuta* Tissue Pre-Test	Total Solids, %Lipids, PAH, Metals* and Organic Tin

T = Tissue

^Denotes that all the like replicates from each sample station were homogenized together to form one sample. For example, the two "A" replicates from samples E-CH03-12 and 15 were homogenized to form sample E-CH03-12,15-T Replicate A.

*Metals (Aluminum, Antimony, Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel Silver, and Zinc)

Analytical results for tissue chemistry (*Macoma nasuta* and *Nereis virens*) are presented in Tables 28 through 35. All the tissue results have been reported in both dry weights and wet weights.

Tables 36 and 37 show the percent value calculation of the 5-replicate average of each station compared to the 5-replicate average of the Reference Station. Additionally, this table highlights in bold the values that are considered statistically different from the Reference Station (Section 3.8).

Partial laboratory data pertaining to tissue chemistry analysis have been included in Appendix C2. To conserve space, pages have been copied double-sided and QC information has been included only in Appendix C2 of the accompanying CD.

3.4 Bioassay Data

3.4.1 Elutriate Bioassay Data

The relevant laboratory raw data pertaining to the elutriate tests are provided in Appendix D for *M. bahia*, *M. beryllina*, and *A. punctulata*.

Mysidopsis bahia

M. bahia survivorship was 96 percent in the laboratory control seawater 1 and 100 percent in laboratory control seawater 2. Survivorship in the laboratory control sediment 1 (Table 16) was 98 percent (10% and 50% concentrations) and 94 percent (100% concentration). Survivorship for laboratory control sediment 2 (Table 16) was 100 percent (100% concentration), 99 percent (10% concentration), and 96 percent (50% concentration). Sample survivorship ranged from 79 percent (100% exposure for sample E-CH03-14) to 100 percent (50% and 100% exposures for sample E-CH03-20). *M. bahia* survivorship among replicates was relatively uniform (Appendix D).

The 100% elutriate survival dataset was found to be both normal and with homogeneity of variance. Analysis of variance followed by Dunnett's comparison indicated that the survival of *M. bahia* in the laboratory control seawater was not significantly different from the 100% control sediment elutriate exposure or the site samples, with the exception of E-CH03-14 (Table 17). Results for the ANOVA followed by Dunnett's between the 100% elutriate exposures for the control sediment and the site samples showed a statistically significant difference only with E-CH03-14 (Table 17). LC_{50} values were greater than 100% (Table 22).

Menidia beryllina

M. beryllina survivorship was 100% in laboratory control seawater 1 and laboratory control seawater 2. Survivorship in laboratory control sediment 1 (Table 18) was 100% in the 10%, 50%, and 100% concentrations. Survivorship for laboratory control sediment 2 (Table 18) was 100% (10% and 50% concentrations) and 98% (100% concentration). Sample survivorship ranged from 100% (10% exposure for sample E-CH03-09, 50% exposure for sample E-CH03-12, and 100% exposure for sample E-CH03-10) to 30% (100% exposure for sample E-CH03-14) (Table 18). *M. beryllina* survivorship among replicates was relatively uniform, except for the 100% exposure for sample E-CH03-14, where survivorship was poor in four replicates but excellent in one of the replicates (Appendix D).

This 100% elutriate survival dataset did not meet the assumptions for a parametric test, and a suitable transformation was not found. The nonparametric comparison showed a statistically significant difference between the survival in the control seawater and the 100% elutriate of E-CH03-14 and E-CH03-17 (Table 19). Survival in these samples were also found to be statistically different from the 100% control sediment elutriate survival in this comparison (Table 19). LC_{50} values were greater than 100%, except for E-CH03-14 which was 79% elutriate (Table 22).

Arbacia punctulata

Fertilization data from the elutriate bioassays of control seawater, control sediment, and sample stations are presented in Table 20. Fertilization of *A. punctulata* gametes was 78%

in the control water (0% elutriate) and 76% in the 100% elutriate control sediment. Fertilization of *A. punctulata* gametes in the site samples ranged from 61% (100% elutriate from sample station E-CH03-14) to 79% (10% elutriate from sample station E-CH03-20) (Table 20).

There were no significant differences (P=0.05) in the fertilization of *A. punctulata* between the control water (0% elutriate) or control sediment (100% elutriate) when compared to the Canaveral sample stations, although Dunnett's comparison identified E-CH03-14 as statistically different (Table 21). EC_{50} values were greater than 100% (Table 22).

Reference Toxicant Tests

Concurrent reference toxicant tests were conducted to determine the general health of each test species. The reference toxicant for the *M. bahia* and *M. beryllina* tests was sodium dodecyl sulfate (SDS) with a test duration of 48 hours. The reference toxicant for the *A. punctulata* test was copper sulfate ($CuSO_4$), and was performed concurrently (duration of 80 minutes) with the fertilization tests. The 48-hour LC_{50} result for *M. bahia* was 4.79 mg SDS/L (95% confidence limits of 3.25 to 7.06 mg SDS/L) and for *M. beryllina* was 2.81 mg SDS/L (95% confidence limits were not reliable). The reference toxicant EC_{50} for the sea urchin was 102.24 µg $CuSO_4$/L (95% confidence limits of 97.35 to 107.37 µg $CuSO_4$/L). The current LC_{50} or EC_{50} values were within the upper and lower control limits (±2 standard deviations) of the MEC control charts running average LC_{50} and EC_{50} and indicated that the test organisms were within their normal sensitivity ranges (USEPA, 1994). The reference toxicant data sheets and the LC_{50} and EC_{50} calculations for the elutriate tests are presented in Appendix D.

3.4.2 Sediment Bioassay Data

The relevant laboratory raw data pertaining to the sediment tests are provided in Appendix D for *M. bahia* and *L. plumulosus*.

Mysidopsis bahia

M. bahia survivorship was 97% in the laboratory control sediment and 93% in the reference sediment, RS-CH03 (Table 23). Survivorship of *M. bahia* in the site sediments ranged from 69% in sample E-CH03-14 to 94% in samples E-CH03-09 and E-CH03-11 (Table 23). Surviving *M. bahia* appeared healthy at the termination of the tests.

Statistical analysis indicated that the survival of *M. bahia* in the laboratory control sediment was not significantly different (P=0.05) from survival in the reference sample (Table 24). Survival was significantly different from the control sediment in several site samples (Table 24). Survival of *M. bahia* in the reference sediment was not significantly different (p=0.05) from survival in the site samples, with the exception of sample E-CH03-14 (Table 24).

Leptocheirus plumulosus

L. plumulosus survivorship was 95% in the laboratory control sediment and 84% in the reference sediment, RS-CH03 (Table 25). Survivorship of *L. plumulosus* in the site sediments ranged from 79% in sample E-CH03-11 to 93% in sample E-CH03-17 (Table 25). Surviving *L. plumulosus* appeared healthy at test termination. *L. plumulosus* survivorship among replicates was relatively uniform (Appendix D).

Statistical analysis using ANOVA with Dunnett's test indicated that the survival of *L. plumulosus* in the laboratory control sediment was not significantly different (P=0.05) from survival in the reference sediment or any of the Canaveral Harbor samples (Table 26). In addition, survival of *L. plumulosus* in the reference sediment was not statistically different from any of the site samples (Table 26).

Reference Toxicant Tests

Reference toxicant tests were conducted on each species tested in the sediment tests. The reference toxicant used for *M. bahia* was SDS and the duration of the test was 48 hours. The reference toxicant used for *L. plumulosus* was cadmium chloride ($CdCl_2$), measured as cadmium (Cd), for a duration of 96 hours. The 48-hour LC_{50} result for *M. bahia* was 10.00 mg SDS/L (95% confidence limits of 7.77 to 12.86 mg SDS/L). The LC_{50} value for *M. bahia* was within the current control limits at MEC control charts and indicated the test organisms were within their expected sensitivity ranges (USEPA, 1994). The 96-hour LC_{50} result for *L. plumulosus* was 1.55 mg $CdCl_2$ (95% confidence limits of 1.36 to 1.77 mg $CdCl_2$). The LC_{50} value was within the current control limits at MEC control charts and indicated the test organisms were within their expected sensitivity ranges (USEPA, 1994). The reference toxicant data sheets and LC_{50} calculations for the sediment tests are presented in Appendix D.

3.5 Bioaccumulation Data

The laboratory raw data are provided in Appendix D.

Macoma nasuta

Data for the survival of *M. nasuta* in the bioaccumulation tests are presented in Table 27. *M. nasuta* survivorships in the laboratory control sediments were 92% and 90%, based on 100 organisms per run (the second control run was conducted concurrently with sample E-CH03-20 exposure). Survival in controls was at acceptable levels and reference toxicant performance was within laboratory control levels. Survival of *M. nasuta* in the site sediments ranged from 75% (E-CH03-14) to 94% (E-CH03-20). Survival of *M. nasuta* in the reference sediment was 90% (Table 27). Adequate mass of *M. nasuta* tissue was available for chemical analysis, if required.

Nereis virens

Data for the survival of *N. virens* in the bioaccumulation tests are also presented in Table 27. N. virens survivorship in the laboratory control sediments were 97% and 95%. Survival in controls was at acceptable levels, and reference toxicant performance was within laboratory control levels. Survival of *N. virens* in the site sediments ranged from 89% (E-CH03-14) to 96% (E-CH03-09 and E-CH03-20) (Table 27). Survival of *N. virens* in the reference sediment was 90%. Adequate mass of *N. virens* tissue was available for chemical analyses in the remaining samples, if required.

3.6 Quality Assurance Quality Control (QAQC) Review

3.6.1 Sediment Data Review

Laboratory blanks were below method reporting detection limits for metals, organics, and water quality parameters. Laboratory control samples and duplicates were within laboratory precision and accuracy limits for metals, organics, and water quality parameters. Matrix spike/matrix spike duplicate recoveries were within laboratory precision and accuracy limits and/or sample duplicate analysis data demonstrated acceptable reproducibility of laboratory processes for metals, organics, and general chemistry parameters. The following exceptions were noted:

The samples were analyzed in separate batches. In some instances the blank associated with the particular batch of samples had above MDL but below MRL concentrations of a particular analyte. Whenever this occurred, the reporting value for the sample analyzed in that particular batch was reported to the MRL level and the value was flagged with a “U*”. Otherwise, all concentrations were reported to the MDL level.

The Relative Percent Difference (RPD) for the replicate analysis of total sulfides showed a high bias, which indicates non-homogenous distribution of sulfide in the sample. The value of 25% was not unusually high for this analysis. No further corrective action was appropriate.

The CAS/Kelso QA/QC policy calls for no more than ten determinations between Continuing Calibration Verification (CCV) checks. As the result of an inadvertent error, 20 readings were performed between CCV2 and CCV3. Very little fluctuation in the two CCVs was observed (i.e. CCV2 = 101% recovery; CCV3 = 101% recovery), and other QA/QC samples analyzed between CCV2 and CCV3 yielded acceptable results. Since the samples were past the recommended hold time when the error was discovered, a reanalysis was not performed. The effect on the results appears to be negligible or non-existent.

The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries of sulfides for sample E-CH03-Control-Sed were outside control criteria because of suspected matrix interference (i.e., carbonate in the bulk sediment). The sample was reanalyzed one day past hold and yielded similar results. The results of the original analysis are reported. No further corrective action was appropriate.

The spike recovery of sulfides for the Laboratory Control Sample (LCS) was outside the lower control criterion. The error associated with reduced recovery equates to a potential low bias. The associated field sample was reanalyzed one day past hold and the LCS produced acceptable recovery. The results from the reanalysis were similar to that of the original analysis. The results of the original analysis are reported. The data is flagged to indicate the problem.

The reporting limit is elevated for total cyanide in some samples because the samples required dilution. The distillates contained a significant amount of carbonate from distillation of carbon dioxide from the bulk sediment sample. The carbonate prevented analysis of the distillate without dilution.

The Matrix Spike (MS) recovery of total cyanide for sample E-CH03-2 was outside control criteria because of suspected matrix interference. The samples contained high levels of sulfide. Lead acetate scrubbers were used in the distillation, but did not provide adequate removal of sulfide. As a result of the interference, the results for this analyte might contain a low bias. A Matrix Spike Duplicate (MSD) was also analyzed with the batch but yielded similar results. No further corrective action was taken.

The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) analyses of cyanide for sample E-CH03-Control-Sed yielded relatively low recoveries. Carbonate in the bulk sediment was suspected as the cause of the matrix interference. No further corrective action was appropriate.

The lower control criterion was exceeded for the following surrogate in Method Blank KWG0304819-4: Tri-n-propyltin. Since the problem indicates a potential negative bias in the analytical batch, all associated field samples containing target analytes were re-extracted and reanalyzed. The Method Blank met control criteria for the reanalysis. Results for the samples were comparable for both determinations, which indicate the problem with the initial analysis was restricted to the Method Blank. Therefore, the results from the original analysis are reported. The data are flagged to indicate the problem.

The MRL for lead was elevated to 0.1 mg/Kg (0.05 is the typical MRL for Method 200.8) due to baseline drift during the course of the analysis. All of the related samples have lead concentrations greater than 20 times the elevated MRL; therefore, no corrective action was appropriate.

The control criteria for matrix spike recoveries of aluminum and iron for sample E-CH03-Control-Sed are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The matrix spike recovery of antimony was below the CAS control criterion. Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analysis. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. Since low recoveries result from a method defect and can be magnified by certain matrix components, no corrective action is appropriate other than using alternative procedures, which specifically target antimony. The associated QA/QC results (e.g., control sample, calibration standards, etc.) indicate the analysis was in control.

The CAS/Kelso control criterion was exceeded for the following surrogate in sample E-CH03-6 due to matrix interferences; Biphenyl-d10 (37% recovery versus a control limit of 39%). A re-extraction was performed past the recommended holding time and produced similar results, which confirmed the interference. Three other surrogates were evaluated with this analysis and all were within control criteria. The results of the original analysis are reported. No further corrective action was required.

The CAS/Kelso control criterion was exceeded for the following surrogate in sample E-CH03-15 due to matrix interferences; Fluoranthene-d10 (49% recovery versus a control limit of 52%). A re-extraction was performed past the recommended hold time and produced similar results, which confirmed the interference. Three other surrogates were evaluated with this analysis and all were within control criteria. The results of the original analysis are reported. No further corrective action was required.

3.6.2 Elutriate Data Review

Laboratory blanks were below method reporting detection limits for metals, organics, and water quality parameters. Laboratory control samples and duplicates were within laboratory precision and accuracy limits for metals, organics, and water quality parameters. Matrix spike/matrix spike duplicate recoveries were within laboratory precision and accuracy limits and/or sample duplicate analysis data demonstrated acceptable reproducibility of laboratory processes for metals, organics, and water quality parameters. The following exceptions were noted:

The samples were analyzed in separate batches. In some instances the blank associated with the particular batch of samples had above MDL but below MRL concentrations of a particular analyte. Whenever this occurred, the reporting value for the sample analyzed in that particular batch was reported to the MRL level and the value was flagged with a “U*”. Otherwise, all concentrations were reported to the MDL level.

The Duplicate Matrix Spike (DMS) recovery of Oil & Grease for sample E-CH03-9 was outside CAS/Kelso control criteria (74% recovery versus a control limit of 78%). The recovery in the Laboratory Control Sample (LCS) was acceptable, as was the recovery in the Matrix Spike (MS). The RPD between the two matrix spike samples was within control criteria. No further corrective action was feasible.

Sample E-CH03-Control-Elut was inadvertently omitted for Oil & Grease analysis during sample log-in. The error was not discovered until the sample was one day past the recommended holding time. Thus, the analysis was performed one day past the recommended holding time. The data is flagged to indicate holding time violation.

The Relative Percent Difference (RPD) for Tetra-n-butylin in the replicate matrix spike analysis of C019R001 was outside control criteria. In general, the RPD was relatively high for all spiked compounds, which indicates a low bias in the Matrix Spike Duplicate (MSD). All spike recoveries in the MS, DMS, and associated Laboratory Control Sample (LCS) were within acceptable limits, indicating the analytical batch was in control. No further corrective action was appropriate.

Sample E-CH03-20 was initially analyzed within the recommended holding time, but appeared to have been inadvertently spiked with the CAS/Kelso butylin matrix spike solution. Upon discovery of the apparent anomaly, a re-extraction was performed on a hydrochloric acid (HCl) preserved portion of the sample. Analysis of butyltins is routinely performed on unpreserved sample. However, the initial step in the extraction of butyltins is to acidify the sample to pH<2 with HCl. The re-extraction was performed past the recommended holding time. The results confirmed the suspected error associated with the original analysis. The results of the reanalysis for this elutriate are consistent with the results for the bulk sediment from which the

elutriate was generated. These results have been reported with qualifying footnotes indicating holding time violation.

The control criteria were exceeded for the following surrogates in E-CH03-9; Fluorene-d10 (40% recovery versus 43% control limit) and Fluoranthene-d10 (15% recovery versus 20% control limit). A reanalysis was not performed because insufficient sample was available. Two other surrogates were evaluated for this analysis and both were within acceptance criteria. No further corrective action was possible.

The upper control criterion was exceeded for the following analytes in Duplicate Laboratory Control Sample (DLCS) KWG0304981-2: Dibenz(a,h)anthracene and Benzo(g,h,i)perylene. The analytes in question were not detected above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Several alternative procedures were used due to difficulties encountered that were primarily related to the associated elutriate samples. Arsenic was analyzed using EPA Method 7062 (Hydride/AAS). Although the Reductive Precipitation/ICP-MS procedure performs very well in typical seawater and other complex salt matrices, an interference was observed in some of the elutriate samples. Therefore, all samples were analyzed by Hydride/AAS.

3.6.3 Tissue Data Review

Laboratory blanks were below method reporting detection limits for metals, organics, and water quality parameters. Laboratory control samples and duplicates were within laboratory precision and accuracy limits for metals, organics, and water quality parameters. Matrix spike/matrix spike duplicate recoveries were within laboratory precision and accuracy limits and/or sample duplicate analysis data demonstrated acceptable reproducibility of laboratory processes for metals, organics, and water quality parameters. The following exceptions were noted:

The samples were analyzed in separate batches. In some instances the blank associated with the particular batch of samples had above MDL but below MRL concentrations of a particular analyte. Whenever this occurred, the reporting value for the sample analyzed in that particular batch was reported to the MRL level and the value was flagged with a “U*”. Otherwise, all concentrations were reported to the MDL level.

The control criteria for matrix spike recovery of aluminum for samples E-CH03-12, 15-T-D (comp) and E-CH03-13,16-T-A (comp) are not applicable. The analyte concentration in the samples was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The matrix spike recovery for aluminum in sample *M. nasuta* CH03 Pre-test was outside the normal CAS/Kelso control criteria. Two factors apparently contributed to the outlier. The concentration of aluminum in the native sample was significantly high relative to the amount spiked, which reduces the accuracy of the recovery. In addition, the sample contained small amounts of sediment that probably contributed to non-homogeneous distribution of aluminum in the sample. This was also apparent from the replicate analyses. No further corrective action was feasible.

The control criteria for matrix spike recovery of aluminum for sample *N. virens* CH03 Pre-test are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The matrix spike recovery of antimony for sample *N. virens* CH03 Pre-test was outside control criteria because of suspected matrix interference. The samples contained relatively high amounts of sediment, which likely caused the low recovery of antimony through the same mechanism commonly seen when digesting sediment samples. The matrix spike result from another tissue sample in the same analytical batch, which contained a much smaller amount of visible particulate, produced an antimony recovery of 99%, indicating the analytical batch was in control. As a result of the interference, the results for this analyte might contain a low bias. No further corrective action was taken.

The Relative Percent Difference (RPD) for the replicate of zinc in sample *N. virens* CH03 Pre-test was outside the normal CAS control limits. The variability in the results is attributed to the sediment present in the sample. Standard mixing techniques were used, but were not sufficient for complete homogenization of this sample.

The matrix spike recoveries for zinc in samples E-CH03-9,10,11,20-T-B (comp) and E-CH03-13,15-T-D (comp) were outside the normal CAS/Kelso control criteria. The matrix spikes were re-digested and reanalyzed, but produced similar results. Two factors apparently contributed to the outliers. The concentration of zinc in the native samples was significantly high relative to the amount spiked, which reduces the accuracy of the recovery. In addition, the samples contained small amounts of sediment that probably contributed to no n-homogeneous distribution of zinc in the samples. This was also apparent from the replicate analyses. No further corrective action was feasible.

The matrix spike recovery of silver in sample E-CH03-9,10,11,20-T-B (comp) was outside CAS/Kelso control criteria. The sample was re-digested and reanalyzed, but again produced low recovery. The other sample in the group that was spiked produced acceptable results. In addition, the Standard Reference Material (SRM) was satisfactory. The cause of the low recovery was not identified. No further corrective action was feasible.

The confirmation criterion of 40% difference for Tri-n-butylin was exceeded in samples E-CH03-9,10,11,20-T-A (comp), E-CH03-12,15,T-A (comp), and E-CH03-12,15-T-B (comp). The lower of the two values was reported because of apparent matrix interference on the alternate column that produced the higher value.

Insufficient sample was available to perform Freeze-Dry Solids on the samples analyzed for PAHs. The “dry weight” results were calculated using the total solids from the associated composites E-CH03-12,15-T-A through E-CH03-12,15-T-E. Thus, the “dry weight” concentrations should be considered as estimated values.

3.6.4 Bioassay Data Review

Elutriate bioassay test conditions including temperature, DO, pH, and salinity were maintained at acceptable levels throughout the testing period for *M. beryllina.* Temperature, DO, and pH were maintained at acceptable levels throughout the testing period for *M. bahia*. Salinity levels for three samples containing *M. bahia* exceeded 22 ppt occasionally during the test (23 to 25 ppt). The salinity deviation from recommended test conditions for *M. bahia* did not appear to have any significant effect on the reported test endpoints. Due to concerns of DO level possibly decreasing for *M. beryllina*, air lines were set up and initiated on May 19, 2003..

Sediment bioassay test conditions, including temperature, DO, pH, and salinity were maintained at acceptable levels throughout the testing period for *L. plumulosus*. Potentially toxic levels of naturally occurring ammonia and/or hydrogen sulfide were removed from sediments prior to testing. DO and pH were maintained within range throughout the testing period for *M. bahia*. Salinity levels for several replicates containing *M. bahia* exceeded 27 ppt occasionally during the test (28 to 31 ppt). EPA guidance specifies a test solution salinity range of 23 ppt to 27 ppt for *M. bahia*. The salinity deviation from recommended test conditions for *M. bahia* did not appear to have any significant effect on the reported test endpoints. Ammonia in the overlying water was determined in the various test vessels and recorded. The laboratory SOP targets a temperature fluctuation of one degree and utilizes water baths to maintain temperature. Occasional fluctuations are not uncommon, and are within the tolerances for the test method. No adverse effects or stress were noted due to temperature deviations.

Loading of *M. bahia* during the elutriate bioassay tests was accomplished by transferring organisms to weigh boats, counted by technician, and recounted by a second person prior to loading. Due to technician error, the number loaded was erroneously recorded as 10, and changed when this error was identified, but proper annotation was not accomplished. These data have been reviewed and approved by the laboratory manager, and additional training undertaken to correct benchsheet annotation procedures.

3.6.5 Bioaccumulation Data Review

The bioaccumulation test conditions, including temperature, DO, pH, and salinity were maintained at acceptable levels throughout the 28-day testing period except for occasional temperature deviations for individual tanks, as noted in the bench data. Corrective actions to maintain testing conditions were undertaken, where necessary. This may include adjustment of ambient room testing temperatures, when indicated. Because aquaria are located throughout the testing facility and allocated randomly to their positions, temperatures are not identical in all tanks. Bench sheet alterations should have been recorded with an overstrike and initialed. These data have been reviewed and approved by the laboratory manager, and corrective action taken with monitoring technicians to avoid recording confusion in the future.

The analysis of the pre-test *N. virens* tissue revealed high concentrations of metals and the presence of PAHs. When the metals analyses were performed, a scan of elements was analyzed that included many unreported metals. This was done because monitoring of other elements is necessary for correct reporting of the target elements. Thus, a review of the overall fingerprint of the sample was possible. The elevated aluminum concentration automatically

suggested that excess sediment was present in the gut of the specimen because hydrated aluminum silicates (i.e., various types of clay) are common in sediment and will elevate the aluminum concentration when present. In addition to aluminum, other elements present at significantly higher levels in the background sample included iron, titanium, silicon, barium, and manganese. These are all indicators that sediment was present in the sample.

The pre-test *N. virens* tissue sample was also the sample used for the duplicate and matrix spike in the analytical batch. Thus, replicate values for all of these elements are available and all three analyses replicated well.

Although the test organisms were removed from the aquaria and allowed to depurate in clean seawater for 24 hours after the 28 days of exposure, it would appear that the pre-test organisms frozen at the beginning of the study were not. Thus, the data obtained from the analysis of the *N. virens* has been flagged.

3.7 Data Evaluation

Data from the Cape Canaveral Harbor sediments were broken down in the following way:

- Evaluation of contaminants in the sediment suspected of bioaccumulation (Theoretical Bioaccumulation Potential [TBP]), and
- Evaluation of the elutriate portion of the sediment (ADDAMS Model).

3.7.1 TBP Calculations

Calculation of the TBP followed the equations contained in the "Green Book" (EPA503/8-91/001) in Section 10.2 "Tier II: Theoretical Bioaccumulation Potential (TBP) of Non-polar Organic Chemicals." The TBP for all samples was calculated using the percent lipid concentration for *M. nasuta* and *N. virens*. Results of the calculations are presented in Tables 38 and 39.

Based on that concentration, TBP was calculated as follows:

$$TBP = 4\ (Cs/\%TOC)\ \%L$$

Where the following apply:

Cs = concentration of non-polar chemical of concern in the sediment (dry weight)

% TOC = Total Organic Carbon content in the dredged material expressed as a decimal

% L = organism lipids content. NOTE: percent lipids were obtained from mean measured values (Tables 28 and 29) from each of the studied specimens

Sample E-CH03-12 had the highest concentration of PAHs in the sediment (29 µg/Kg of 2-Methylnapthalene and 140 µg/Kg for Naphthalene) and the highest TBP concentrations when compared to the reference station. Although some TBP calculations for specific analytes show results higher than the corresponding TBP calculations for the reference station, these values should be considered estimates as the contaminate concentration values used for the

calculations were either flagged with a “U” or a “J”. The bolded values in Tables 38 and 39 represent the TBP calculation results derived from concentrations above the MRL.

The 2-Methylnaphthalene and Naphthalene TBP calculations for Station E-CH03-12 and the Fluoranthene and Pyrene TBP calculations for Station E-CH03-20 exceed the TBP for the Reference Sediment. These results indicate that there is insufficient information to determine whether the dredge material complies with the bioaccumulation aspects of the benthic criteria in paragraph 227.13(c)(3), and further evaluation of bioaccumulation in Tier III is appropriate.

3.7.2 ADDAMS Model

Simulations of the STFATE module of the ADDAMS model were run for samples E-CH03-20 and E-CH03-14 from Canaveral Harbor, Cape Canaveral, Florida. Based on the results of the analytical and toxicological tests, these samples were selected for modeling because they showed elevated levels of arsenic (Table 13) and elutriate bioassay toxicity (Tables 17 and 19) when compared to the reference site water.

Two separate applications of the model were run. They were:

- Section 103 Regulatory Analysis for Ocean Water, Tier II, Short-Term Fate of Dredged Material from Split Hull Barge or Hopper/Arsenic Run (sample E-CH03-20, Appendix F1)
- Section 103 Regulatory Analysis for Ocean Water, Tier III, Short-Term Fate of Dredged Material from Split Hull Barge or Hopper/Toxicity Run (sample E-CH03-14, Appendix F2)

Parameters described in the disposal site and equipment specifications were gathered from the Contractual Scope of Work and from Appendix B of the Canaveral ODMDS Site Management and Monitoring Plan. Whenever information was not available, the program’s default values were used. Map 5 shows the location and configuration of the reference station. Parameters utilized in the module were as follows:

Disposal area: 4 square nautical miles (12,152 feet x 12,152 feet)

Water depth: The site is generally smooth with depth gradually increasing from 47 feet along the northwest boundary to 55 feet in the southern corner (45 feet average depth in disposal area)

Current velocity: 0.1 to 0.4 knots (0.169 to 0.675 feet per second, average of 0.33fps used)

Current direction: north

Density: calculated from temperature and salinity provided in Table 4 (*in situ* measurements)

Sediment physical characteristics: obtained from physical analysis testing, refer to Tables 5 and 6.

Size of disposal vessel: 22 X 91.5 meters

Velocity of disposal vessel: 2.68 meters per second

Vessel volume and time to dump: 1,700 cubic meters and 60 seconds, respectively

Criteria Maximum Concentration (CMC), National Recommended Water Quality Criteria for Priority Toxic Pollutants: arsenic in seawater, 69 µg/L

Background concentration, as measured in the Reference Station marine water: 0.5 µg/L (see Appendix C-1)

Highest arsenic concentration used as input: 70.1 µg/L on sample E-CH03-20

Specifications

The grid (45 x 45) was delineated to be larger in area than the ODMDS to ensure that contaminant concentrations outside the ODMDS boundaries were also considered. The barge was positioned in the center of the ODMDS.

The slight slope (47 feet to 55 feet) was considered insignificant for model calculations. A depth of 45 feet was specified as the average single depth.

A uniform depth average velocity of 0.33 feet per second was used. The vertically averaged (X and Z) velocity directions were calculated to reflect the orientation of the ODMDS.

The Volumetric Fraction was calculated as the total volume of dredged material occupied by a solids fraction expressed as a decimal value. The physical characteristics used to obtain these calculations were % sand and % clay (Table 6).

Results

The enclosed printouts (Appendix F) and the electronic files in the accompanying CD (CH0320RE.DUO and CH0314RE.DUO) give the results of the STFATE model run for these particular tests.

Corresponding concentrations of arsenic were determined by the model at various depths. The maximum concentration of arsenic found at these respective depths after 4 hours of mixing (specified for water column evaluation) are given below:

Depth (Feet)	Arsenic Concentration (mg/L)
1.0	0.770×10^{-19}
36.2	0.653×10^{-5}
44.0	0.136×10^{-5}

These results confirm that the arsenic concentrations would decrease to below the water quality criteria within the 4-hour mixing period. The results also confirm that outside the ODMDS boundaries, the water quality criteria regulatory limit for arsenic (69 µg/L CMC) was not exceeded at any depth or at any time within the mixing phase.

Neither water quality nor toxicity criteria were violated during the Tier II elutriate chemistry and Tier III toxicity simulations.

3.8 Statistical Analysis of Bioaccumulation Data

EPA Decision Tree

All statistical analyses were based on the EPA Decision Tree (1995). According to these guidelines, growth data with at least two replicates and multiple comparisons should be checked for normality and homogeneity of variance using Shapiro-Wilk's and Bartlett's tests.

a. The Shapiro-Wilk's test is a powerful and preferred method for determining if the sample data are normally distributed. The test is considered an omnibus test that has good power characteristics over a broad range of non-normal distributions.

b. Bartlett's Homogeneity of Variance test is a commonly used and powerful test for determining homogeneity of variances between multiple samples. The test is unduly sensitive to departures from normality; therefore, a significant test may indicate non-normality rather than heteroscedasticity.

If results indicate normal distribution and equal variances, and if there is an equal number of replicates, the Dunnett's Multiple Comparison test is applied.

ANOVA-based parametric methods, like Dunnett's, require that the data are independently and randomly sampled (i.e., the errors are independently and identically distributed), the data are normally distributed, and the variance among groups is homogeneous (i.e., the groups are homoscedastic).

Parametric methods generally have greater statistical power compared to nonparametric methods, but are only valid when specific distributional assumptions are tested and verified. The most widely used and studied statistical procedures for comparing groups are based on the Gaussian distribution. There are generally five assumptions (i.e., widely referred to as ANOVA assumptions) required for parametric methods based on the Gaussian or normal distribution:

1) The variable measured must be continuous and at least ordinal, not discrete.

2) The data adhere to a normal probability distribution (i.e., data are normally distributed).

3) Samples are independent of each other.

4) The samples are randomly drawn from their respective populations.

5) The variances of all samples are homogeneous (i.e., data are homoscedastic).

Dunnett's Multiple Comparison Test is intended for jointly comparing multiple treatments with a single control. The test is typically conducted as a one-sided test whereby the experimenter has *a priori* expectation that the treatments will yield a higher or lower response compared to the control. Dunnett's Test requires an ANOVA computation for deriving the Mean Square Error (MSE). Dunnett's procedure is recommended when all ANOVA assumptions are met because the experimentwise (i.e., overall) error rate is fixed at the chosen alpha level (α) and is considered a relatively powerful multiple comparison.

If the data have an equal number of replicates, do not indicate a normal distribution, and/or show unequal variances in a non-parametric test, Steel's Many-One Rank test should be applied.

Non-parametric methods are used when data fail to meet certain distributional assumptions required for parametric-based methods. Nonparametric methods typically have lower statistical power compared to parametric methods, but because they are distribution-free, many of the distributional assumptions are unnecessary and irrelevant. As the name implies, the null hypothesis of nonparametric methods is not based on specific parameters such as means and variances. Non-parametric tests have at least four assumptions including:

1) The variable measured must be continuous and at least ordinal (not nominal).

2) The two populations that the samples are drawn from must be continuous distributions.

3) Samples are independent within and between each other.

4) Samples are drawn randomly from their populations

Steel's Many-One Rank test is intended for jointly comparing multiple treatments with a single control (in this case, the reference station) and is used when the data are not normally distributed. The test is typically conducted as a one-sided test whereby the experimenter has *a priori* expectation that the treatments result in a higher or lower response compared to the reference. The experimentwise error rate is fixed at alpha (α). Steel's test is a rank test whereby the data for each reference-treatment pair are ranked (in the case of ties across references and treatments, average ranks are assigned) and the sum of the reference ranks are compared to a critical value. If the sum of the control ranks is equal or less than the critical value then a statistically significant difference is declared.

Problem

Are concentrations of chemicals detected in *Macoma nasuta* (clams) or *Nereis virens* (worms) significantly greater at sites in the project area (Canaveral Harbor) than at the reference site?

Hypothesis

Null Hypothesis: All sites, including the reference site, are drawn from the same population.

Method of Analysis

Tissue metals data were evaluated by a statistical comparison of mean tissue concentration of the test analyte from the sample stations relative to the field reference mean tissue concentration using ANOVA and Dunnett's multiple comparisons procedure. Values reported as below detection limit were entered as the reported detection limit. Data were first checked for normality and homogeneity of variance. If either of these assumptions was not met and a suitable transformation was not found, the data were analyzed using Steel's Many One Rank Test. Because the objective of this analysis is to determine if organisms exposed to the dredge materials have a greater bioaccumulation of analytes than organisms exposed to the reference

sediments, it is appropriate to use a “one-sided” test distribution. In other words, the analysis is testing for significant differences among sample means only for tissue concentrations greater than, not less than, the reference tissue concentration.

Results

Macoma nasuta

Data sets for 21 of the 35 analytes tested on *M. nasuta* tissues passed statistical tests, indicating no statistical difference between the reference site and the test sites (Table 36). All samples had five replicates, and ANOVA with either Dunnett’s or Steel’s Many One Rank Test comparisons were used throughout, depending on the data profile (Appendices E3 and E4). Statistically different values were observed at Station E-CH03-12-T for Anthracene, Benzo(b)flouranthene, Flouranthene dry and wet weight and for Acenaphthene wet weight. Elevated values for aluminum, Tri-n-butyltin wet and dry weights, and lead and silver dry weights were noted for Stations E-CH03-9,10,11,20-T, E-CH03-13,16-T, and E-CH03-12,15,T. Stations E-CH03-9,10,11,20-T had elevated values for arsenic wet weight, E-CH03-13,16-T for arsenic, copper and n-Butyltin dry weights and Station E-CH03-12,15,T for cadmium dry weight.

Nereis virens

N. virens tissue concentrations were also analyzed with either Dunnett’s or Steel’s Many One Rank Test comparison, depending on the data profile (Appendix E1 and E2). Organic tin values showed no statistical differences when compared to the reference site. Mercury wet and dry weights show elevated values for sites E-CH03-9,10,11,20-T, E-CH03-13,16-T, and E-CH03-12,15,T. Elevated values of aluminum and silver wet and dry weights were indicated for site E-CH03-9,10,11,20-T. Site E-CH03-13,16-T shows statistically different values for silver dry weight, site E-CH03-12,15,T for nickel dry weight and site E-CH03-12-T for Fluoranthene dry and wet weights. Refer to Table 37 for statistical differences found for *N. virens.*

Data Presentation

Statistical outputs (Appendix E) were produced with ToxCalc Version 5.0.23. Each output includes a graphical representation of the mean of each parameter for the various stations. The significant differences are marked with an asterisk next to the station name by the X-axis. A critical bar corresponding to the 1-tail, 0.05 experiment-wise level or significance is marked for the Dunnett’s Test. The graph does not show a level of significance for Steel’s Many-One Rank Test because it is not based on means and variances but on the sum of the ranks of the reference station. These rank sum values as well as the 1-tailed critical reference value are printed in the middle of the output.

Tables 36 and 37 are a compilation of the percent differences between the average of all five tissue sample replicates at the reference station and the average of all five replicates at the sample stations for the same parameter and same species. For statistical purposes, when calculating the average for each group of replicates, the data below detection limit were assigned the same value as the detection limit. The reporting limits for some of the analytes (especially PAHs) vary considerably from sample to sample, partially due to differences in tissue lipid content and interference from the sample matrix. Therefore, the percent of the reference value can appear high even though the sample had a “U” (result below detection limit, either

method detection limit (MDL) or method reporting limit (MRL) or "J" (result between the MDL an the MRL) qualifiers. Values that are considered statistically significant using ToxCalc have been bolded on Tables 36 and 37.

For example, in Table 34 you will find that sample E-CH02-12-T shows that the average concentration of Dibenzofuran is 234% higher than the average concentration of the same parameter measured at the reference station. For this particular parameter and these stations, all data results were below detection limits; however, lower detection limits were achieved in samples from the reference station. Therefore, these percent differences are biased high. The actual results (taken from Table 34) for this sample are:

Sample ID	Replicate	Result (µg/Kg-Wet Weight)	Qualifier
E-CH03-12-T	A	1.5	J
E-CH03-12-T	B	0.29	J
E-CH03-12-T	C	0.22	J
E-CH03-12-T	D	0.27	J
E-CH03-12-T	E	0.20	J
Average		0.50	
RS-CH03	A	0.19	U
RS-CH03	B	0.21	J
RS-CH03	C	0.28	J
RS-CH03	D	0.19	U
RS-CH03	E	0.19	U
Average		0.21	
% of Reference		234%	

U = Result below detection limit

J = Result is an estimated concentration that is less than the MRL but greater than the MDL

4 References

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Figure 1. Photos Depicting Sampling Sequence

1. Set– Up

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2. Instrument Calibration

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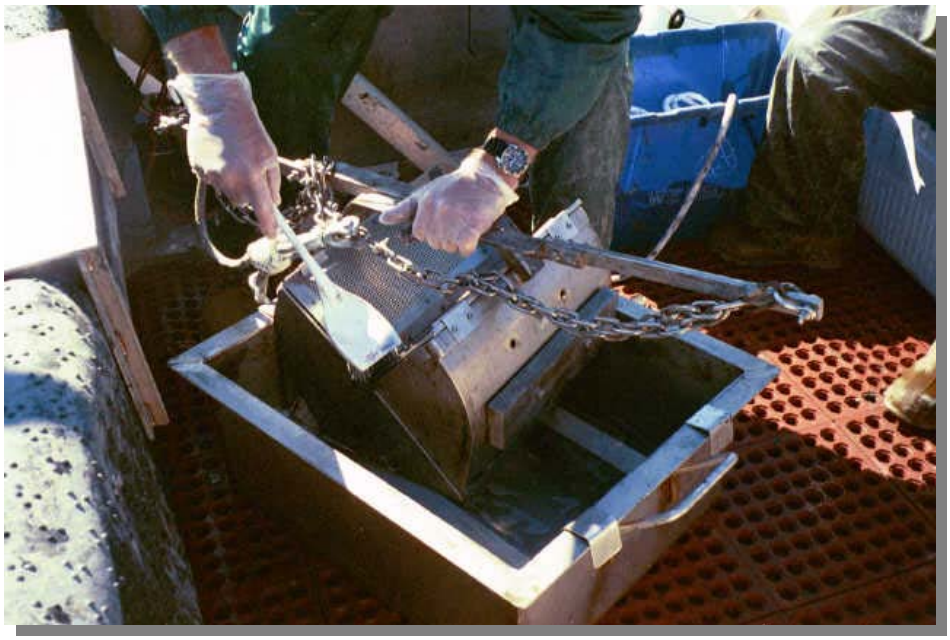
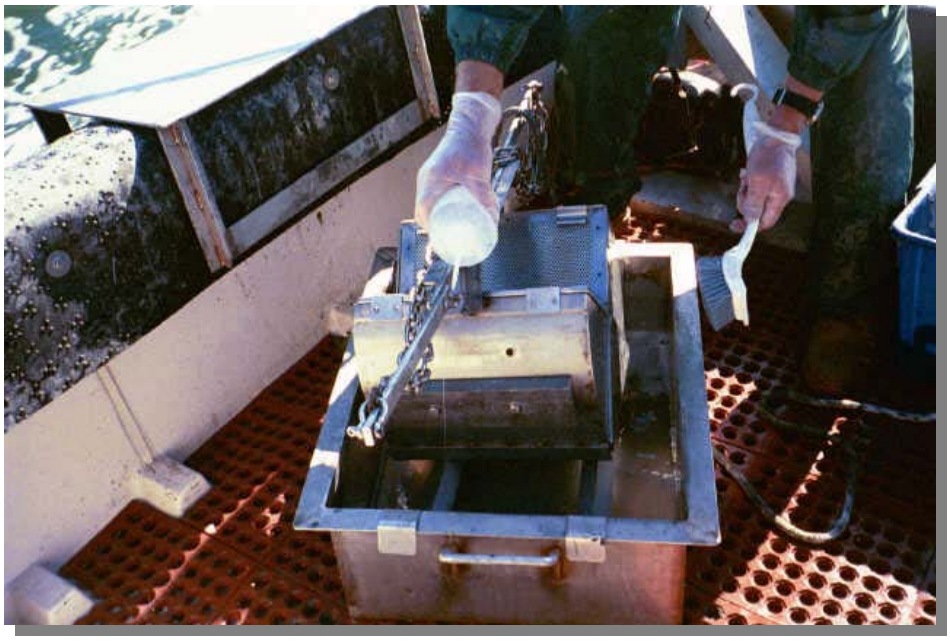
3. Decontamination





4. Sampling

4. Sampling (Continued)

5. Sample Examination and Storage

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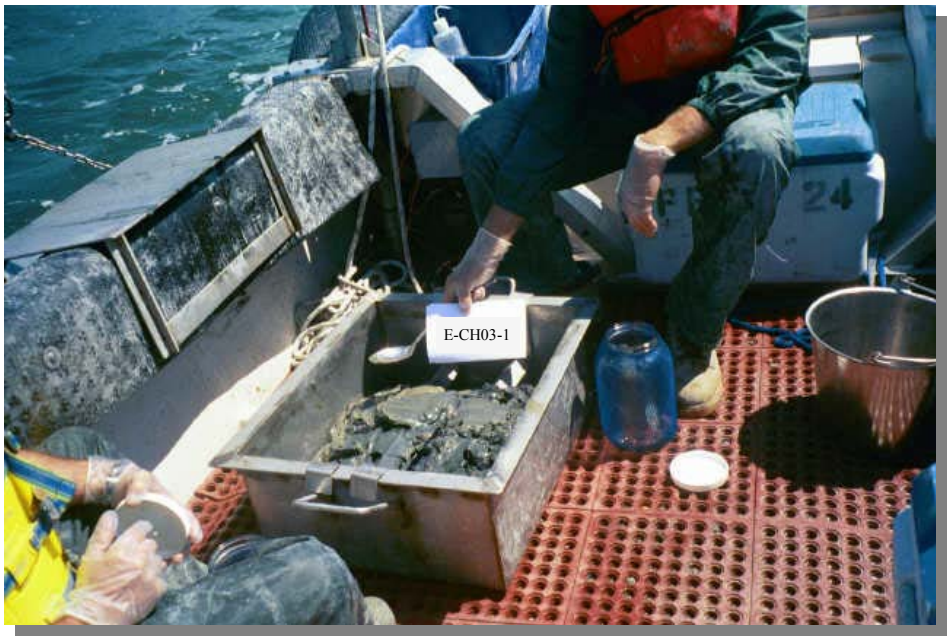
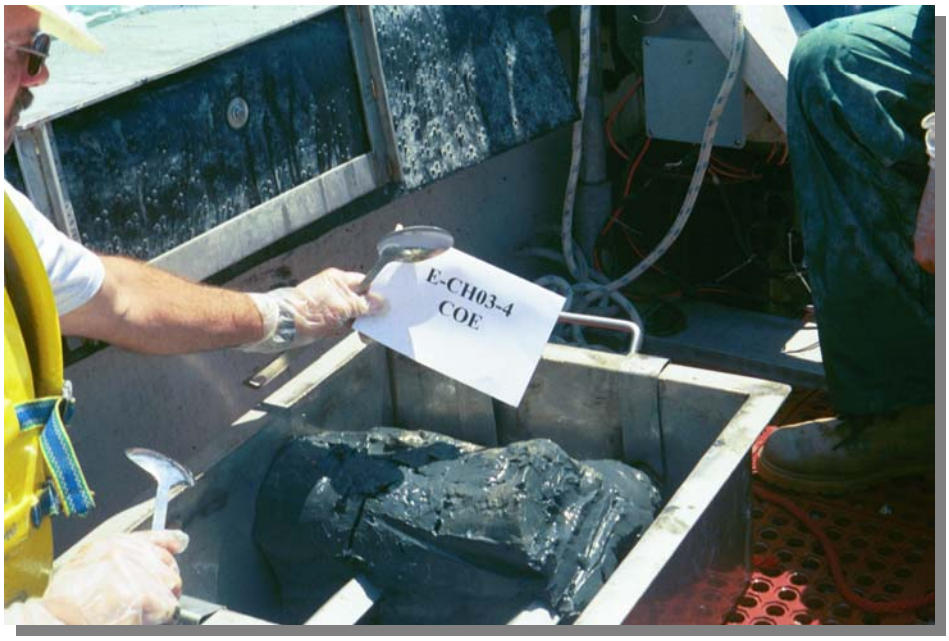
5. Sample Examination and Storage (Continued)

Figure 2. Sample Photographs

Please note that in several of the following photos, the original sample ID card was not easily read and a clearer station number has been superimposed electronically. The original photos can be presented upon request.





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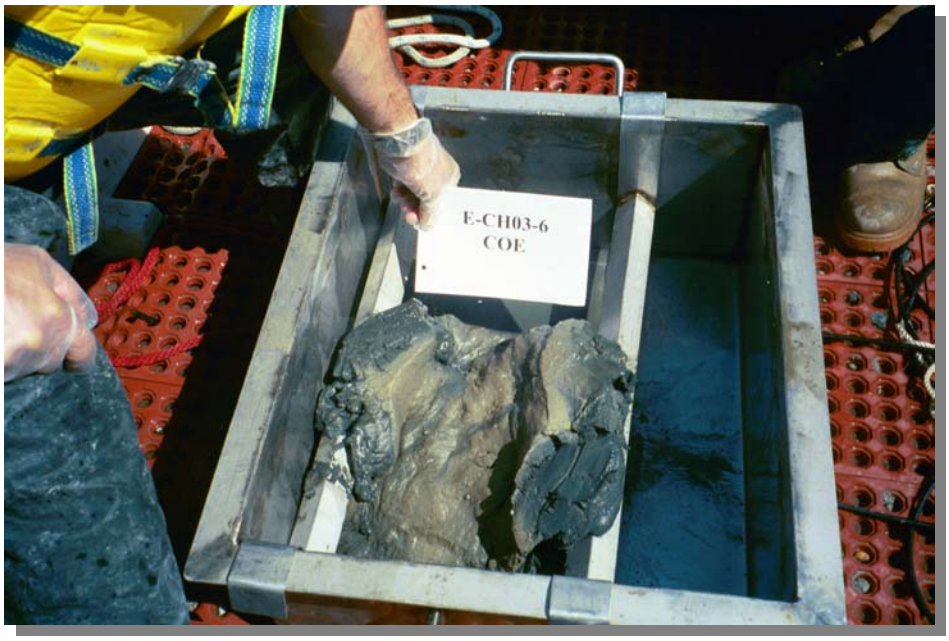

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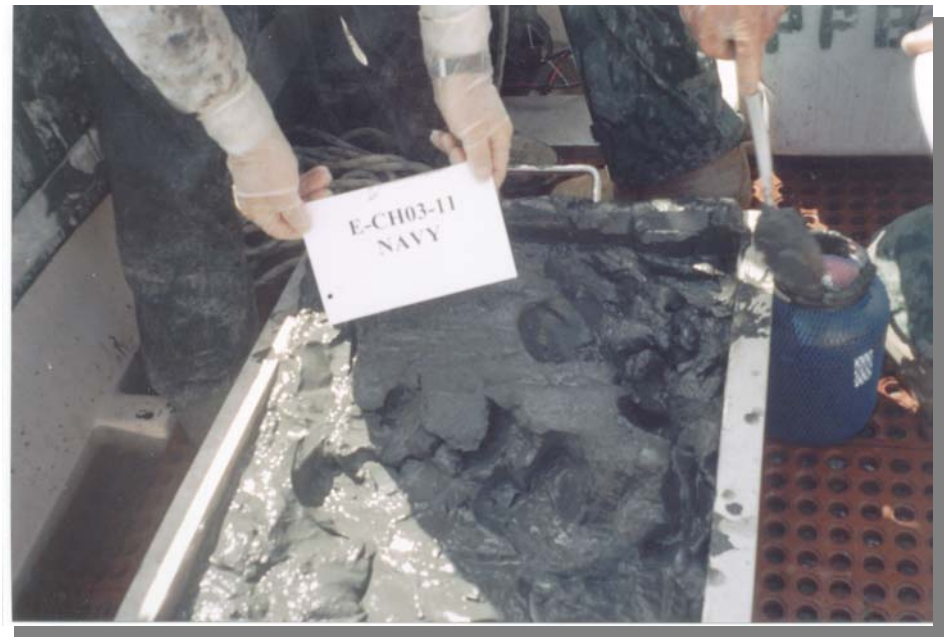

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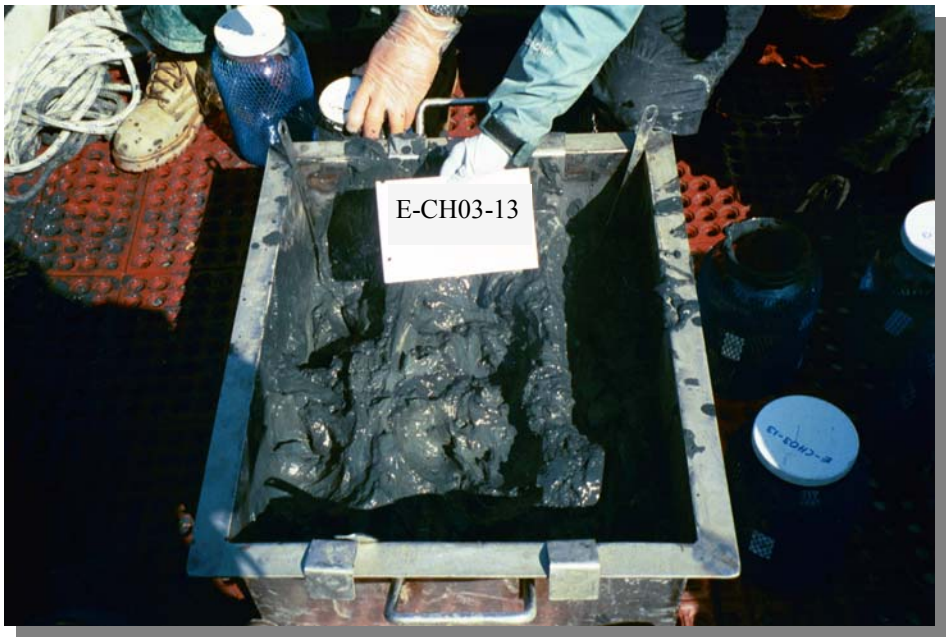

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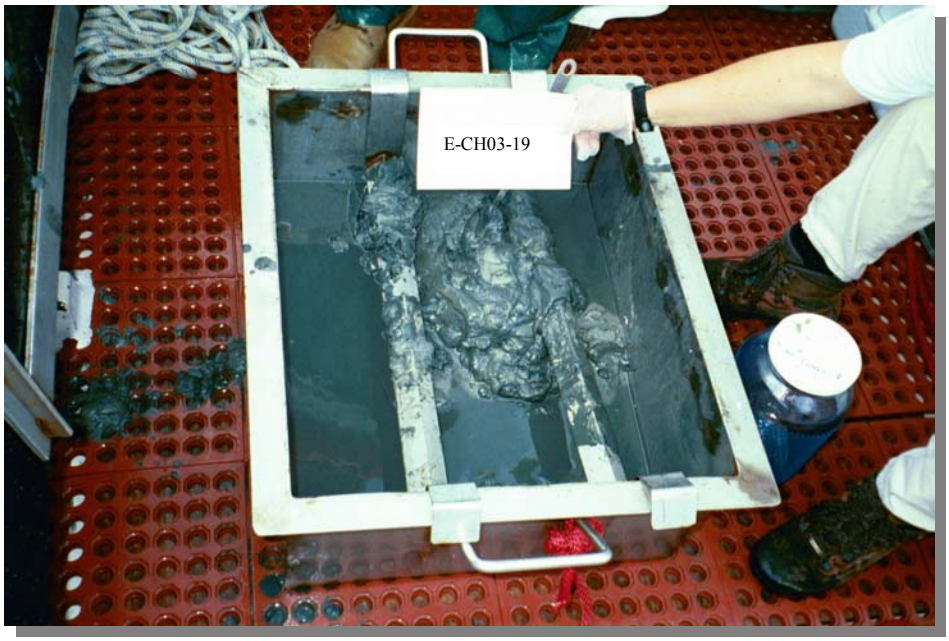

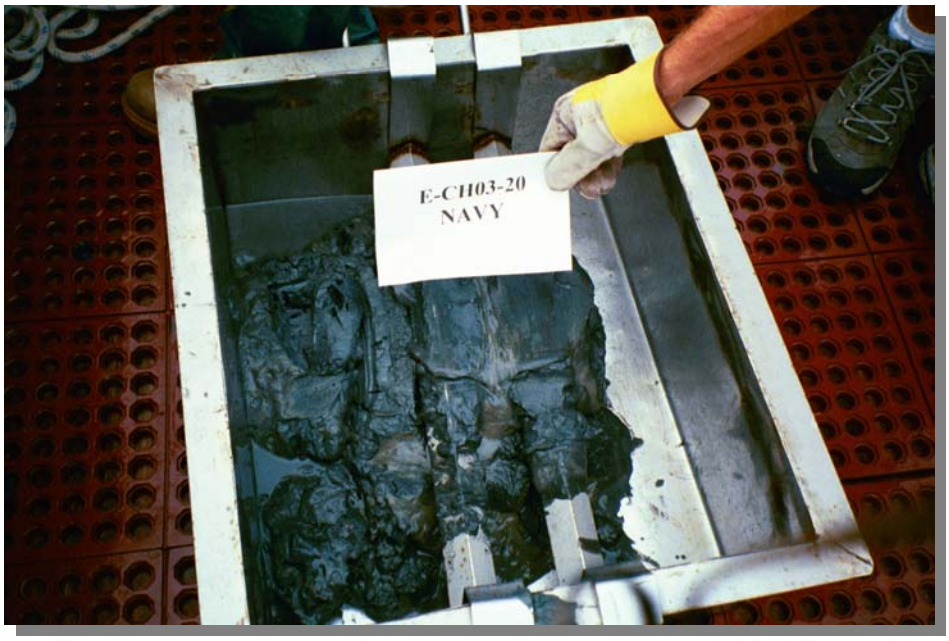

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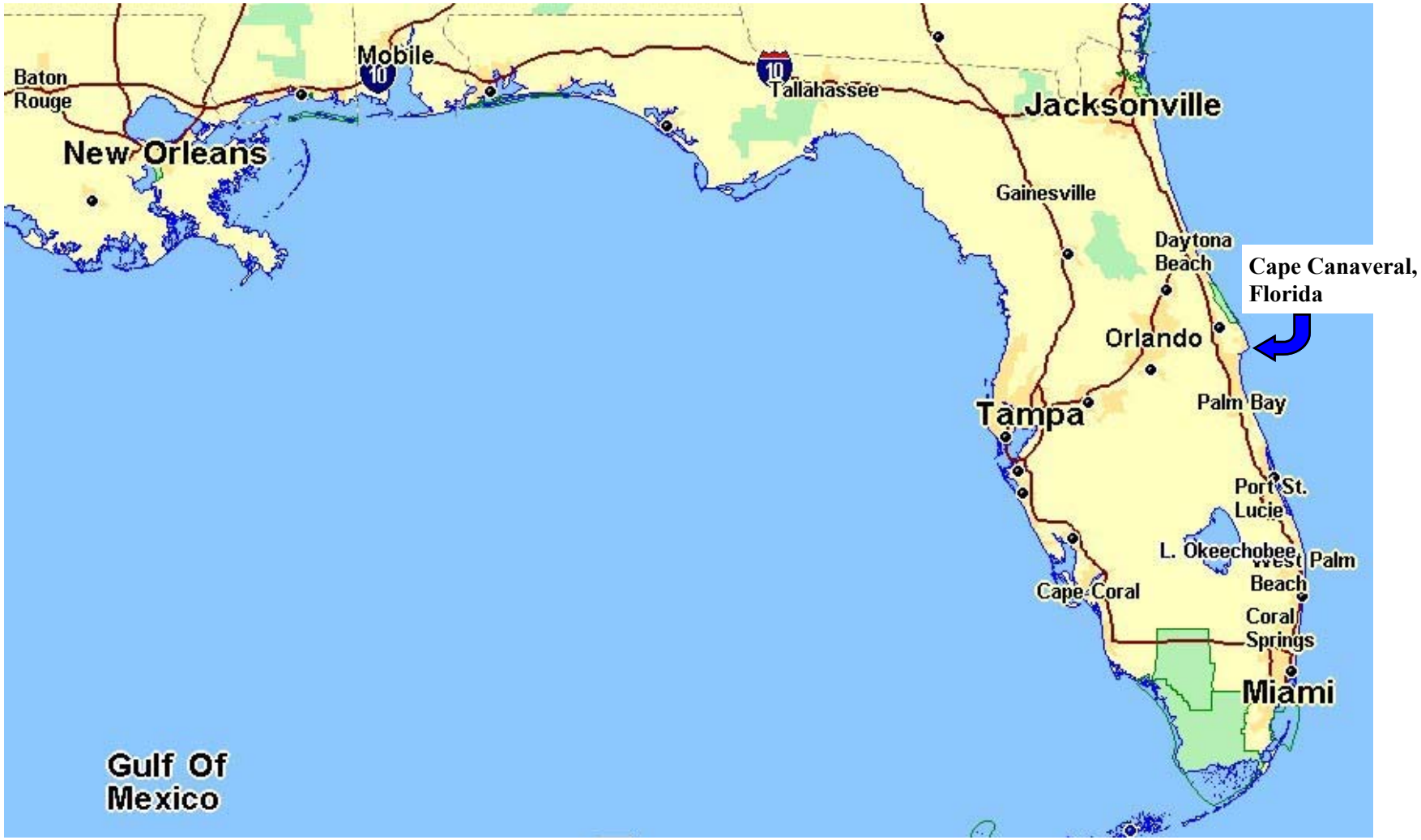
Map 1. General Location Map for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida March - May 2003



COE and Navy Sampling Sites

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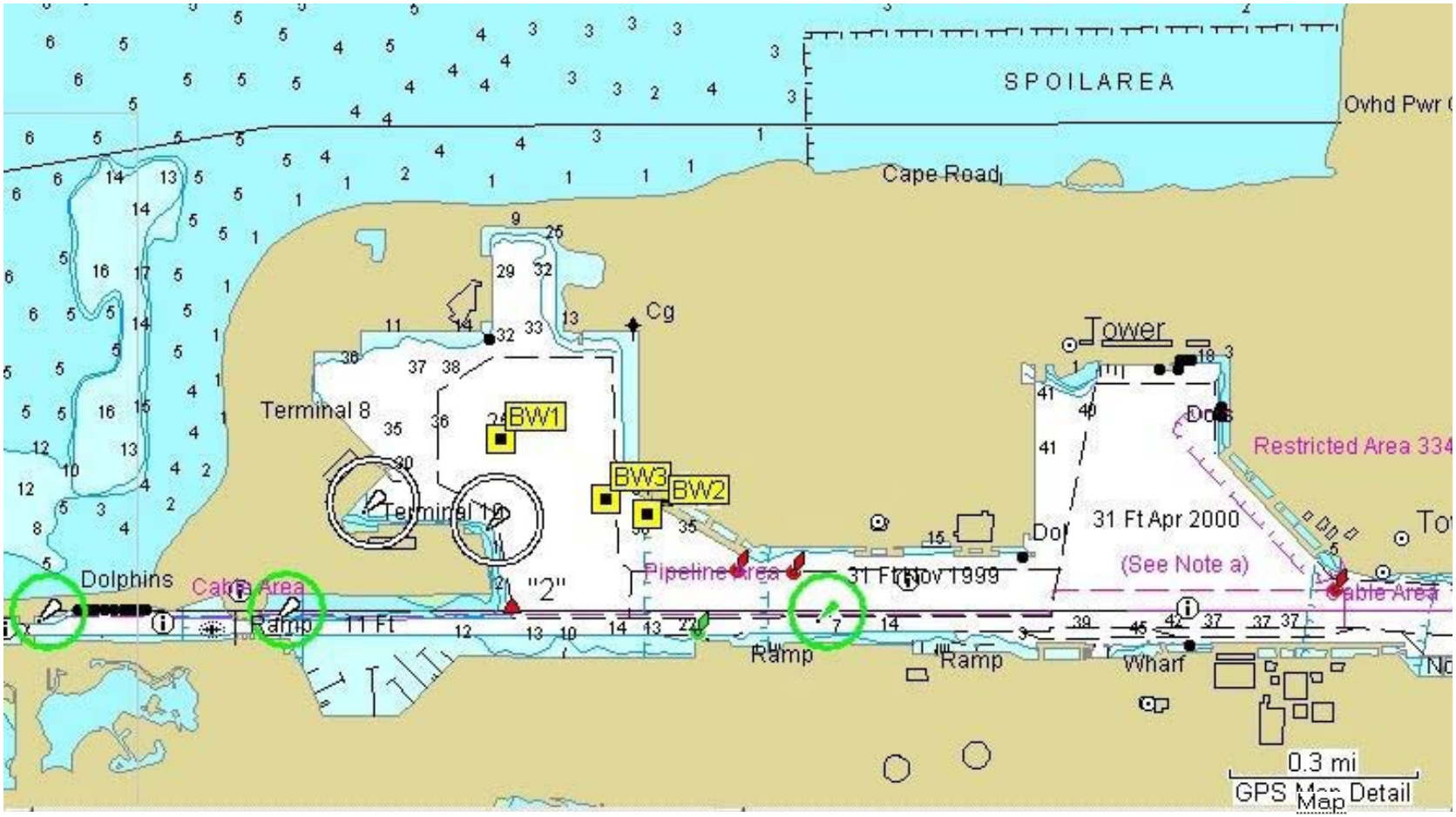
Map 2. Basin Water for Elutriate Preparation Sampling Locations for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003

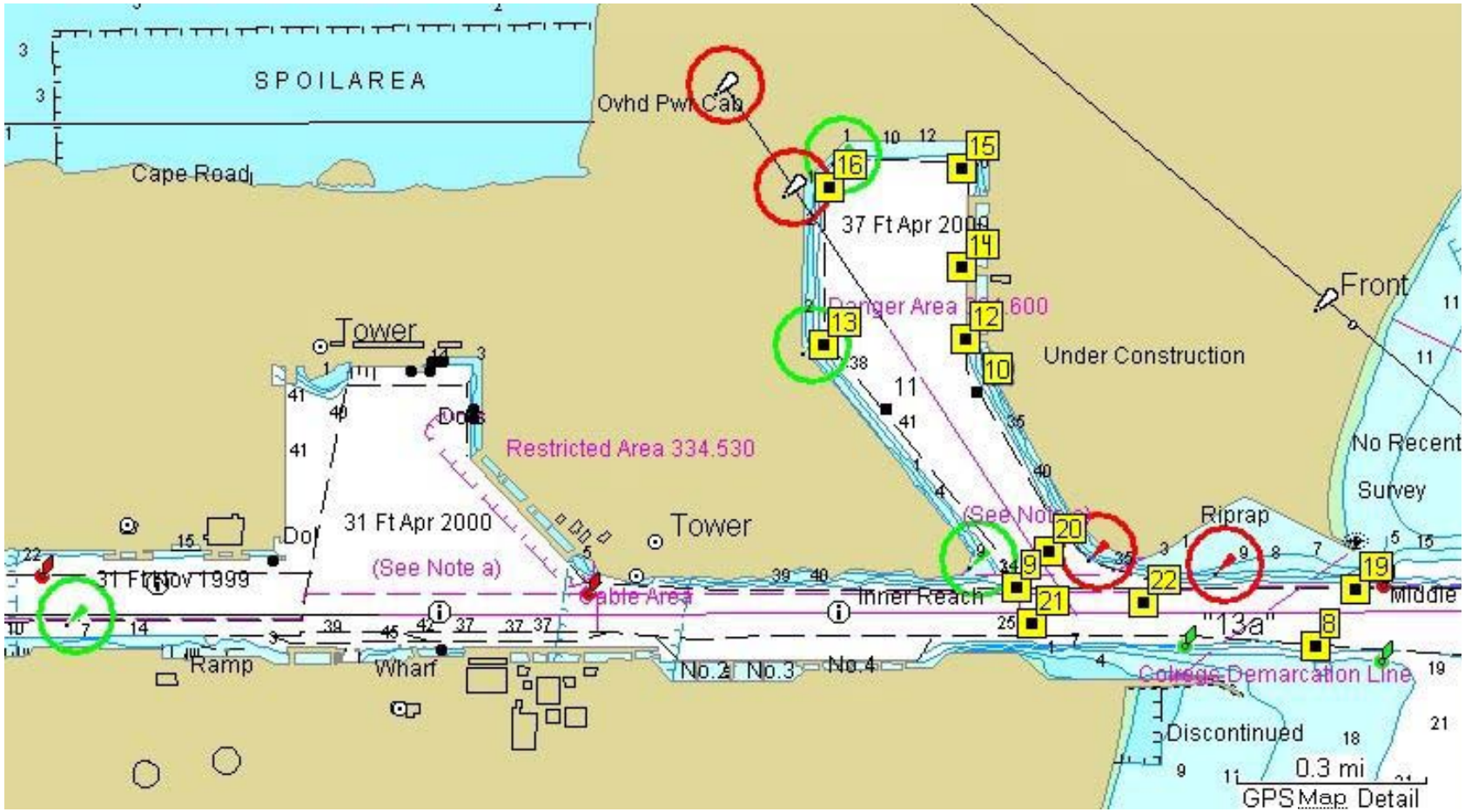


Map ID	BW1	BW2	BW3
Sample ID	Basin Water 1	Basin Water 2	Basin Water 3

COE and Navy Sampling Sites

ANAMAR Environmental Chemistry, Inc.

Map 3. General View of the Navy Trident Basin for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003



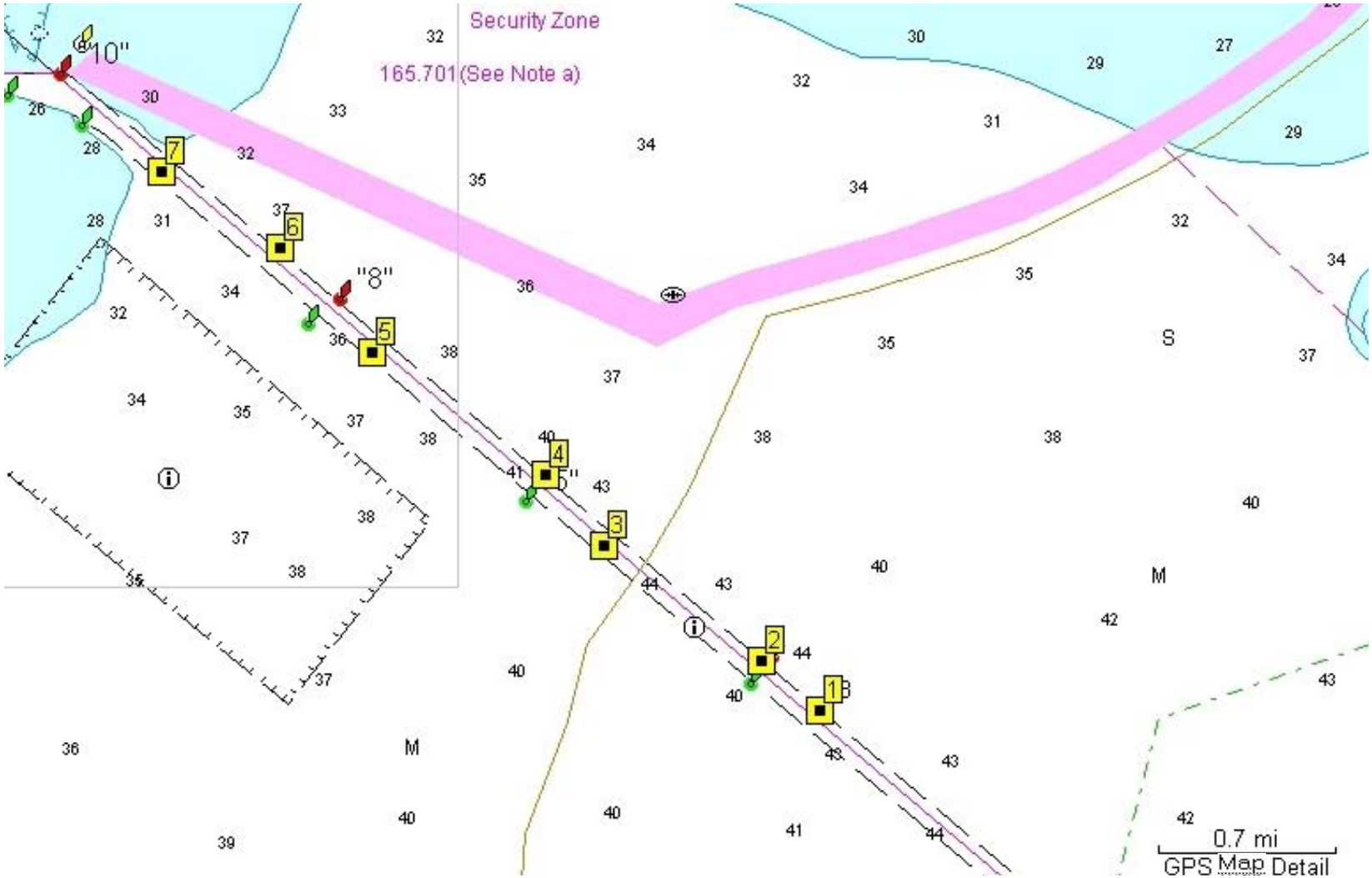
Map ID	8	9	10	11	12	13	15	16
Sample ID	E-CH03-8	E-CH03-9	E-CH03-10	E-CH03-11	E-CH03-12	E-CH03-13	E-CH03-15	E-CH03-16

Map ID	14	19	20	21	22
Station ID	E-CH03-14/ E-CH03-14 DUP	E-CH03-19	E-CH03-20	E-CH03-21	E-CH03-22

COE and Navy Sampling Sites

ANAMAR Environmental Chemistry, Inc.

Map 4. General View of the Entrance Channel for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003



Map ID	1	2	3	4	5	6	7
Sample ID	ECH03-1 / E-CH03-1 DUP	E-CH03-2	E-CH03-3	E-CH03-4	E-CH03-5	E-CH03-6	E-CH03-7

COE and Navy Sampling Sites

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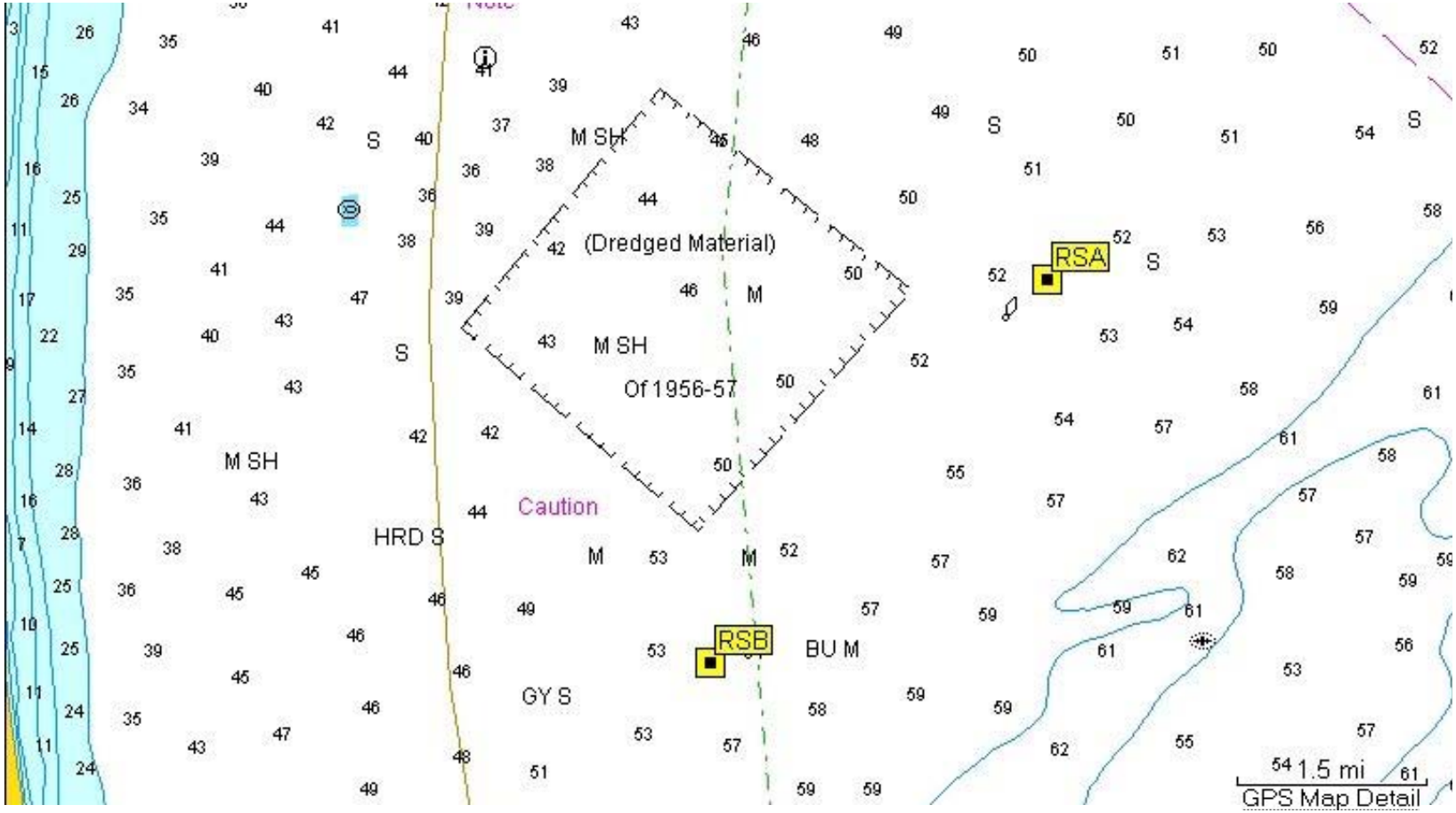
Map 5. Reference Station, Sediment Sampling Locations for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003

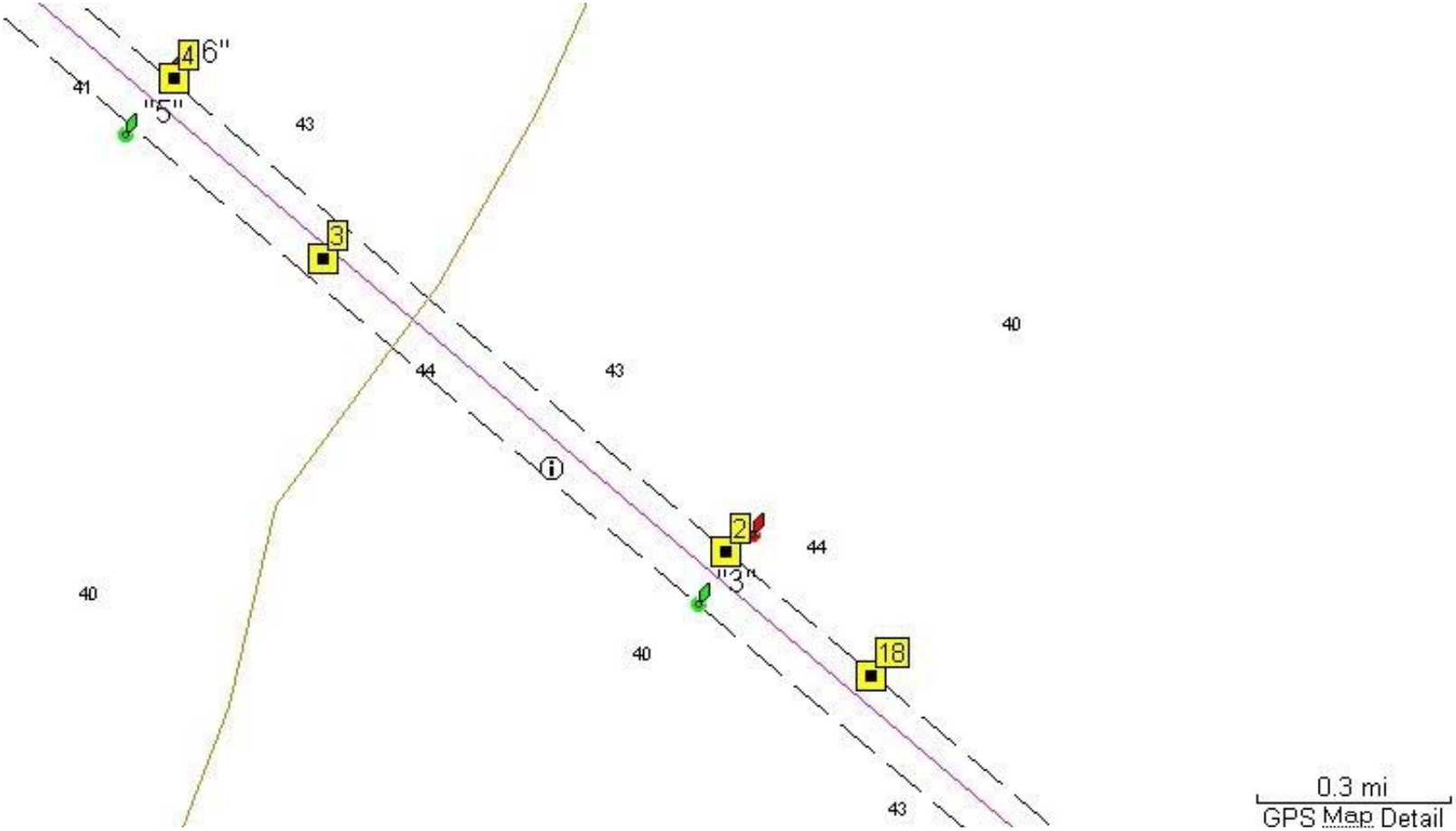


Map ID	RSA	RSB
Sample ID	RS-CH03A	RS-CH03B

COE and Navy Sampling Sites

ANAMAR Environmental Chemistry, Inc.

Map 6. Close-up View of Entrance Channel Sampling Locations for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003



Map ID	18	2	3	4
Sample ID	E-CH03-1/ E-CH03-1 DUP	E-CH03-2	E-CH03-3	E-CH03-4

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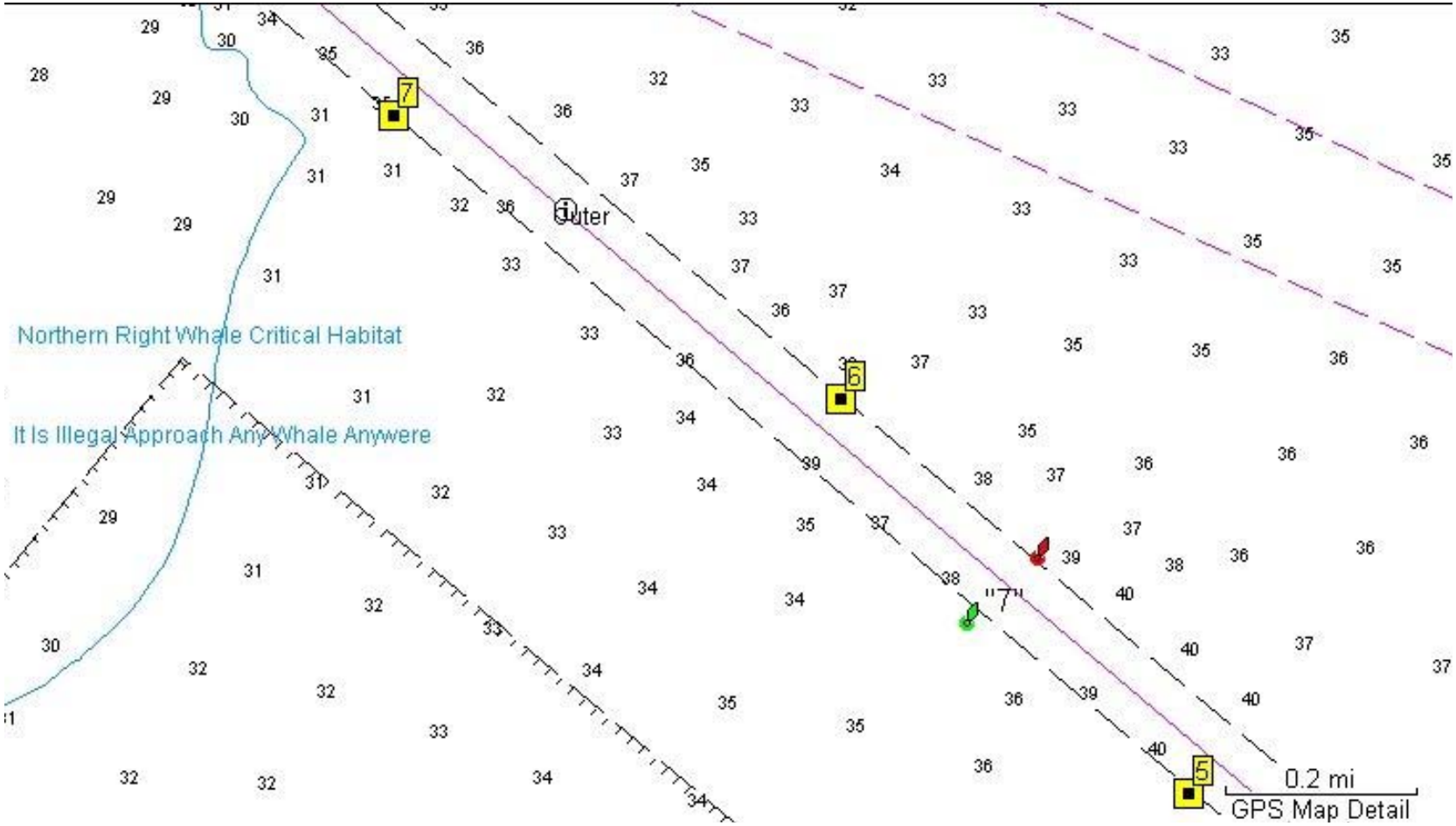
Map 7. Close-up View of Entrance Channel Sampling Locations for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003



Map ID	5	6	7
Sample ID	E-CH03-5	E-CH03-6	E-CH03-7

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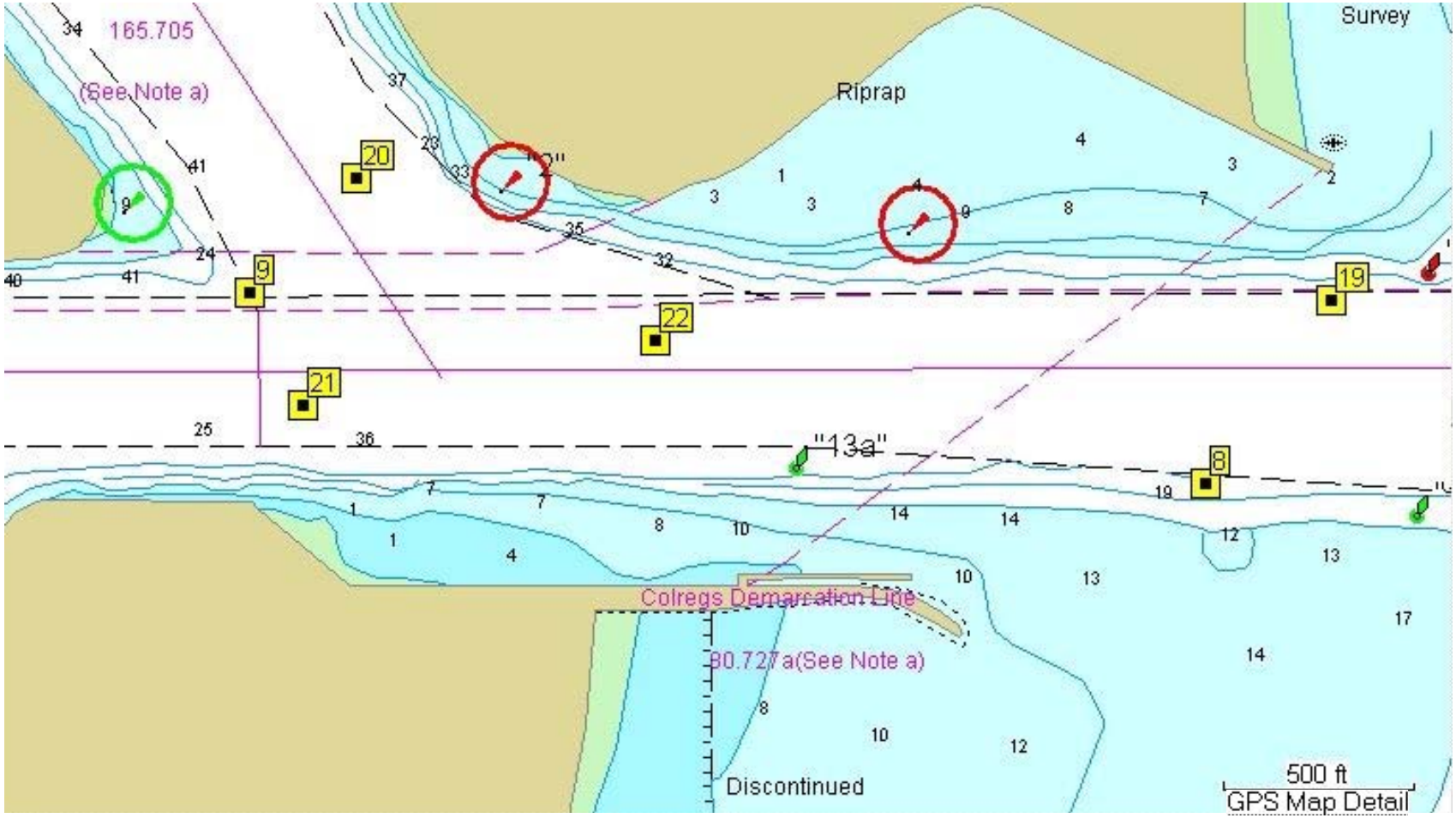
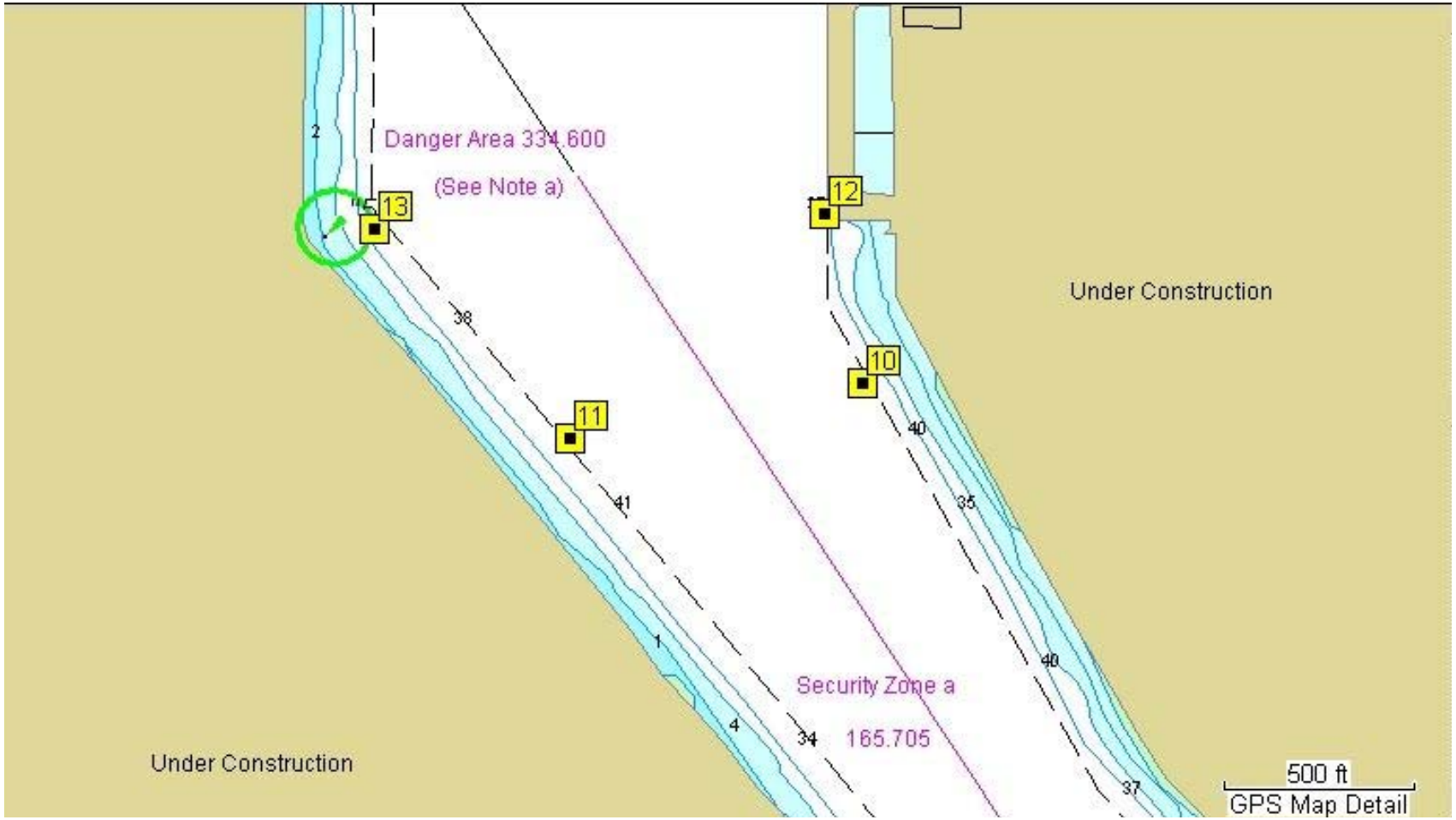
Map 8. Close-up View of Entrance Channel and Navy Trident Basin Entrance Sediment Sampling Locations for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003



Map ID	8	9	19	20	21	22
Sample ID	E-CH03-8	E-CH03-9	E-CH03-19	E-CH03-20	E-CH03-21	E-CH03-22

ANAMAR Environmental Chemistry, Inc.

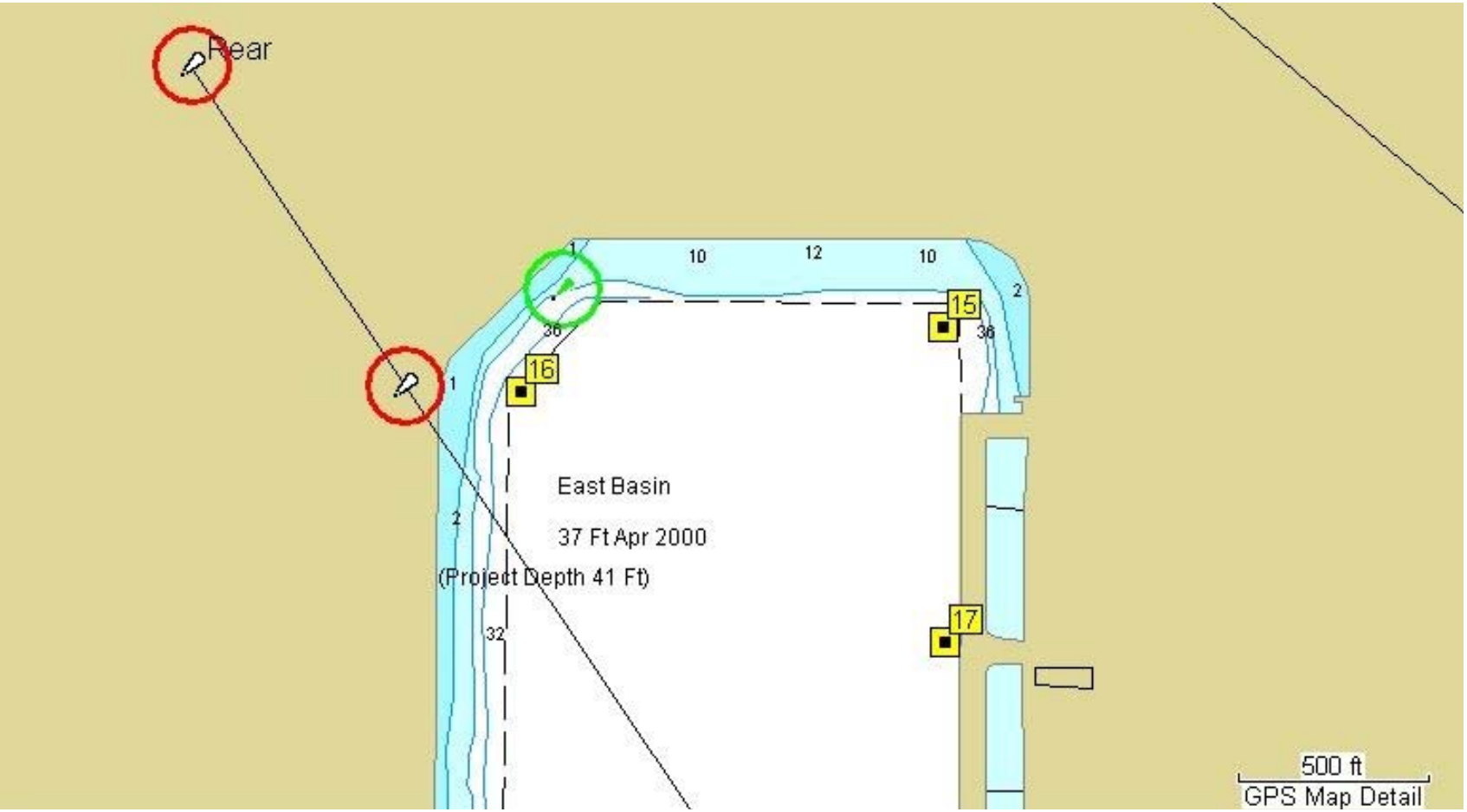
Map 9. Close-up View of Navy Trident Basin Sampling Locations for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003



Map ID	10	11	12	13
Sample ID	E-CH03-10	E-CH03-11	E-CH03-12	E-CH03-13

ANAMAR Environmental Chemistry, Inc.

Map 10. Close-up View of Navy Trident Basin Sampling Locations for Canaveral Harbor 103 Evaluation, Cape Canaveral, Florida, March - May 2003



Map ID	15	16	17
Sample ID	E-CH03-15	E-CH03-16	E-CH03-14/E-CH03-14 DUP

TABLE 1
Sediment and Tissue Analytes with Analytical Methods

Analyte	Sediment Method Number	Tissue Method Number
Aluminum	EPA 6010B	EPA 6010B
Antimony	EPA 200.8	EPA 200.8
Arsenic	EPA 200.8	EPA 200.8
Cadmium	EPA 200.8	EPA 200.8
Chromium	EPA 200.8	EPA 6010B
Copper	EPA 200.8	EPA 200.8
Iron	EPA 6010B	--
Lead	EPA 200.8	EPA 200.8
Mercury	EPA 7471A	EPA 7471A
Nickel	EPA 200.8	EPA 200.8
Silver	EPA 200.8	EPA 200.8
Zinc	EPA 200.8	EPA 200.8
Cyanide	EPA 9010B	--
Ammonia	EPA 350.1M	--
Total Organic Carbon (TOC)	EPA 415.1 & ASTM D4129-82M	--
Oil and Grease	EPA 9071A & 1664	--
Total Solids	EPA 160.3M	--
Organic Tin	Krone	GC-FPD
Sulfides	EPA 9030M	--
PAHs	EPA 8270C SIM	EPA 8270C SIM
Grain Size	ASTM D422	--
Specific Gravity	ASTM D854	--
Atterburg Limits	ASTM D4318	--
Settling Rates	Corps SAD Lab Methods	--
Lipids	--	PSEP

Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 2
Elutriate Analytes and Analytical Methods

Analyte	Method Number
Antimony	EPA 200.8
Arsenic	EPA 7062
Cadmium	EPA 200.8
Chromium	EPA 200.8
Copper	EPA 200.8
Lead	EPA 200.8
Mercury	EPA 7470A
Nickel	EPA 200.8
Silver	EPA 200.8
Zinc	EPA 200.8
Cyanide	EPA 335.2 & EPA 9010
Ammonia	EPA 350.1
Total Organic Carbon (TOC)	EPA 415.1
Oil and Grease	Method 1664
PAHs	EPA 8270C SIM
Sulfides	EPA 376.2 & EPA 9030M
Organic Tin	Krone

Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 3
Results of *In Situ* Hydrographic Measurements at Canaveral Harbor, Florida, March - May 2003

Station ID	Coordinates*	Date and Time	Depth (feet)	Sea State	Weather
E-CH03-1	28°22.401 N 80°31.531 W	04/02/03 1112	43.3	1-3 feet	Clear, sunny, wind from the north-northwest at 13.0 mph
E-CH03-2	28°22.570 N 80°31.762 W	04/02/03 1155	43.3	1-3 feet	Clear, sunny, wind from the north-northwest at 12.7 mph
E-CH03-3	28°22.972 N 80°32.370 W	04/02/03 1220	44.1	1-3 feet	Clear, sunny, wind from the north-northwest at 12.7 mph
E-CH03-4	28°23.214 N 80°32.603 W	04/02/03 1243	42.1	1-3 feet	Clear, sunny, wind from the north-northwest at 14.1 mph
E-CH03-5	28°23.633 N 80°33.278 W	04/02/03 1307	41.7	1-3 feet	Clear, sunny, wind from the north-northwest
E-CH03-6	28°23.995 N 80°33.637 W	04/02/03 1336	40.1	1-3 feet	Clear, sunny, wind from the north-northwest at 15.8 mph
E-CH03-7	28°24.251 N 80°34.094 W	04/02/03 1401	41.5	1-3 feet	Clear, sunny, wind from northwest at 6.7 mph
E-CH03-8	28 24.533 N 80 35.076 W	04/01/03 1250	39.4	1-3 feet	Clear, sunny, wind from the north at 17 mph
E-CH03-9	28 24.615 N 80 35.545 W	03/31/03 1109	43.8	Less than 2 feet	Clear, sunny, wind from the northwest at 21.6 mph
E-CH03-10	28°24.883 N 80°35.604 W	04/01/03 1420	40.6	Calm	Clear, sunny, wind from the north-northeast at 10.5 mph
E-CH03-11	28°24.858 N 80°35.745 W	04/02/03 0924	42.9	Calm	Clear, sunny, wind from the north-northwest at 8.5 mph
E-CH03-12	28°24.961 N 80°35.634 W	04/01/03 1346	38.8	1-2 feet	Clear, sunny, wind from north at 15.1 mph
E-CH03-13	28°24.947 N 80°35.841 W	04/01/03 0930	42.7	Less than 1 foot	Clear, sunny, wind from north-northeast at 13.7 mph
E-CH03-14	28°25.055 N 80°35.629 W	03/31/03 1554	40.7	Less than 1 foot	Clear, sunny, wind from north at 17.7 mph
E-CH03-15	28°25.190 N 80°35.627 W	03/31/03 1332	38.9	Less than 1 foot	Clear, sunny, wind from north at 17.7 mph

TABLE 3
Results of *In Situ* Hydrographic Measurements at Canaveral Harbor, Florida, March - May 2003

Station ID	Coordinates*	Date and Time	Depth (feet)	Sea State	Weather
E-CH03-16	28°25.144 N 80°35.837 W	04/01/03 0835	43.7	Calm	Clear, sunny, wind from northeast at 8.2 mph
E-CH03-17	28°25.056 N 80°35.629	03/31/03 1635	40.8	Less than 1 foot	Clear, sunny, wind from north at 18.2 mph
E-CH03-18	28°22.401 N 80°31.531 W	04/02/03 1220	43.3	1-3 feet	Clear, sunny, wind from north-northwest at 13.0 mph
E-CH03-19	28°24.612 N 80°35.014 W	05/14/03 0910	39.0	Calm	Overcast, warm , humid , wind from Northeast at 1.0 mph
E-CH03-20	28°24.664 N 80°35.491 W	05/14/03 0650	43.0	Calm	Overcast, warm, humid, wind from East at 3.7 mph
E-CH03-21	28°24.563 N 80°35.520 W	05/14/03 0725	45.0	Calm	Overcast, warm, humid , wind East-Northeast at 0.7 mph
E-CH03-22	28°24.594 N 80°35.344 W	05/14/03 0745	45.0	Calm	Overcast, warm, humid, wind at 0.6 mph
RS-CH03-A	28°18.977 N 80°28.207 W	04/03/03 1004	53.7	Calm	Clear, sunny, wind at 2.2 mph
RS-CH03-B	28°16.350 N 80°30.833 W	04/03/03 1158	53.4	Calm	Clear, sunny, wind from north-northeast at 5.3 mph
Basin Water 1	28°24.816 N 80°37.526 W	04/10/03 0711	28.7	Choppy	Cold, overcast, cold front and rain moving through night
Basin Water 2	28°24.711 N 80°37.297 W	04/17/03 1015	10.0	Calm	Warm, clear, very sunny
Basin Water 3	28°24.734 N 80°37.373 W	05/14/03 0955	35.0	Calm	Clear and sunny, warm , humid, wind from Southeast at 3-2 mph

*Coordinate Datum: NAD 1983, dd° mm.mmm

Source: ANAMAR Environmental Chemistry, Inc.

TABLE 3

Results of *In Situ* Hydrographic Measurements at Canaveral Harbor, Florida, March - May 2003

Below are the tides, sunrise, sunset and moon-phase times for Trident Pier, Port Canaveral, Florida from March 31 to April 11 and May 5-8, 2003

Date	Time	Tide	Description
03/31/03	0033	0.03 feet	Low tide
03/31/03	0522	--	Twilight begins
03/31/03	0552	--	Moonrise
03/31/03	0614	--	Sunrise
03/31/03	0650	3.58 feet	High tide
03/31/03	1254	0.06 feet	Low tide
03/31/03	1751	--	Moonset
03/31/03	1839	--	Sunset
03/31/03	1909	3.59 feet	High tide
03/31/03	1931	--	Twilight ends
04/01/03	0114	0.02 feet	Low tide
04/01/03	0521	--	Twilight begins
04/01/03	0612	--	Sunrise
04/01/03	0621	--	Moonrise
04/01/03	0726	3.50 feet	High tide
04/01/03	1326	0.01 feet	Low tide
04/01/03	1420	--	New moon
04/01/03	1840	--	Sunset
04/01/03	1843	--	Moonset
04/01/03	1931	--	Twilight ends
04/01/03	1946	3.71 feet	High tide
04/02/03	0152	0.05 feet	Low tide
04/02/03	0520	--	Twilight begins
04/02/03	0611	--	Sunrise
04/02/03	0649	--	Moonrise
04/02/03	0802	3.39 feet	High tide
04/02/03	1359	0.01 feet	Low tide
04/02/03	1840	--	Sunset
04/02/03	1932	--	Twilight ends
04/02/03	1935	--	Moonset
04/02/03	2023	3.78 feet	High tide
04/03/03	0231	0.12 feet	Low tide
04/03/03	0519	--	Twilight begins
04/03/03	0610	--	Sunrise

TABLE 3

Results of *In Situ* Hydrographic Measurements at Canaveral Harbor, Florida, March - May 2003

Below are the tides, sunrise, sunset and moon-phase times for Trident Pier, Port Canaveral, Florida from March 31 to April 11 and May 5-8, 2003

Date	Time	Tide	Description
04/03/03	0717	--	Moonrise
04/03/03	0837	3.26 feet	High tide
04/03/03	1432	0.05 feet	Low tide
04/03/03	1841	--	Sunset
04/03/03	1932	--	Twilight ends
04/03/03	2028	--	Moonset
04/03/03	2059	3.80 feet	High tide
04/04/03	0310	0.23 feet	Low tide
04/04/03	0517	--	Twilight begins
04/04/03	0609	--	Sunrise
04/04/03	0748	--	Moonrise
04/04/03	0913	3.11 feet	High tide
04/04/03	1507	0.14 feet	Low tide
04/04/03	1841	--	Sunset
04/04/03	1933	--	Twilight ends
04/04/03	2122	--	Moonset
04/04/03	2137	3.76 feet	High tide
04/05/03	0351	0.36 feet	Low tide
04/05/03	0516	--	Twilight begins
04/05/03	0608	--	Sunrise
04/05/03	0821	--	Moonrise
04/05/03	0950	2.95 feet	High tide
04/05/03	1544	0.26 feet	Low tide
04/05/03	1842	--	Sunset
04/05/03	1934	--	Twilight ends
04/05/03	2215	3.69 feet	High tide
04/05/03	2217	--	Moonset
04/06/03	0535	0.51 feet	Low tide
04/06/03	0615	--	Twilight begins
04/06/03	0707	--	Sunrise
04/06/03	0958	--	Moonrise
04/06/03	1128	2.79 feet	High tide
04/06/03	1725	0.38 feet	Low tide
04/06/03	1942	--	Sunset

TABLE 3

Results of *In Situ* Hydrographic Measurements at Canaveral Harbor, Florida, March - May 2003

Below are the tides, sunrise, sunset and moon-phase times for Trident Pier, Port Canaveral, Florida from March 31 to April 11 and May 5-8, 2003

Date	Time	Tide	Description
04/06/03	2034	--	Twilight ends
04/06/03	2356	3.59 feet	High tide
04/07/03	0012	--	Moonset
04/07/03	0614	--	Twilight begins
04/07/03	0623	0.65 feet	Low tide
04/07/03	0706	--	Sunrise
04/07/03	1040	--	Moonrise
04/07/03	1209	2.65 feet	High tide
04/07/03	1810	0.49 feet	Low tide
04/07/03	1943	--	Sunset
04/07/03	2035	--	Twilight ends
04/08/03	0042	3.49 feet	High tide
04/08/03	0108	--	Moonset
04/08/03	0613	--	Twilight begins
04/08/03	0704	--	Sunrise
04/08/03	0714	0.74 feet	Low tide
04/08/03	1128	--	Moonrise
04/08/03	1256	2.55 feet	High tide
04/08/03	1902	0.54 feet	Low tide
04/08/03	1944	--	Sunset
04/08/03	2036	--	Twilight ends
04/09/03	0134	3.43 feet	High tide
04/09/03	0202	--	Moonset
04/09/03	0611	--	Twilight begins
04/09/03	0703	--	Sunrise
04/09/03	0809	0.77 feet	Low tide
04/09/03	1221	--	Moonrise
04/09/03	1352	2.51 feet	High tide
04/09/03	1941	--	First quarter
04/09/03	1944	--	Sunset
04/09/03	1959	0.54 feet	Low tide
04/09/03	2036	--	Twilight ends
04/10/03	0234	3.44 feet	High tide
04/10/03	0253	--	Moonset

TABLE 3

Results of *In Situ* Hydrographic Measurements at Canaveral Harbor, Florida, March - May 2003

Below are the tides, sunrise, sunset and moon-phase times for Trident Pier, Port Canaveral, Florida from March 31 to April 11 and May 5-8, 2003

Date	Time	Tide	Description
04/10/03	0610	--	Twilight begins
04/10/03	0702	--	Sunrise
04/10/03	0905	0.70 feet	Low tide
04/10/03	1320	--	Moonrise
04/10/03	1456	2.60 feet	High tide
04/10/03	1945	--	Sunset
04/10/03	2037	--	Twilight ends
04/10/03	2100	0.46 feet	Low tide
04/11/03	0336	3.53 feet	High tide
04/11/03	0341	--	Moonset
04/11/03	0609	--	Twilight begins
04/11/03	0701	--	Sunrise
04/11/03	1001	0.55 feet	Low tide
04/11/03	1422	--	Moonrise
04/11/03	1601	2.82 feet	High tide
04/11/03	1945	--	Sunset
04/11/03	2037	--	Twilight ends
04/11/03	2202	0.30 feet	Low tide
05/05/03	0513	0.53 feet	Low tide
05/05/03	0543	--	Twilight begins
05/05/03	0638	--	Sunrise
05/05/03	0924	--	Moonrise
05/05/03	1104	2.74 feet	High tide
05/05/03	1654	0.39 feet	Low tide
05/05/03	1959	--	Sunset
05/05/03	2054	--	Twilight ends
05/05/03	2331	3.80 feet	High tide
05/05/03	2357	--	Moonset
05/06/03	0543	--	Twilight begins
05/06/03	0601	0.60 feet	Low tide
05/06/03	0638	--	Sunrise
05/06/03	1015	--	Moonrise
05/06/03	1147	2.66 feet	High tide
05/06/03	1741	0.47 feet	Low tide

TABLE 3

Results of *In Situ* Hydrographic Measurements at Canaveral Harbor, Florida, March - May 2003

Below are the tides, sunrise, sunset and moon-phase times for Trident Pier, Port Canaveral, Florida from March 31 to April 11 and May 5-8, 2003

Date	Time	Tide	Description
05/06/03	2000	--	Sunset
05/06/03	2055	--	Twilight ends
05/07/03	0016	3.72 feet	High tide
05/07/03	0049	--	Moonset
05/07/03	0542	--	Twilight begins
05/07/03	0637	--	Sunrise
05/07/03	0651	0.63 feet	Low tide
05/07/03	1111	--	Moonrise
05/07/03	1235	2.62 feet	High tide
05/07/03	1834	0.52 feet	Low tide
05/07/03	2000	--	Sunset
05/07/03	2056	--	Twilight ends
05/08/03	0105	3.66 feet	High tide
05/08/03	0137	--	Moonset
05/08/03	0541	--	Twilight begins
05/08/03	0636	--	Sunrise
05/08/03	0743	0.60 feet	Low tide
05/08/03	1210	--	Moonrise
05/08/03	1330	2.66 feet	High tide
05/08/03	1932	0.52 feet	Low tide
05/08/03	2001	--	Sunset
05/08/03	2056	--	Twilight ends

Source: *WTides,* Version 2.1.5 (software)

Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 4
Depth Profile *In Situ* Data from Canaveral Harbor, Florida, March - May 2003

Station ID	Sampling Depth (feet)	Temp (°C)	pH (units)	Dissolved O_2 (ppm)	Salinity (ppt)	Conductivity (mmhos/cm)	Turbidity (NTU)
E-CH03-1	1	19.38	7.89	7.01	33.04	50.24	3.3
	21.6	18.94	7.97	6.49	37.73	49.84	2.7
	40.3	18.82	7.93	6.41	32.67	49.78	9.3
E-CH03-2	1	19.37	8.01	6.42	32.65	49.79	7.0
	21.6	19.12	8.01	6.21	32.65	49.81	3.3
	40.3	18.97	8.02	6.07	32.70	49.83	9.2
E-CH03-3	1	19.56	8.07	5.82	32.66	49.80	3.1
	22	19.35	8.07	5.62	32.66	49.79	3.3
	41.1	19.05	8.05	5.16	32.64	49.76	10.1
E-CH03-4	1	19.62	8.08	5.77	32.69	49.81	3.4
	21	19.24	8.07	5.54	32.69	49.81	3.2
	39.1	19.06	8.05	5.02	32.65	49.77	6.9
E-CH03-5	1	19.72	8.07	5.40	32.64	49.77	3.7
	20.8	19.62	8.07	4.99	32.63	49.77	3.8
	38.7	19.02	8.05	4.75	32.63	49.75	10.6
E-CH03-6	1	19.50	8.06	4.89	32.60	49.74	4.1
	20	19.50	8.06	4.56	32.64	49.75	10.3
	37.1	19.50	8.04	4.37	32.62	49.77	18.3
E-CH03-7	1	19.52	8.07	4.62	32.65	49.78	4.3
	21.8	19.50	8.07	4.30	32.66	49.79	4.7
	38.5	19.15	8.05	4.09	32.66	49.77	11.7
E-CH03-8	1	19.48	7.84	6.80	32.45	49.51	3.9
	18.2	19.17	7.86	7.09	32.51	49.61	4.3
	36.4	19.10	7.87	7.10	32.54	49.61	1.0
E-CH03-9	1	19.86	8.06	5.62	32.79	49.96	4.5
	21.5	19.54	8.08	5.36	32.85	50.03	10.2
	40.8	18.53	8.07	5.42	32.97	50.19	22.5

TABLE 4
Depth Profile *In Situ* Data from Canaveral Harbor, Florida, March - May 2003

Station ID	Sampling Depth (feet)	Temp (°C)	pH (units)	Dissolved O_2 (ppm)	Salinity (ppt)	Conductivity (mmhos/cm)	Turbidity (NTU)
E-CH03-10	1	20.92	7.91	6.63	32.53	49.58	3.6
	20.3	19.26	7.86	6.07	32.60	49.70	2.6
	37.6	19.21	7.87	5.82	32.39	49.70	2.8
E-CH03-11	1	19.24	7.79	5.88	32.53	49.61	3.3
	21.5	19.09	7.92	5.92	32.55	49.63	2.8
	39.9	19.13	7.89	5.06	32.60	49.71	6.7
E-CH03-12	1	19.29	7.77	6.43	32.57	49.69	2.2
	19.5	19.13	7.78	5.42	32.59	49.68	2.8
	35.8	19.07	7.79	5.31	32.57	49.64	2.8
E-CH03-13	1	18.95	7.88	6.13	32.57	49.65	5.2
	21.5	18.83	7.91	5.63	32.59	49.62	4.7
	39.7	18.94	7.91	5.39	32.55	49.93	5.3
E-CH03-14	1	19.30	7.94	4.72	32.95	50.19	6.0
	20.3	19.25	8.03	5.02	32.99	50.21	8.2
	37.7	19.03	8.04	4.84	33.00	50.25	15.5
E-CH03-15	1	19.61	7.94	5.14	32.70	49.84	8.5
	19.5	19.46	8.01	4.34	33.02	50.33	6.3
	35.9	19.44	7.94	3.31	33.10	50.40	9.5
E-CH03-16	1	18.93	7.83	5.75	32.58	49.68	6.0
	21.5	19.01	7.89	5.42	32.61	49.71	5.3
	40.7	18.93	7.91	5.25	32.56	49.64	5.5
E-CH03-17	1	19.35	8.01	4.50	32.90	50.14	6.3
	20.4	19.25	8.05	4.77	33.00	50.24	8.7
	37.8	19.02	8.05	4.80	32.99	50.10	12.8

TABLE 4
Depth Profile *In Situ* Data from Canaveral Harbor, Florida, March - May 2003

Station ID	Sampling Depth (feet)	Temp (°C)	pH (units)	Dissolved O_2 (ppm)	Salinity (ppt)	Conductivity (mmhos/cm)	Turbidity (NTU)
	1	19.38	7.89	7.01	33.04	50.24	3.3
E-CHO3-18	21.6	18.94	7.97	6.49	32.73	49.84	2.7
	40.3	18.82	7.93	6.41	32.67	49.78	9.3
	1	19.52	8.08	7.15	33.01	50.26	0.1
RS-CH03-A	26.8	19.24	8.07	7.10	33.02	50.28	0.8
	50.7	19.74	8.10	6.67	33.52	50.96	4.3
	1	20.25	8.17	7.00	32.99	50.14	0.8
RS-CH03-B	26.8	19.13	8.18	6.86	33.18	50.44	6.1
	50.4	18.88	8.16	6.56	33.47	50.86	7.9

NOTE: As per contract, *in situ* data were not collected for Stations E-CH03-19, E-CH03-20, E-CH03-21, and E-CH03-22.

Source: ANAMAR Environmental Chemistry, Inc.

TABLE 5
Results of Physical Analyses (Specific Gravity, Atterberg Limits, and Percent Solids) from Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample Number	Specific Gravity	Atterberg Limits			Percent Solids
		Liquid Limit (Percent)	Plastic Limit (Percent)	Plasticity Index	
E-CH03-1	2.627	117	49	68	37.5
E-CH03-2	2.617	101	45	56	53.3
E-CH03-3	2.587	156	62	94	33.0
E-CH03-4	2.570	165	65	100	30.5
E-CH03-5	2.628	129	46	83	37.3
E-CH03-6	2.641	50	31	19	56.5
E-CH03-7	2.580	165	63	102	31.0
E-CH03-8	2.662	NP	NP	NP	63.2
E-CH03-9	2.614	103	50	53	38.4
E-CH03-10	2.581	196	80	116	24.1
E-CH03-11	2.539	197	78	119	23.7
E-CH03-12	2.635	145	69	76	40.1
E-CH03-13	2.528	188	70	118	22.8
E-CH03-14	2.570	206	71	135	22.8
E-CH03-15	2.582	208	76	132	22.1
E-CH03-16	2.569	199	66	133	23.1
E-CH03-19	2.659	30	28	2	68.5
E-CH03-20	2.648	56	27	29	50.3
E-CH03-21/22	2.652	45	32	13	54.4
RS-CH03	2.665	45	32	13	65.0

NP = Non Plastic

Source: MACTEC Engineering and Consulting, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 6

Results of Physical Analyses (Grain Size) from Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample ID	Gravel (Percent)	Sand (Percent)	Silt/Clay (Percent)
E-CH03-1	0.0	13.3	86.7
E-CH03-2	0.0	20.8	79.2
E-CH03-3	0.0	5.8	94.2
E-CH03-4	0.0	4.5	95.5
E-CH03-5	0.0	24.9	75.1
E-CH03-6	0.0	46.9	53.1
E-CH03-7	0.0	2.8	97.2
E-CH03-8	0.0	73.8	26.2
E-CH03-9	0.0	35.2	64.8
E-CH03-10	0.0	3.9	96.1
E-CH03-11	0.0	2.7	97.3
E-CH03-12	16.4	64.2	19.4
E-CH03-13	0.0	5.6	94.4
E-CH03-14	0.0	6.5	93.5
E-CH03-15	0.0	5.7	94.3
E-CH03-16	0.0	5.6	94.4
E-CH03-19	0.0	82.0	18.0
E-CH03-20	0.0	58.0	42.0
E-CH03-21/22	0.0	66.2	33.8
RS-CH03	0.3	51.3	48.4
Statistical Values			
Maximum	16.4	73.8	97.3
Minimum	0.0	2.7	19.4
Average	1.0	22.0	77.0
90 Percent Exceed	0.0	3.5	39.5
50 Percent Exceed	0.0	6.5	93.5
10 Percent Exceed	0.1	56.5	96.5

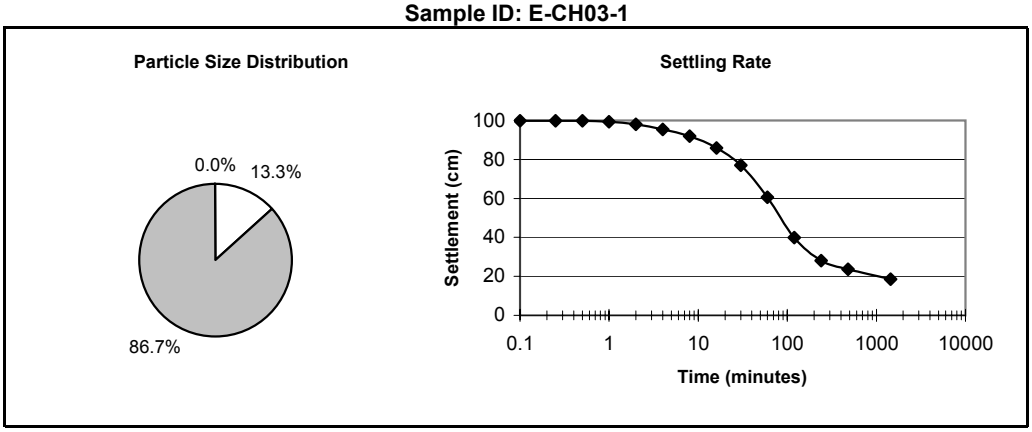
Source: MACTEC Engineering and Consulting, Inc.

Compiled by ANAMAR Environmental Chemistry, Inc.

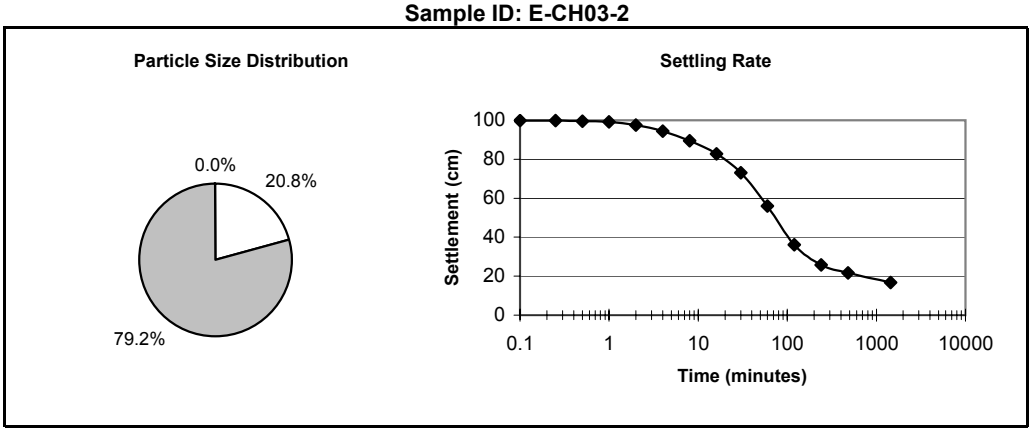
TABLE 6A

Particle Size Distribution and Settling Rate for Canaveral Harbor 103 Evaluation, Canaveral Harbor, Florida, March - May 2003

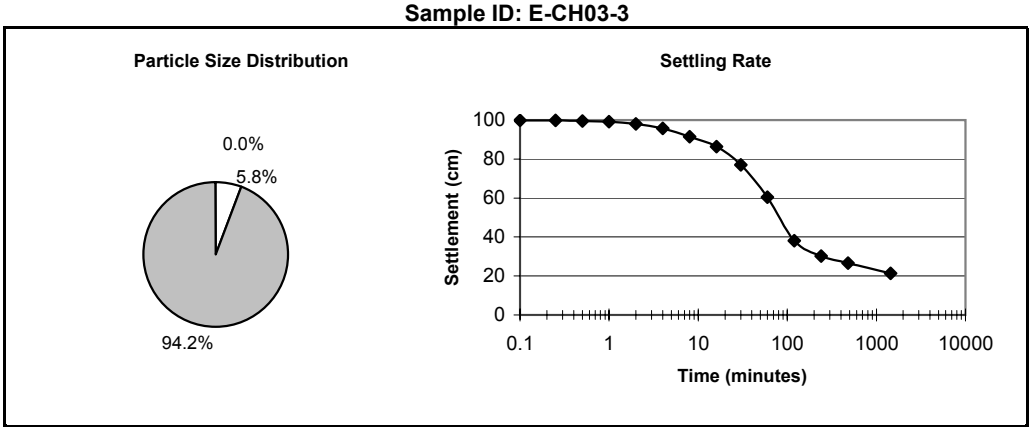
Sample ID: E-CH03-1



Sample ID: E-CH03-2



Sample ID: E-CH03-3

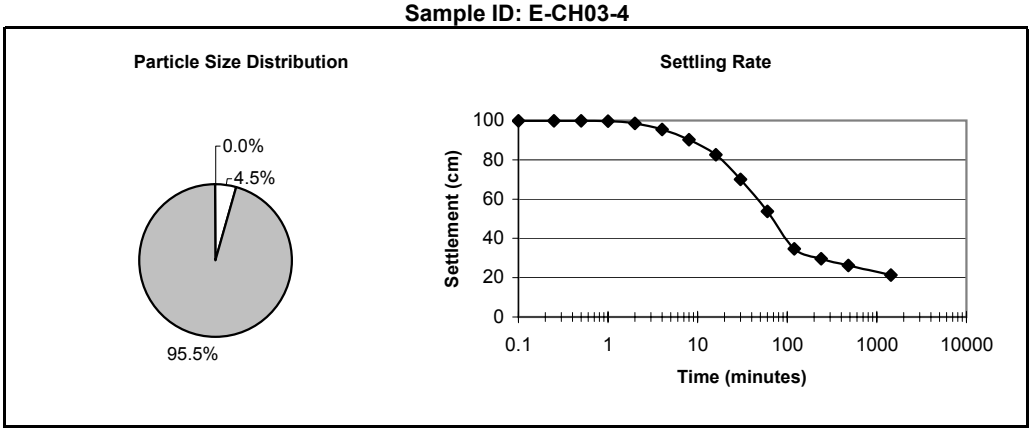


Gravel **Sand** **Silt/Clay**

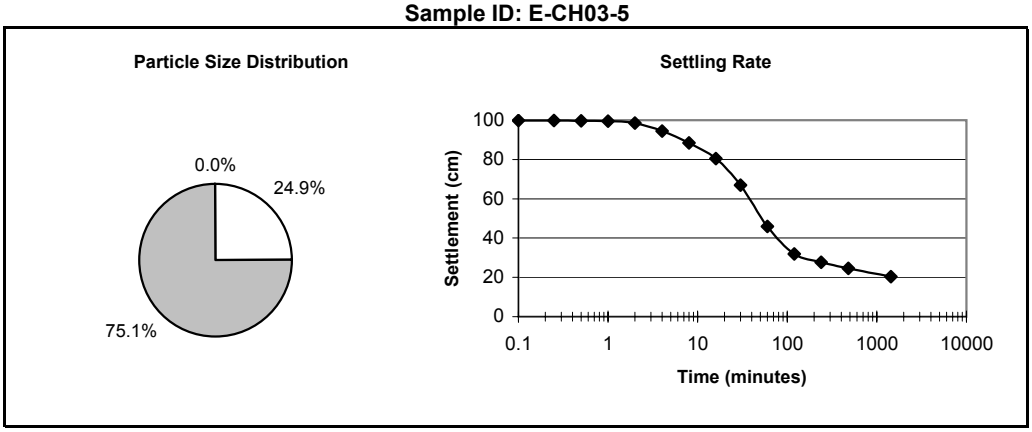
TABLE 6A

Particle Size Distribution and Settling Rate for Canaveral Harbor 103 Evaluation, Canaveral Harbor, Florida, March - May 2003

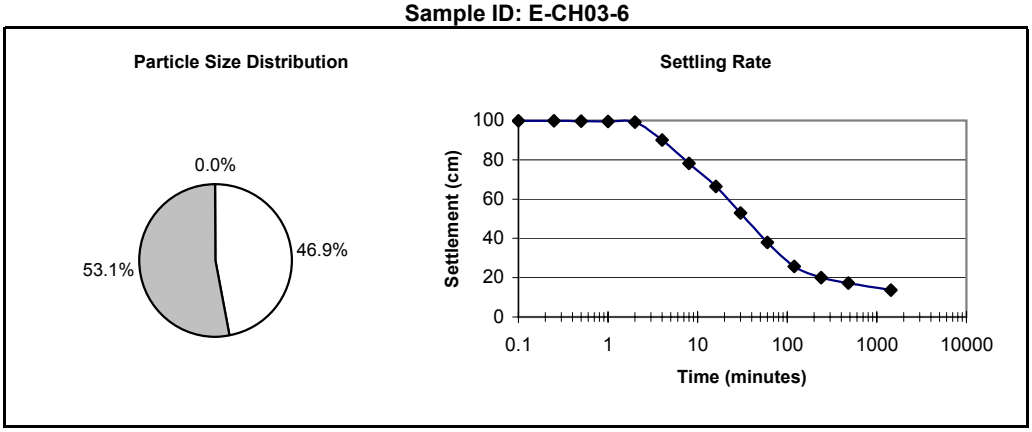
Sample ID: E-CH03-4



Sample ID: E-CH03-5



Sample ID: E-CH03-6

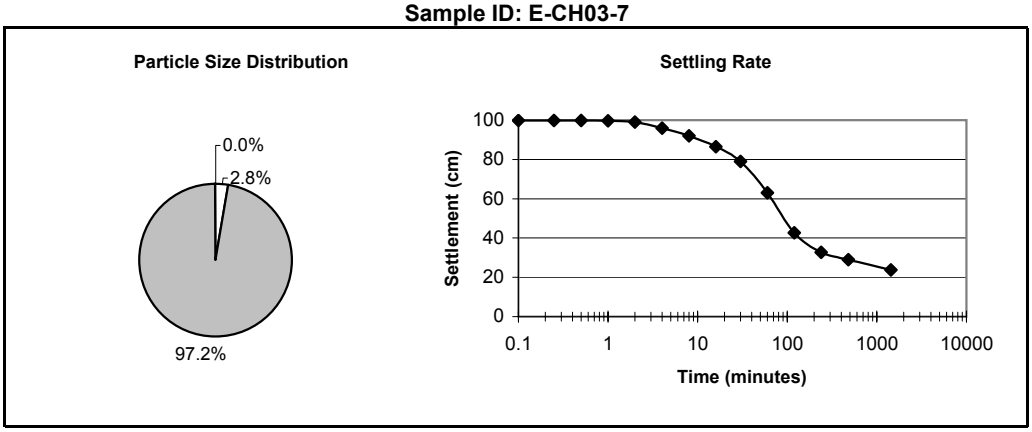


Gravel **Sand** **Silt/Clay**

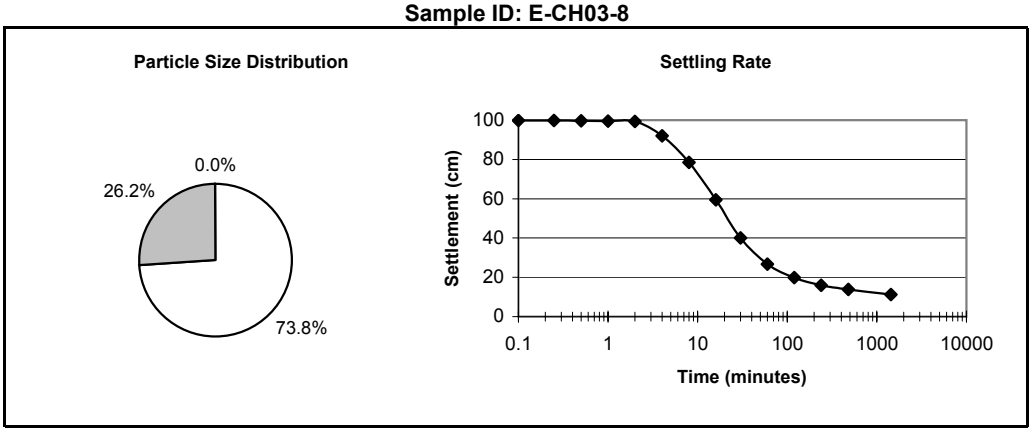
TABLE 6A

Particle Size Distribution and Settling Rate for Canaveral Harbor 103 Evaluation, Canaveral Harbor, Florida, March - May 2003

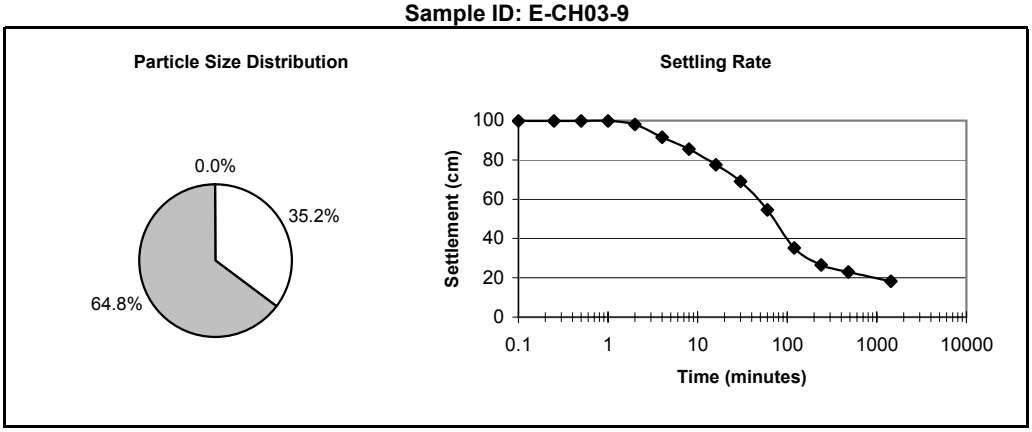
Sample ID: E-CH03-7



Sample ID: E-CH03-8



Sample ID: E-CH03-9

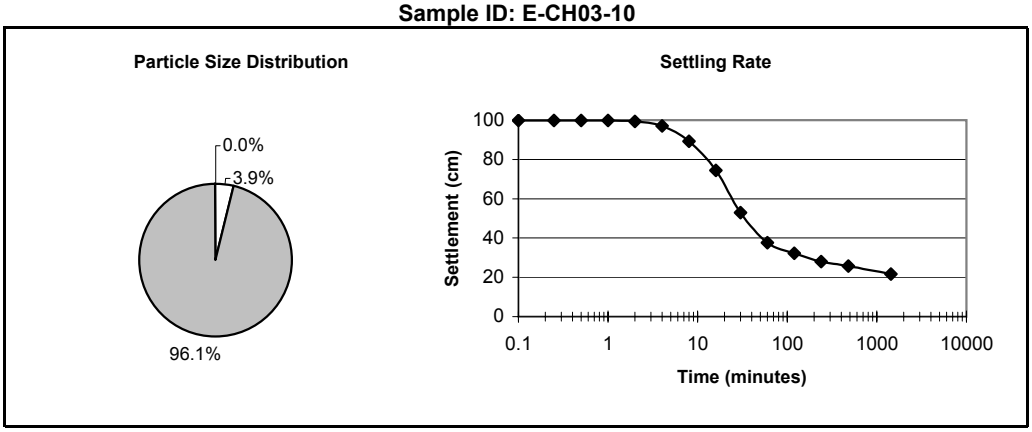


Gravel **Sand** **Silt/Clay**

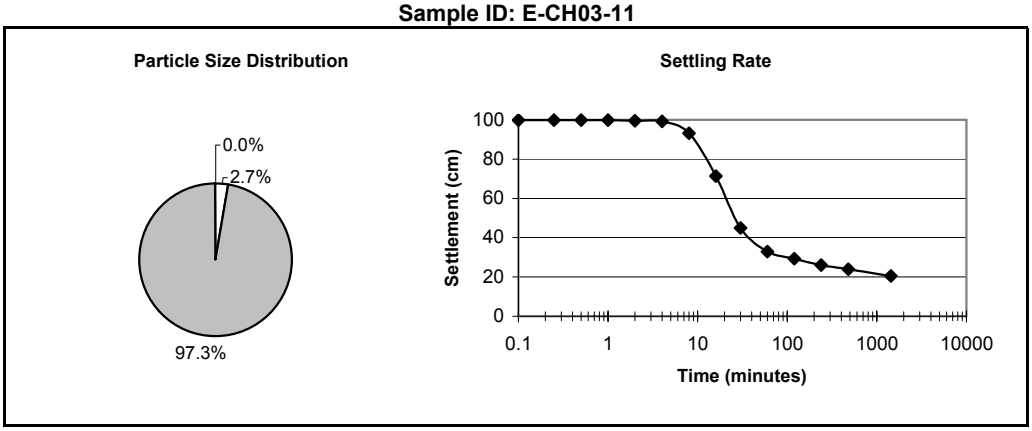
TABLE 6A

Particle Size Distribution and Settling Rate for Canaveral Harbor 103 Evaluation, Canaveral Harbor, Florida, March - May 2003

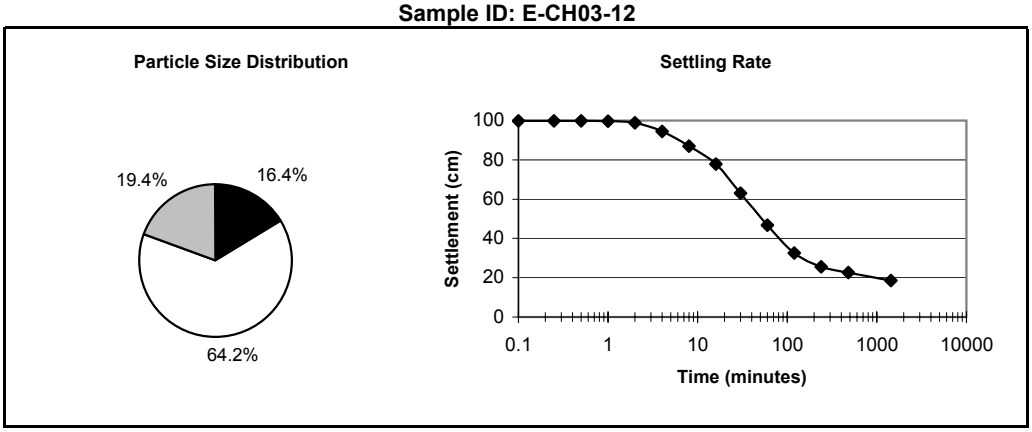
Sample ID: E-CH03-10



Sample ID: E-CH03-11



Sample ID: E-CH03-12

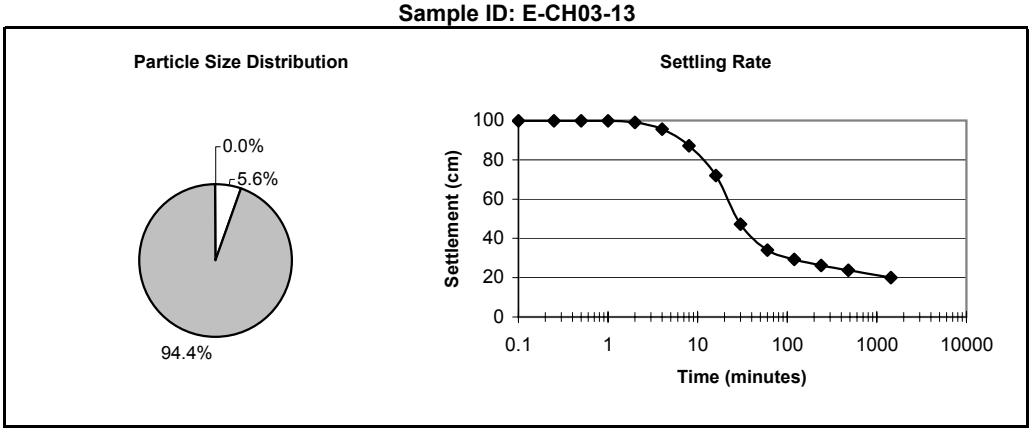


Gravel **Sand** **Silt/Clay**

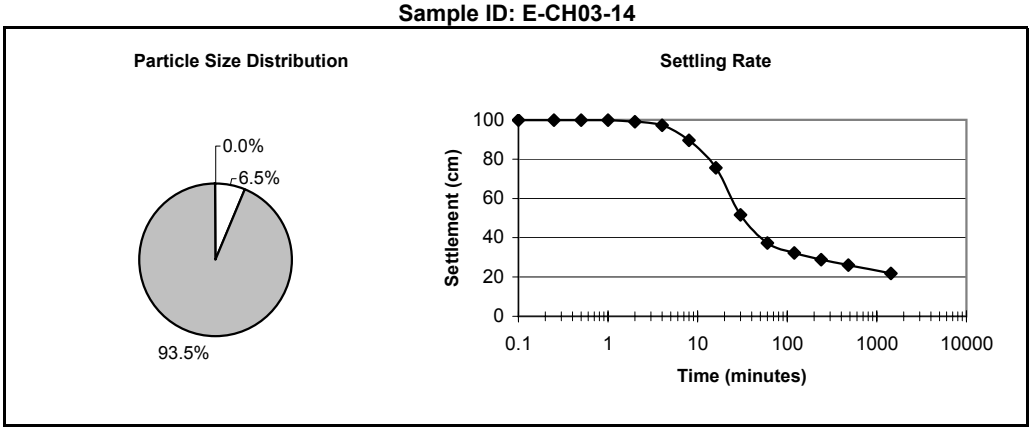
TABLE 6A

Particle Size Distribution and Settling Rate for Canaveral Harbor 103 Evaluation, Canaveral Harbor, Florida, March - May 2003

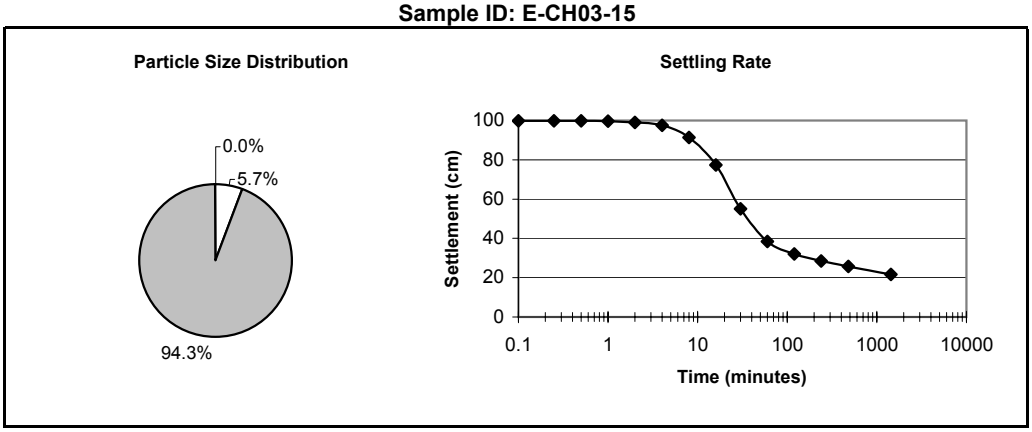
Sample ID: E-CH03-13



Sample ID: E-CH03-14



Sample ID: E-CH03-15

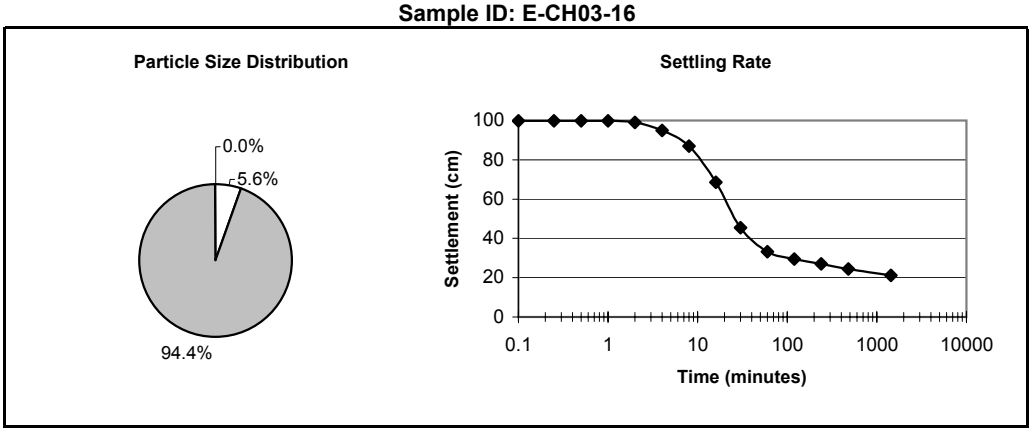


Gravel **Sand** **Silt/Clay**

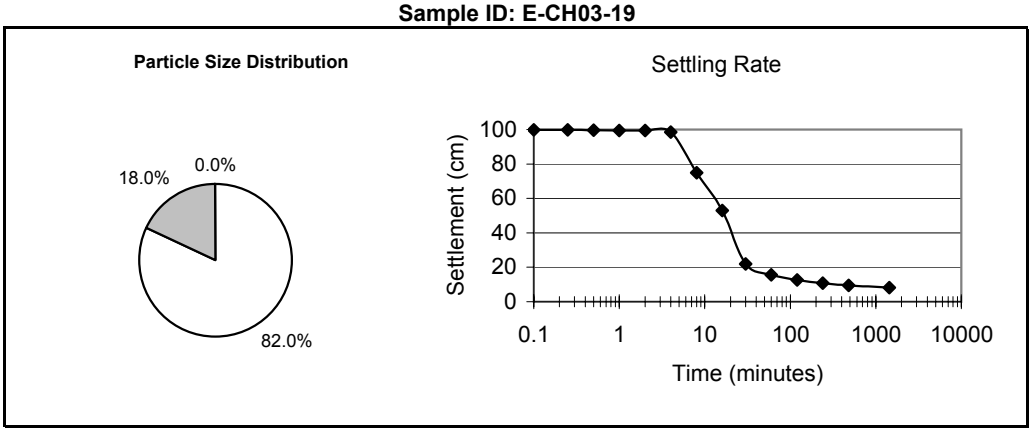
TABLE 6A

Particle Size Distribution and Settling Rate for Canaveral Harbor 103 Evaluation, Canaveral Harbor, Florida, March - May 2003

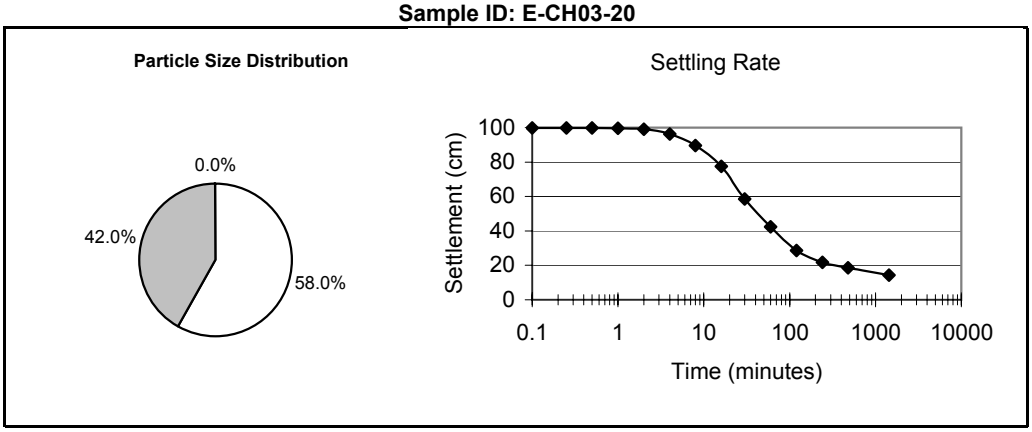
Sample ID: E-CH03-16



Sample ID: E-CH03-19



Sample ID: E-CH03-20

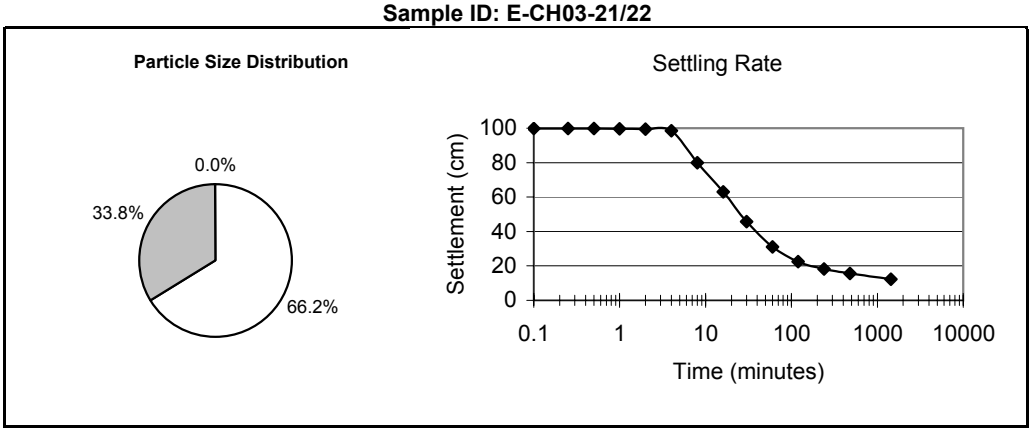


Gravel **Sand** **Silt/Clay**

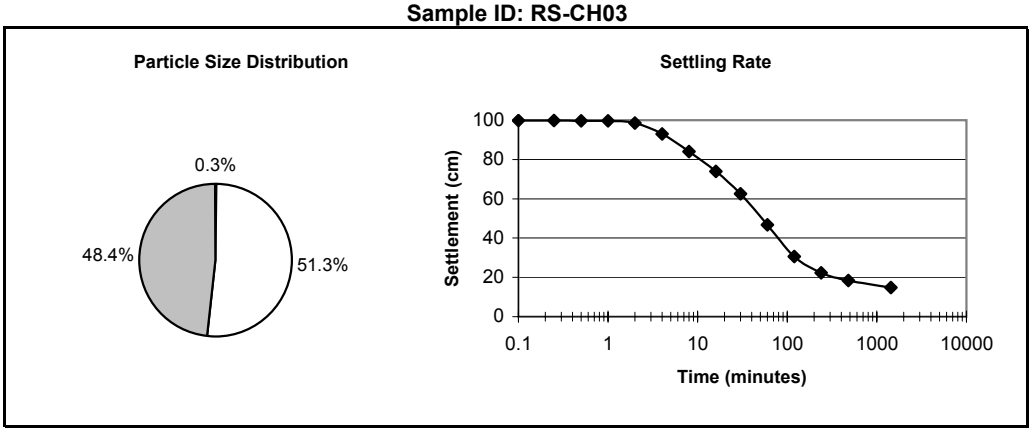
TABLE 6A

Particle Size Distribution and Settling Rate for Canaveral Harbor 103 Evaluation, Canaveral Harbor, Florida, March - May 2003

Sample ID: E-CH03-21/22



Sample ID: RS-CH03



Gravel **Sand** **Silt/Clay**

TABLE 7

Results of Physical Analysis (Settling Rate) from Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Time:	0.1	0.25	0.5	1	2	4	8	16	30	60	120	240	480	1440
E-CH03-1	99.9	99.9	99.9	99.4	98.0	95.4	91.9	85.9	77.0	60.6	39.9	28	23.6	18.5
E-CH03-2	99.9	99.8	99.5	99.2	97.5	94.4	89.5	82.7	73.0	56.0	36.1	25.8	21.6	16.7
E-CH03-3	99.9	99.8	99.5	99.2	98.1	95.7	91.5	86.4	77.0	60.4	38.1	30.2	26.6	21.4
E-CH03-4	99.9	99.9	99.9	99.7	98.5	95.4	90.2	82.5	70.0	53.8	34.7	29.6	26.2	21.4
E-CH03-5	99.9	99.8	99.7	99.5	98.6	94.5	88.4	80.5	67.0	45.9	31.9	27.7	24.6	20.4
E-CH03-6	99.9	99.8	99.7	99.5	99.2	90.0	78.2	66.5	53.0	37.9	25.7	20.1	17.2	13.7
E-CH03-7	99.9	99.9	99.8	99.7	99.0	96.0	92.0	86.5	79.0	63.0	42.7	32.8	29.0	23.7
E-CH03-8	99.9	99.8	99.7	99.5	99.3	92.0	78.5	59.5	40.0	26.7	19.8	16.0	13.9	11.2
E-CH03-9	99.9	99.9	99.9	99.8	98.0	91.5	85.5	77.6	69.0	54.6	35.2	26.5	23.0	18.3
E-CH03-10	99.9	99.9	99.9	99.8	99.4	97.0	89.3	74.5	53.0	37.6	32.2	28.0	25.7	21.7
E-CH03-11	99.9	99.9	99.9	99.8	99.5	99.2	93.2	71.4	45.0	32.9	29.3	26.0	24.0	20.6
E-CH03-12	99.9	99.9	99.9	99.7	98.8	94.5	87.0	77.9	63.0	46.7	32.5	25.6	22.7	18.5
E-CH03-13	99.9	99.9	99.9	99.9	99.0	95.6	87.2	72.0	47.3	34.0	29.3	26.2	23.7	20.0
E-CH03-14	99.9	99.9	99.9	99.9	99.1	97.2	89.5	75.5	51.6	37.3	32.2	28.9	26.0	21.8
E-CH03-15	99.9	99.9	99.9	99.7	99.0	97.6	91.3	77.3	55.0	38.4	32.1	28.5	25.8	21.7
E-CH03-16	99.9	99.9	99.8	99.8	99.0	95.0	87.0	68.5	45.4	33.3	29.4	27.0	24.5	21.1
E-CH03-19	99.9	99.8	99.7	99.5	99.4	98.5	75.0	53.0	21.9	15.6	12.7	10.8	9.4	8.1
E-CH03-20	99.9	99.9	99.8	99.6	99.0	96.3	89.5	77.5	58.5	42.4	28.6	21.7	18.5	14.4
E-CH03-21/22	99.9	99.9	99.8	99.7	99.5	98.5	80.0	63.0	45.8	31.0	22.5	18.2	15.6	12.3
RS-CH03	99.9	99.9	99.7	99.6	98.5	93.0	84.0	74.0	62.5	46.8	30.6	22.3	18.4	14.9

*Sample Concentration: 100 g/L, Time (minutes), Sample Settlement (cm)

Source: MACTEC Engineering and Consulting, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 8

Analytical Results for Ammonia, TOC, Oil & Grease (O&G), Solids, Sulfides, and Cyanide (Wet Weights) in Sediments Collected at Canaveral Harbor, Florida, March - May 2003

	Ammonia (mg/kg)		TOC (%)		O&G (mg/kg)		Solids (%)		Sulfides (mg/kg)		Cyanide (mg/kg)	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	51	--	0.70	--	50	J	36.3	--	383	--	0.08	Ui
E-CH03-1 DUP	54	--	0.70	--	80	J	36.3	--	384	--	0.04	U
E-CH03-2	41	--	0.68	--	50	U	39.4	--	533	--	0.04	U
E-CH03-3	36	--	0.71	--	50	U	30.8	--	452	--	0.04	U
E-CH03-4	68	--	1.02	--	50	U	30.2	--	427	--	0.04	U
E-CH03-5	5.8	--	0.65	--	50	U	37.2	--	78	--	0.04	U
E-CH03-6	25	--	0.52	--	170	--	55.4	--	381	--	0.04	U
E-CH03-7	72	--	0.85	--	60	J	30.0	--	171	--	0.04	U
E-CH03-8	8.7	--	0.41	--	80	J	55.7	--	126	--	0.04	U
E-CH03-9	50	--	0.59	--	80	J	37.4	--	555	--	0.07	J
E-CH03-10	97	--	0.57	--	100	--	23.5	--	477	--	0.04	U
E-CH03-11	83	--	0.58	--	70	J	23.0	--	364	--	0.2	--
E-CH03-12	40	--	0.49	--	90	J	35.0	--	667	--	0.05	J
E-CH03-13	76	--	0.57	--	100	J	22.4	--	255	--	0.04	U
E-CH03-14	77	--	0.60	--	130	--	21.8	--	476	--	0.05	J
E-CH03-14 DUP	92	--	0.60	--	90	J	22.4	--	540	--	0.05	J
E-CH03-15	86	--	0.57	--	110	--	21.6	--	354	--	0.08	Ui
E-CH03-16	74	--	0.57	--	80	--	22.7	--	273	--	0.07	J
E-CH03-19	11.6	--	0.24	--	60	J	66.0	--	104	--	0.04	U
E-CH03-20	30	--	0.43	--	70	J	47.6	--	299	--	0.07	J
E-CH03-21/22	21.5	--	0.48	--	130	--	49.8	--	327	--	0.05	J
RS-CH03	4.9	--	0.51	--	50	U	63.2	--	67	--	0.04	U
Control-Sed.	1.5	--	0.49	--	60	J	74.2	--	123	--	0.2	Ui

i = The MRL/MDL has been elevated due to a matrix interference.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for, but was not detected ("non-detect") at or above the MDL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 8A

Analytical Results for Ammonia, TOC, Oil & Grease (O&G), Solids, Sulfides, and Cyanide (Dry Weights) in Sediments Collected at Canaveral Harbor, Florida, March – May 2003

	Ammonia (mg/kg)		TOC (%)		O&G (mg/kg)		Sulfides (mg/kg)		Cyanide (mg/kg)	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	142	--	1.93	--	150	--	1050	--	0.60	Ui
E-CH03-1 DUP	150	--	1.94	--	230	--	1060	--	0.30	U
E-CH03-2	103	--	1.74	--	100	--	1350	--	0.30	U
E-CH03-3	116	--	2.30	--	150	--	1470	--	0.30	U
E-CH03-4	226	--	3.36	--	160	--	1410	--	0.30	U
E-CH03-5	15.7	--	1.73	--	80	J	209	--	0.30	U
E-CH03-6	45	--	0.93	--	300	--	687	--	0.30	U
E-CH03-7	241	--	2.84	--	180	--	570	--	0.30	U
E-CH03-8	15.7	--	0.74	--	140	--	226	--	0.30	U
E-CH03-9	134	--	1.58	--	220	--	1480	--	0.18	J
E-CH03-10	412	--	2.42	--	440	--	2030	--	0.18	U
E-CH03-11	360	--	2.51	--	300	--	1580	--	1.04	--
E-CH03-12	114	--	1.39	--	250	--	1910	--	0.36	Ui
E-CH03-13	340	--	2.53	--	440	--	1140	--	0.18	U
E-CH03-14	355	--	2.74	--	610	--	2180	--	0.25	J
E-CH03-14 DUP	411	--	2.68	--	400	--	2410	--	0.22	J
E-CH03-15	400	--	2.62	--	530	--	1640	--	0.36	Ui
E-CH03-16	325	--	2.52	--	350	--	1200	--	0.31	J
E-CH03-19	17.5	--	0.37	--	100	J	157	--	0.08	U
E-CH03-20	64	--	0.91	--	150	--	628	--	0.14	J
E-CH03-21/22	43.2	--	0.97	--	270	--	657	--	0.11	J
RS-CH03	7.8	--	0.81	--	71	J	106	--	0.30	U
Control-Sed.	2.0	--	0.66	--	80	J	165	--	0.25	Ui

i = The MRL/MDL has been elevated due to a matrix interference.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for, but was not detected (“non-detect”) at or above the MDL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 9

Analytical Results for Metals in Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported in mg/kg, wet weight)

	Aluminum		Antimony		Arsenic		Cadmium		Chromium		Copper		Iron		Lead		Mercury		Nickel		Silver		Zinc	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	5360	--	0.018	BN	2.99	--	0.03	--	10.6	--	1.77	--	6240	--	5.37	--	0.010	--	2.97	--	0.012	--	10.2	--
E-CH03-1 DUP	7570	--	0.020	N	3.09	--	0.03	--	12.2	--	1.99	--	6600	--	5.68	--	0.010	--	3.37	--	0.013	--	11.3	--
E-CH03-2	4920	--	0.017	BN	2.90	--	0.03	--	9.99	--	1.65	--	5860	--	4.91	--	0.010	--	2.81	--	0.011	--	9.55	--
E-CH03-3	3540	--	0.015	BN	2.66	--	0.02	--	9.62	--	1.65	--	5160	--	5.30	--	0.010	--	2.47	--	0.010	--	9.55	--
E-CH03-4	4760	--	0.016	BN	3.17	--	0.03	--	11.8	--	1.96	--	5840	--	5.60	--	0.011	--	3.00	--	0.011	--	10.7	--
E-CH03-5	7100	--	0.018	BN	2.40	--	0.03	--	13.4	--	1.97	--	6440	--	5.90	--	0.009	--	3.55	--	0.012	--	11.5	--
E-CH03-6	4000	--	0.023	BN	2.41	--	0.03	--	9.16	--	1.42	--	4720	--	4.29	--	0.008	B	2.55	--	0.009	B	8.10	--
E-CH03-7	4270	--	0.055	BN	2.99	--	0.03	--	11.5	--	1.90	--	5690	--	5.72	--	0.009	--	2.93	--	0.036	--	10.9	--
E-CH03-8	2400	--	0.021	BN	1.81	--	0.03	--	7.23	--	1.23	--	3520	--	2.86	--	0.005	U	1.95	--	0.007	B	7.13	--
E-CH03-9	5480	--	0.013	BN	1.52	--	0.03	--	9.85	--	2.68	--	5500	--	4.33	--	0.008	--	2.53	--	0.011	--	11.2	--
E-CH03-10	4410	--	0.010	BN	1.14	--	0.03	--	9.06	--	3.17	--	4700	--	3.87	--	0.007	--	2.23	--	0.015	--	12.2	--
E-CH03-11	6580	--	0.013	BN	1.10	--	0.04	--	9.65	--	3.00	--	5460	--	3.95	--	0.006	--	2.55	--	0.016	--	12.7	--
E-CH03-12	2990	--	0.025	N	1.45	--	0.13	--	7.07	--	17.8	--	3760	--	3.50	--	0.009	--	6.52	--	0.013	--	108	--
E-CH03-13	4270	--	0.010	BN	1.02	--	0.04	--	8.30	--	3.46	--	4400	--	3.68	--	0.007	--	2.12	--	0.013	--	12.9	--
E-CH03-14	6520	--	0.013	BN	1.35	--	0.05	--	9.59	--	5.55	--	5220	--	4.03	--	0.008	--	2.71	--	0.015	--	19.4	--
E-CH03-14 DUP	3920	--	0.013	BN	1.27	--	0.04	--	8.34	--	5.34	--	5130	--	3.86	--	0.008	--	2.17	--	0.014	--	19.1	--
E-CH03-15	5860	--	0.013	BN	1.09	--	0.05	--	10.5	--	4.58	--	4910	--	3.98	--	0.007	--	2.63	--	0.015	--	16.4	--
E-CH03-16	4340	--	0.011	BN	1.12	--	0.04	--	8.84	--	3.74	--	4660	--	3.90	--	0.007	--	2.16	--	0.014	--	14.2	--
E-CH03-19	2240	--	0.029	BN	1.70	--	0.04	--	4.84	--	0.87	--	2700	--	1.66	--	0.003	U	1.56	--	0.033	--	4.63	--
E-CH03-20	6000	--	0.062	N	1.78	--	0.04	--	7.85	--	2.16	--	5100	--	3.59	--	0.007	--	2.29	--	0.023	--	9.61	--
E-CH03-21/22	5390	--	0.029	N	1.60	--	0.04	--	7.30	--	2.04	--	4740	--	3.13	--	0.006	B	2.13	--	0.013	--	8.64	--
RS-CH03	5040	--	0.030	BN	2.36	--	0.05	--	9.42	--	1.38	--	4970	--	3.98	--	0.008	B	2.41	--	0.010	B	8.16	--
Control-Sed	3480	--	0.03	BN	1.20	--	0.014	B	4.56	--	1.90	--	3380	--	2.42	--	0.010	B	1.58	--	0.010	--	5.00	--

B = The result is an estimated concentration that is less than the MRL but greater than or equal the MDL.
N = The matrix spike sample recovery is not within control limits.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 9A

Analytical Results for Metals in Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported in mg/kg, dry weight)

	Aluminum		Antimony		Arsenic		Cadmium		Chromium		Copper		Iron		Lead		Mercury		Nickel		Silver		Zinc	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	14800	--	0.05	BN	8.2	--	0.07	--	29.2	--	4.87	--	17200	--	14.8	--	0.027	--	8.17	--	0.032	--	28.1	--
E-CH03-1 DUP	20800	--	0.05	N	8.5	--	0.09	--	33.6	--	5.49	--	18200	--	15.6	--	0.028	--	9.29	--	0.037	--	31.1	--
E-CH03-2	12500	--	0.04	BN	7.4	--	0.07	--	25.3	--	4.19	--	14900	--	12.5	--	0.025	--	7.13	--	0.029	--	24.2	--
E-CH03-3	11500	--	0.05	BN	8.6	--	0.06	--	31.2	--	5.35	--	16700	--	17.2	--	0.034	--	8.02	--	0.033	--	31.0	--
E-CH03-4	15800	--	0.05	BN	10.5	--	0.09	--	38.9	--	6.48	--	19300	--	18.5	--	0.035	--	9.94	--	0.037	--	35.5	--
E-CH03-5	19100	--	0.05	BN	6.5	--	0.08	--	35.9	--	5.30	--	17300	--	15.9	--	0.024	--	9.54	--	0.031	--	30.8	--
E-CH03-6	7230	--	0.04	BN	4.4	--	0.06	--	16.5	--	2.56	--	8520	--	7.75	--	0.014	B	4.61	--	0.017	B	14.6	--
E-CH03-7	14200	--	0.06	BN	10	--	0.09	--	38.5	--	6.32	--	19000	--	19.1	--	0.031	--	9.75	--	0.036	--	36.5	--
E-CH03-8	4310	--	0.04	BN	3.2	--	0.05	--	13.0	--	2.22	--	6320	--	5.13	--	0.009	U	3.50	--	0.013	B	12.8	--
E-CH03-9	14700	--	0.04	BN	4.1	--	0.09	--	26.3	--	7.17	--	14700	--	11.6	--	0.020	--	6.77	--	0.030	--	29.9	--
E-CH03-10	18800	--	0.04	BN	4.9	--	0.14	--	38.6	--	13.5	--	20000	--	16.5	--	0.030	--	9.48	--	0.064	--	51.9	--
E-CH03-11	28600	--	0.06	BN	4.8	--	0.17	--	41.9	--	13.0	--	23800	--	17.2	--	0.030	--	11.1	--	0.068	--	55.1	--
E-CH03-12	8550	--	0.07	N	4.1	--	0.37	--	20.2	--	50.9	--	10700	--	9.99	--	0.030	--	18.6	--	0.037	--	310	--
E-CH03-13	19100	--	0.05	BN	4.5	--	0.17	--	37.0	--	15.4	--	19600	--	16.4	--	0.030	--	9.46	--	0.056	--	57.7	--
E-CH03-14	29900	--	0.06	BN	6.2	--	0.21	--	44.0	--	25.4	--	24000	--	18.5	--	0.040	--	12.4	--	0.070	--	88.8	--
E-CH03-14 DUP	17500	--	0.06	BN	5.7	--	0.18	--	37.3	--	23.8	--	22900	--	17.2	--	0.030	--	9.68	--	0.061	--	85.5	--
E-CH03-15	27100	--	0.06	BN	5.0	--	0.22	--	48.6	--	21.2	--	22700	--	18.4	--	0.030	--	12.2	--	0.068	--	76.1	--
E-CH03-16	19100	--	0.05	BN	5.0	--	0.20	--	38.9	--	16.5	--	20500	--	17.2	--	0.030	--	9.52	--	0.061	--	62.5	--
E-CH03-19	3400	--	0.04	BN	2.6	--	0.07	--	7.33	--	1.32	--	4090	--	2.51	--	0.010	U	2.37	--	0.050	--	7.00	--
E-CH03-20	12600	--	0.13	N	3.7	--	0.08	--	16.5	--	4.53	--	10700	--	7.55	--	0.010	--	4.81	--	0.050	--	20.2	--
E-CH03-21/22	10800	--	0.06	N	3.2	--	0.09	--	14.7	--	4.09	--	9510	--	6.29	--	0.010	B	4.27	--	0.030	--	17.4	--
RS-CH03	7980	--	0.05	BN	3.7	--	0.07	--	14.9	--	2.19	--	7870	--	6.30	--	0.012	B	3.81	--	0.016	B	12.9	--
Control-Sed	4690	--	0.03	BN	1.6	--	0.02	B	6.14	--	2.56	--	4560	--	3.27	--	0.010	B	2.13	--	0.020	--	6.80	--

B = The result is an estimated concentration that is less than the MRL but greater than or equal the MDL.
N = The matrix spike sample recovery is not within control limits.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 10

Results of PAH Analyses for Sediments Collected at Canaveral Harbor, Florida, March – May 2003 (all data reported in µg/kg, wet weight)

Station ID:	E-CH03-1		E-CH03-1 DUP		E-CH03-2		E-CH03-3		E-CH03-4		E-CH03-5		E-CH03-6		E-CH03-7		E-CH03-8		E-CH03-9		E-CH03-10	
Analyte	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier
2-Methylnaphthalene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.22	J	0.21	U
Acenaphthene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Acenaphthylene	0.16	U	0.16	U	0.30	J	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Anthracene	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.24	J	0.23	J	0.19	U
Benz(a)anthracene	1.1	J	0.98	J	2.7	J	0.78	J	0.75	J	0.36	J	0.39	J	0.97	J	1.5	J	2.0	J	0.84	J
Benzo(a)pyrene	1.2	J	0.73	J	2.4	J	0.61	J	0.72	J	0.41	J	0.41	J	0.93	J	1.2	J	1.7	J	0.65	J
Benzo(b)fluoranthene	1.4	J	1.1	J	2.4	J	0.94	J	1.2	J	0.56	J	0.66	J	1.2	J	1.5	J	2.2	J	0.85	J
Benzo(g,h,i)perylene	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*
Benzo(k)fluoranthene	2.0	J	1.5	J	3.3	J	1.3	J	1.3	J	1.1	J	1.0	J	1.6	J	2.2	J	3.0	J	1.5	J
Chrysene	1.7	J	1.7	J	3.9	J	1.2	J	1.3	J	0.66	J	0.81	J	1.6	J	2.2	J	3.0	J	1.2	J
Dibenz(a,h)anthracene	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*
Dibenzofuran	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Fluoranthene	2.3	J	2.8	J	3.5	J	1.8	J	1.8	J	1.2	J	1.2	J	2.2	J	4.1	J	5.2	--	2.1	J
Fluorene	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.22	J	0.17	U	0.17	U
Indeno(1,2,3-cd)pyrene	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*
Naphthalene	0.39	J	0.32	J	0.38	J	0.32	J	0.31	J	0.35	J	0.29	J	0.36	J	0.38	J	0.40	J	0.30	J
Phenanthrene	0.87	J	0.75	J	0.65	J	0.56	J	0.54	J	0.40	J	0.36	J	0.66	J	1.9	J	1.6	J	0.97	J
Pyrene	2.1	J	2.2	J	4.0	J	1.4	J	1.5	J	0.99	J	0.93	J	1.8	J	2.9	J	4.2	J	1.8	J

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected (“non-detect”) at or above the MDL.
U* = The compound was analyzed for but was not detected (“non-detect”) at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 10

Results of PAH Analyses for Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported in µg/kg, wet weight)

Station ID:	E-CH03-11		E-CH03-12		E-CH03-13		E-CH03-14		E-CH03-14 DUP		E-CH03-15		E-CH03-16		E-CH03-19		E-CH03-20		E-CH03-21/22		RS-CH03		Control-Sed	
Analyte	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier
2-Methylnaphthalene	0.21	U	10	--	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Acenaphthene	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
Acenaphthylene	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
Anthracene	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	U	0.19	J	0.23	J	0.19	U	0.19	U	0.23	J
Benz(a)anthracene	1.2	J	0.92	J	0.65	J	0.67	J	0.40	J	0.73	J	0.89	J	0.74	J	1.4	J	0.91	J	1.4	J	1.4	J
Benzo(a)pyrene	1.1	J	0.72	J	0.50	J	0.58	J	0.60	J	0.60	J	0.83	J	0.59	J	1.3	J	0.90	J	1.5	J	1.8	J
Benzo(b)fluoranthene	1.3	J	1.2	J	0.67	J	0.90	J	0.79	J	1.0	J	1.0	J	0.87	J	1.5	J	1.1	J	1.1	J	2.3	J
Benzo(g,h,i)perylene	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*
Benzo(k)fluoranthene	1.2	J	1.6	J	1.0	J	1.3	J	1.1	J	1.0	J	1.3	J	0.89	J	2.0	J	1.3	J	1.8	J	1.7	J
Chrysene	1.4	J	1.3	J	0.85	J	1.2	J	1.1	J	1.1	J	1.1	J	1.2	J	2.4	J	1.5	J	1.9	J	2.1	J
Dibenz(a,h)anthracene	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	0.18	U	0.21	J	0.18	U	5.0	U*	5.0	U*
Dibenzofuran	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U
Fluoranthene	2.5	J	2.7	J	1.5	J	1.9	J	1.7	J	1.9	J	1.9	J	2.0	J	3.2	--	2.4	J	1.9	J	2.7	J
Fluorene	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U
Indeno(1,2,3-cd)pyrene	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	5.0	U*	0.62	J	1.1	J	0.86	J	5.0	U*	5.0	U*
Naphthalene	0.29	J	50	--	0.23	J	0.25	J	0.23	J	0.27	J	0.26	J	0.22	J	0.26	J	0.23	J	0.39	J	0.38	J
Phenanthrene	0.72	J	0.69	J	0.43	J	0.87	J	0.43	J	0.38	J	0.47	J	0.81	J	1.0	J	0.69	J	0.60	J	0.74	J
Pyrene	1.9	J	2.5	J	1.2	J	2.1	J	1.4	J	1.6	J	1.5	J	1.9	J	2.9	--	2.7	--	2.2	J	2.5	J

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
U* = The compound was analyzed for but was not detected ("non-detect") at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 10A

Results of PAH Analyses for Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported in µg/kg, dry weight)

Station ID:	E-CH03-1		E-CH03-1 DUP		E-CH03-2		E-CH03-3		E-CH03-4		E-CH03-5		E-CH03-6		E-CH03-7		E-CH03-8		E-CH03-9		E-CH03-10	
Analyte	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier
2-Methylnaphthalene	0.58	U	0.58	U	0.54	U	0.69	U	0.70	U	0.57	U	0.38	U	0.70	U	0.38	U	0.59	J	0.90	U
Acenaphthene	0.58	U	0.58	U	0.54	U	0.69	U	0.70	U	0.57	U	0.38	U	0.70	U	0.38	U	0.57	U	0.90	U
Acenaphthylene	0.45	U	0.45	U	0.76	J	0.52	U	0.53	U	0.44	U	0.29	U	0.54	U	0.29	U	0.43	U	0.69	U
Anthracene	0.53	U	0.53	U	0.49	U	0.62	U	0.63	U	0.52	U	0.35	U	0.64	U	0.43	J	0.62	J	0.81	U
Benz(a)anthracene	3.1	J	2.7	J	6.9	J	2.5	J	2.5	J	0.98	J	0.71	J	3.2	J	2.6	J	5.2	J	3.6	J
Benzo(a)pyrene	3.2	J	2.0	J	6.1	J	2.0	J	2.4	J	1.1	J	0.74	J	3.1	J	2.2	J	4.5	J	2.8	J
Benzo(b)fluoranthene	3.8	J	2.9	J	6.1	J	3.1	J	4.0	J	1.5	J	1.2	J	3.9	J	2.7	J	5.9	J	3.6	J
Benzo(g,h,i)perylene	14	U*	14	U*	13	U*	17	U*	17	U*	14	U*	9.1	U*	17	U*	9.0	U*	14	U*	22	U*
Benzo(k)fluoranthene	5.5	J	4.1	J	8.3	J	4.3	J	4.3	J	2.9	J	1.9	J	5.3	J	3.9	J	8.1	J	6.3	J
Chrysene	4.8	J	4.6	J	10	J	4.0	J	4.2	J	1.8	J	1.5	J	5.4	J	4.0	J	8.1	J	5.2	J
Dibenz(a,h)anthracene	14	U*	14	U*	13	U*	17	U*	17	U*	14	U*	9.1	U*	17	U*	9.0	U*	14	U*	22	U*
Dibenzofuran	0.56	U	0.56	U	0.51	U	0.65	U	0.67	U	0.54	U	0.37	U	0.67	U	0.36	U	0.54	U	0.86	U
Fluoranthene	6.4	J	7.8	J	9.0	J	5.9	J	6.1	J	3.2	J	2.2	J	7.5	J	7.3	J	14	J	9.1	J
Fluorene	0.47	U	0.47	U	0.44	U	0.56	U	0.57	U	0.46	U	0.31	U	0.57	U	0.39	J	0.46	U	0.73	U
Indeno(1,2,3-cd)pyrene	14	U*	14	U*	13	U*	17	U*	17	U*	14	U*	9.1	U*	17	U*	9.0	U*	14	U*	22	U*
Naphthalene	1.1	J	0.87	J	0.97	J	1.0	J	1.0	J	0.93	J	0.53	J	1.2	J	0.68	J	1.1	J	1.3	J
Phenanthrene	2.4	J	2.1	J	1.6	J	1.8	J	1.8	J	1.1	J	0.64	J	2.2	J	3.4	J	4.3	J	4.1	J
Pyrene	5.8	J	6.1	J	10	J	4.5	J	5.0	J	2.7	J	1.7	J	5.8	J	5.2	J	11	J	7.5	J

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected (“non-detect”) at or above the MDL.
U* = The compound was analyzed for but was not detected (“non-detect”) at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 10A

Results of PAH Analyses for Sediments Collected at Canaveral Harbor, Florida, March – May 2003 (all data reported in µg/kg, dry weight)

Station ID:	E-CH03-11		E-CH03-12		E-CH03-13		E-CH03-14		E-CH03-14 DUP		E-CH03-15		E-CH03-16		E-CH03-19		E-CH03-20		E-CH03-21/22		RS-CH03		Control-Sed	
Analyte	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier
2-Methylnaphthalene	0.92	U	29	--	0.94	U	0.97	U	0.94	U	0.98	U	0.93	U	0.32	U	0.45	U	0.43	U	0.34	U	0.29	U
Acenaphthene	0.92	U	0.60	U	0.94	U	0.97	U	0.94	U	0.98	U	0.93	U	0.32	U	0.45	U	0.43	U	0.34	U	0.29	U
Acenaphthylene	0.70	U	0.46	U	0.72	U	0.74	U	0.72	U	0.75	U	0.71	U	0.25	U	0.34	U	0.33	U	0.26	U	0.22	U
Anthracene	0.83	U	0.55	U	0.85	U	0.88	U	0.85	U	0.88	U	0.84	U	0.29	U	0.48	J	0.39	U	0.31	U	0.31	J
Benz(a)anthracene	5.0	J	2.6	J	2.9	J	3.1	J	1.8	J	3.4	J	3.9	J	1.1	J	2.9	J	1.8	J	2.3	J	1.9	J
Benzo(a)pyrene	5.0	J	2.1	J	2.2	J	2.6	J	2.7	J	2.8	J	3.7	J	0.89	J	2.7	J	1.8	J	2.4	J	2.5	J
Benzo(b)fluoranthene	5.6	J	3.3	J	3.0	J	4.1	J	3.5	J	4.8	J	4.4	J	1.3	J	3.2	J	2.2	J	1.8	J	3.2	J
Benzo(g,h,i)perylene	22	U*	15	U*	23	U*	23	U*	23	U*	24	U*	23	U*	3.3	U*	2.4	U*	2.5	U*	7.9	U*	5.0	U*
Benzo(k)fluoranthene	5.4	J	4.6	J	4.5	J	6.0	J	4.9	J	4.7	J	5.8	J	1.3	J	4.2	J	2.7	J	2.9	J	2.2	J
Chrysene	6.1	J	3.8	J	3.8	J	5.7	J	5.1	J	5.2	J	5.0	J	1.8	J	5.0	J	3.1	J	3.0	J	2.9	J
Dibenz(a,h)anthracene	22	U*	15	U*	23	U*	23	U*	23	U*	24	U*	23	U*	0.28	U	0.44	J	0.37	U	7.9	U*	5.0	U*
Dibenzofuran	0.87	U	0.58	U	0.90	U	0.92	U	0.90	U	0.93	U	0.89	U	0.31	U	0.43	U	0.41	U	0.32	U	0.27	U
Fluoranthene	11	J	7.8	J	6.6	J	8.9	J	7.6	J	8.7	J	8.5	J	3.0	J	6.8	--	4.8	J	3.0	J	3.6	J
Fluorene	0.74	U	0.49	U	0.76	U	0.78	U	0.76	U	0.79	U	0.75	U	0.26	U	0.36	U	0.35	U	0.27	U	0.23	U
Indeno(1,2,3-cd)pyrene	22	U*	15	U*	23	U*	23	U*	23	U*	24	U*	23	U*	0.94	J	2.3	J	1.7	J	7.9	U*	5.0	U*
Naphthalene	1.3	J	140	--	1.0	J	1.1	J	1.0	J	1.3	J	1.1	J	0.34	J	0.55	J	0.46	J	0.62	J	0.51	J
Phenanthrene	3.1	J	2.0	J	1.9	J	4.0	J	1.9	J	1.7	J	2.1	J	1.2	J	2.2	J	1.4	J	0.95	J	1.0	J
Pyrene	8.3	J	7.0	J	5.2	J	9.4	J	6.2	J	7.4	J	6.6	J	2.8	J	6.1	--	5.3	--	3.4	J	3.4	J

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
U* = The compound was analyzed for but was not detected ("non-detect") at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 11
Analytical Results for Organic Tin in Sediments Collected at Canaveral Harbor, Florida, March – May 2003 (all data reported in µg/kg, wet weight)

	MonoButyl Tin		DiButyl Tin		TriButyl Tin		TetraButyl Tin	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-1 DUP	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-2	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-3	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-4	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-5	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-6	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-7	0.47	U	0.73	U	0.36	U	0.81	U
E-CH03-8	0.47	U	0.73	U	0.48	J	0.81	U
E-CH03-9	0.47	U	0.73	U	1.2	--	0.81	U
E-CH03-10	0.47	U	0.80	J	2.4	--	0.81	U
E-CH03-11	0.47	U	0.73	U	0.98	Ui	0.81	U
E-CH03-12	0.61	J	1.8	--	6.2	--	0.81	U
E-CH03-13	0.47	U	0.73	U	1.1	--	0.81	U
E-CH03-14	0.47	U	0.85	J	2.1	--	0.81	U
E-CH03-14 DUP	0.47	U	1.2	--	3.4	--	0.81	U
E-CH03-15	0.47	U	0.73	U	1.5	--	0.81	U
E-CH03-16	0.47	U	0.73	U	1.4	--	0.81	U
E-CH03-19	0.47	U	0.73	U	1.0	--	0.81	U
E-CH03-20	0.47	U	0.73	U	2.4	--	0.81	U
E-CH03-21/22	0.47	U	0.73	U	1.7	--	0.81	U
RS-CH03	0.47	U	0.73	U	0.36	U	0.81	U
Control-Sed	0.47	U	0.73	U	0.36	U	0.81	U

i = The MRL/MDL has been elevated due to a matrix interference.
J = The result is an estimated concentration that is less than MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected (“non-detect”) at or above the MDL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 11A

Analytical Results for Organic Tin in Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported in µg/kg, dry weight)

	MonoButyl Tin		DiButyl Tin		TriButyl Tin		TetraButyl Tin	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	1.3	U	2.1	U	1.0	U	2.3	U
E-CH03-1 DUP	1.3	U	2.1	U	1.0	U	2.3	U
E-CH03-2	1.2	U	1.9	U	0.92	U	2.1	U
E-CH03-3	1.6	U	2.4	U	1.2	U	2.7	U
E-CH03-4	1.6	U	2.5	U	1.2	U	2.7	U
E-CH03-5	1.3	U	2.0	U	0.97	U	2.2	U
E-CH03-6	0.85	U	1.4	U	0.65	U	1.5	U
E-CH03-7	1.6	U	2.5	U	1.2	U	2.7	U
E-CH03-8	0.85	U	1.4	U	0.87	J	1.5	U
E-CH03-9	1.3	U	2.0	U	3.3	--	2.2	U
E-CH03-10	2.0	U	3.4	J	10	--	3.5	U
E-CH03-11	2.1	U	3.2	U	4.3	Ui	3.6	U
E-CH03-12	1.7	J	5.2	--	18	--	2.4	U
E-CH03-13	2.1	U	3.3	U	4.8	--	3.7	U
E-CH03-14	2.2	U	3.9	J	9.8	--	3.8	U
E-CH03-14 DUP	2.1	U	5.4	--	15	--	3.7	U
E-CH03-15	2.2	U	3.4	U	6.8	--	3.8	U
E-CH03-16	2.1	U	3.3	U	6.4	--	3.6	U
E-CH03-19	0.72	U	1.2	U	1.5	--	1.3	U
E-CH03-20	0.99	UX	1.6	UX	5.0	X	1.8	UX
E-CH03-21/22	0.95	U	1.5	U	3.4	--	1.7	U
RS-CH03	0.75	U	1.2	U	0.57	U	1.3	U
Control-Sed	0.64	U	0.99	U	0.49	U	1.1	U

i = The MRL/MDL has been elevated due to a matrix interference.
J = The result is an estimated concentration that is less than MRL but greater than or equal to MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
X = The analysis was performed out of holding time. See text Section 3.6.1 for explanation.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 12
Analytical Results for Ammonia, TOC, Cyanide, Oil & Grease, and Sulfides in Reference Water and Elutriates Prepared from Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported in mg/L)

Analyte:	Ammonia		TOC		Cyanide		O&G		Sulfides	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	17.8	--	5.9	--	0.003	U	1.2	U	0.05	U*
E-CH03-1 DUP	15.8	--	5.1	--	0.003	U	1.2	U	0.05	U*
E-CH03-2	14.4	--	5.1	--	0.003	U	1.2	U	0.05	U*
E-CH03-3	14.1	--	4.9	--	0.003	U	1.2	U	0.05	U*
E-CH03-4	19.8	--	7.0	--	0.003	U	1.2	U	0.05	U*
E-CH03-5	1.41	--	3.6	--	0.003	U	1.2	U	0.05	U*
E-CH03-6	7.69	--	3.9	--	0.003	U	1.2	U	0.05	U*
E-CH03-7	20.3	--	6.6	--	0.003	U	1.2	U	0.05	U*
E-CH03-8	1.95	--	3.7	--	0.003	U	1.2	U	0.05	U*
E-CH03-9	17.8	--	6.1	--	0.003	U	1.2	U	0.05	U*
E-CH03-10	25.6	--	7.9	--	0.003	U	1.2	U	0.05	U*
E-CH03-11	23.6	--	6.7	--	0.003	U	3.0	J	8.2	--
E-CH03-12	12.2	--	4.5	--	0.003	U	1.2	U	0.05	U*
E-CH03-13	24.8	--	7.1	--	0.003	U	5.5	--	15	--
E-CH03-14	27.0	--	8.3	--	0.003	U	5.1	--	11	--
E-CH03-14 DUP	27.6	--	9.2	--	0.003	U	17	--	6.4	--
E-CH03-15	26.8	--	7.1	--	0.003	U	5.4	--	12	--
E-CH03-16	22.5	--	7.4	--	0.003	U	4.0	J	3.9	--
E-CH03-19	1.36	--	7.5	--	0.003	U	1.2	U	0.05	U*
E-CH03-20	12.2	--	7.1	--	0.003	U	1.2	U	0.05	U*
E-CH03-21/22	7.44	--	6.5	--	0.003	U	1.2	U	0.05	U*
RS-CH03	0.95	--	4.0	--	0.003	U	1.2	U	0.05	U*
Control-Elut	0.30	--	4.8	--	0.003	U	1.2	UX	0.05	U*

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
U* = The compound was analyzed for but was not detected ("non-detect") at or above the MRL.
X = The analysis was performed out of holding time. See text Section 3.6.1 for explanation.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 13

Analytical Results for Metals in Reference Water and Elutriates Prepared from Sediments Collected at Canaveral Harbor, Florida, March – May 2003 (all data reported in µg/L)

	Antimony		Arsenic		Cadmium		Chromium		Copper		Lead		Mercury		Nickel		Silver		Zinc	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	1.11	--	56.2	--	0.02	B	0.40	U*	0.74	--	0.04	U	0.15	B	0.33	--	0.02	B	1.7	--
E-CH03-1 DUP	0.99	B	52.5	--	0.01	B	0.40	U*	0.43	--	0.04	U	0.10	U	0.37	--	0.01	U	0.8	B
E-CH03-2	1.11	--	51.1	--	0.01	U	0.40	U*	0.24	--	0.04	U	0.10	U	0.44	--	0.13	U	1.2	--
E-CH03-3	0.83	B	38.6	--	0.02	B	0.40	U*	0.77	--	0.04	U	0.10	U	0.88	--	0.01	U	1.8	--
E-CH03-4	1.22	--	40.6	--	0.05	B	0.40	U*	0.35	--	0.11	U	0.10	U	0.54	--	0.02	U	1.9	--
E-CH03-5	0.32	B	3.34	--	0.02	B	0.40	U*	0.34	--	0.04	U	0.10	U	0.37	--	0.01	U	1.0	--
E-CH03-6	0.87	B	30.9	--	0.01	U	0.40	U*	0.22	--	0.04	U	0.10	U	0.44	--	0.01	U	0.8	B
E-CH03-7	0.53	B	106	--	0.01	U	0.40	U*	0.15	B	0.04	U	0.10	U	0.36	--	0.01	U	0.9	B
E-CH03-8	0.59	B	9.26	--	0.01	U	0.40	U*	0.32	--	0.04	U	0.10	U	0.51	--	0.01	U	1.4	--
E-CH03-9	0.80	B	47.8	--	0.01	U	0.40	U*	0.15	B	0.04	U	0.10	U	0.91	--	0.01	U	0.8	B
E-CH03-10	0.93	B	14.4	--	0.01	U	0.40	U*	0.47	--	0.04	--	0.10	U	0.72	--	0.01	U	1.2	--
E-CH03-11	1.37	--	7.12	--	0.01	U	0.40	U*	0.42	--	0.04	U	0.10	U	0.85	--	0.01	U	1.4	--
E-CH03-12	0.50	B	2.32	--	0.01	U	0.40	U*	0.12	B	0.04	U	0.10	B	0.20	--	0.01	U	0.5	B
E-CH03-13	0.55	B	7.58	--	0.01	B	0.40	U*	0.16	B	0.04	U	0.10	U	0.89	--	0.01	U	1.0	B
E-CH03-14	0.58	B	35.2	--	0.01	B	0.40	U*	0.42	--	0.05	--	0.10	U	1.59	--	0.01	U	1.5	--
E-CH03-14 DUP	0.70	B	18.0	--	0.01	U	0.40	U*	0.27	--	0.04	U	0.10	U	1.08	--	0.01	U	1.6	--
E-CH03-15	0.60	B	12.8	--	0.01	B	0.44	--	0.25	--	0.04	U	0.10	U	1.06	--	0.01	U	1.0	--
E-CH03-16	0.73	B	7.92	--	0.01	B	0.58	--	0.21	--	0.04	U	0.10	U	1.05	--	0.01	U	1.1	--
E-CH03-19	0.60	U	47.6	--	0.42	--	0.31	B	0.79	--	0.06	--	0.10	U	2.32	--	0.02	B	8.4	--
E-CH03-20	0.60	U	70.1	--	0.08	--	0.20	B	0.47	--	0.05	--	0.10	U	0.70	--	0.02	B	3.2	--
E-CH03-21/22	0.60	U	63.5	--	0.23	--	0.15	B	0.42	--	0.04	--	0.10	U	0.55	--	0.02	B	2.5	--
RS-CH03	1.08	--	16.9	--	0.01	U	0.40	U*	0.19	B	0.04	U	0.10	U	0.41	--	0.01	U	1.2	--
Control-Elut	1.74	--	2.92	--	0.02	B	0.29	B	0.24	--	0.27	--	0.10	U	0.54	--	0.06	--	1.5	--

B = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
U* = The compound was analyzed for but was not detected ("non-detect") at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 14

Analytical Results for Organic Tin in Reference Water and Elutriates Prepared from Sediments Collected at Canaveral Harbor, Florida, March – May 2003 (all data reported in µg/L, wet weight)

	MonoButyltin		DiButyltin		TriButyl Tin		TetraButyl Tin	
Station ID	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
E-CH03-1	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-1 DUP	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-2	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-3	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-4	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-5	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-6	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-7	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-8	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-9	0.0090	J	0.0057	U	0.0056	U	0.0097	U
E-CH03-10	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-11	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-12	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-13	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-14	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-14 DUP	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-15	0.019	JP	0.018	J	0.0056	U	0.0097	U
E-CH03-16	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-19	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-20	0.0065	U	0.0057	U	0.0056	U	0.0097	U
E-CH03-21/22	0.0065	U	0.0057	U	0.0056	U	0.0097	U
RS-CH03	0.0065	U	0.0057	U	0.0056	U	0.0097	U
Control-Elut	0.0065	U	0.0057	U	0.0056	U	0.0097	U

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
P = The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 15

Analytical Results for PAHs in Reference Water and Elutriates Prepared from Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported as µg/L)

Station ID:	E-CH03-1		E-CH03-1 DUP		E-CH03-2		E-CH03-3		E-CH03-4		E-CH03-5		E-CH03-6		E-CH03-7		E-CH03-8		E-CH03-9		E-CH03-10	
Analyte	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier
2-Methylnaphthalene	0.0027	U	0.0027	U	0.0027	J	0.0027	U	0.0027	U	0.0027	U	0.0030	J	0.0029	J	0.0027	U	0.0035	J	0.0027	U
Acenaphthene	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0021	J
Acenaphthylene	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U
Anthracene	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U
Benz(a)anthracene	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U
Benzo(a)pyrene	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U
Benzo(b)fluoranthene	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
Benzo(g,h,i)perylene	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U
Benzo(k)fluoranthene	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U
Chrysene	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U
Dibenz(a,h)anthracene	0.0017	U	0.0017	U	0.0029	J	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
Dibenzofuran	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U
Fluoranthene	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U
Fluorene	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U
Indeno(1,2,3-cd)pyrene	0.0021	U	0.0021	U	0.0029	J	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U
Naphthalene	0.013	J	0.017	J	0.014	J	0.018	J	0.018	J	0.015	J	0.019	J	0.019	J	0.013	J	0.031	--	0.017	J
Phenanthrene	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U
Pyrene	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
U* = The compound was analyzed for but was not detected ("non-detect") at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 15

Analytical Results for PAHs in Reference Water and Elutriates Prepared from Sediments Collected at Canaveral Harbor, Florida, March - May 2003 (all data reported as µg/L)

Station ID:	E-CH03-11		E-CH03-12		E-CH03-13		E-CH03-14		E-CH03-14 DUP		E-CH03-15		E-CH03-16		E-CH03-19		E-CH03-20		E-CH03-21/22		RS-CH03		Control-Elut	
Analyte	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier	Results	Qualifier
2-Methylnaphthalene	0.0029	J	0.0030	J	0.0041	J	0.0037	J	0.0050	J	0.0034	J	0.0034	J	0.02	U*	0.02	U*	0.02	U*	0.0029	J	0.0036	J
Acenaphthene	0.0023	J	0.0037	J	0.0032	J	0.0027	J	0.0040	J	0.0026	J	0.0031	J	0.0051	J	0.0042	J	0.0050	J	0.0020	U	0.0030	J
Acenaphthylene	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0019	J	0.0018	U	0.0020	J	0.0018	U	0.0018	U
Anthracene	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0018	J	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0011	U	0.0018	J	0.0011	U
Benz(a)anthracene	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U
Benzo(a)pyrene	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0026	J	0.0042	J	0.0018	J	0.0016	U	0.0016	U
Benzo(b)fluoranthene	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0030	J	0.0020	U	0.0020	U	0.0020	U
Benzo(g,h,i)perylene	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0037	U	0.0078	J	0.010	J	0.0045	J	0.0037	U	0.0037	U
Benzo(k)fluoranthene	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0031	J	0.0014	U	0.0014	U	0.0014	U
Chrysene	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0013	U	0.0016	J	0.0013	U	0.0014	J	0.0026	J
Dibenz(a,h)anthracene	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0062	J	0.0094	J	0.0039	J	0.0017	U	0.0017	U
Dibenzofuran	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U	0.0071	U
Fluoranthene	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U
Fluorene	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U
Indeno(1,2,3-cd)pyrene	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0068	J	0.0091	J	0.0031	J	0.0021	U	0.0021	U
Naphthalene	0.016	J	0.016	J	0.025	--	0.016	J	0.024	--	0.021	--	0.019	J	0.039	--	0.038	--	0.027	--	0.015	J	0.023	--
Phenanthrene	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0036	J	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0032	U	0.0044	J
Pyrene	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected (“non-detect”) at or above the MDL.
U* = The compound was analyzed for but was not detected (“non-detect”) at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 16
96-Hour *Mysidopsis bahia* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample	Replicate	Number of Survivors[a]
SEAWATER CONTROL (1)	A	20
	B	20
	C	18
	D	20
	E	18
	Total	96
	Percent	96%

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
CONTROL SEDIMENT (1)	A	20	20	20
	B	20	20	16
	C	20	20	20
	D	19	19	18
	E	19	19	20
	Total	98	98	94
	Percent	98%	98%	94%
E-CH03-9	A	18	20	20
	B	20	20	17
	C	20	20	19
	D	20	20	18
	E	20	18	20
	Total	98	98	94
	Percent	98%	98%	94%
E-CH03-10	A	20	20	17
	B	17	17	20
	C	18	20	20
	D	17	20	17
	E	19	20	18
	Total	91	97	92
	Percent	91%	97%	92%

TABLE 16
96-Hour *Mysidopsis bahia* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
E-CH03-11	A	20	20	20
	B	19	19	18
	C	20	20	19
	D	20	17	20
	E	18	20	20
	Total	97	96	97
	Percent	97%	96%	97%
E-CH03-12	A	20	19	19
	B	19	19	19
	C	20	18	20
	D	20	18	20
	E	18	19	19
	Total	97	93	97
	Percent	97%	93%	97%
E-CH03-13	A	20	20	20
	B	19	19	15
	C	18	18	19
	D	19	19	16
	E	19	18	19
	Total	95	94	89
	Percent	95%	94%	89%
E-CH03-14	A	19	20	19
	B	20	19	15
	C	18	17	12
	D	19	20	18
	E	18	18	15
	Total	94	94	79
	Percent	94%	94%	79%

TABLE 16
96-Hour *Mysidopsis bahia* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
E-CH03-15	A	18	18	15
	B	17	19	16
	C	17	18	19
	D	19	19	19
	E	17	17	16
	Total	88	91	85
	Percent	88%	91%	85%
E-CH03-16	A	20	18	18
	B	18	18	20
	C	18	20	17
	D	20	19	14
	E	18	18	18
	Total	94	93	87
	Percent	94%	93%	87%
E-CH03-17	A	19	20	20
	B	18	19	18
	C	20	18	18
	D	18	20	14
	E	18	20	17
	Total	93	97	87
	Percent	93%	97%	87%

TABLE 16
96-Hour *Mysidopsis bahia* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample	Replicate	Number of Survivors[a]
SEAWATER CONTROL (2)	A	20
	B	20
	C	20
	D	20
	E	20
	Total	100
	Percent	100%

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
CONTROL SEDIMENT (2)	A	20	19	20
	B	20	19	20
	C	19	19	20
	D	20	20	20
	E	20	19	20
	Total	99	96	100
	Percent	99%	96%	100%
E-CH03-20	A	20	20	20
	B	17	20	20
	C	20	20	20
	D	20	20	20
	E	18	20	20
	Total	95	100	100
	Percent	95%	100%	100%

a - Based upon 100 organisms exposed

(1) Control concentration studies conducted with initial group of samples (E-CH03-9 through E-CH03-17)

(2) Control concentration studies conducted with sample (E-CH03-20), received after initial group of samples

Source: MACTEC Engineering and Consulting, Inc.

TABLE 17
Summary of ANOVA and Dunnett's Test of Seawater Control (0 percent Elutriate) or Control Sediment (100 percent Elutriate) and Test Sediment (100 percent Elutriate) *Mysidopsis bahia* for Samples Collected at Canaveral Harbor, Florida, March – May 2003

M. bahia Control Seawater vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	11	82.1	7.47	2.56	0.012
Within Means	48	140.0	2.91		
Total	59				

Since $P < 0.05$, reject H_o: all groups equal;

Dunnett's Test

Sample ID	*a* = 0.05	Difference Between Means	Probability
Seawater Control (0 percent Elutriate)	-	-	-
ECH03-9 (100 percent)	=	-0.400	0.500
ECH03-10 (100 percent)	=	-0.800	0.496
ECH03-11(100 percent)	=	0.200	0.500
ECH03-12 (100 percent)	=	0.200	0.500
ECH03-13(100 percent)	=	-1.400	0.388
ECH03-14(100 percent)	*	-3.400	0.012
ECH03-15(100 percent)	=	-2.200	0.141
ECH03-16(100 percent)	=	-1.800	0.254
ECH03-17(100 percent)	=	-1.800	0.254
ECH03-20(100 percent)	=	0.800	0.496
Control Sediment (100 percent)	=	-0.400	0.500

= Indicates no significant difference between the sample station and the control water
* Indicates a significant difference between the sample station and the control sediment

TABLE 17
Summary of ANOVA and Dunnett's Test of Seawater Control (0 percent Elutriate) or Control Sediment (100 percent Elutriate) and Test Sediment (100 percent Elutriate) *Mysidopsis bahia* for Samples Collected at Canaveral Harbor, Florida, March – May 2003

M. bahia Control Sediment vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	10	77.60	7.760	2.53	0.017
Within Means	44	135.20	3.073		
Total	54				

Since $P < 0.05$, reject H_o: all groups equal;

Dunnett's Test

Sample ID	*a* = 0.05	Difference Between Means	Probability
Sediment Control (100 percent Elutriate)	-	-	-
ECH03-9 (100 percent)	=	0.000	0.500
ECH03-10 (100 percent)	=	-0.400	0.500
ECH03-11(100 percent)	=	0.600	0.499
ECH03-12 (100 percent)	=	0.600	0.499
ECH03-13(100 percent)	=	-1.000	0.478
ECH03-14(100 percent)	*	-3.000	0.034
ECH03-15(100 percent)	=	-1.800	0.258
ECH03-16(100 percent)	=	-1.400	0.388
ECH03-17(100 percent)	=	-1.400	0.388
ECH03-20(100 percent)	=	1.200	0.442

= Indicates no significant difference between the sample station and the control sediment
* Indicates a significant difference between the sample station and the control sediment

Source: MACTEC Engineering and Consulting, Inc.

TABLE 18
96-Hour *Menidia beryllina* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
SEAWATER CONTROL (1)	A	10
	B	10
	C	10
	D	10
	E	10
	Total	50
	Percent	100%

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
CONTROL SEDIMENT (1)	A	10	10	10
	B	10	10	10
	C	10	10	10
	D	10	10	10
	E	10	10	10
	Total	50	50	50
	Percent	100%	100%	100%
E-CH03-9	A	10	9	10
	B	10	10	9
	C	10	9	10
	D	10	10	10
	E	10	10	10
	Total	50	48	49
	Percent	100%	96%	98%
E-CH03-10	A	10	10	10
	B	9	10	10
	C	10	9	10
	D	10	10	10
	E	10	10	10
	Total	49	49	50
	Percent	98%	98%	100%

TABLE 18
96-Hour *Menidia beryllina* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
E-CH03-11	A	10	10	8
	B	7	10	8
	C	10	10	9
	D	9	10	10
	E	10	9	9
	Total	46	49	44
	Percent	92%	98%	88%
E-CH03-12	A	10	10	9
	B	10	10	10
	C	10	10	9
	D	9	10	7
	E	10	10	9
	Total	49	50	44
	Percent	98%	100%	88%
E-CH03-13	A	10	9	10
	B	10	9	7
	C	8	10	8
	D	9	9	10
	E	7	10	8
	Total	44	47	43
	Percent	88%	94%	86%
E-CH03-14	A	9	10	9
	B	10	9	1
	C	10	7	1
	D	9	9	3
	E	9	10	1
	Total	47	45	15
	Percent	94%	90%	30%

TABLE 18
96-Hour *Menidia beryllina* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
E-CH03-15	A	10	8	10
	B	9	9	8
	C	10	6	6
	D	9	9	8
	E	10	9	9
	Total	48	41	41
	Percent	96%	82%	82%
E-CH03-16	A	8	9	7
	B	8	7	10
	C	10	10	8
	D	9	10	10
	E	9	10	10
	Total	44	46	45
	Percent	88%	92%	90%
E-CH03-17	A	8	10	6
	B	10	9	7
	C	10	10	6
	D	10	10	8
	E	10	8	6
	Total	48	47	33
	Percent	96%	94%	66%

TABLE 18
96-Hour *Menidia beryllina* Survival in Three Elutriate Concentrations Prepared from Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
SEAWATER CONTROL (2)	A	10
	B	10
	C	10
	D	10
	E	10
	Total	50
	Percent	100%

Sample	Replicate	Elutriate Concentration, Number of Survivors		
		10%	50%	100%
CONTROL SEDIMENT (2)	A	10	10	10
	B	10	10	9
	C	10	10	10
	D	10	10	10
	E	10	10	10
	Total	50	50	49
	Percent	100%	100%	98%
E-CH03-20	A	10	9	10
	B	9	10	8
	C	9	10	10
	D	10	10	10
	E	10	9	9
	Total	48	48	47
	Percent	96%	96%	94%

a - Based upon 50 organisms exposed

(1) Control concentration studies conducted with initial group of samples (E-CH03-9 through E-CH03-17)

(2) Control concentration studies conducted with sample (E-CH03-20), received after initial group of samples

Source: MACTEC Engineering and Consulting, Inc.

TABLE 19

Summary of Kruskal-Wallis One-Way Test of Seawater Control (0 percent Elutriate) or Control Sediment (100 percent Elutriate) and Test Sediment (100 percent Elutriate) *Menidia beryllina* for Samples Collected at Canaveral Harbor, Florida, March - May 2003

M. beryllina Control Elutriate vs. Other Samples

Sample ID	α = 0.05	Count	Rank Sum
Seawater Control (0 percent Elutriate)	-	5	227.500
ECH03-9 (100 percent)	=	5	208.000
ECH03-10 (100 percent)	=	5	227.500
ECH03-11(100 percent)	=	5	131.500
ECH03-12 (100 percent)	=	5	134.000
ECH03-13(100 percent)	=	5	135.500
ECH03-14(100 percent)	*	5	36.000
ECH03-15(100 percent)	=	5	112.000
ECH03-16(100 percent)	=	5	164.000
ECH03-17(100 percent)	*	5	47.000
ECH03-20(100 percent)	=	5	179.500
Control Sediment (100 percent)	=	5	227.500

= Indicates no significant difference between the sample station and the control sediment

* Indicates a significant difference between the sample station and the control sediment

M. beryllina Control Sediment vs. Other Samples

Sample ID	α = 0.05	Count	Rank Sum
ECH03-9 (100 percent)	=	5	198.000
ECH03-10 (100 percent)	=	5	215.000
ECH03-11(100 percent)	=	5	129.000
ECH03-12 (100 percent)	=	5	131.500
ECH03-13(100 percent)	=	5	130.500
ECH03-14(100 percent)	*	5	36.000
ECH03-15(100 percent)	=	5	109.500
ECH03-16(100 percent)	=	5	156.500
ECH03-17(100 percent)	*	5	47.000
ECH03-20(100 percent)	=	5	172.000
Control Sediment (100 percent)	=	5	215.000

= Indicates no significant difference between the sample station and the reference sediment

* Indicates a significant difference between the sample station and the reference sediment

Source: MACTEC Engineering and Consulting, Inc.

TABLE 20
Sea Urchin (*Arbacia punctulata*) Fertilization Test, Fertilized Eggs in Three Elutriate Concentrations Prepared from Samples Collected at Canaveral Harbor, Florida, March - May 2003

Sample	Replicate	Number of Fertilized Eggs,[a] and Elutriate Concentration		
		10%	50%	100%
E-CH03-9	A	70	62	73
	B	64	77	70
	C	72	69	60
	Total	206	208	203
	Percent	69%	69%	68%
E-CH03-10	A	71	73	79
	B	62	70	72
	C	66	61	66
	Total	199	204	217
	Percent	66%	68%	73%
E-CH03-11	A	68	71	62
	B	73	67	69
	C	80	65	79
	Total	221	203	210
	Percent	74%	68%	70%
E-CH03-12	A	79	69	79
	B	82	75	69
	C	71	80	73
	Total	232	224	221
	Percent	77%	75%	74%
E-CH03-13	A	82	77	68
	B	69	64	81
	C	76	78	80
	Total	227	219	229
	Percent	76%	73%	76%
E-CH03-14	A	77	80	69
	B	81	74	60
	C	66	70	53
	Total	224	224	182
	Percent	75%	75%	61%

TABLE 20
Sea Urchin (*Arbacia punctulata*) Fertilization Test, Fertilized Eggs in Three Elutriate Concentrations Prepared from Samples Collected at Canaveral Harbor, Florida, March - May 2003

Sample	Replicate	Number of Fertilized Eggs,[a] and Elutriate Concentration		
		10%	50%	100%
E-CH03-15	A	69	71	68
	B	72	74	73
	C	73	70	75
	Total	214	215	216
	Percent	71%	72%	72%
E-CH03-16	A	72	78	69
	B	66	70	81
	C	85	71	76
	Total	223	219	226
	Percent	74%	73%	75%
E-CH03-17	A	75	82	68
	B	76	69	70
	C	68	77	75
	Total	219	228	213
	Percent	73%	76%	71%
E-CH03-20	A	79	66	73
	B	85	78	78
	C	72	79	65
	Total	236	223	216
	Percent	79%	74%	72%
CONTROL SEAWATER	A	80	--	--
	B	73	--	--
	C	81	--	--
	Total	234	--	--
	Percent	78%	--	--
CONTROL SEDIMENT	A	72	83	74
	B	82	75	79
	C	76	77	76
	Total	230	235	229
	Percent	77%	78%	76%

a - Based upon 100 eggs counted per replicate

Source: MACTEC Engineering and Consulting, Inc.

TABLE 21
Summary of ANOVA and Dunnett's Test of Seawater Control (0 percent Elutriate) or Control Sediment (100 percent Elutriate) and Test Sediment (100 percent Elutriate) *Arbacia punctulata* Fertilization for Samples Collected at Canaveral Harbor, Florida, March - May 2003

A. punctulata Control Seawater vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	11	718.89	65.35	1.81	0.109
Within Means	24	868.67	36.19		
Total	35				

Since P > 0.05 fail to reject H_o: all groups equal

Dunnett's Test (one-sided)

Sample ID	*a* = 0.05	Difference Between Means	Probability
Seawater Control (0 percent Elutriate)	-	-	1.00
E-CH03-9 (100 percent)	=	-10.33	0.13
E-CH03-10 (100 percent)	=	-5.67	0.43
E-CH03-11 (100 percent)	=	-8.00	0.27
E-CH03-12 (100 percent)	=	-4.33	0.48
E-CH03-13 (100 percent)	=	-1.67	0.50
E-CH03-14 (100 percent)	*	-17.33	0.01
E-CH03-15 (100 percent)	=	-6.00	0.41
E-CH03-16 (100 percent)	=	-2.67	0.50
E-CH03-17 (100 percent)	=	-7.00	0.34
E-CH03-20 (100 percent)	=	-6.00	0.41
Control Sediment (100 percent)	=	-1.67	0.50

= Indicates no significant difference between the sample station and the control seawater
* Indicates a significant difference between the sample station and the control seawater

TABLE 21
Summary of ANOVA and Dunnett's Test of Seawater Control (0 percent Elutriate) or Control Sediment (100 percent Elutriate) and Test Sediment (100 percent Elutriate) *Arbacia punctulata* Fertilization for Samples Collected at Canaveral Harbor, Florida, March - May 2003

A. punctulata Control Sediment vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	10	605.39	60.54	1.603	0.171
Within Means	22	830.67	37.76		
Total	32				

Since P > 0.05 fail to reject H_o: all groups equal

Dunnett's Test (one-sided)

Sample ID	*a* = 0.05	Difference Between Means	Probability
Sediment Control (100 percent Elutriate)	-	-	1.000
E-CH03-9 (100 percent)	=	-8.67	0.229
E-CH03-10 (100 percent)	=	-4.00	0.488
E-CH03-11 (100 percent)	=	-6.33	0.387
E-CH03-12 (100 percent)	=	-2.67	0.499
E-CH03-13 (100 percent)	=	0.00	0.500
E-CH03-14 (100 percent)	*	-15.67	0.018
E-CH03-15 (100 percent)	=	-4.33	0.481
E-CH03-16 (100 percent)	=	-1.00	0.500
E-CH03-17 (100 percent)	=	-5.33	0.444
E-CH03-20 (100 percent)	=	-4.33	0.481

= Indicates no significant difference between the sample station and the control sediment
* Indicates a significant difference between the sample station and the control sediment

Source: MACTEC Engineering and Consulting, Inc.

TABLE 22
LC_{50} or EC_{50} (*Mysidopsis bahia*, *Menidia beryllina* and *Arbacia punctulata*) Values[a] for Elutriate Bioassays from Samples Collected at Canaveral Harbor, Florida, March - May 2003

Sample ID	*Mysidopsis bahia* LC_{50}	*Menidia beryllina* LC_{50}	*Arbacia punctulata* EC_{50}
Control Seawater	>100	>100	>100
E-CH03-9	>100	>100	>100
E-CH03-10	>100	>100	>100
E-CH03-11	>100	>100	>100
E-CH03-12	>100	>100	>100
E-CH03-13	>100	>100	>100
E-CH03-14	>100	79	>100
E-CH03-15	>100	>100	>100
E-CH03-16	>100	>100	>100
E-CH03-17	>100	>100	>100
E-CH03-20	>100	>100	>100
Control Sediment	>100	>100	>100

[a] LC_{50} values recorded as greater than 100% had greater than 50% survivorship. In the case of *Arbacia punctulata*, an EC_{50} value greater than 100% indicated development greater than 100%.

Source: MACTEC Engineering and Consulting, Inc.

TABLE 23
10-Day Sediment Test, *Mysidopsis bahia* Survival in Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
CONTROL SEDIMENT	A	20
	B	20
	C	20
	D	18
	E	19
	Total	97
	Percent	97%
E-CH03-9	A	18
	B	20
	C	20
	D	19
	E	17
	Total	94
	Percent	94%
E-CH03-10	A	16
	B	20
	C	19
	D	19
	E	19
	Total	93
	Percent	93%
E-CH03-11	A	19
	B	19
	C	20
	D	19
	E	17
	Total	94
	Percent	94%

TABLE 23
10-Day Sediment Test, *Mysidopsis bahia* Survival in Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
E-CH03-12	A	18
	B	16
	C	16
	D	18
	E	16
	Total	84
	Percent	84%
E-CH03-13	A	18
	B	19
	C	18
	D	20
	E	18
	Total	93
	Percent	93%
E-CH03-14	A	12
	B	17
	C	12
	D	14
	E	14
	Total	69
	Percent	69%
E-CH03-15	A	14
	B	20
	C	19
	D	15
	E	14
	Total	82
	Percent	82%

TABLE 23
10-Day Sediment Test, *Mysidopsis bahia* Survival in Sediments Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
E-CH03-16	A	16
	B	17
	C	18
	D	17
	E	18
	Total	86
	Percent	86%
E-CH03-17	A	18
	B	17
	C	16
	D	17
	E	16
	Total	84
	Percent	84%
E-CH03-20	A	16
	B	17
	C	18
	D	17
	E	16
	Total	84
	Percent	84%
RS-CH030	A	19
	B	17
	C	19
	D	18
	E	20
	Total	93
	Percent	93%

a – Based on 100 organism exposed

Source: MACTEC Engineering and Consulting, Inc.

TABLE 24
Summary of ANOVA and Dunnett's Test of Control Sediment or Reference Sediment and Test Sediment Survival for Canaveral Harbor Sediment Bioassays of *Mysidopsis bahia* in Samples Collected at Canaveral Harbor, Florida, March – May 2003

Mysidopsis bahia Control Sediment vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	11	131.38	11.94	6.43	0.0001
Within Means	48	89.20	1.86		
Total	59				

Since $P < 0.05$ reject H_o: all groups equal

Dunnett's Test (one-sided)

Sample ID	*a* = 0.05	Difference Between Means	Probability
Control Sediment	-	-	1.000
E-CH03-9	=	-0.6	0.497
E-CH03-10	=	-0.8	0.479
E-CH03-11	=	-0.6	0.497
E-CH03-12	*	-2.6	0.017
E-CH03-13	=	-0.8	0.479
E-CH03-14	*	-5.6	0.000
E-CH03-15	*	-2.6	0.017
E-CH03-16	*	-2.2	0.050
E-CH03-17	*	-2.6	0.017
E-CH03-20	*	-2.6	0.017
RS-CH03	=	-0.8	0.479

= Indicates no significant difference between the sample station and the control sediment
* Indicates a significant difference between the sample station and the control sediment

TABLE 24
Summary of ANOVA and Dunnett's Test of Control Sediment or Reference Sediment and Test Sediment Survival for Canaveral Harbor Sediment Bioassays of *Mysidopsis bahia* in Samples Collected at Canaveral Harbor, Florida, March – May 2003

Mysidopsis bahia Reference Sediment vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	10	113.38	11.34	5.801	0.000
Within Means	44	86.00	1.96		
Total	54				

Since $P < 0.05$ reject H_o: all groups equal

Dunnett's Test (one-sided)

Sample ID	*a* = 0.05	Difference Between Means	Probability
RS-CH03	-	-	1.000
E-CH03-9	=	0.2	0.500
E-CH03-10	=	0.0	0.500
E-CH03-11	=	0.2	0.500
E-CH03-12	=	-1.8	0.134
E-CH03-13	=	0.0	0.500
E-CH03-14	*	-4.8	0.000
E-CH03-15	=	-1.8	0.134
E-CH03-16	=	-1.4	0.272
E-CH03-17	=	-1.8	0.134
E-CH03-20	=	-1.8	0.134

= Indicates no significant difference between the sample station and the reference sediment
* Indicates a significant difference between the sample station and the reference sediment

Source: MACTEC Engineering and Consulting, Inc.

TABLE 25
10-Day Sediment Test, *Leptocheirus plumulosus* Survival in Samples Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
CONTROL SEDIMENT	A	19
	B	19
	C	19
	D	20
	E	18
	Total	95
	Percent	95%
E-CH03-9	A	20
	B	20
	C	15
	D	13
	E	15
	Total	83
	Percent	83%
E-CH03-10	A	15
	B	16
	C	15
	D	19
	E	16
	Total	81
	Percent	81%
E-CH03-11	A	16
	B	13
	C	20
	D	16
	E	14
	Total	79
	Percent	79%

TABLE 25
10-Day Sediment Test, *Leptocheirus plumulosus* Survival in Samples Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
E-CH03-12	A	17
	B	18
	C	18
	D	15
	E	17
	Total	85
	Percent	85%
E-CH03-13	A	14
	B	17
	C	19
	D	17
	E	16
	Total	83
	Percent	83%
E-CH03-14	A	12
	B	14
	C	20
	D	20
	E	14
	Total	80
	Percent	80%
E-CH03-15	A	18
	B	15
	C	13
	D	20
	E	18
	Total	84
	Percent	84%

TABLE 25
10-Day Sediment Test, *Leptocheirus plumulosus* Survival in Samples Collected at Canaveral Harbor, Florida, March – May 2003

Sample	Replicate	Number of Survivors[a]
E-CH03-16	A	16
	B	18
	C	19
	D	17
	E	18
	Total	88
	Percent	88%
E-CH03-17	A	20
	B	18
	C	19
	D	19
	E	17
	Total	93
	Percent	93%
E-CH03-20	A	15
	B	19
	C	19
	D	17
	E	17
	Total	87
	Percent	87%
RS-CH03	A	17
	B	14
	C	18
	D	18
	E	17
	Total	84
	Percent	84%

a – Based on 100 organisms exposed

Source: MACTEC Consulting and Engineering, Inc.

TABLE 26
Summary of Statistical Analyses of Control Sediment or Reference Sediment and Test Sediment Survival for Canaveral Harbor Sediment Bioassays of *Leptocheirus plumulosus*, for Samples Collected at Canaveral Harbor, Florida, March – May 2003

Leptocheirus plumulosus Control Sediment vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	11	52.7	4.79	1.04	0.428
Within Means	48	221.2	4.61		
Total	59				

Since P > 0.05 fail to reject H_o: all groups equal

Dunnett's Test (one-sided)

Sample ID	*a* = 0.05	Difference Between Means	Probability
Control Sediment	-	-	-
ECH03-9	=	-2.4	0.219
ECH03-10	=	-2.8	0.135
ECH03-11	=	-3.2	0.076
ECH03-12	=	-2.0	0.324
ECH03-13	=	-2.4	0.219
ECH03-14	=	-3.0	0.102
ECH03-15	=	-2.2	0.270
ECH03-16	=	-1.4	0.462
ECH03-17	=	-0.4	0.500
ECH03-20	=	-1.6	0.425
Reference Sediment	=	-2.2	0.270

= Indicates no significant difference between the sample station and the control sediment
* Indicates a significant difference between the sample station and the control sediment

TABLE 26
Summary of Statistical Analyses of Control Sediment or Reference Sediment and Test Sediment Survival for Canaveral Harbor Sediment Bioassays of *Leptocheirus plumulosus*, for Samples Collected at Canaveral Harbor, Florida, March – May 2003

Leptocheirus plumulosus Reference Sediment vs. Other Samples

ANOVA for Differences Between Means

Source of Variation	df	Sum of Squares	Mean Square	F	P
Between Means	10	31.63	3.164	0.635	0.776
Within Means	44	219.20	4.982		
Total	54				

Since P > 0.05, fail to reject H_o: all groups equal

Dunnett's Test (one-sided)

Sample ID	*a* = 0.05	Difference Between Means	Probability
RSCH03	=	-	1.000
ECH03-9	=	-0.2	0.500
ECH03-10	=	-0.6	0.500
ECH03-11	=	-1.0	0.495
ECH03-12	=	0.2	0.500
ECH03-13	=	-0.2	0.500
ECH03-14	=	-0.8	0.499
ECH03-15	=	0.0	0.500
ECH03-16	=	0.8	0.499
ECH03-17	=	1.8	0.384
ECH03-20	=	0.6	0.500

= Indicates no significant difference between the sample station and the reference sediment
* Indicates a significant difference between the sample station and the reference sediment

Source: MACTEC Engineering and Consulting, Inc.

TABLE 27
Survivorship of *Macoma nasuta* and *Nereis virens* During 28-Day Bioaccumulation Bioassays with Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample ID	Replicate	*Macoma nasuta*[a]	*Nereis virens*[a]
E-CH03-9	A	20	20
	B	17	20
	C	18	19
	D	18	18
	E	17	19
	Total	90	96
	Percent	90%	96%
E-CH03-10	A	16	18
	B	18	19
	C	18	20
	D	17	20
	E	15	18
	Total	84	95
	Percent	84%	95%
E-CH03-11	A	19	20
	B	15	17
	C	19	20
	D	19	19
	E	17	19
	Total	89	95
	Percent	89%	95%
E-CH03-12	A	19	18
	B	16	19
	C	17	18
	D	16	19
	E	18	20
	Total	86	94
	Percent	86%	94%
E-CH03-13	A	15	20
	B	14	20
	C	17	18
	D	17	17
	E	17	18
	Total	80	93
	Percent	80%	93%

TABLE 27
Survivorship of *Macoma nasuta* and *Nereis virens* During 28-Day Bioaccumulation Bioassays with Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample ID	Replicate	*Macoma nasuta*[a]	*Nereis virens*[a]
E-CH03-14	A	14	18
	B	13	17
	C	16	19
	D	17	17
	E	15	18
	Total	75	89
	Percent	75%	89%
E-CH03-15	A	17	18
	B	17	17
	C	15	19
	D	18	20
	E	16	20
	Total	83	94
	Percent	83%	94%
E-CH03-16	A	18	18
	B	19	19
	C	16	20
	D	19	17
	E	16	20
	Total	88	94
	Percent	88%	94%
E-CH03-17	A	18	19
	B	19	19
	C	17	20
	D	17	18
	E	16	19
	Total	87	95
	Percent	87%	95%
RS-CH03	A	18	19
	B	16	18
	C	18	17
	D	18	17
	E	20	19
	Total	90	90
	Percent	90%	90%

TABLE 27
Survivorship of *Macoma nasuta* and *Nereis virens* During 28-Day Bioaccumulation Bioassays with Sediments Collected at Canaveral Harbor, Florida, March - May 2003

Sample ID	Replicate	*Macoma nasuta*[a]	*Nereis virens*[a]
Control Sediment (1)	A	19	20
	B	20	20
	C	20	20
	D	20	17
	E	13	20
	Total	92	97
	Percent	92%	97%
E-CH03-20	A	17	18
	B	19	19
	C	19	20
	D	20	19
	E	19	20
	Total	94	96
	Percent	94%	96%
Control Sediment (2)*	A	19	20
	B	17	20
	C	18	17
	D	18	19
	E	18	19
	Total	90	95
	Percent	90%	95%

a - Based upon 100 organisms exposed per sample
* - corresponds to control sediment run concurrently with E-CH03-20

Source: MACTEC Engineering and Consulting, Inc.

TABLE 28
Results of Lipids and Total Solids Analyses for *Macoma nasuta* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station ID	Replicate	Lipids, Total (%)	Total Solids (%)
RS-CH03-T	A	0.46	13.8
RS-CH03-T	B	0.43	15.2
RS-CH03-T	C	0.49	15.8
RS-CH03-T	D	0.34	10.3
RS-CH03-T	E	0.24 U	8.63
E-CH03-9,10,11,20-T	A	0.44	13.4
E-CH03-9,10,11,20-T	B	0.45	13.8
E-CH03-9,10,11,20-T	C	0.45	13.9
E-CH03-9,10,11,20-T	D	0.39	12.9
E-CH03-9,10,11,20-T	E	0.37	13.1
E-CH03-13,16-T	A	0.25 U	9.8
E-CH03-13,16-T	B	0.24	9.1
E-CH03-13,16-T	C	0.24	8.3
E-CH03-13,16-T	D	0.24	8.9
E-CH03-13,16-T	E	0.25	9.4
E-CH03-12,15-T	A	0.27	13.4
E-CH03-12,15-T	B	0.41	13.2
E-CH03-12,15-T	C	0.25 U	9.5
E-CH03-12,15-T	D	0.37	14.7
E-CH03-12,15-T	E	0.32	18.2
M. nasuta tissue pre-test	NA	0.57	14.2

NA = Not applicable
U = The compound was analyzed for, but was not detected (“non-detect”) at or above the MDL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 29

Results of Lipids and Total Solids Analyses for *Nereis virens* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station ID	Replicate	Lipids, Total (%)	Total Solids (%)
RS-CH03-T	A	0.97	12.8
RS-CH03-T	B	0.98	12.2
RS-CH03-T	C	0.81	11.8
RS-CH03-T	D	1.2	12.8
RS-CH03-T	E	1.1	11.8
E-CH03-9,10,11,20-T	A	0.66	11.9
E-CH03-9,10,11,20-T	B	0.74	12.1
E-CH03-9,10,11,20-T	C	0.79	12.3
E-CH03-9,10,11,20-T	D	0.85	12.5
E-CH03-9,10,11,20-T	E	0.71	12.0
E-CH03-13,16-T	A	0.78	12.1
E-CH03-13,16-T	B	0.80	12.3
E-CH03-13,16-T	C	0.64	10.5
E-CH03-13,16-T	D	0.68	11.7
E-CH03-13,16-T	E	0.54	10.6
E-CH03-12,15-T	A	0.51	11.3
E-CH03-12,15-T	B	0.64	12.2
E-CH03-12,15-T	C	0.57	11.1
E-CH03-12,15-T	D	0.73	12.3
E-CH03-12,15-T	E	0.75	12.1
N. virens tissue pre-test^	NA	0.69	14.8

NA = Not applicable
^ = The pre-test N. Virens organisms were not depurated before freezing. Section text Section 3.6.5 for full explanation.

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 30
Results of Metals Analyses for *Macoma nasuta* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station	Replicate	Aluminum (mg/Kg)				Antimony (mg/Kg)				Arsenic (mg/Kg)				Cadmium (mg/Kg)				Chromium (mg/Kg)				Copper (mg/Kg)				Lead (mg/Kg)				Mercury (mg/Kg)				Nickel (mg/Kg)				Silver (mg/Kg)				Zinc (mg/Kg)			
		Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes
RS-CH03-T	A	391	*N	54.0	*N	0.08	--	0.011	--	13.8	--	1.900	--	0.12	--	0.017	--	36.0	--	4.97	--	12.3	--	1.700	--	1.090	--	0.1500	--	0.07	--	0.009	--	19.5	--	2.690	--	0.066	--	0.0092	--	125	--	17.2	--
RS-CH03-T	B	750	*N	114	*N	0.07	--	0.011	--	13.7	--	2.080	--	0.15	--	0.022	--	22.3	--	3.39	--	12.7	--	1.930	--	1.450	--	0.2200	--	0.07	--	0.011	--	14.0	--	2.140	--	0.100	--	0.0152	--	81.8	--	12.4	--
RS-CH03-T	C	751	*N	119	*N	0.07	--	0.010	--	13.4	--	2.120	--	0.15	--	0.024	--	46.5	--	7.34	--	11.4	--	1.790	--	1.380	--	0.2180	--	0.07	--	0.011	--	27.1	--	4.280	--	0.124	--	0.0196	--	89.1	--	14.1	--
RS-CH03-T	D	419	*N	43.1	*N	0.13	--	0.013	--	20.3	--	2.090	--	0.12	--	0.012	--	56.9	--	5.86	--	13.7	--	1.410	--	1.110	--	0.1140	--	0.11	--	0.011	--	30.2	--	3.110	--	0.116	--	0.0119	--	87.5	--	9.0	--
RS-CH03-T	E	673	*N	57.9	*N	0.09	--	0.008	--	17.5	--	1.510	--	0.13	--	0.011	--	32.5	--	2.79	--	13.7	--	1.180	--	1.130	--	0.0975	--	0.08	--	0.007	--	17.7	--	1.520	--	0.120	--	0.0103	--	112	--	9.6	--
E-CH03-9,10,11,20-T	A	1230	--	164	--	0.063	--	0.009	--	15.9	--	2.130	--	0.13	--	0.017	--	23.9	--	3.20	--	12.0	--	1.610	--	1.490	--	0.1990	--	0.05	--	0.007	--	13.5	--	1.810	--	0.133	--	0.0179	--	69.8	--	9.35	--
E-CH03-9,10,11,20-T	B	1700	--	235	--	0.054	--	0.007	--	16.2	--	2.240	--	0.14	--	0.019	--	20.2	--	2.79	--	12.2	--	1.690	--	1.660	--	0.2290	--	0.06	--	0.008	--	11.1	--	1.540	--	0.189	--	0.0261	--	78.6	--	10.9	--
E-CH03-9,10,11,20-T	C	1100	--	153	--	0.075	--	0.010	--	18.5	--	2.570	--	0.14	--	0.019	--	19.6	--	2.72	--	11.5	--	1.600	--	1.440	--	0.2000	--	0.06	--	0.008	--	11.7	--	1.630	--	0.163	--	0.0227	--	69.9	--	9.71	--
E-CH03-9,10,11,20-T	D	1580	--	204	--	0.055	--	0.007	--	17.9	--	2.310	--	0.14	--	0.018	--	23.9	--	3.09	--	11.0	--	1.420	--	1.660	--	0.2140	--	0.06	--	0.008	--	14.4	--	1.850	--	0.161	--	0.0208	--	75.8	--	9.77	--
E-CH03-9,10,11,20-T	E	1410	--	184	--	0.060	--	0.008	--	18.2	--	2.390	--	0.15	--	0.020	--	18.6	--	2.43	--	11.0	--	1.440	--	1.640	--	0.2150	--	0.07	--	0.009	--	11.0	--	1.440	--	0.123	--	0.0161	--	83.7	--	11.0	--
E-CH03-13,16-T	A	1260	--	124	--	0.053	--	0.005	--	21.3	--	2.080	--	0.13	--	0.013	--	5.0	--	0.49	--	14.7	--	1.440	--	1.410	--	0.1380	--	0.05	--	0.005	--	6.46	--	0.633	--	0.137	--	0.0134	--	66.9	--	6.56	--
E-CH03-13,16-T	B	1440	--	131	--	0.052	--	0.005	--	17.0	--	1.550	--	0.15	--	0.013	--	4.3	--	0.39	--	17.1	--	1.560	--	1.520	--	0.1380	--	0.05	--	0.004	--	4.29	--	0.390	--	0.102	--	0.0093	--	75.6	--	6.88	--
E-CH03-13,16-T	C	1700	--	141	--	0.054	--	0.004	--	19.3	--	1.600	--	0.12	--	0.010	--	4.5	--	0.37	--	13.5	--	1.120	--	1.490	--	0.1240	--	0.05	--	0.004	--	3.76	--	0.312	--	0.206	--	0.0171	--	62.0	--	5.15	--
E-CH03-13,16-T	D	1530	--	136	--	0.062	--	0.006	--	22.1	--	1.970	--	0.14	--	0.013	--	2.3	--	0.21	--	15.3	--	1.360	--	1.530	--	0.1360	--	0.05	--	0.005	--	3.37	--	0.300	--	0.151	--	0.0134	--	63.0	--	5.60	--
E-CH03-13,16-T	E	1740	--	164	--	0.058	--	0.005	--	21.2	--	1.990	--	0.14	--	0.013	--	2.4	--	0.23	--	19.6	--	1.840	--	1.780	--	0.1670	--	0.05	--	0.005	--	3.31	--	0.311	--	0.189	--	0.0178	--	59.4	--	5.58	--
E-CH03-12,15-T	A	1140	--	153	--	0.059	--	0.008	--	18.8	--	2.520	--	0.15	--	0.020	--	7.1	--	0.95	--	14.2	--	1.910	--	1.440	--	0.1930	--	0.05	--	0.007	--	5.54	--	0.743	--	0.148	--	0.0199	--	87.3	--	11.7	--
E-CH03-12,15-T	B	1300	--	172	--	0.055	--	0.007	--	16.1	--	2.130	--	0.19	--	0.024	--	14.0	--	1.85	--	14.8	--	1.960	--	1.780	--	0.2340	--	0.06	--	0.008	--	8.99	--	1.190	--	0.178	--	0.0235	--	95.1	--	12.6	--
E-CH03-12,15-T	C	2110	--	200	--	0.056	--	0.005	--	15.7	--	1.490	--	0.15	--	0.014	--	11.9	--	1.13	--	16.3	--	1.540	--	1.780	--	0.1690	--	0.07	--	0.007	--	9.46	--	0.898	--	0.119	--	0.0113	--	88.3	--	8.39	--
E-CH03-12,15-T	D	1650	--	243	--	0.057	--	0.008	--	19.9	--	2.930	--	0.15	--	0.022	--	23.2	--	3.41	--	13.0	--	1.900	--	1.840	--	0.2700	--	0.05	--	0.007	--	12.7	--	1.870	--	0.182	--	0.0267	--	101	--	14.8	--
E-CH03-12,15,T	E	1050	--	192	--	0.057	--	0.010	--	20.3	--	3.690	--	0.15	--	0.027	--	5.2	--	0.95	--	13.8	--	2.520	--	1.730	--	0.3150	--	0.03	--	0.006	--	5.10	--	0.928	--	0.221	--	0.0402	--	71.2	--	13.0	--
M. nasuta tissue pre-test		236	*N	33.5	*N	0.09	--	0.013	--	20.2	--	2.870	--	0.20	--	0.028	--	3.1	--	0.44	--	10.1	--	1.430	--	0.701	--	0.0995	--	0.08	--	0.011	--	4.51	--	0.640	--	0.154	--	0.0219	--	83.6	--	11.9	--

* = The result is an outlier, see case narrative.
N = The matrix spike sample recovery is not within control limits.
NA = Not applicable
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 31
Results of Metals Analyses for *Nereis virens* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station	Replicate	Aluminum (mg/Kg)				Antimony (mg/Kg)				Arsenic (mg/Kg)				Cadmium (mg/Kg)				Chromium (mg/Kg)				Copper (mg/Kg)				Lead (mg/Kg)				Mercury (mg/Kg)				Nickel (mg/Kg)				Silver (mg/Kg)				Zinc (mg/Kg)			
		Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes
RS-CH03-T	A	32.0	--	4.1	--	0.012	B,N	0.002	B,N	17.8	--	2.27	--	0.29	--	0.037	--	0.30	U	0.04	U	8.35	--	1.070	--	0.868	--	0.1110	--	0.068	--	0.009	--	0.51	--	0.066	--	0.112	--	0.0143	--	234	*	29.9	*
RS-CH03-T	B	31.0	--	3.8	--	0.013	B,N	0.002	B,N	14.5	--	1.76	--	0.24	--	0.029	--	0.41	B	0.05	B	11.1	--	1.360	--	0.734	--	0.0895	--	0.067	--	0.008	--	0.85	--	0.104	--	0.125	--	0.0152	--	67.7	*	8.25	*
RS-CH03-T	C	72.5	--	8.6	--	0.014	B,N	0.002	B,N	16.4	--	1.94	--	0.29	--	0.034	--	1.76	--	0.21	--	14.7	--	1.740	--	0.810	--	0.0956	--	0.075	--	0.009	--	2.02	--	0.238	--	0.113	--	0.0134	--	211	*	24.9	*
RS-CH03-T	D	20.4	--	2.6	--	0.010	B,N	0.001	B,N	17.8	--	2.28	--	0.30	--	0.039	--	0.30	U	0.04	U	8.87	--	1.130	--	0.839	--	0.1070	--	0.047	--	0.006	--	0.57	--	0.073	--	0.102	--	0.0131	--	205	*	26.2	*
RS-CH03-T	E	16.2	--	1.9	--	0.013	B,N	0.002	B,N	16.1	--	1.90	--	0.29	--	0.034	--	0.30	U	0.04	U	11.8	--	1.390	--	0.819	--	0.0966	--	0.068	--	0.008	--	0.58	--	0.068	--	0.100	--	0.0118	--	63.1	*	7.45	*
E-CH03-9,10,11,20-T	A	81.1	--	9.66	--	0.01	B	0.001	B	12.2	--	1.45	--	0.27	--	0.032	--	0.4	B	0.05	B	12.3	--	1.460	--	0.750	--	0.0893	--	0.12	--	0.014	--	0.79	--	0.094	--	0.184	N	0.0219	N	72.2	N*	8.59	N*
E-CH03-9,10,11,20-T	B	82.8	--	10.0	--	0.01	B	0.001	B	11.8	--	1.42	--	0.26	--	0.031	--	0.3	B	0.04	B	12.3	--	1.480	--	0.668	--	0.0809	--	0.10	--	0.012	--	0.92	--	0.112	--	0.185	N	0.0224	N	147	N*	17.7	N*
E-CH03-9,10,11,20-T	C	104	--	12.7	--	0.02	B	0.002	B	11.2	--	1.38	--	0.23	--	0.028	--	0.3	U	0.04	U	10.1	--	1.240	--	0.591	--	0.0727	--	0.10	--	0.013	--	0.79	--	0.097	--	0.138	N	0.0169	N	112	N*	13.8	N*
E-CH03-9,10,11,20-T	D	196	--	24.5	--	0.01	B	0.001	B	12.3	--	1.53	--	0.27	--	0.033	--	0.4	B	0.05	B	13.5	--	1.690	--	0.703	--	0.0879	--	0.12	--	0.015	--	0.86	--	0.107	--	0.139	N	0.0173	N	264	N*	33.0	N*
E-CH03-9,10,11,20-T	E	73.3	--	8.79	--	0.01	B	0.002	B	11.7	--	1.40	--	0.23	--	0.028	--	0.4	B	0.04	B	10.7	--	1.280	--	0.532	--	0.0639	--	0.12	--	0.014	--	0.66	--	0.079	--	0.250	N	0.0300	N	221	N*	26.5	N*
E-CH03-13,16-T	A	20.5	--	2.48	--	0.01	B	0.001	B	13.0	--	1.57	--	0.26	--	0.031	--	0.3	U	0.04	U	15.3	--	1.860	--	0.546	--	0.0661	--	0.11	--	0.013	--	1.29	--	0.156	--	0.130	N	0.0158	N	387	N*	46.8	N*
E-CH03-13,16-T	B	60.3	--	7.41	--	0.01	B	0.001	B	11.9	--	1.46	--	0.24	--	0.030	--	0.3	B	0.04	B	12.8	--	1.570	--	0.567	--	0.0698	--	0.12	--	0.015	--	1.13	--	0.139	--	0.160	N	0.0196	N	75.6	N*	9.30	N*
E-CH03-13,16-T	C	34.7	--	3.64	--	0.01	B	0.001	B	12.6	--	1.32	--	0.27	--	0.028	--	0.4	B	0.04	B	13.2	--	1.390	--	0.580	--	0.0609	--	0.13	--	0.014	--	1.39	--	0.145	--	0.135	N	0.0141	N	314	N*	32.9	N*
E-CH03-13,16-T	D	22.6	--	2.64	--	0.01	B	0.001	B	11.9	--	1.39	--	0.27	--	0.031	--	0.4	B	0.04	B	11.4	--	1.340	--	0.563	--	0.0659	--	0.14	--	0.016	--	1.16	--	0.136	--	0.153	N	0.0179	N	187	N*	21.9	N*
E-CH03-13,16-T	E	22.5	--	2.39	--	0.01	B	0.001	B	12.0	--	1.27	--	0.26	--	0.028	--	0.4	B	0.04	B	10.5	--	1.120	--	0.552	--	0.0585	--	0.17	--	0.018	--	0.98	--	0.104	--	0.180	N	0.0191	N	67.8	N*	7.19	N*
E-CH03-12,15-T	A	59.0	--	6.66	--	0.01	B	0.001	B	12.6	--	1.42	--	0.26	--	0.030	--	0.5	U	0.06	U	12.4	--	1.410	--	0.587	--	0.0663	--	0.12	--	0.014	--	1.55	--	0.175	--	0.158	N	0.0178	N	353	N*	39.9	N*
E-CH03-12,15-T	B	29.2	--	3.56	--	0.01	B	0.001	B	12.9	--	1.57	--	0.28	--	0.034	--	0.3	--	0.04	--	20.0	--	2.440	--	0.648	--	0.0790	--	0.14	--	0.017	--	1.48	--	0.180	--	0.137	N	0.0167	N	144	N*	17.6	N*
E-CH03-12,15-T	C	60.7	--	6.73	--	0.01	B	0.001	B	14.0	--	1.56	--	0.30	--	0.033	--	0.3	U	0.03	U	11.9	--	1.320	--	0.655	--	0.0727	--	0.17	--	0.019	--	1.54	--	0.171	--	0.126	N	0.0140	N	400	N*	44.4	N*
E-CH03-12,15-T	D	47.2	--	5.81	--	0.01	B	0.001	B	11.7	--	1.44	--	0.29	--	0.035	--	0.3	U	0.04	U	12.4	--	1.520	--	0.675	--	0.0831	--	0.15	--	0.018	--	1.48	--	0.182	--	0.116	N	0.0143	N	145	N*	17.9	N*
E-CH03-12,15-T	E	26.3	--	3.18	--	0.02	B	0.002	B	12.0	--	1.45	--	0.26	--	0.031	--	0.3	B	0.04	B	11.5	--	1.390	--	0.582	--	0.0704	--	0.13	--	0.016	--	0.95	--	0.115	--	0.181	N	0.0219	N	258	N*	31.3	N*
N. virens tissue pre-test^		5230	--	774	--	0.019	B,N	0.003	B,N	10.2	--	1.50	--	0.24	--	0.035	--	11.4	--	1.69	--	12.3	--	1.810	--	5.260	--	0.7790	--	0.175	--	0.026	--	5.53	--	0.819	--	0.236	--	0.0349	--	120	*	17.8	*

B = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N = The matrix spike sample recovery is not within control limits.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
-- = No qualifier needed
* = The result is an outlier, see case narrative.
^ = The pre-test N. Virens organisms were not depurated before freezing. Section text Section 3.6.5 for full explanation.

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 32

Results of Organotin Analyses for *Macoma nasuta* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

		Di-n-butyltin (ug/Kg)				n-Butyltin (ug/Kg)				Tetra-n-butyltin (ug/Kg)				Tri-n-butyltin (ug/Kg)			
Station	Replicate	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes
RS-CH03-T	A	22	--	3.1	--	2.8	U	0.38	U	2.8	U	0.38	U	8.5	U, i	1.2	U, i
RS-CH03-T	B	29	--	4.5	--	2.5	U	0.38	U	2.5	U	0.38	U	7.5	--	1.1	--
RS-CH03-T	C	42	--	6.6	--	3.2	J	0.51	J	2.5	U	0.38	U	7.6	U, i	1.2	U, i
RS-CH03-T	D	54	--	5.6	--	6.2	J	0.64	J	3.7	U	0.38	U	9.7	U, i	1.0	U, i
RS-CH03-T	E	43	--	3.7	--	4.5	U	0.38	U	4.5	U	0.38	U	12	U, i	1.0	U, i
E-CH03-9,10,11,20-T	A	53	--	7.1	--	5.5	J	0.74	J	2.9	U	0.38	U	21	P	2.8	P
E-CH03-9,10,11,20-T	B	38	--	5.3	--	4.1	J	0.56	J	2.8	U	0.38	U	18	--	2.5	--
E-CH03-9,10,11,20-T	C	50	--	7.0	--	4.8	J	0.67	J	2.8	U	0.38	U	19	--	2.7	--
E-CH03-9,10,11,20-T	D	53	--	6.8	--	5.8	J	0.75	J	3.0	U	0.38	U	18	U, i	2.3	U, i
E-CH03-9,10,11,20-T	E	41	--	5.3	--	3.0	U	0.38	U	3.0	U	0.38	U	15	--	2.0	--
E-CH03-13,16-T	A	49	--	4.8	--	4.9	J	0.48	J	3.9	U	0.38	U	18	--	1.7	--
E-CH03-13,16-T	B	71	--	6.5	--	7.0	J	0.63	J	4.2	U	0.38	U	19	--	1.7	--
E-CH03-13,16-T	C	73	--	6.0	--	6.7	J	0.56	J	4.6	U	0.38	U	21	--	1.7	--
E-CH03-13,16-T	D	26	--	2.3	--	4.3	U	0.38	U	4.3	U	0.38	U	20	--	1.8	--
E-CH03-13,16-T	E	47	--	4.4	--	6.6	J	0.62	J	4.1	U	0.38	U	27	--	2.5	--
E-CH03-12,15-T	A	38	--	5.1	--	2.9	U	0.38	U	2.9	U	0.38	U	23	P	3.1	P
E-CH03-12,15-T	B	43	--	5.7	--	6.3	J	0.83	J	2.9	U	0.38	U	25	P	3.3	P
E-CH03-12,15-T	C	45	--	4.2	--	6.1	J	0.58	J	4.0	U	0.38	U	31	--	3.0	--
E-CH03-12,15-T	D	48	--	7.0	--	5.1	J	0.74	J	2.6	U	0.38	U	22	--	3.3	--
E-CH03-12,15-T	E	44	--	8.0	--	3.8	J	0.70	J	2.1	U	0.38	U	20	--	3.6	--
M. nasuta tissue pre-test		5.5	J	0.78	J	2.7	U	0.38	U	2.7	U	0.38	U	2.4	U	0.33	U

i = The MRL/MDL has been elevated due to a chromatographic interference.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
P = The GC or HPLC confirmation criteria was exceeded; the relative percent difference is >40% between the two analytical results.
U = The compound was anayzed for, but was not detected ("non-detect") at or above the MDL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 33

Results of Organotin Analyses for *Nereis virens* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

		Di-n-butyltin (ug/Kg)				n-Butyltin (ug/Kg)				Tetra-n-butyltin (ug/Kg)				Tri-n-butyltin (ug/Kg)			
Station	Replicate	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes	Reported Value **(Dry)**	Result Notes	Reported Value **(Wet)**	Result Notes
RS-CH03-T	A	94	--	12	--	27	--	3.5	--	3.0	U	0.38	U	5.8	J	0.74	J
RS-CH03-T	B	42	--	5.1	--	21	--	2.6	--	3.2	U	0.38	U	3.9	J	0.48	J
RS-CH03-T	C	61	--	7.1	--	28	--	3.3	--	3.3	U	0.38	U	7.0	J	0.83	J
RS-CH03-T	D	43	--	5.5	--	20	--	2.6	--	3.0	U	0.38	U	5.8	J	0.75	J
RS-CH03-T	E	76	--	9.0	--	27	--	3.1	--	3.3	U	0.38	U	5.0	J	0.59	J
E-CH03-9,10,11,20-T	A	43	--	5.1	--	16	--	1.9		3.2	U	0.38	U	2.8	U	0.33	U
E-CH03-9,10,11,20-T	B	29	--	3.5	--	13	--	1.6	--	3.2	U	0.38	U	2.8	U	0.33	U
E-CH03-9,10,11,20-T	C	27	--	3.3	--	10	--	1.2	--	3.1	U	0.38	U	2.7	U	0.33	U
E-CH03-9,10,11,20-T	D	38	--	4.8	--	12	--	1.5	--	3.1	U	0.38	U	2.9	J	0.36	J
E-CH03-9,10,11,20-T	E	26	--	3.1	--	7.7	J	0.92	J	3.2	U	0.38	U	2.8	U	0.33	U
E-CH03-13,16-T	A	18	--	2.1	--	10	--	1.3	--	3.2	U	0.38	U	2.8	U	0.33	U
E-CH03-13,16-T	B	12	--	1.5	--	17	--	2.1	--	3.1	U	0.38	U	2.7	U	0.33	U
E-CH03-13,16-T	C	37	--	3.8	--	15	--	1.6	--	3.7	U	0.38	U	3.2	U	0.33	U
E-CH03-13,16-T	D	48	--	5.6	--	19	--	2.2	--	3.3	U	0.38	U	2.9	U	0.33	U
E-CH03-13,16-T	E	15	--	1.6	--	12	--	1.3	--	3.6	U	0.38	U	3.2	U	0.33	U
E-CH03-12,15-T	A	30	--	3.4	--	12	--	1.4	--	3.4	U	0.38	U	3.0	U	0.33	U
E-CH03-12,15-T	B	18	--	2.2	--	4.6	J	0.56	J	3.2	U	0.38	U	2.8	U	0.33	U
E-CH03-12,15-T	C	29	--	3.2	--	9.7	--	1.1	--	3.5	U	0.38	U	3.0	U	0.33	U
E-CH03-12,15-T	D	51	--	6.2	--	98	--	12	--	3.1	U	0.38	U	2.7	U	0.33	U
E-CH03-12,15-T	E	30	--	3.6	--	14	--	1.7	--	3.2	U	0.38	U	2.8	U	0.33	U
N. virens tissue pre-test^		2.4	U	0.35	U	2.6	U	0.38	U	2.6	U	0.38	U	2.3	U	0.33	U

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.

-- = No qualifier needed

^ = The pre-test *N. virens* organisms were not depurated before freezing. Section text Section 3.6.5 for full explanation.

Source: Columbia Analytical Services, Inc.

Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 34
Results of PAH Analyses for *Macoma nasuta* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station	Replicate	2-Methyl naphthalene (ug/Kg)				Acenaphthene (ug/Kg)				Acenaphthylene (ug/Kg)				Anthracene (ug/Kg)				Benz(a) anthracene (ug/Kg)				Benzo(a) pyrene (ug/Kg)				Benzo(b) fluoranthene (ug/Kg)				Benzo(g,h,i) perylene (ug/Kg)				Benzo(k) fluoranthene (ug/Kg)			
		Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes
RS-CH03-T	A	27	J	3.8	J	0.86	J	0.12	J	0.87	U	0.12	U	1.3	J	0.18	J	6.8	J	0.94	J	2.1	J	0.29	J	4.3	J	0.60	J	2.1	J	0.29	J	3.4	J	0.46	J
RS-CH03-T	B	13	J	1.9	J	0.91	J	0.14	J	2.4	J	0.36	J	1.5	J	0.23	J	6.0	J	0.91	J	4.7	J	0.72	J	5.4	J	0.81	J	4.4	J	0.67	J	5.4	J	0.82	J
RS-CH03-T	C	13	J	2.0	J	1.0	J	0.16	J	0.76	U	0.12	U	1.6	J	0.25	J	5.9	J	0.93	J	2.1	J	0.33	J	4.2	J	0.67	J	2.4	J	0.38	J	3.9	J	0.62	J
RS-CH03-T	D	9.4	J	0.97	J	0.81	U	0.083	U	1.2	U	0.12	U	1.6	J	0.16	J	6.7	J	0.69	J	1.5	J	0.15	J	3.7	J	0.38	J	2.0	U	0.20	U	3.2	J	0.33	J
RS-CH03-T	E	11	J	0.96	J	0.97	U	0.083	U	1.4	U	0.12	U	1.4	U	0.12	U	5.4	J	0.47	J	1.2	U	0.10	U	2.8	J	0.24	J	2.4	U	0.20	U	2.0	U	0.17	U
E-CH03-12-T	A	37	U*	5.0	U*	37	U*	5.0	U*	3.0	J	0.41	J	12	J	1.6	J	6.0	J	0.80	J	2.1	J	0.28	J	5.3	J	0.71	J	1.7	J	0.23	J	3.8	J	0.51	J
E-CH03-12-T	B	38	U*	5.0	U*	38	U*	5.0	U*	0.38	U	0.050	U	2.2	J	0.29	J	7.6	J	1.0	J	2.4	J	0.32	J	6.6	J	0.87	J	2.1	J	0.27	J	4.9	J	0.64	J
E-CH03-12-T	C	52	U*	5.0	U*	52	U*	5.0	U*	2.8	J	0.26	J	2.7	J	0.26	J	9.1	J	0.86	J	2.8	J	0.27	J	7.7	J	0.73	J	3.0	J	0.28	J	6.5	J	0.62	J
E-CH03-12-T	D	34	U*	5.0	U*	34	U*	5.0	U*	2.2	J	0.32	J	2.5	J	0.37	J	10	J	1.5	J	11	J	1.6	J	10	J	1.5	J	8.2	J	1.2	J	9.8	J	1.4	J
E-CH03-12-T	E	28	U*	5.0	U*	28	U*	5.0	U*	0.28	U	0.050	U	1.3	J	0.23	J	4.3	J	0.79	J	1.8	J	0.32	J	3.5	J	0.64	J	1.5	J	0.26	J	3.0	J	0.55	J
M. nasuta tissue pre-test		35	U*	4.9	U*	35	U*	4.9	U*	1.7	J	0.24	J	2.3	J	0.32	J	6.0	J	0.85	J	3.8	J	0.55	J	7.8	J	1.1	J	3.5	J	0.49	J	5.6	J	0.79	J

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected at or above the MDL.
U* = The compound was analyzed for but was not detected at or above the MRL.
Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 34
Results of PAH Analyses for *Macoma nasuta* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station	Replicate	Chrysene (ug/Kg)				Dibenz(a,h) anthracene (ug/Kg)				Dibenzofuran (ug/Kg)				Fluoranthene (ug/Kg)				Fluorene (ug/Kg)				Indeno (1,2,3-cd) pyrene (ug/Kg)				Naphthalene (ug/Kg)				Phenanthrene (ug/Kg)				Pyrene (ug/Kg)			
		Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes
RS-CH03-T	A	9.4	J	1.3	J	1.7	J	0.23	J	1.4	U	0.19	U	18	J	2.5	J	2.7	U	0.37	U	1.8	J	0.25	J	25	J	3.5	J	8.4	J	1.2	J	26	J	3.5	J
RS-CH03-T	B	12	J	1.8	J	2.2	J	0.34	J	1.4	J	0.21	J	25	J	3.8	J	2.5	U	0.37	U	3.7	J	0.56	J	15	J	2.2	J	12	J	1.9	J	33	--	5.1	--
RS-CH03-T	C	7.0	J	1.1	J	1.5	J	0.23	J	1.8	J	0.28	J	18	J	2.8	J	2.4	U	0.38	J	2.0	J	0.32	J	13	J	2.0	J	11	J	1.7	J	24	J	3.8	J
RS-CH03-T	D	7.7	J	0.79	J	1.5	U	0.15	U	1.9	U	0.19	U	18	J	1.9	J	3.6	U	0.37	U	1.8	U	0.18	U	12	J	1.3	J	9.4	J	0.97	J	24	J	2.5	J
RS-CH03-T	E	6.2	J	0.54	J	1.8	U	0.15	U	2.3	U	0.19	U	16	J	1.3	J	4.3	U	0.37	U	2.1	U	0.18	U	15	J	1.3	J	11	J	0.94	J	21	J	1.8	J
E-CH03-12-T	A	11	J	1.4	J	1.4	J	0.19	J	11	J	1.5	J	47	--	6.2	--	9.5	J	1.3	J	1.4	J	0.19	J	37	U*	5.0	U*	22	J	3.0	J	36	J	4.9	J
E-CH03-12-T	B	15	J	1.9	J	0.60	U	0.079	U	2.2	J	0.29	J	50	--	6.6	--	3.1	J	0.41	J	1.9	J	0.25	J	38	U*	5.0	U*	14	J	1.8	J	33	J	4.4	J
E-CH03-12-T	C	12	J	1.1	J	1.9	J	0.18	J	2.3	J	0.22	J	37	J	3.5	J	3.1	J	0.30	J	3.0	J	0.28	J	52	U*	5.0	U*	11	J	1.1	J	29	J	2.8	J
E-CH03-12-T	D	14	J	2.1	J	2.2	J	0.32	J	1.8	J	0.27	J	22	J	3.2	J	2.7	J	0.40	J	8.6	J	1.3	J	34	U*	5.0	U*	9.8	J	1.4	J	17	J	2.6	J
E-CH03-12-T	E	6.3	J	1.2	J	0.44	U	0.079	U	1.1	J	0.20	J	22	J	4.1	J	1.7	J	0.31	J	1.4	J	0.26	J	28	U*	5.0	U*	6.6	J	1.2	J	17	J	3.0	J
M. nasuta tissue pre-test		14	J	2.1	J	3.1	J	0.45	J	2.2	J	0.31	J	38	--	5.5		2.8	J	0.40	J	3.4	J	0.48	J	35	U*	4.9	U*	11	J	1.5	J	20	J	2.8	J

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
U* = The compound was analyzed for but was not detected ("non-detect") at or above the MRL.
-- = No qualifier needed

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 35

Results of PAH Analyses for *Nereis virens* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station	Replicate	2-Methyl naphthalene (ug/Kg)				Acenaphthene (ug/Kg)				Acenaphthylene (ug/Kg)				Anthracene (ug/Kg)				Benz(a) anthracene (ug/Kg)				Benzo(a) pyrene (ug/Kg)				Benzo(b) fluoranthene (ug/Kg)				Benzo(g,h,i) perylene (ug/Kg)				Benzo(k) fluoranthene (ug/Kg)			
		Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes
RS-CH03-T	A	10	J	1.3	J	2.2	J	0.28	J	2.6	J	0.33	J	1.6	J	0.20	J	1.4	U	0.17	U	0.79	U	0.10	U	1.2	U	0.15	U	2.9	J	0.37	J	1.4	U	0.17	U
RS-CH03-T	B	8.1	J	0.99	J	2.0	J	0.24	J	2.5	J	0.30	J	1.8	J	0.23	J	1.4	U	0.17	U	0.82	U	0.10	U	1.3	U	0.15	U	2.2	J	0.27	J	1.4	U	0.17	U
RS-CH03-T	C	8.7	J	1.0	J	2.1	J	0.25	J	2.6	J	0.30	J	1.8	J	0.21	J	1.5	U	0.17	U	0.85	U	0.10	U	1.3	U	0.15	U	1.7	U	0.20	U	1.5	U	0.17	U
RS-CH03-T	D	9.7	J	1.2	J	1.8	J	0.23	J	2.3	J	0.30	J	1.4	J	0.17	J	1.4	U	0.17	U	0.79	U	0.10	U	1.2	U	0.15	U	1.9	J	0.24	J	1.4	U	0.17	U
RS-CH03-T	E	9.4	J	1.1	J	2.2	J	0.26	J	2.5	J	0.29	J	1.3	J	0.15	J	1.5	U	0.17	U	2.9	J	0.35	J	1.3	U	0.15	U	1.7	U	0.20	U	1.5	U	0.17	U
E-CH03-12-T	A	9.3	J	1.1	J	1.5	J	0.18	J	2.1	J	0.26	J	0.45	U	0.12	U	0.44	U	0.17	U	5.4	J	0.66	J	0.37	U	0.15	U	0.83	J	0.20	U	0.66	U	0.17	U
E-CH03-12-T	B	7.3	J	1.1	J	1.7	J	0.25	J	1.8	J	0.27	J	0.36	U	0.12	U	0.36	U	0.17	U	0.50	U	0.10	U	0.30	U	0.15	U	0.71	J	0.20	U	0.53	U	0.17	U
E-CH03-12-T	C	9.3	J	1.1	J	1.7	J	0.21	J	2.1	J	0.26	J	0.46	U	0.12	U	0.45	U	0.17	U	0.63	U	0.10	U	0.37	U	0.15	U	0.90	J	0.20	U	0.67	U	0.17	U
E-CH03-12-T	D	8.1	J	1.2	J	1.2	J	0.18	J	0.34	U	0.12	U	1.7	J	0.25	J	4.9	J	0.74	J	1.7	J	0.26	J	4.4	J	0.66	J	1.6	J	0.23	J	3.50	J	0.52	J
E-CH03-12-T	E	12	J	1.8	J	2.1	J	0.32	J	1.9	J	0.29	J	0.36	U	0.12	U	0.35	U	0.17	U	0.50	U	0.10	U	0.30	U	0.15	U	0.63	U	0.20	U	0.53	U	0.17	U
N. virens tissue pre-test^		14	J	2.0	J	2.8	J	0.42	J	7.6	J	1.1	J	8.5	J	1.3	J	22	J	3.2	J	27	J	4.0	J	28	J	4.2	J	25	J	3.6	J	27	J	3.9	J

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected at or above the MDL.
U* = The compound was analyzed for but was not detected at or above the MRL.
-- = No qualifier needed
^ = The pre-test N. Virens organisms were not depurated before freezing. Section text Section 3.6.5 for full explanation.

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

TABLE 35

Results of PAH Analyses for *Nereis virens* Tissues Collected at Canaveral Harbor, Florida, March - May 2003

Station	Replicate	Chrysene (ug/Kg)				Dibenz(a,h) anthracene (ug/Kg)				Dibenzofuran (ug/Kg)				Fluoranthene (ug/Kg)				Fluorene (ug/Kg)				Indeno (1,2,3-cd) pyrene (ug/Kg)				Naphthalene (ug/Kg)				Phenanthrene (ug/Kg)				Pyrene (ug/Kg)			
		Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes	Reported Value (Dry)	Result Notes	Reported Value (Wet)	Result Notes
RS-CH03-T	A	4.2	J	0.53	J	39	U*	5.0	U*	1.9	J	0.24	J	7.1	J	0.91	J	2.9	U	0.37	U	1.5	U	0.18	U	17	J	2.2	J	8.0	J	1.0	J	9.5	J	1.2	J
RS-CH03-T	B	4.2	J	0.51	J	41	U*	5.0	U*	1.8	J	0.22	J	3.1	U	0.37	U	3.1	J	0.38	J	1.9	J	0.23	J	13	J	1.6	J	8.1	J	0.98	J	10	J	1.3	J
RS-CH03-T	C	3.0	J	0.35	J	42	U*	5.0	U*	2.6	J	0.30	J	3.2	U	0.37	U	4.0	J	0.48	J	1.7	J	0.20	J	14	J	1.6	J	8.9	J	1.1	J	20	J	2.3	J
RS-CH03-T	D	7.0	J	0.90	J	39	U*	5.0	U*	1.5	U	0.19	U	7.7	J	0.99	J	2.9	U	0.37	U	2.0	J	0.25	J	14	J	1.8	J	6.9	J	0.88	J	7.9	J	1.0	J
RS-CH03-T	E	3.5	J	0.42	J	43	U*	5.0	U*	1.7	U	0.19	U	7.0	J	0.83	J	3.2	U	0.37	U	1.6	U	0.18	U	15	J	1.8	J	7.4	J	0.87	J	7.6	J	0.90	J
E-CH03-12-T	A	2.4	J	0.30	J	0.65	U	0.15	U	1.5	J	0.19	U	8.6	J	1.1	J	2.2	J	0.37	U	0.60	U	0.18	U	12	J	1.5	J	4.9	J	0.60	J	6.2	J	0.77	J
E-CH03-12-T	B	2.0	J	0.30	J	0.52	U	0.15	U	1.2	J	0.19	U	7.2	J	1.1	J	1.8	J	0.37	U	0.48	U	0.18	U	8.8	J	1.4	J	3.8	J	0.58	J	4.8	J	0.74	J
E-CH03-12-T	C	9.2	J	1.1	J	0.65	U	0.15	U	1.5	J	0.19	U	9.6	J	1.2	J	2.4	J	0.37	U	0.60	U	0.18	U	12	J	1.5	J	4.7	J	0.57	J	10	J	1.2	J
E-CH03-12-T	D	9.6	J	1.4	J	0.54	U	0.15	U	1.6	J	0.24	J	32	J	4.7	J	2.3	J	0.37	U	1.6	J	0.24	J	10	J	1.5	J	9.9	J	1.5	J	21	J	3.1	J
E-CH03-12-T	E	2.3	J	0.35	J	0.51	U	0.15	U	1.3	J	0.20	J	7.3	J	1.1	J	2.2	J	0.37	U	0.48	U	0.18	U	14	J	2.1	J	4.8	J	0.74	J	4.3	J	0.67	J
N. virens tissue pre-test		40	--	5.9	--	34	U*	5.0	U*	3.2	J	0.47	J	58	--	8.6	--	4.6	J	0.67	J	25	J	3.7	J	24	J	3.5	J	24	J	3.6	J	54	--	8.0	--

J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U = The compound was analyzed for but was not detected ("non-detect") at or above the MDL.
U* = The compound was analyzed for but was not detected ("non-detect") at or above the MRL.
-- = No qualifier needed
^ = The pre-test N. Virens organisms were not depurated before freezing. Section text Section 3.6.5 for full explanation.

Source: Columbia Analytical Services, Inc.
Compiled by ANAMAR Environmental Chemistry, Inc.

Table 36
Percent Value Compared to Reference for All Compounds for *Macoma nasuta*, Canaveral Harbor, Florida, April 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
Lipids, Total	Wet	%	0.34	0.42	122%	0.24	71%	*		0.32	94%
Solids, Total	As Received	%	12.75	13.42	105%	9.10	71%	*		13.80	108%
2-Methylnaphthalene	Dry Wt.	mg/Kg	14.68	*		*		11.94	81%	*	
	Wet Wt.	mg/Kg	1.93	*		*		1.56	81%	*	
Acenaphthene	Dry Wt.	mg/Kg	0.91	*		*		1.85	203%	*	
	Wet Wt.	mg/Kg	0.12	*		*		***0.25***	***212%***	*	
Acenaphthylene	Dry Wt.	ug/Kg	1.33	*		*		1.73	131%	*	
	Wet Wt.	ug/Kg	0.17	*		*		0.22	130%	*	
Aluminum, Total	Dry Wt.	ug/Kg	596.80	**1404**	**235%**	**1534**	**257%**	*		**1450**	**243%**
	Wet Wt.	ug/Kg	77.60	**188**	**242%**	**139**	**179%**	*		**192**	**247%**
Anthracene	Dry Wt.	ug/Kg	1.48	*		*		***4.14***	***280%***	*	
	Wet Wt.	ug/Kg	0.19	*		*		***0.55***	***293%***	*	
Antimony, Total	Dry Wt.	ug/Kg	0.09	0.06	70%	0.06	63%	*		0.06	65%
	Wet Wt.	ug/Kg	0.01	0.01	77%	0.01	47%	*		0.01	72%
Arsenic, Total	Dry Wt.	ug/Kg	15.74	17.34	110%	**20.18**	**128%**	*		18.16	115%
	Wet Wt.	ug/Kg	1.94	**2.33**	**120%**	1.84	95%	*		2.55	132%
Benz(a)anthracene	Dry Wt.	ug/Kg	6.16	*		*		7.40	120%	*	
	Wet Wt.	ug/Kg	0.79	*		*		0.99	126%	*	
Benzo(a)pyrene	Dry Wt.	ug/Kg	2.32	*		*		4.02	173%	*	
	Wet Wt.	ug/Kg	0.318	*		*		0.558	175%	*	
Benzo(b)fluoranthene	Dry Wt.	ug/Kg	4.08	*		*		***6.62***	***162%***	*	
	Wet Wt.	ug/Kg	0.54	*		*		***0.89***	***165%***	*	
Benzo(g,h,i)perylene	Dry Wt.	ug/Kg	2.66	*		*		3.30	124%	*	

Table 36
Percent Value Compared to Reference for All Compounds for *Macoma nasuta*, Canaveral Harbor, Florida, April 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
	Wet Wt.	ug/Kg	0.35	*		*		0.45	129%	*	
Benzo(k)fluoranthene	Dry Wt.	ug/Kg	3.58	*		*		5.60	156%	*	
	Wet Wt.	ug/Kg	0.48	*		*		0.74	155%	*	
Cadmium, Total	Dry Wt.	ug/Kg	0.13	0.14	104%	0.14	101%	*		**0.16**	**118%**
	Wet Wt.	ug/Kg	0.02	0.02	108%	0.01	72%	*		0.02	124%
Chromium, Total	Dry Wt.	ug/Kg	38.84	21.24	55%	3.70	10%	*		12.28	32%
	Wet Wt.	ug/Kg	4.87	2.85	58%	0.34	7%	*		1.66	34%
Chrysene	Dry Wt.	ug/Kg	8.46	*		*		11.66	138%	*	
	Wet Wt.	ug/Kg	1.11	*		*		1.54	139%	*	
Copper, Total	Dry Wt.	ug/Kg	12.76	11.54	90%	**16.04**	**126%**	*		14.42	113%
	Wet Wt.	ug/Kg	1.60	1.55	97%	1.46	91%	*		1.97	123%
Dibenz(a,h)anthracene	Dry Wt.	ug/Kg	1.74	*		*		1.31	75%	*	
	Wet Wt.	ug/Kg	0.22	*		*		0.17	77%	*	
Dibenzofuran	Dry Wt.	ug/Kg	1.76	*		*		3.68	209%	*	
	Wet Wt.	ug/Kg	0.21	*		*		0.50	234%	*	
Di-n-butyltin	Dry Wt.	ug/Kg	38.00	47.00	124%	53.20	140%	*		43.60	115%
	Wet Wt.	ug/Kg	4.70	6.30	134%	4.80	102%	*		6.00	128%
Fluoranthene	Dry Wt.	ug/Kg	19.00	*		*		**35.60**	**187%**	*	
	Wet Wt.	ug/Kg	2.46	*		*		**4.72**	**192%**	*	
Fluorene	Dry Wt.	ug/Kg	3.10	*		*		4.02	130%	*	
	Wet Wt.	ug/Kg	0.37	*		*		0.54	146%	*	
Indeno(1,2,3-cd)pyrene	Dry Wt.	ug/Kg	2.28	*		*		3.26	143%	*	
	Wet Wt.	ug/Kg	0.30	*		*		0.46	153%	*	

Table 36
Percent Value Compared to Reference for All Compounds for *Macoma nasuta*, Canaveral Harbor, Florida, April 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
Lead, Total	Dry Wt.	ug/Kg	1.23	**1.58**	**128%**	**1.55**	**125%**	*		**1.71**	**139%**
	Wet Wt.	ug/Kg	0.16	0.21	132%	0.14	88%	*		0.24	148%
Mercury, Total	Dry Wt.	ug/Kg	0.08	0.06	75%	0.05	63%	*		0.05	65%
	Wet Wt.	ug/Kg	0.01	0.01	82%	0.00	47%	*		0.01	71%
Naphthalene	Dry Wt.	ug/Kg	16.00	*		*		15.30	96%	*	
	Wet Wt.	ug/Kg	2.06	*		*		2.06	100%	*	
n-Butyltin	Dry Wt.	ug/Kg	3.84	4.64	121%	***5.90***	***154%***	*		4.84	126%
	Wet Wt.	ug/Kg	0.46	0.62	135%	0.53	117%	*		0.65	141%
Nickel, Total	Dry Wt.	ug/Kg	21.70	12.34	57%	4.24	20%	*		8.36	39%
	Wet Wt.	ug/Kg	2.75	1.65	60%	0.39	14%	*		1.13	41%
Phenanthrene	Dry Wt.	ug/Kg	10.36	*		*		12.68	122%	*	
	Wet Wt.	ug/Kg	1.34	*		*		1.70	127%	*	
Pyrene	Dry Wt.	ug/Kg	25.60	*		*		26.40	103%	*	
	Wet Wt.	ug/Kg	3.34	*		*		3.54	106%	*	
Silver, Total	Dry Wt.	ug/Kg	0.11	**0.15**	**146%**	**0.16**	**149%**	*		**0.17**	**161%**
	Wet Wt.	ug/Kg	0.01	0.02	156%	0.01	107%	*		0.02	184%
Tetra-n-butyltin	Dry Wt.	ug/Kg	3.20	2.90	91%	4.22	132%	*		2.90	91%
	Wet Wt.	ug/Kg	0.38	0.38	100%	0.38	100%	*		0.38	100%

Table 36

Percent Value Compared to Reference for All Compounds for *Macoma nasuta*, Canaveral Harbor, Florida, April 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
Tri-n-butyltin	Dry Wt.	ug/Kg	9.06	**18.20**	**201%**	**21.00**	**232%**	*		**24.20**	**267%**
	Wet Wt.	ug/Kg	1.10	**2.46**	**224%**	**1.88**	**171%**	*		**3.26**	**296%**
Zinc, Total	Dry Wt.	ug/Kg	99.08	75.56	76%	65.38	66%	*		88.58	89%
	Wet Wt.	ug/Kg	12.46	10.15	81%	5.95	48%	*		12.10	97%

* = Percent value calculations not performed because analysis was not requested. See text Section 3.3.3 for explanation

NOTE: For statistical purposes, data below the Method Detection Limit (MDL) are treated as being equal to that detection limit. The reporting limits for some of the analytes vary considerably from sample to sample, partially due to differences in tissue lipid contentand interference from the sample matrix. Therefore, the percent of the reference value can appear high even though the sample had a “U” (below detection limit) or a "J" (estimated concentration) result. Numbers in bold denote values that are considered statistically different from the reference station (as calculated by *ToxCalc*, Version 5.0, by Tidepool Scientific Software). Numbers in bold italics denote values that are statistically different from the reference station and were based on censored (below detection limits) data.

Percent value comparisons performed by ANAMAR Environmental Chemistry, Inc.

Table 37
Percent Value Compared to Reference for All Compounds for *Nereis virens*, Canaveral Harbor, Florida, March - May 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
Lipids, Total	Wet	%	1.01	0.75	74%	0.69	68%	0.00	0%	0.64	63%
Solids, Total	As Received	%	12.28	12.16	99%	11.44	93%	14.06	114%	11.80	96%
2-Methylnaphthalene	Dry Wt.	mg/Kg	9.18	*		*		9.20	100%	*	
	Wet Wt.	mg/Kg	1.12	*		*		1.26	113%	*	
Acenaphthene	Dry Wt.	mg/Kg	2.06	*		*		1.64	80%	*	
	Wet Wt.	mg/Kg	0.25	*		*		0.23	90%	*	
Acenaphthylene	Dry Wt.	ug/Kg	2.50	*		*		1.65	66%	*	
	Wet Wt.	ug/Kg	0.30	*		*		0.24	79%	*	
Aluminum, Total	Dry Wt.	ug/Kg	34.42	**107.44**	**312%**	32.12	93%	*		44.48	129%
	Wet Wt.	ug/Kg	4.20	**13.13**	**313%**	3.71	88%	*		5.19	124%
Anthracene	Dry Wt.	ug/Kg	1.58	*		*		0.67	42%	*	
	Wet Wt.	ug/Kg	0.19	*		*		0.15	76%	*	
Antimony, Total	Dry Wt.	ug/Kg	0.01	0.01	97%	0.01	81%	*		0.01	97%
	Wet Wt.	ug/Kg	0.00	0.00	78%	0.001	56%	*		0.00	67%
Arsenic, Total	Dry Wt.	ug/Kg	16.52	11.84	72%	12.28	74%	*		12.64	77%
	Wet Wt.	ug/Kg	2.03	1.44	71%	1.40	69%	*		1.49	73%
Benz(a)anthracene	Dry Wt.	ug/Kg	1.44	*		*		1.30	90%	*	
	Wet Wt.	ug/Kg	0.17	*		*		0.28	167%	*	
Benzo(a)pyrene	Dry Wt.	ug/Kg	1.23	*		*		1.75	142%	*	
	Wet Wt.	ug/Kg	0.150	*		*		0.24	163%	*	
Benzo(b)fluoranthene	Dry Wt.	ug/Kg	1.26	*		*		1.15	91%	*	
	Wet Wt.	ug/Kg	0.15	*		*		0.25	168%	*	
Benzo(g,h,i)perylene	Dry Wt.	ug/Kg	2.08	*		*		0.93	45%	*	

Table 37

Percent Value Compared to Reference for All Compounds for *Nereis virens*, Canaveral Harbor, Florida, March - May 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
	Wet Wt.	ug/Kg	0.26	*		*		0.21	80%	*	
Benzo(k)fluoranthene	Dry Wt.	ug/Kg	1.44	*		*		1.18	82%	*	
	Wet Wt.	ug/Kg	0.17	*		*		0.24	141%	*	
Cadmium, Total	Dry Wt.	ug/Kg	0.28	0.25	89%	0.26	92%	*		0.28	99%
	Wet Wt.	ug/Kg	0.03	0.03	88%	0.03	86%	*		0.03	94%
Chromium, Total	Dry Wt.	ug/Kg	0.61	0.36	59%	0.36	59%	*		0.34	55%
	Wet Wt.	ug/Kg	0.08	0.04	58%	0.04	53%	*		0.04	55%
Chrysene	Dry Wt.	ug/Kg	4.38	*		*		5.10	116%	*	
	Wet Wt.	ug/Kg	0.54	*		*		0.69	127%	*	
Copper, Total	Dry Wt.	ug/Kg	10.96	11.78	107%	12.64	115%	*		13.64	124%
	Wet Wt.	ug/Kg	1.34	1.43	107%	1.46	109%	*		1.62	121%
Dibenz(a,h)anthracene	Dry Wt.	ug/Kg	1.92	*		*		0.57	30%	*	
	Wet Wt.	ug/Kg	0.23	*		*		0.15	66%	*	
Dibenzofuran	Dry Wt.	ug/Kg	1.90	*		*		1.42	75%	*	
	Wet Wt.	ug/Kg	0.23	*		*		0.20	89%	*	
Di-n-butyltin	Dry Wt.	ug/Kg	63.20	32.60	52%	26.00	41%	*		31.60	50%
	Wet Wt.	ug/Kg	7.74	3.96	51%	2.92	38%	*		3.72	48%
Fluoranthene	Dry Wt.	ug/Kg	5.62	*		*		***12.94***	***230%***	*	
	Wet Wt.	ug/Kg	0.69	*		*		***1.84***	***265%***	*	

Table 37
Percent Value Compared to Reference for All Compounds for *Nereis virens*, Canaveral Harbor, Florida, March - May 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
Fluorene	Dry Wt.	ug/Kg	3.22	*		*		2.18	68%	*	
	Wet Wt.	ug/Kg	0.39	*		*		0.37	94%	*	
Indeno(1,2,3-cd)pyrene	Dry Wt.	ug/Kg	1.74	*		*		0.75	43%	*	
	Wet Wt.	ug/Kg	0.21	*		*		0.19	92%	*	
Lead, Total	Dry Wt.	ug/Kg	0.81	0.65	80%	0.56	69%	*		0.63	77%
	Wet Wt.	ug/Kg	0.10	0.08	79%	0.06	64%	*		0.07	74%
Mercury, Total	Dry Wt.	ug/Kg	0.07	**0.11**	**172%**	**0.13**	**206%**	*		**0.14**	**218%**
	Wet Wt.	ug/Kg	0.01	**0.01**	**170%**	**0.02**	**190%**	*		**0.02**	**210%**
Naphthalene	Dry Wt.	ug/Kg	14.60	*		*		11.36	78%	*	
	Wet Wt.	ug/Kg	1.80	*		*		1.60	89%	*	
n-Butyltin	Dry Wt.	ug/Kg	24.60	11.74	48%	14.60	59%	*		27.66	112%
	Wet Wt.	ug/Kg	3.02	1.42	47%	1.70	56%	*		3.35	111%
Nickel, Total	Dry Wt.	ug/Kg	0.91	0.80	89%	1.19	131%	*		**1.40**	**155%**
	Wet Wt.	ug/Kg	0.11	0.10	89%	0.14	124%	*		0.16	150%
Phenanthrene	Dry Wt.	ug/Kg	7.86	*		*		5.62	72%	*	
	Wet Wt.	ug/Kg	0.97	*		*		0.80	83%	*	
Pyrene	Dry Wt.	ug/Kg	11.00	*		*		9.26	84%	*	
	Wet Wt.	ug/Kg	1.34	*		*		1.30	97%	*	
Silver, Total	Dry Wt.	ug/Kg	0.11	**0.18**	**162%**	**0.15**	**137%**	*		0.14	130%
	Wet Wt.	ug/Kg	0.01	**0.02**	**160%**	0.02	128%	*		0.02	125%

Table 37

Percent Value Compared to Reference for All Compounds for *Nereis virens*, Canaveral Harbor, Florida, March - May 2003

			Reference	E-CH03-9,10,11,20-T		E-CH03-13,16-T		E-CH03-12-T		E-CH03-12,15-T	
Analyte	Basis	Units	Value	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.	Value	% of Ref.
Tetra-n-butyltin	Dry Wt.	ug/Kg	3.16	3.16	100%	3.38	107%	*		3.28	104%
	Wet Wt.	ug/Kg	0.38	0.38	100%	0.38	100%	*		0.38	100%
Tri-n-butyltin	Dry Wt.	ug/Kg	5.50	2.80	51%	2.96	54%	*		2.86	52%
	Wet Wt.	ug/Kg	0.68	0.34	50%	0.33	49%	*		0.33	49%
Zinc, Total	Dry Wt.	ug/Kg	156.16	163.24	105%	206.28	132%	*		260.00	166%
	Wet Wt.	ug/Kg	19.34	19.92	103%	23.62	122%	*		30.22	156%

* = Percent value calculations not performed because analysis was not requested. See text Section 3.3.3 for explanation

NOTE: For statistical purposes, data below the Method Detection Limit (MDL) are treated as being equal to that detection limit. The reporting limits for some of the analytes vary considerably from sample to sample, partially due to differences in tissue lipid contentand interference from the sample matrix. Therefore, the percent of the reference value can appear high even though the sample had a “U” (below detection limit) or a "J" (estimated concentration) result. Numbers in bold denote values that are considered statistically different from the reference station (as calculated by *ToxCalc*, Version 5.0, by Tidepool Scientific Software). Numbers in bold italics denote values that are statistically different from the reference station and were based on censored (below detection limits) data.

Percent value comparisons performed by ANAMAR Environmental Chemistry, Inc.

Table 38

Theoretical Bioaccumulation Potential (TBP) Calculation Results for *Macoma nasuta* Tissues from Sediment Samples Collected at Canaveral Harbor, Florida, March - May 2003 (µg/Kg, dry weight basis)

	E-CH03-9	E-CH03-10	E-CH03-11	E-CH03-12	E-CH03-13	E-CH03-15	E-CH03-16	E-CH03-20	RS-CH03
2-Methylnaphthalene	0.63	0.62	0.61	**27.96**	0.36	0.50	0.36	0.82	0.71
Acenaphthene	0.60	0.62	0.61	0.59	0.36	0.50	0.36	0.82	0.71
Acenaphthylene	0.46	0.47	0.46	0.45	0.27	0.38	0.27	0.63	0.54
Anthracene	0.65	0.56	0.55	0.53	0.32	0.46	0.32	0.90	0.64
Benz(a)anthracene	5.69	2.48	3.48	2.57	1.11	1.75	1.51	5.47	4.72
Benzo(a)pyrene	4.84	1.92	3.19	2.01	0.85	1.44	1.41	5.08	5.06
Benzo(b)fluoranthene	6.26	2.51	3.77	3.36	1.14	2.40	1.70	5.86	3.71
Benzo(g,h,i)perylene	5.69	2.27	3.48	2.54	1.11	1.95	1.65	4.30	5.06
Benzo(k)fluoranthene	8.54	4.42	3.48	4.47	1.70	2.40	2.21	7.81	6.07
Chrysene	8.54	3.54	4.06	3.63	1.45	2.64	1.87	9.38	6.41
Dibenz(a,h)anthracene	0.97	0.71	0.67	0.50	0.31	0.43	0.31	0.82	0.88
Dibenzofuran	0.57	0.59	0.58	0.56	0.34	0.48	0.34	0.78	0.67
Fluoranthene	14.81	6.19	7.24	7.55	2.55	4.57	3.23	**12.50**	6.41
Fluorene	0.48	0.50	0.49	0.48	0.29	0.41	0.29	0.66	0.57
Indeno(1,2,3-cd)pyrene	4.56	1.83	4.06	1.96	0.82	1.27	1.41	4.30	3.00
Naphthalene	1.14	0.88	0.84	**139.80**	0.39	0.65	0.44	1.02	1.32
Phenanthrene	4.56	2.86	2.09	1.93	0.73	0.91	0.80	3.91	2.02
Pyrene	11.96	5.31	5.50	6.99	2.04	3.85	2.55	**11.33**	7.42

TBP = 4(Cs/%TOC)%Lipids

Cs = contaminate concentration, dry weight

%TOC = precent total organic carbon expressed as a decimal

Macoma nasuta % Lipids = percent lipid concentration expressed as a decimal

Bolded values represent the TBP calculation results derived from concentrations above the MRL. All other calculatlions should be considered estimates as the contaminate concentration values used in the calculations were flagged with "U" or "J".

Calculations by ANAMAR Environmental Chemistry, Inc.

Table 39

Theoretical Bioaccumulation Potential (TBP) Calculation Results for *Nereis virens* Tissues Collected at Canaveral Harbor, Florida, March - May 2003 (µg/Kg, dry weight basis)

	E-CH03-9	E-CH03-10	E-CH03-11	E-CH03-12	E-CH03-13	E-CH03-15	E-CH03-16	E-CH03-20	RS-CH03
2-Methylnaphthalene	1.12	1.11	1.09	**52.24**	1.31	0.94	1.31	1.47	1.67
Acenaphthene	1.07	1.11	1.09	1.10	1.31	0.94	1.31	1.47	1.67
Acenaphthylene	0.81	0.84	0.83	0.84	1.00	0.72	1.00	1.12	1.27
Anthracene	1.17	1.00	0.98	0.99	1.18	0.85	1.18	1.60	1.51
Benz(a)anthracene	10.17	4.42	6.21	4.81	4.05	3.28	5.55	9.77	11.11
Benzo(a)pyrene	8.64	3.42	5.69	3.76	3.12	2.69	5.17	9.07	11.91
Benzo(b)fluoranthene	11.19	4.47	6.72	6.27	4.18	4.49	6.23	10.47	8.73
Benzo(g,h,i)perylene	10.17	4.05	6.21	4.75	4.05	3.64	6.04	7.67	11.91
Benzo(k)fluoranthene	15.25	7.89	6.21	8.36	6.23	4.49	8.10	13.95	14.29
Chrysene	15.25	6.32	7.24	6.79	5.30	4.94	6.85	16.74	15.08
Dibenz(a,h)anthracene	1.73	1.26	1.19	0.94	1.12	0.81	1.12	1.47	2.06
Dibenzofuran	1.02	1.05	1.03	1.04	1.25	0.90	1.25	1.40	1.59
Fluoranthene	26.44	11.05	12.93	14.11	9.35	8.53	11.84	**22.33**	15.08
Fluorene	0.86	0.89	0.88	0.89	1.06	0.76	1.06	1.19	1.35
Indeno(1,2,3-cd)pyrene	8.14	3.26	7.24	3.66	2.99	2.38	5.17	7.67	7.06
Naphthalene	2.03	1.58	1.50	**261.22**	1.43	1.21	1.62	1.81	3.10
Phenanthrene	8.14	5.11	3.72	3.60	2.68	1.71	2.93	6.98	4.76
Pyrene	21.36	9.47	9.83	13.06	7.48	7.19	9.35	**20.23**	17.46

TBP = 4(Cs/%TOC)%Lipids

Cs = contaminate concentration, dry weight

%TOC = precent total organic carbon expressed as a decimal

Nereis virens % Lipids = percent lipid concentration expressed as a decimal

Bolded values represent the TBP calculation results derived from concentrations above the MRL. All other calculatlions should be considered estimates as the contaminate concentration values used in the calculations were flagged with "U" or "J".

Calculations by ANAMAR Environmental Chemistry, Inc.

Appendices

- **Appendices**
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Appendix A

In Situ Field Measurements and Field Sheets

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-1
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#2661

Sediment

Sampling Time: 1112
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-1
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

~~**Water**~~ NA

~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information Water Depth (ft): 43.3
Lat/Long N 28 22 401
Weather: Clear, sunny, wind 13.0 mph NNW
WAAS (NAD83) W 80 31 531
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21.6 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.38	18.94	18.82
pH (units):	7.89	7.97	7.93
Salinity (ppt):	33.04	37.73	32.67
Conductivity (mS/cm):	50.24	49.84	49.70
Dis. Oxygen (mg/L):	7.01 (91.4%)	6.49 (85.1%)	6.41 (84.3%)
Turbidity (NTU):	3.3	2.7	9.3

Description of Sediment Collected: Black, sandy with brown striations

Description of Water Collected:

Sheet 1 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-2
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
(1) Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#267

Sediment

Sampling Time: 1155
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-2
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

Water N/A

Sampling Time: ~~-t~~
Water Container & Presevation:
Sample ID:
Number of Water Containers:
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information
Water Depth (ft): 43.3
Lat/Long N 28 22 578
Weather: clear, sunny, wind 12.7 mph NNW
WAAS (NAD83) W 80 31 762
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21.6 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.37	19.12	18.97
pH (units):	8.01	8.01	8.02
Salinity (ppt):	32.65	32.65	32.70
Conductivity (mS/cm):	49.79	49.81	49.83
Dis. Oxygen (mg/L):	6.42 (87.6%)	6.21 (82.0%)	6.07 (79.6%)
Turbidity (NTU):	7.0	3.3	9.2

Description of Sediment Collected: Black, sandy, no odor

Description of Water Collected:

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-3
Sampled By: DF, JMM, PWF, BW
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
(1) Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#268

Sediment

Sampling Time: 1220
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-3
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

~~**Water**~~ N/A

~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 44.1
Lat/Long N 28 22 972
Weather: clear, sunny, wind 16.1 mph NNW
WAAS (NAD83) W 80 32 370
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (22 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.56	19.35	19.05
pH (units):	8.07	8.07	8.05
Salinity (ppt):	32.66	32.66	32.64
Conductivity (mS/cm):	49.80	49.79	49.76
Dis. Oxygen (mg/L):	5.82(76.7%)	5.62(73.9%)	5.16(67.7%)
Turbidity (NTU):	3.1	3.3	10.1

Description of Sediment Collected: black, sandy, brown striations, sulfer odor

Description of Water Collected:

Sheet 3 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-C403-4
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#269

Sediment

Sampling Time: 1243
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-C403-4
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

Water

~~Sampling Time: 1243 @ 4/2/03~~
~~Water Container & Presevation:~~
~~Sample ID: N/A~~
~~Number of Water Containers:~~
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information
Water Depth (ft): 42.1
Lat/Long N 28 23 214
Weather: Clear, sunny, wind 14.1 mph NNW
WAAS (NAD83) W 80 32 603
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.62	19.24	19.06
pH (units):	8.08	8.07	8.05
Salinity (ppt):	32.69	32.69	32.65
Conductivity (mS/cm):	49.81	49.81	49.77
Dis. Oxygen (mg/L):	5.77 (76.3%)	5.54 (72.7%)	5.02 (66.7)
Turbidity (NTU):	3.4	3.2	6.9

Description of Sediment Collected: black mayo, some brown striations, strong sulfer odor

Description of Water Collected:

Sheet 4 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-5
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#270

Sediment

Sampling Time: 1307
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-5
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

~~**Water**~~ N/A

Sampling Time:
Water Container & Presevation:
Sample ID:
Number of Water Containers:
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information
Water Depth (ft): 41.7
Lat/Long N 28 23 633
Weather: Clear, sunny, wind mph from NNW
WAAS (NAD83) W 80 33 278
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (20.8 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.72	19.62	19.02
pH (units):	8.07	8.07	8.05
Salinity (ppt):	32.64	32.63	32.63
Conductivity (mS/cm):	49.77	49.77	49.75
Dis. Oxygen (mg/L):	5.40 (72.7%)	4.99 (66.4%)	4.75 (62.8%)
Turbidity (NTU):	3.7	3.8	10.6

Description of Sediment Collected: grey, fine sand, shells present, brown streaks, sulfer odor

Description of Water Collected:

Sheet 5 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-6
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
(1) Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#271

Sediment

Sampling Time: 1336
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-6
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

Water N/A

Sampling Time:
Water Container & Presevation:
Sample ID:
Number of Water Containers:
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information
Water Depth (ft): 40.1
Lat/Long N 28 23 995
Weather: clear, sunny, wind 15.8 mph NNW
WAAS (NAD83) W 80 33 637
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (20 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.50	19.50	19.50
pH (units):	8.06	8.06	8.04
Salinity (ppt):	32.60	32.64	32.62
Conductivity (mS/cm):	49.74	49.75	49.77
Dis. Oxygen (mg/L):	4.09 (65.7%)	4.56 (59.9%)	4.37 (57.9%)
Turbidity (NTU):	4.1	10.3	18.3

Description of Sediment Collected: Dark grey fine sand, brown striations, slight sulfer odor

Description of Water Collected:

Sheet 6 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-7
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones	
1	Entrance Channel-COE
2	Trident Basin-NAVY
3	West Turning Basin-CPA
4	Basin Center

Picture yes: ✓ #272 no: _____

Sediment

Sampling Time: 1401
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-7
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

~~**Water**~~

~~Sampling Time: N/A~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 41.5
Lat/Long N 28 24 251
Weather: clear, sunny, wind 6.7 mph NW
WAAS (NAD83) W 80 34 094
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21.8 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.52	19.50	19.15
pH (units):	8.07	8.07	8.05
Salinity (ppt):	32.65	32.66	32.66
Conductivity (mS/cm):	49.70	49.79	49.77
Dis. Oxygen (mg/L):	4.62 (61.3%)	4.30 (57.0%)	4.09 (38.0%)
Turbidity (NTU):	4.3	4.7	11.7

Description of Sediment Collected: grey, fine sand/silt, brown streaks, little/no odor

Description of Water Collected:

Sheet 7 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-8
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/1/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
(1) Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#247

Sediment

Sampling Time: 1250
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-8
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

~~**Water**~~

~~Sampling Time: N/A~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 39.4
Lat/Long N 28° 24. 533
Weather: Clear, sunny, wind 17mplt out of N
WAAS (NAD83) W 80° 35. 076
Sea State: 1-3 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (18.2 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.48	19.17	19.10
pH (units):	7.84	7.86	7.87
Salinity (ppt):	32.45	32.51	32.54
Conductivity (mS/cm):	49.51	49.61	49.61
Dis. Oxygen (mg/L):	6.80 (92.4%)	7.09 (93.9%)	7.10 (93.4%)
Turbidity (NTU):	3.9	4.3	1.0

Description of Sediment Collected: Grey, sandy with brown striations, no odor

Description of Water Collected:

Sheet 8 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH 03-9
Sampled By: 3/31/03 DF, JMM, DWF
Sampled Date: 3/31/03 BW, JMC, NL

General Conditions, Observations, and/or Field Instrument Calibrations:

Outside Trident Base gate

Sampling Zones
1 Entrance Channel-COE
(2) Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____

#214/#215 / #216/#217/#218/#219/#221/#222

Sediment

Sampling Time: 1109
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-9
Number of Sediment Containers: 22
Collection Method: (Van Veen) or Other:

Water

N/A

Sampling Time:
Water Container & Presevation:
Sample ID:
Number of Water Containers:
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 43.9
Lat/Long N 28° 24.615
Weather: wind 21.6 NW, clear, sunny
WAAS (NAD83) W 80° 35.545
Sea State: less than 2 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21.5 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.86	19.54	18.53
pH (units):	8.06	8.08	8.07
Salinity (ppt):	32.79	32.85	32.97
Conductivity (mS/cm):	49.96	50.03	50.19
Dis. Oxygen (mg/L):	5.62 (75.8%)	5.36 (71.5%)	5.42 (70.6%)
Turbidity (NTU):	4.5	10.2	22.5

Description of Sediment Collected: black mayo, sulfer odor, some organic material/ some brown streaks

Description of Water Collected:

Sheet 9 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-10
Sampled By: DF, JMM, DWF, BW, JMC NL
Sampled Date: 4/1/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
(2) Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: _____ no: _____
#253/#254/#255/#256/

Sediment

Sampling Time: 1420
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-10
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

Water N/A

Sampling Time:
Water Container & Presevation:
Sample ID:
Number of Water Containers:
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 40.6
Lat/Long N 28 24 883
Weather: Clear, sunny, wind 10.5 from NNE
WAAS (NAD83) W 80 35 604
Sea State: Calm
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (20.3ft)	Near-Bottom (3-ft above)
Water Temp (°C):	20.92	19.26	19.21
pH (units):	7.91 ~~6.63~~	7.86	7.87
Salinity (ppt):	32.53	32.60	32.39
Conductivity (mS/cm):	49.50	49.70	49.70
Dis. Oxygen (mg/L):	6.63 (89.3%)	6.07 (79.8%)	5.82 (76.4%)
Turbidity (NTU):	3.6	2.6	2.8

Description of Sediment Collected: black mayo, thick, sulfur odor

Description of Water Collected:

Sheet 10 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-11
Sampled By: DF, JMM, DWF, BW, JMC NL
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones	
1	Entrance Channel-COE
(2)	Trident Basin-NAVY
3	West Turning Basin-CPA
4	Basin Center

Picture yes: ✓ no: _____
#261/#262/#263/#264/#265

Sediment

Sampling Time: 0924
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-11
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

~~**Water**~~ N/A

~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 42.9
Lat/Long N 28 24 858
Weather: Clear, sunny, wind 8.5 mph NNW
WAAS (NAD83) W 80 35 745
Sea State: Calm
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21.5 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.24	19.09	19.13
pH (units):	7.79	7.92	7.89
Salinity (ppt):	32.53	32.55	32.60
Conductivity (mS/cm):	49.61	49.63	49.71
Dis. Oxygen (mg/L):	5.88 (77.8%)	5.92 (78.5%)	5.06 (66.3%)
Turbidity (NTU):	3.3	2.8	6.7

Description of Sediment Collected: Black mayo, some grey striations, strong sulfer odor

Description of Water Collected:

Sheet 11 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-12
Sampled By: DF, JMM, DWF, BW, JMC, NL
Sampled Date: 4/1/03

General Conditions, Observations, and/or Field Instrument Calibrations:
sample collected just off of pilings at (S) end of trident wharf

Sampling Zones	
1	Entrance Channel-COE
(2)	Trident Basin-NAVY
3	West Turning Basin-CPA
4	Basin Center

Picture yes: ✓ no: _____
#248/249/250/251/252

Sediment

Sampling Time: 1346
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-12
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

~~**Water**~~ N/A
~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 38.8
Lat/Long N ~~28~~ 23 24 961 NL 3/31/03
Weather: Clear, Sunny, wind 15.1 mph from N
WAAS (NAD83) W 80 35 634
Sea State: 1-2 feet
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (19.5 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.29	19.13	19.07
pH (units):	7.77	7.78	7.79
Salinity (ppt):	32.57	32.59	32.57
Conductivity (mS/cm):	49.69	49.68	49.64
Dis. Oxygen (mg/L):	6.43 (84.3%)	5.42 (71.5%)	5.31 (69.8%)
Turbidity (NTU):	2.2	2.8	2.8

Description of Sediment Collected: Black, course, grit, shells present, slight sulfer odor

Description of Water Collected:

Sheet 12 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-13
Sampled By: DF, JMM, DWF, BW, JMC, NL
Sampled Date: 4/1/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
(2) Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#243/#244/#245/#246

Sediment

Sampling Time: 0930
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH02-13
Number of Sediment Containers: 22
Collection Method: (Van Veen) or Other:

Water N/A

Sampling Time:
Water Container & Presevation:
Sample ID:
Number of Water Containers:
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 42.7
Lat/Long N 28 24 947
Weather: Clear, Sunny Wind 13.7 mph NNE
WAAS (NAD83) W 80 35 941
Sea State: less than 1 foot
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21.5 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	18.95	18.83	18.94
pH (units):	7.89	7.91	7.91
Salinity (ppt):	32.57	32.59	32.55
Conductivity (mS/cm):	49.65	49.62	49.93
Dis. Oxygen (mg/L):	6.13 (78.5%)	5.63 (74.1%)	5.39 (70.6%)
Turbidity (NTU):	3.2	4.7	5.3

Description of Sediment Collected: black mayo, no striations, strong sulfer odor

Description of Water Collected:

Sheet 13 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-14
Sampled By: DE, JMM, DWP, BW, JMC, NC
Sampled Date: 3/31/03

General Conditions, Observations, and/or Field Instrument Calibrations:
sampled just off of bumbers on trident wharf

Sampling Zones
1 Entrance Channel-COE
(2) Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#228 / #229 / #230 / #231 / #232

Sediment

Sampling Time: 1554
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-14
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

~~**Water**~~ N/A

~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 40.7
Lat/Long N 28 25 055
Weather: Clear, sunny, wind 17.7 N
WAAS (NAD83) W 80 35 629
Sea State: less than 1 foot
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (20.3 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.30	19.25	19.03
pH (units):	7.94	8.03	8.04
Salinity (ppt):	32.95	32.99	33.00
Conductivity (mS/cm):	50.19	50.21	50.25
Dis. Oxygen (mg/L):	4.72 (62.2%)	5.02 (66.6)	4.84 (63.7%)
Turbidity (NTU):	6.0	9.2	15.5

Description of Sediment Collected: black mayo, sulfer odor, some organic material, rock/shell present

Description of Water Collected:

Sheet 14 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-15
Sampled By: DF, JMM, DWF, BW, JMC, NL
Sampled Date: 3/31/03

General Conditions, Observations, and/or Field Instrument Calibrations:
NE end of basin

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: ____
#223/#224/#225/#226/#227

Sediment

Sampling Time: 1332
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-15
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

~~**Water**~~

~~Sampling Time:~~ N/A
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 38.9
Lat/Long N 28 25 190
Weather: Sunny, wind 17.7 mph N
WAAS (NAD83) W 80 35 627
Sea State: less than 1 foot
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (19.5 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.61	19.46	19.44
pH (units):	7.94	8.01	7.94
Salinity (ppt):	32.70	33.02	33.10
Conductivity (mS/cm):	49.84	50.33	50.40
Dis. Oxygen (mg/L):	5.14 (68.6%)	4.34 (58.8%)	3.31 (44.5%)
Turbidity (NTU):	8.5	6.3	9.5

Description of Sediment Collected: thick, black mayo, sulfer odor

Description of Water Collected:

Sheet 15 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-16
Sampled By: DE, JMM, DWF, BW, JMC, NL
Sampled Date: 4/1/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
(2) Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#238 / #239 / #240 / #241 / #242

Sediment

Sampling Time: 0835
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-16
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

~~**Water**~~ N/A

~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information Water Depth (ft): 43.7
Lat/Long N 28 25 144
Weather: Clear, sunny, wind 8.2 mph, NE
WAAS (NAD83) W 80 35 837
Sea State: calm
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (21.5 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	18.93	19.01	18.93
pH (units):	7.83	7.89	7.91
Salinity (ppt):	32.58	32.61	32.56
Conductivity (mS/cm):	49.60	49.71	49.64
Dis. Oxygen (mg/L):	5.75 (75.9%)	5.42 (71.4%)	5.25 (68.2%)
Turbidity (NTU):	6.0	5.3	5.5

Description of Sediment Collected: black mayo, sand/silt, brown striations, thick/dense, strong sulfer odor

Description of Water Collected:

Sheet 16 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-17
Sampled By: DF, JMM, DWF, BW, JMC, NC
Sampled Date: 3/31/03

General Conditions, Observations, and/or Field Instrument Calibrations:

sampled just off of bumpers on trident wharf

Sampling Zones	
1	Entrance Channel-COE
2	Trident Basin-NAVY
3	West Turning Basin-CPA
4	Basin Center

Picture yes: ✓ no: ____ 235 / 236 / ~~#233~~ / ~~#234~~ / ~~#245~~ / ~~#246~~ / #237
234 @ 3/31/03

Sediment

Sampling Time: 1635
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-17
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

~~**Water**~~

N/A

~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information

Water Depth (ft): 40.8
Lat/Long N 28 25 056
WAAS (NAD83) W 80 35 629
Weather: clear, sunny, wind 18.2 mph N
Sea State: less than 1 foot
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (20.4 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.35	19.25	19.02
pH (units):	8.01	8.05	8.05
Salinity (ppt):	32.9	33.0	32.99
Conductivity (mS/cm):	50.14	50.24	50.10
Dis. Oxygen (mg/L):	4.50 (59.9%)	4.77 (62.6%)	4.80 (63.0%)
Turbidity (NTU):	6.3	8.7	12.8

Description of Sediment Collected: black mayo, sulfer oder, some organic material, rock/shell present

Description of Water Collected:

Sheet 17 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-18
Sampled By: DF, JMM, DWF, BW, JMC, NL
Sampled Date: 4/2/03

General Conditions, Observations, and/or Field Instrument Calibrations:
Dup for E-CH03-1

Sampling Zones
(1) Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: ✓ no: _____
#266

Sediment
1220 for E-CH03-18
Sampling Time: 1112 for E-CH03-1 Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-18 Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

~~**Water**~~
N/A
Sampling Time: _____ Water Container & Presevation: _____
Sample ID: _____ Number of Water Containers: _____
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 43.3 Lat/Long N 28 22 401
Weather: clear, sunny wind 13.0 mph from NNW WAAS (NAD83) W 80 31 531
Sea State: 1-3 feet
Tidal Cycle: _____

	Near-Surface (1-ft below)	Mid-depth (21.6 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.30	18.94	18.82
pH (units):	7.89	7.97	7.93
Salinity (ppt):	33.04	32.73	32.67
Conductivity (mS/cm):	50.24	49.84	49.70
Dis. Oxygen (mg/L):	7.01 (91.4%)	6.49 (85%)	6.41 (84.3%)
Turbidity (NTU):	3.3	2.7	9.3

Description of Sediment Collected: Black, sandy with brown striations

Description of Water Collected: _____

Sheet 18 of 18

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-19
Sampled By: DWF-DCF-NL
Sampled Date: 5/14/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
(1) Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

#287

Picture yes: _____ no: _____

Sediment

Sampling Time: 0910
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-19
Number of Sediment Containers: 2
Collection Method: Van Veen or Other:

~~**Water**~~

~~Sampling Time: N/A~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 39
Lat/Long N 28° 24.612
Weather: Overcast, warm, humid, wind NE 1 mph.
WAAS (NAD83) W 80° 35.014
Sea State: calm
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (_____ ft)	Near-Bottom (3-ft above)
Water Temp (°C):			
pH (units):		N/A	
Salinity (ppt):			
Conductivity (mS/cm):			
Dis. Oxygen (mg/L):			
Turbidity (NTU):			

Description of Sediment Collected: Very sandy with some silt, some vegetation

Description of Water Collected: N/A.

Sheet ____ of _____

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-20
Sampled By: DWF, DCF, NL
Sampled Date: 5/14/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
(2) Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

#284

Picture yes: ✓ no: _____

Sediment

Sampling Time: 0650
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-20
Number of Sediment Containers: 22
Collection Method: Van Veen or Other:

~~**Water**~~

~~Sampling Time: N/A~~
~~Water Container & Presevation: 28° 24.664~~
~~Sample ID:~~
~~Number of Water Containers: 80° 35.491~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 43
Lat/Long N 28° 24.664
Weather: Overcast, warm, humid, wind 3-7 mph from East
WAAS (NAD83) W 80° 35.491
Sea State: Calm
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (____ ft)	Near-Bottom (3-ft above)
Water Temp (°C):			
pH (units):			
Salinity (ppt):		N/A	
Conductivity (mS/cm):			
Dis. Oxygen (mg/L):			
Turbidity (NTU):			

Description of Sediment Collected: Dark to medium grey w/ brown streaks, consistency of silty/sandy mayonnaise like

Description of Water Collected: N/A

Sheet ____ of _____

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: E-CH03-21
Sampled By: DWE, DCE, NL
Sampled Date: 5/14/03

General Conditions, Observations, and/or Field Instrument Calibrations:
Submarine exercises commencing

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY-Entrance
3 West Turning Basin-CPA
4 Basin Center

#285

Picture yes: ✓ no: _____

Sediment

Sampling Time: 0725
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: E-CH03-21
Number of Sediment Containers: 1
Collection Method: Van Veen or Other:

~~**Water**~~

~~Sampling Time:~~
~~Water Container & Presevation:~~
~~Sample ID:~~
~~Number of Water Containers:~~
~~Collection Method: van Dorn or Directly into Sample Container or Other:~~

Station Information
Water Depth (ft): 45
Lat/Long N 28° 24.563 } use #
WAAS (NAD83) W 80° 35.520 } 285
Weather: Overcast, warm, humid, wind ENE 0-7 mph
Sea State: calm
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (____ ft)	Near-Bottom (3-ft above)
Water Temp (°C):			
pH (units):			
Salinity (ppt):		N/A	
Conductivity (mS/cm):			
Dis. Oxygen (mg/L):			
Turbidity (NTU):			

Description of Sediment Collected: Dark to medium grey, mayonnaise like

Description of Water Collected: N/A

Sheet ____ of _____

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: F-CH03-22
Sampled By: DWF, DCE, NL
Sampled Date: 5/14/03

General Conditions, Observations, and/or Field Instrument Calibrations:
Favorite bait spot, 3 small vessels cast netting around us.

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY-Entrance
3 West Turning Basin-CPA
4 Basin Center

#284

Picture yes: ✓ no: _____

Sediment

Sampling Time: 0745
Sample ID: E-CH03-22
Collection Method: Van Veen or Other:
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Number of Sediment Containers: 1

~~**Water**~~

Sampling Time: _____
Sample ID: _____
Collection Method: van Dorn or Directly into Sample Container or Other:
~~Water Container & Presevation:~~ _____
~~Number of Water Containers:~~ _____

Station Information
Water Depth (ft): 45
Weather: Overcast, warm, humid, wind 0-8 mph
Tidal Cycle: 6
Lat/Long N 28° 24.594
WAAS (NAD83) W 80° 35.344
Sea State: _____

	Near-Surface (1-ft below)	Mid-depth (____ ft)	Near-Bottom (3-ft above)
Water Temp (°C):			
pH (units):			
Salinity (ppt):		N/A	
Conductivity (mS/cm):			
Dis. Oxygen (mg/L):			
Turbidity (NTU):			

Description of Sediment Collected: Sand + silt light grey & medium streaks, + dark silt some vegetation

Description of Water Collected: _____

Sheet ____ of _____

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: Basin Water
Sampled By: DWF/DCF/NL
Sampled Date: 5/14/03

General Conditions, Observations, and/or Field Instrument Calibrations:

#288

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: _____ no: ✓

Sediment

Sampling Time: N/A
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID:
Number of Sediment Containers: 14
Collection Method: Van Veen or Other: Direct

Water

Sampling Time: 0955
Water Container & Presevation: 1 Gallon-Glass 4°C
Sample ID: Basin Water
Number of Water Containers: 14
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information
Water Depth (ft): 35 (by map)
Lat/Long N 28° 24.734
Weather: clear, sunny, warm, humid wind SE 3-7 mph
WAAS (NAD83) W 80° 37.373
Sea State: calm (protected basin)
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (____ ft)	Near-Bottom (3-ft above)
Water Temp (°C):		N/A	
pH (units):			
Salinity (ppt):			
Conductivity (mS/cm):			
Dis. Oxygen (mg/L):			
Turbidity (NTU):			

Description of Sediment Collected: N/A

Description of Water Collected:

Sheet ____ of _____

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: Basin Water
Sampled By: NL/JMM
Sampled Date: 4/10/03

General Conditions, Observations, and/or Field Instrument Calibrations:

#280

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center

Picture yes: _____ no: ✓

~~**Sediment**~~

~~Sampling Time: _____ Sediment Container & Presevation: 1-Gallon Glass, 4°C~~
~~Sample ID: _____ Number of Sediment Containers: _____~~
~~Collection Method: Van Veen or Other:~~

Water

Sampling Time: 0711 Water Container & Presevation: 1 Gallon Amber
Sample ID: Basin water Number of Water Containers: ~~92~~ 89
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 28.7 Lat/Long N 28° 24.816 #280
Weather: Cold, overcast, cold front and rain moving through night WAAS (NAD83) W 80° 37.526
Sea State: choppy - (protected basin)
Tidal Cycle: _____

	Near-Surface (1-ft below)	Mid-depth (_____ ft)	Near-Bottom (3-ft above)
Water Temp (°C):			
pH (units):			
Salinity (ppt):			
Conductivity (mS/cm):			
Dis. Oxygen (mg/L):			
Turbidity (NTU):			

Description of Sediment Collected: N/A

Description of Water Collected: clear, light amber, no particulates

Sheet 1 of 2

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: Basin Water
Sampled By: NL
Sampled Date: 4/17/03

General Conditions, Observations, and/or Field Instrument Calibrations:

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
(4) Basin Center

Picture yes: _____ no: ✓

~~**Sediment**~~

~~Sampling Time: _____~~ ~~Sediment Container & Presevation: 1-Gallon Glass, 4°C~~

~~Sample ID: _____~~ ~~Number of Sediment Containers: _____~~

~~Collection Method: Van Veen or Other:~~

Water

Sampling Time: 1015 Water Container & Presevation: 1 Gallon Ambers / 4 Gallon Cubitainers

Sample ID: Basin Water Number of Water Containers: 12 Ambers + 12 Cubi.

Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information Water Depth (ft): 10 feet Lat/Long N 28° 24.711

Weather: warm, clear, very sunny WAAS (NAD83) W 80° 37.297

Sea State: calm (protected basin)

Tidal Cycle: _____

	Near-Surface (1-ft below)	Mid-depth (____ ft)	Near-Bottom (3-ft above)
Water Temp (°C):			
pH (units):			
Salinity (ppt):			
Conductivity (mS/cm):			
Dis. Oxygen (mg/L):			
Turbidity (NTU):			

Description of Sediment Collected: _____

Description of Water Collected: _____

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: RS-CH03-A, B
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/3/03

General Conditions, Observations, and/or Field Instrument Calibrations:
RS-CH03-A

Sampling Zones
1 Entrance Channel-COE
2 Trident Basin-NAVY
3 West Turning Basin-CPA
4 Basin Center
RS

Picture yes: ✓ no: _____
#273 / #274 / #275

Sediment

Sampling Time: 1004
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: RS-CH03-A
Number of Sediment Containers: 11
Collection Method: Van Veen or Other:

Water

Sampling Time: _____
Water Container & Presevation: _____
Sample ID: _____
Number of Water Containers: _____
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information
Water Depth (ft): 53.7
Lat/Long N 28 18 977
Weather: Clear, sunny, wind 2.2
WAAS (NAD83) W 80 29 207
Sea State: calm
Tidal Cycle: _____

	Near-Surface (1-ft below)	Mid-depth (26.8 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	19.52	19.24	19.74
pH (units):	8.08	8.07	8.10
Salinity (ppt):	33.01	33.02	33.52
Conductivity (mS/cm):	50.26	50.20	50.96
Dis. Oxygen (mg/L):	7.15 (95.3%)	7.10 (94.6%)	6.67 (85.6)
Turbidity (NTU):	0.1	0.0	4.3

Description of Sediment Collected: grey fine sand, silt, some shells present

Description of Water Collected: _____

Sheet 1 of 2

Canaveral Harbor - 103 Evaluation - 2003
Sediment/Water Sampling Field Sheet

ANAMAR Environmental Chemistry Inc.
6821 SW Archer Road
Gainesville, Florida 32608
Phone: 352/377-5770

Station ID: RS-CH03-B
Sampled By: DF, JMM, DWF, BW
Sampled Date: 4/3/03

General Conditions, Observations, and/or Field Instrument Calibrations:

CAS samples taken at 1140,
Organotic
metal
Cn
TOC / NH^3
8270 - PAH - Sim
O/G

pH checked on preserved samples
acidified <2 -
Cn <12

Sampling Zones	
1	Entrance Channel-COE
2	Trident Basin-NAVY
3	West Turning Basin-CPA
4	Basin Center
RS-CH03	

Picture yes: ✓ no: ____
#276/#277/278/#279

Sediment

Sampling Time: 1158
Sediment Container & Presevation: 1-Gallon Glass, 4°C
Sample ID: RS-CH03-B
Number of Sediment Containers: 11
Collection Method: Van Veen or Other:

Water

Sampling Time: 1132
Water Container & Presevation: 1/2 gallon
Sample ID: Off-shore - RS-CH03-B
Number of Water Containers: 25
Collection Method: van Dorn or Directly into Sample Container or Other:

Station Information
Water Depth (ft): 53.4
Lat/Long N 28 16 350
Weather: Clear, sunny, wind 5.3 mph from NNE
WAAS (NAD83) W 80 30 833
Sea State: calm
Tidal Cycle:

	Near-Surface (1-ft below)	Mid-depth (26.8 ft)	Near-Bottom (3-ft above)
Water Temp (°C):	20.25	19.13	18.88
pH (units):	8.17	8.13	8.16
Salinity (ppt):	32.99	33.18	33.47
Conductivity (mS/cm):	50.14	50.44	50.86
Dis. Oxygen (mg/L):	7.00 (94.6%)	6.86 (91.0%)	6.56 (86.6%)
Turbidity (NTU):	0.8	6.1	7.9

Description of Sediment Collected: Grey, fine sand, silt, w brown striations, some shell fragments

Description of Water Collected: Clear, slight amber, no particulate

Sheet 2 of 2

Appendix B

Physical Testing Data

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
COE Samples

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
✓ E-CH3-1	04/2/03	1112	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-2	04/2/03	1155	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-3	04/2/03	1220	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-4	04/2/03	1243	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-5	04/2/03	1307	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-6	04/2/03	1336	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-7	04/2/03	1401	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-8	04/1/03	1250	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ RS-CH03	04/3/03	1004	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ Ref. Water	04/3/04	1004	Sea Water	1/2 Gallon Plastic Jug	24	Per Contract		

Samples Relinquished by: [signature]
Date: 4/16/03 Time: 1628
Samples Relinquished by: [signature]
Date: 1645 Time: 4/12/03 VIA UPS

Received by: [signature]
Date: 4/16/03 Time: 1628
Received by: _____
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
NAVY Samples

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
✓ E-CH3-9	03 04/3/ /03	1109	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-10	04/ / /03	1420	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-11	04/ / /03	0924	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-12	04/ / /03	1346	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-13	04/ / /03	0930	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-14	03 04/3/ /03	1554	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-15	03 04/3/ /03	1332	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ E-CH3-16	04/ / /03	0835	Sediment	1 Gallon Ziplock Bag	1	Per Contract		

Samples Relinquished by: [signature]
Date: 4/16/03 Time: 1628
Samples Relinquished by: [signature]
Date: 1645 Time: 4/16/03 → VIA UPS

Received by: [signature]
Date: 4/16/03 Time: 1628
Received by: _____
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
Canaveral Port Authority (CPA) Samples

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
✓ CCO1-2	04/7/03	1335	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ CCO3-4	04/8/03	0900	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ CCO5-6	04/8/03	1345	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ B7	04/2/03	1259	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ B8	04/3/03	1110	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ B9	04/3/03	1323	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ B10	04/3/03	1630	Sediment	1 Gallon Ziplock Bag	1	Per Contract		
✓ CT6-7	04/9/03	0830	Sediment	1 Gallon Ziplock Bag	1	Per Contract		

Samples Relinquished by: [signature]
Date: 4/16/03 Time: 1628
Samples Relinquished by: [signature]
Date: 1645 Time: 4/16/03 VIA UPS

Received by: [signature]
Date: 4/16/03 Time: 1628
Received by: _____
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

MACTEC

Project:	Canaveral Harbor 103 Evaluation	Law Project Number:	0736-03-4318
Client:	Anamar Environmental Inc.	Date:	April 23, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering and Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on April 17, 2003. The results are outlined below and on the attached sheets.

Sample Number	Moisture Content (%)	Percent Solids (%)	Specific Gravity	Atterberg Limits		
				Liquid Limit	Plastic Limit	Plasticity Index
E-CH03-1	166.3	37.5	2.627	117	49	68
E-CH03-2	87.5	53.3	2.617	101	45	56
E-CH03-3	203.3	33.0	2.587	156	62	94
E-CH03-4	227.9	30.5	2.570	165	65	100
E-CH03-5	168.3	37.3	2.628	129	46	83
E-CH03-6	77.0	56.5	2.641	50	31	19
E-CH03-7	223.1	31.0	2.580	165	63	102
E-CH03-8	58.3	63.2	2.662		NP	
RS-CH03	54.0	65.0	2.665	45	32	13

Reviewed By:

Michael J. Holm

MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

Project:	Canaveral Harbor 103 Evaluation	Law Project Number:	6738-03-4318
Client:	Anamar Environmental Inc.	Date:	April 23, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering and Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on April 17, 2003. The results are outlined below and on the attached sheets.

Sample Number	Moisture Content (%)	Percent Solids (%)	Specific Gravity	Atterberg Limits		
				Liquid Limit	Plastic Limit	Plasticity Index
E-CH03-9	160.6	38.4	2.614	103	50	53
E-CH03-10	315.5	24.1	2.581	196	80	116
E-CH03-11	321.7	23.7	2.539	197	78	119
E-CH03-12	149.4	40.1	2.635	145	69	76
E-CH03-13	338.3	22.8	2.528	188	70	118
E-CH03-14	338.0	22.8	2.570	206	71	135
E-CH03-15	352.9	22.1	2.582	208	76	132
E-CH03-16	332.4	23.1	2.569	199	66	133

Reviewed By:

Michael J. Holm

MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

Project:	Canaveral Harbor 103 Evaluation	Law Project Number:	6738-03-4318
Client:	Anamar Environmental Inc.	Date:	April 23, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering and Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on April 17, 2003. The results are outlined below and on the attached sheets.

Sample Number	Moisture Content (%)	Percent Solids (%)	Specific Gravity	Atterberg Limits		
				Liquid Limit	Plastic Limit	Plasticity Index
CC01-2	31	76.3	Not Performed		NP	
CC03-4	177.1	36.1	Not Performed		NP	
CC05-6	36.2	73.4	Not Performed	34	26	8
B-7	42.9	70.0	Not Performed	48	29	19
B-8	44.1	69.4	Not Performed	51	28	23
B-9	72.6	57.9	Not Performed	77	37	40
B-10	67.8	59.6	Not Performed	81	40	41
CT6-7	27	78.8	Not Performed		NP	

Reviewed By:

Michael J. Holm

MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

REPORT OF SOIL TESTING

Project: Canaveral Harbor 103 Evaluation

Project Number: 6738-03-4318-02

Client: Anamar Environmental

Date: April 23, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering & Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on April 17, 2003. The results are outlined below and on the attached sheets.

Sample Number	Sample ID	Percent Solids (%)	Moisture Content (%)	Wet Bulk Density (pcf)	Dry Bulk Density (pcf)
E-CH03-1		37.5	166.3	80.6	30.3
E-CH03-2		53.3	87.5	82.7	44.1
E-CH03-3		33.0	203.3	77.6	25.6
E-CH03-4		30.6	227.9	75.8	23.1
E-CH03-5		37.3	168.3	81.1	30.2
E-CH03-6		56.5	77.0	97.2	54.9
E-CH03-7		31.0	223.1	76.5	23.7
E-CH03-8		63.2	58.3	103.5	65.4
RS-CH03		65.0	54.0	104.9	68.1

Respectfully Submitted

Michael J Holm

MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, FL 32207
(904)396-5173

MACTEC

REPORT OF SOIL TESTING

Project: Canaveral Harbor 103 Evaluation

Project Number: 6738-03-4318-02

Client: Anamar Environmental

Date: April 23, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering & Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on April 17, 2003. The results are outlined below and on the attached sheets.

Sample Number	Sample ID	Percent Solids (%)	Moisture Content (%)	Wet Bulk Density (pcf)	Dry Bulk Density (pcf)
E-CH03-9		38.4	160.6	81.4	31.2
E-CH03-10		24.1	315.5	72.8	17.5
E-CH03-11		23.7	321.7	72.7	17.2
E-CH03-12		40.1	149.4	83.3	33.4
E-CH03-13		22.8	338.3	72.2	16.5
E-CH03-14		22.8	338.0	72.3	16.5
E-CH03-15		22.1	352.9	72.0	15.9
E-CH03-16		23.1	332.4	72.4	16.7

Respectfully Submitted

Michael J Kolo

MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, FL 32207
(904)396-5173

MACTEC

REPORT OF SOIL TESTING

Project: Canaveral Harbor 103 Evaluation

Project Number: 6738-03-4318-02

Client: Anamar Environmental

Date: April 23, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering & Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on April 17, 2003. The results are outlined below and on the attached sheets.

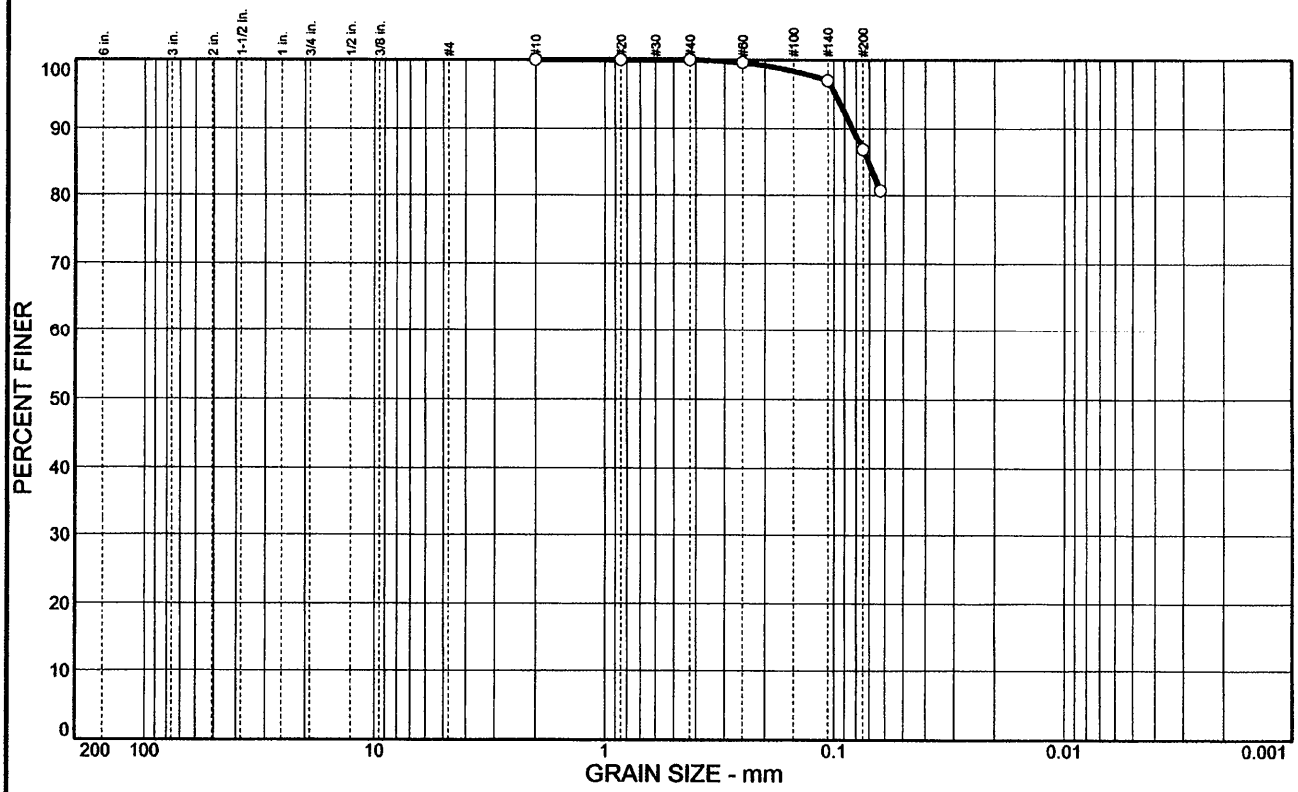
Sample Number	Sample ID	Percent Solids (%)	Moisture Content (%)	Wet Bulk Density (pcf)	Dry Bulk Density (pcf)
CC01-2		76.3	31.0	115.8	88.4
CC03-4		36.1	177.1	116.2	41.9
CC05-6		73.4	36.2	113.2	83.1
B-7		70.0	42.9	112.3	78.6
B-8		69.4	44.1	108.7	75.4
B-9		57.9	72.6	96.1	55.7
B-10		59.6	67.8	97.5	58.1
CT6-7		78.8	27.0	120.5	94.9

Respectfully Submitted

Michael J Hol

MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, FL 32207
(904)396-5173

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			13.3	86.7		MH	A-7-5(72)	49	117

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#10	100.0		
#20	100.0		
#40	100.0		
#60	99.6		
#140	97.0		
#200	86.7		
#230	80.7		

SOIL DESCRIPTION

○ SILT, mostly silt, little fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-1

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

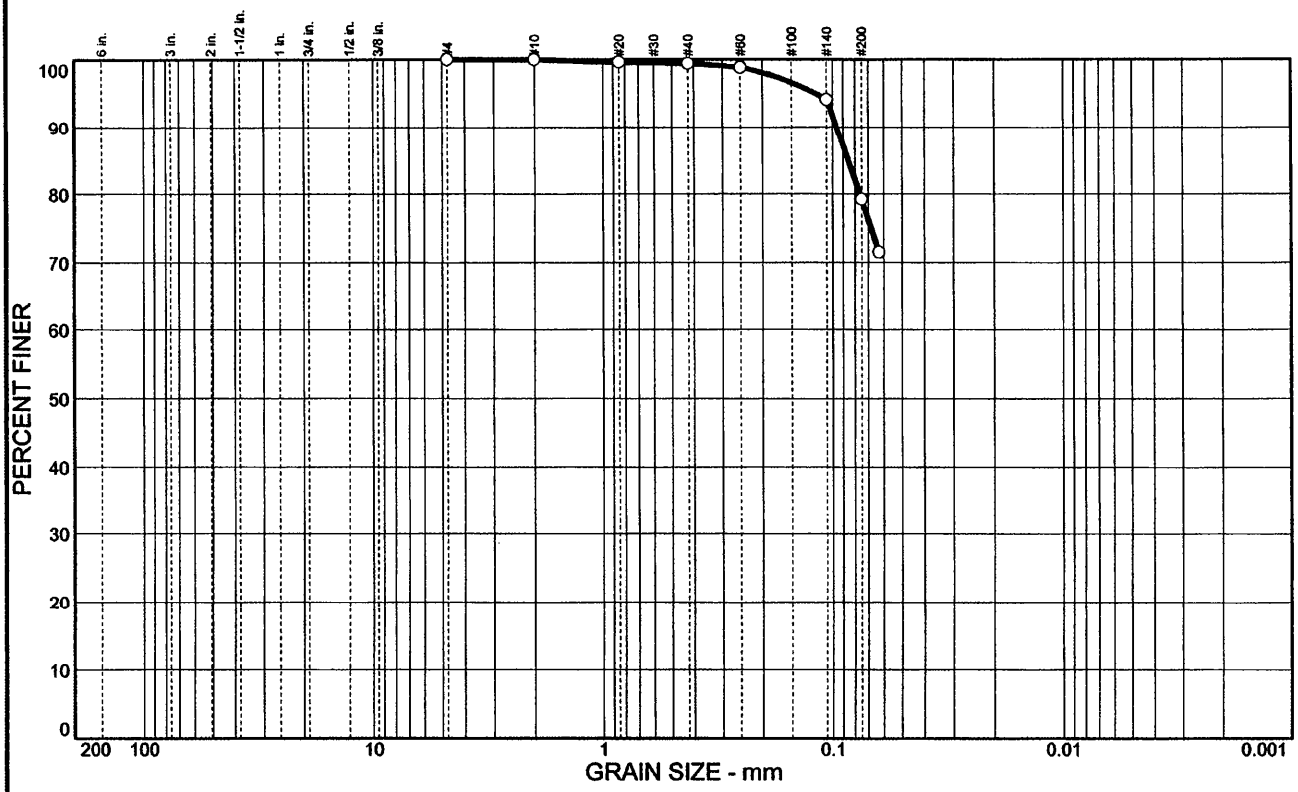
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Richard Fletcher

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			20.8	79.2		MH	A-7-5(52)	45	101

SIEVE inches size	PERCENT FINER ○		
GRAIN SIZE			
D_{60}			
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	100.0		
#20	99.6		
#40	99.4		
#60	98.8		
#140	94.1		
#200	79.2		
#230	71.5		

SOIL DESCRIPTION

○ SILT, mostly silt, little fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-2

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

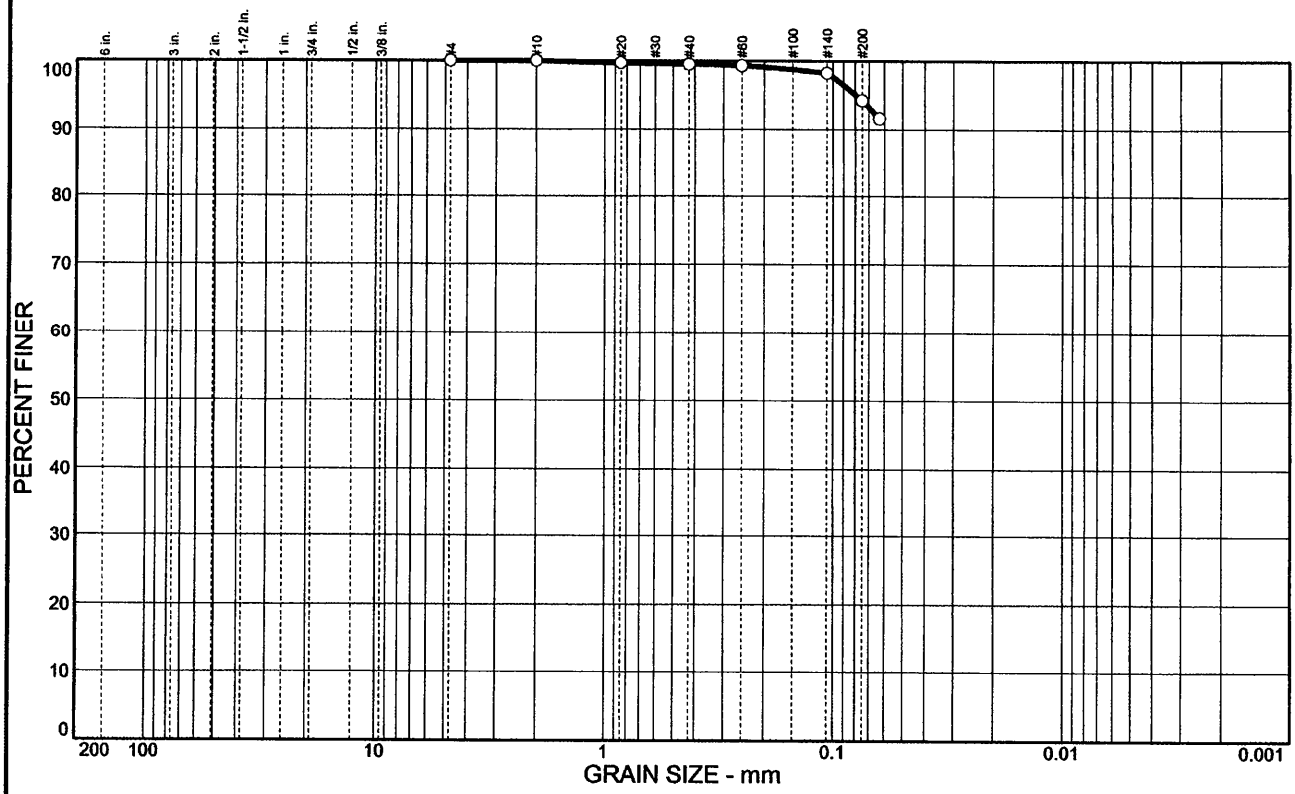
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			5.8	94.2		MH	A-7-5(112)	62	156

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	100.0		
#20	99.7		
#40	99.5		
#60	99.3		
#140	98.2		
#200	94.2		
#230	91.6		

SOIL DESCRIPTION

○ SILT, mostly silt, few fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-3

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

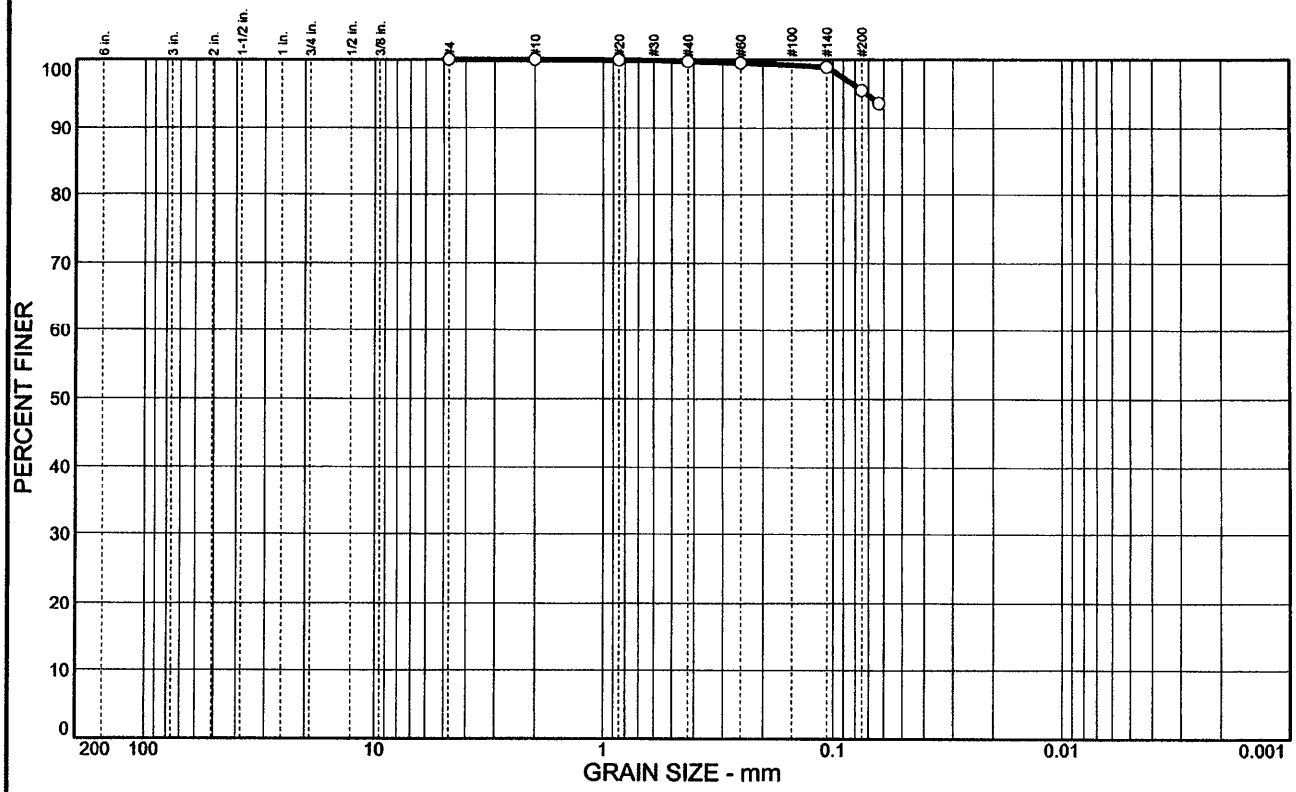
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael Hohn

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			4.5	95.5		MH	A-7-5(123)	65	165

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.7		
#60	99.5		
#140	98.9		
#200	95.5		
#230	93.6		

SOIL DESCRIPTION

○ SILT, mostly silt, trace fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-4

Law Engineering and Environmental Services, Inc.

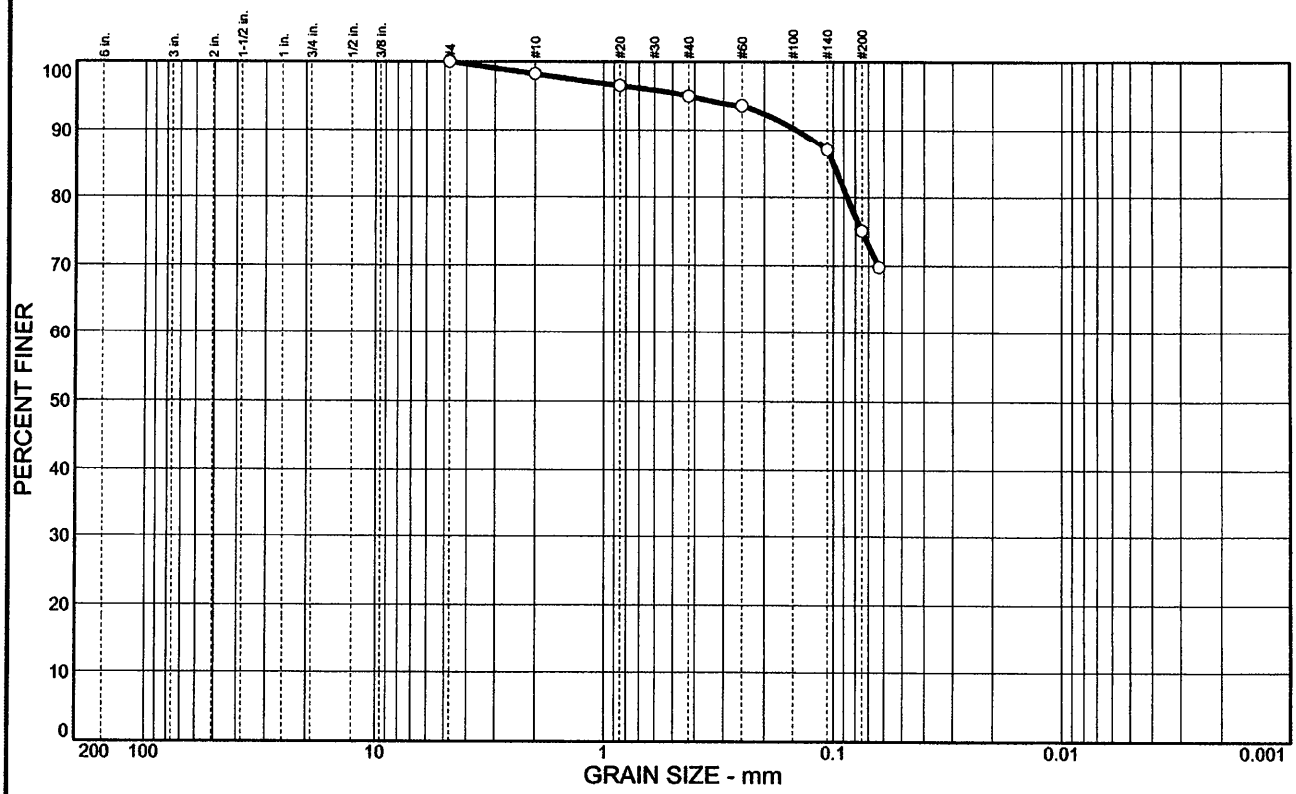
Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			24.9	75.1		CH	A-7-5(70)	46	129

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	98.2		
#20	96.5		
#40	95.0		
#60	93.6		
#140	87.0		
#200	75.1		
#230	69.8		

SOIL DESCRIPTION

○ CLAY, mostly clay, little fine sand size quartz, trace coarse to medium sand size shell fragments, gray

REMARKS:

○

○ Source: E-CH03-5

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

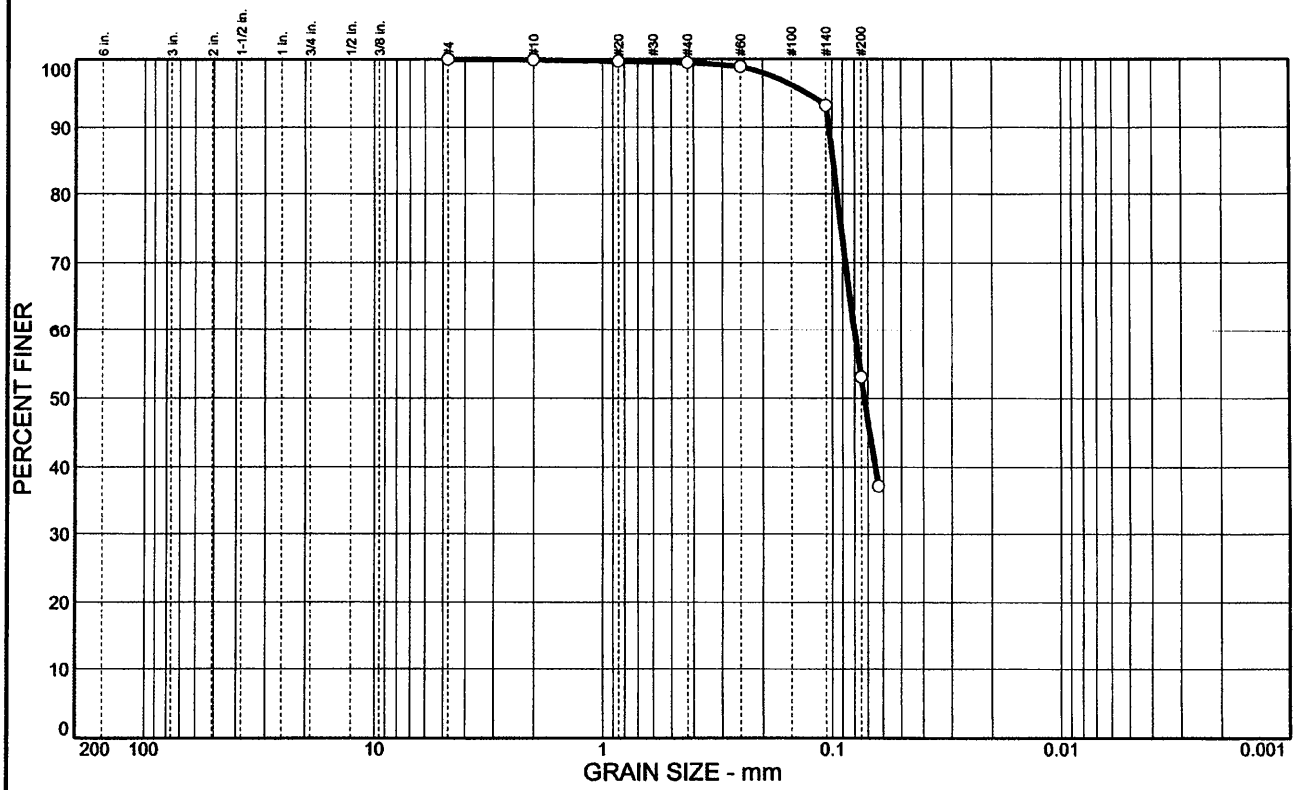
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael Hale

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			46.9	53.1		MH	A-7-5(8)	31	50

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}	0.0801		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.9		
#20	99.7		
#40	99.5		
#60	98.9		
#140	93.2		
#200	53.1		
#230	37.2		

SOIL DESCRIPTION

○ SILT, mostly silt, some fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-6

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

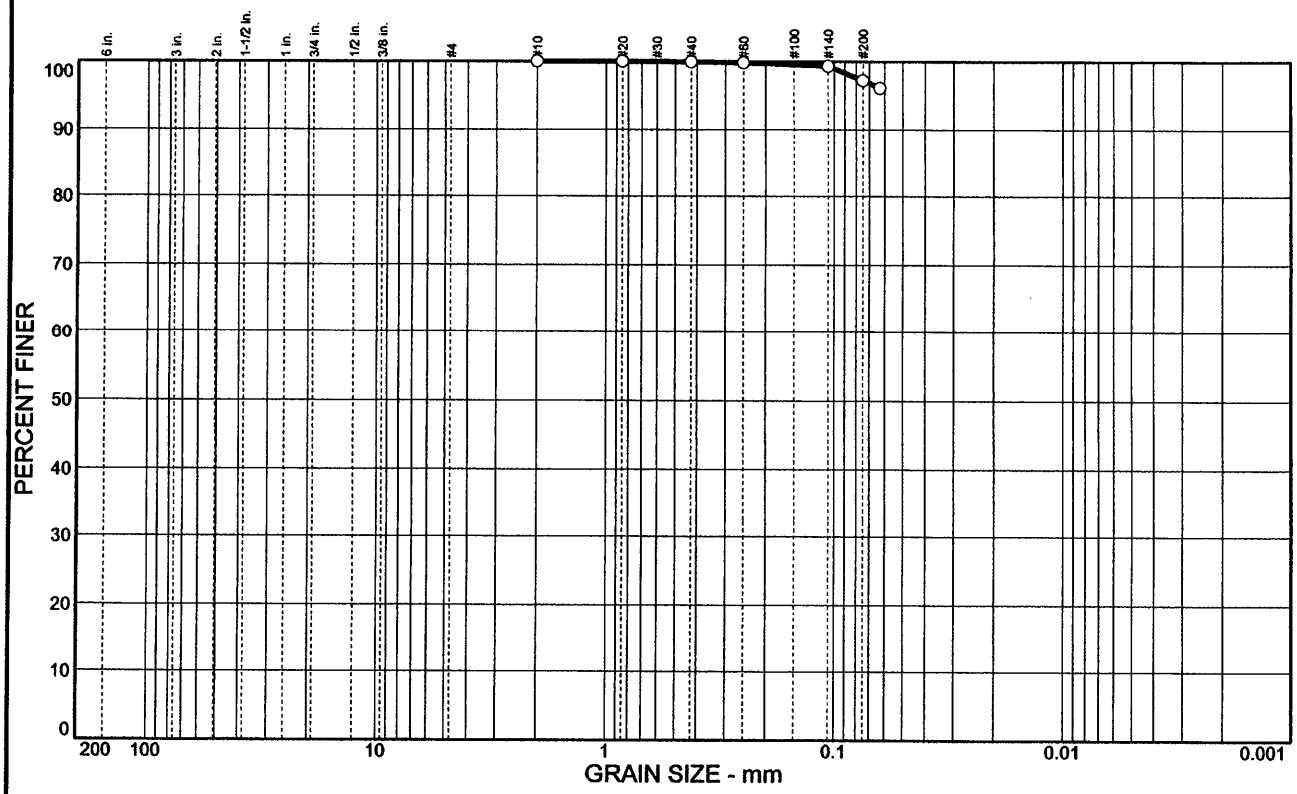
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael J Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			2.8	97.2		MH	A-7-5(127)	63	165

SIEVE inches size	PERCENT FINER ○		
GRAIN SIZE			
D_{60}			
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#10	100.0		
#20	100.0		
#40	99.9		
#60	99.8		
#140	99.3		
#200	97.2		
#230	96.1		

SOIL DESCRIPTION

○ SILT, mostly silt, trace fine sand size quartz, gray

REMARKS:

○

○ Source: E-CH03-7

Law Engineering and Environmental Services, Inc.

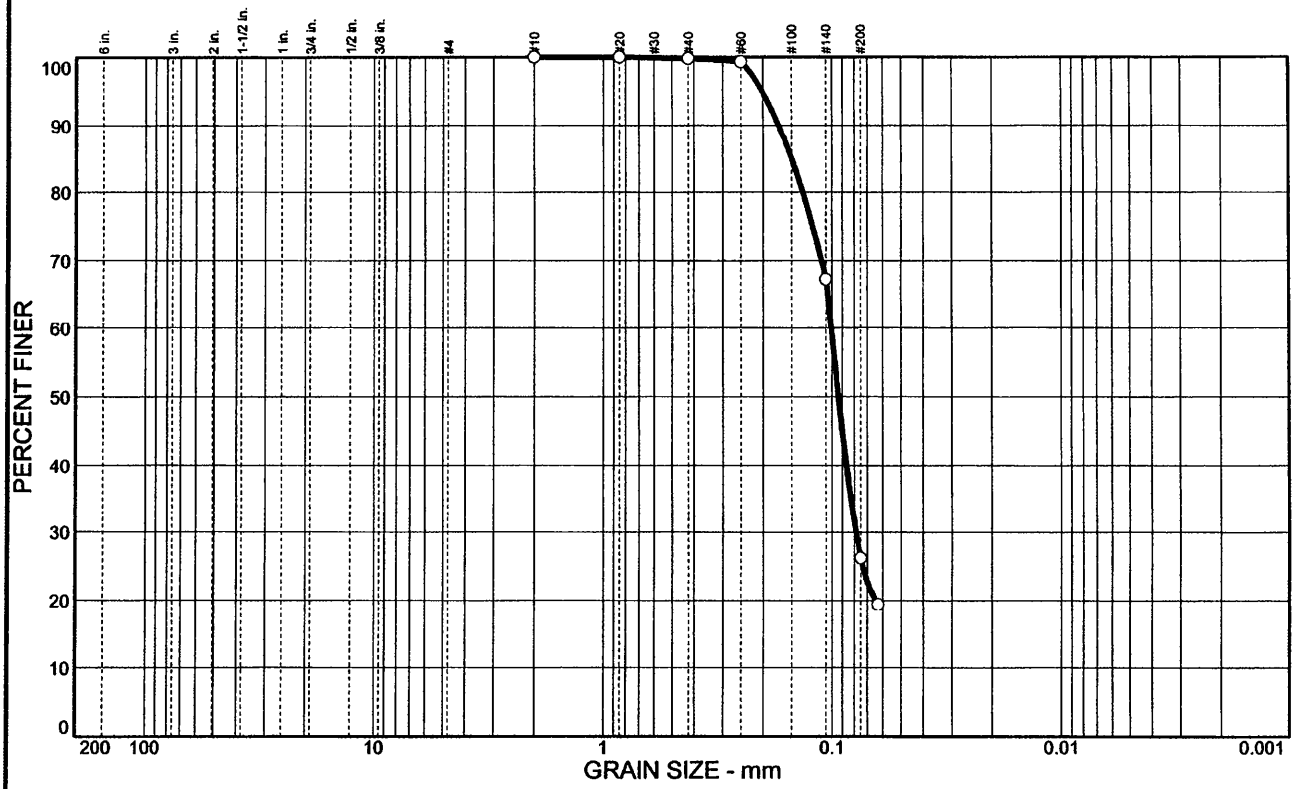
Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			73.8	26.2		SM	A-2-4(0)		

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}	0.101		
D_{30}	0.0788		
D_{10}			
	COEFFICIENTS		
C_C			
C_U			

SIEVE number size	PERCENT FINER ○		
#10	100.0		
#20	100.0		
#40	99.8		
#60	99.3		
#140	67.3		
#200	26.2		
#230	19.4		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, little silt, gray

REMARKS:

○

○ Source: E-CH03-8

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

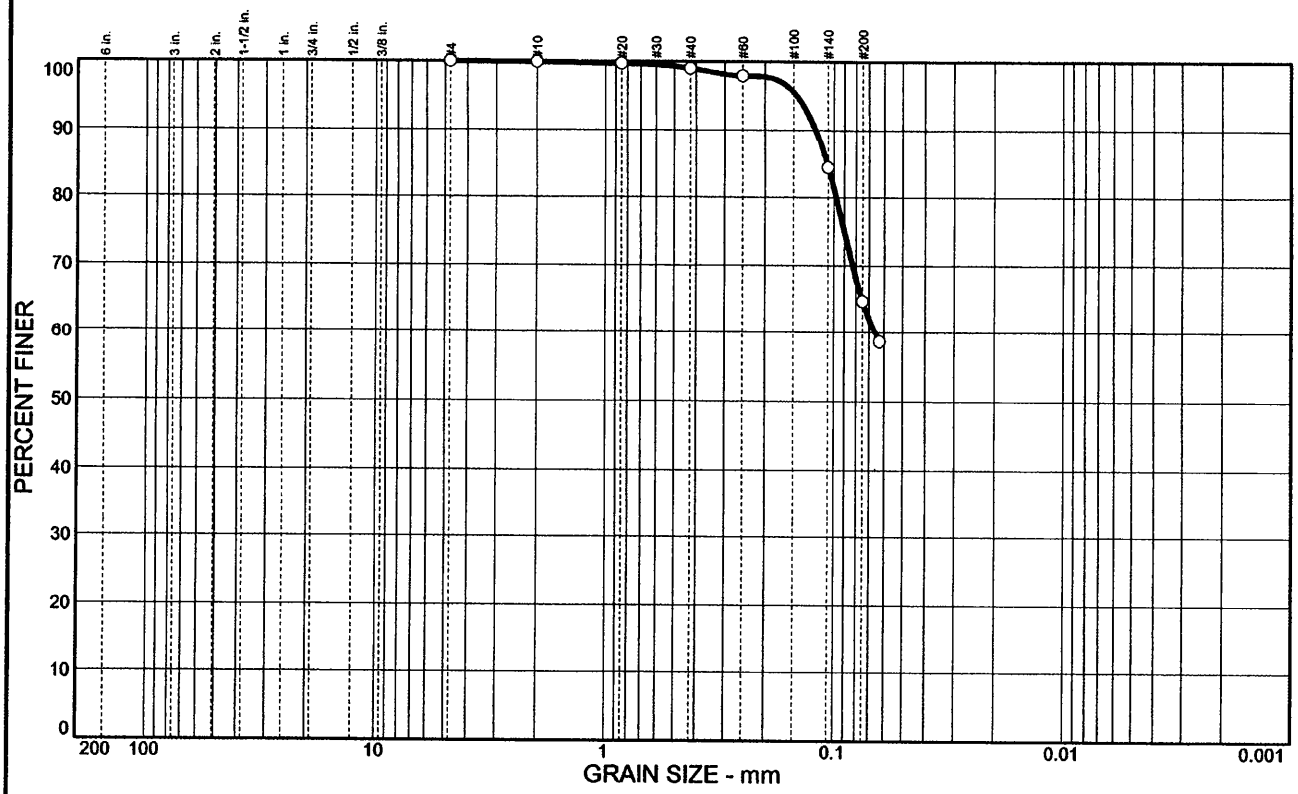
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			35.2	64.8		MH	A-7-5(37)	50	103

SIEVE inches size	PERCENT FINER ○		
GRAIN SIZE			
D_{60}	0.0658		
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.9		
#20	99.7		
#40	99.0		
#60	97.9		
#140	84.4		
#200	64.8		
#230	58.7		

SOIL DESCRIPTION

○ SILT, mostly silt, some fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-9

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

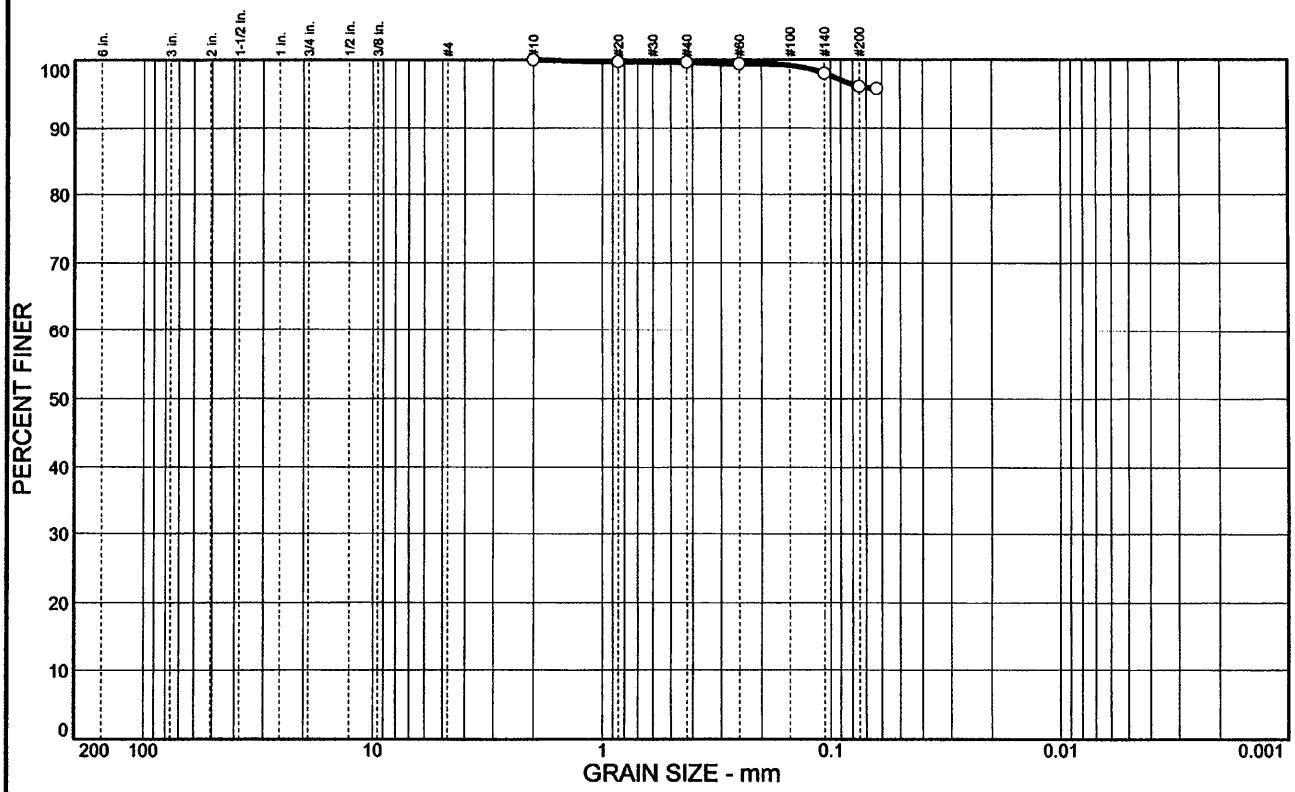
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael Hale

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			3.9	96.1		MH	A-7-5(146)	80	196

SIEVE incnes size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#10	100.0		
#20	99.7		
#40	99.6		
#60	99.4		
#140	98.0		
#200	96.1		
#230	95.8		

SOIL DESCRIPTION

○ SILT, mostly silt, trace fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-10

Law Engineering and Environmental Services, Inc.

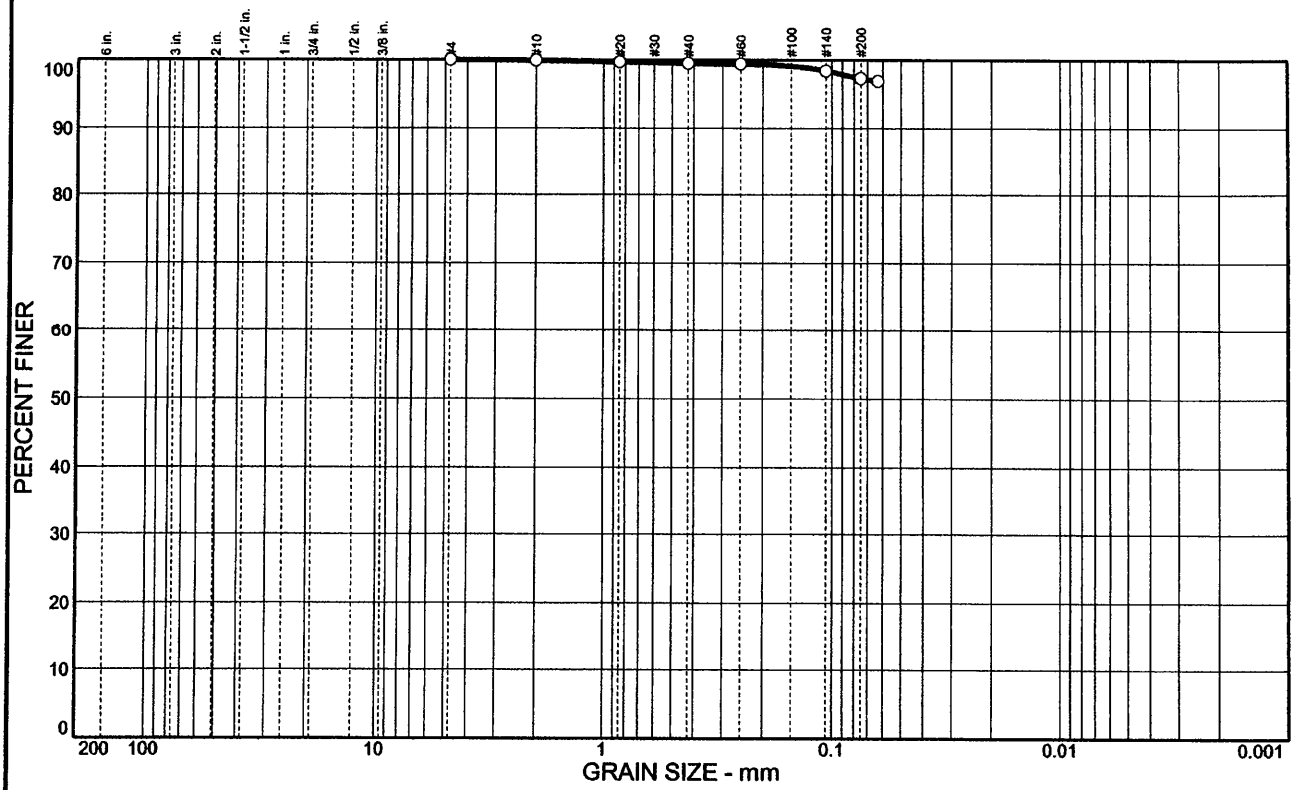
Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			2.7	97.3		MH	A-7-5(150)	78	197

SIEVE Inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	99.9		
#20	99.7		
#40	99.5		
#60	99.4		
#140	98.4		
#200	97.3		
#230	96.9		

SOIL DESCRIPTION

○ SILT, mostly silt, trace fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-11

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

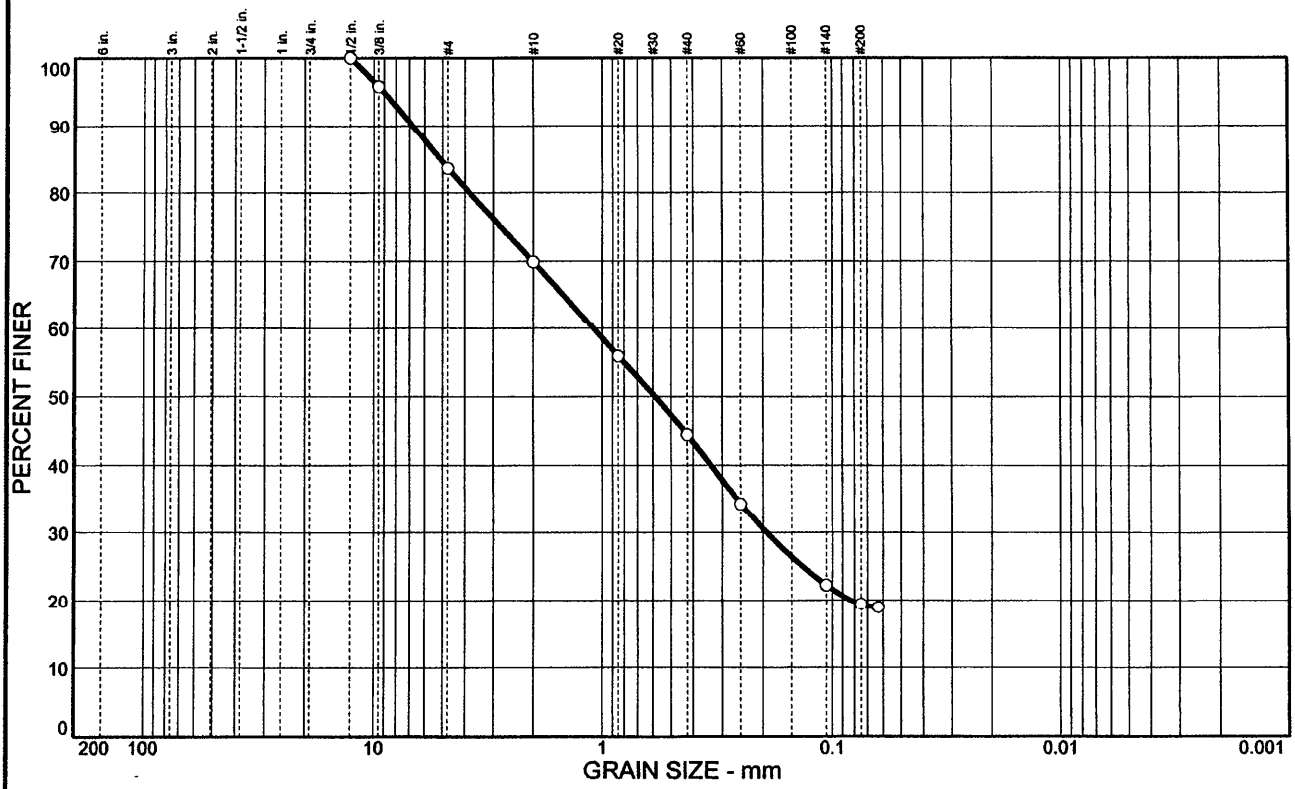
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Nichol Gilstrap

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		16.4	64.2	19.4		SM	A-2-7(3)	69	145

SIEVE inches size	PERCENT FINER ○		
1/2	100.0		
3/8	95.8		
GRAIN SIZE			
D_{60}	1.09		
D_{30}	0.193		
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	83.6		
#10	69.9		
#20	55.9		
#40	44.4		
#60	34.3		
#140	22.2		
#200	19.4		
#230	18.9		

SOIL DESCRIPTION

○ SAND, little medium to fine sand size quartz, little silt, little fine gravel size shell fragments, little coarse sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-12

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

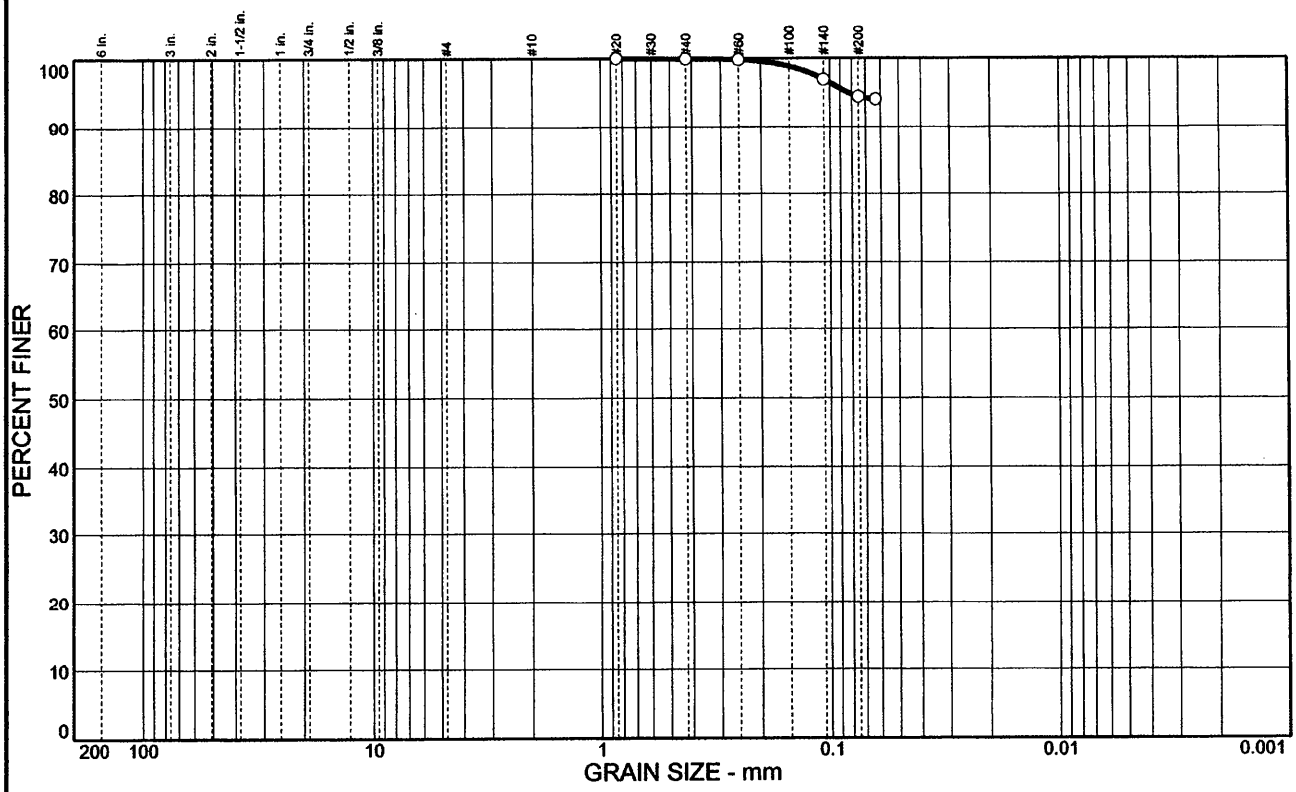
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael Hill

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			5.6	94.4		MH	A-7-5(141)	70	188

SIEVE inches size	PERCENT FINER ○		
GRAIN SIZE			
D_{60}			
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#20	100.0		
#40	99.9		
#60	99.8		
#140	96.9		
#200	94.4		
#230	94.0		

SOIL DESCRIPTION

○ SILT, mostly silt, few fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-13

Law Engineering and Environmental Services, Inc.

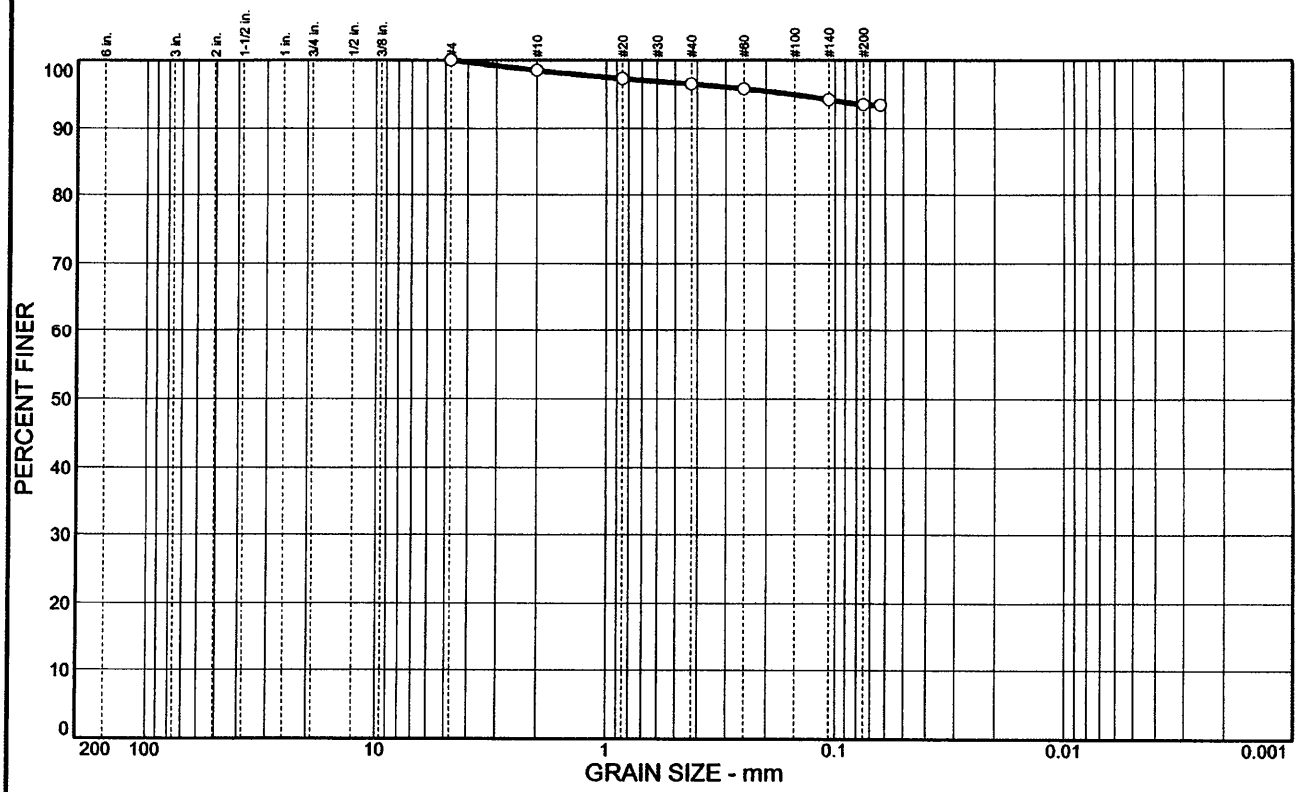
Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02 Plate

Michael Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			6.5	93.5		MH	A-7-5(160)	71	206

SIEVE inches size	PERCENT FINER ○		
GRAIN SIZE			
D_{60}			
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	98.5		
#20	97.3		
#40	96.5		
#60	95.8		
#140	94.2		
#200	93.5		
#230	93.4		

SOIL DESCRIPTION

○ SILT, mostly silt, trace medium to fine sand size quartz, trace coarse sand size shell fragments, dark gray

REMARKS:

○

○ Source: E-CH03-14

Law Engineering and Environmental Services, Inc.

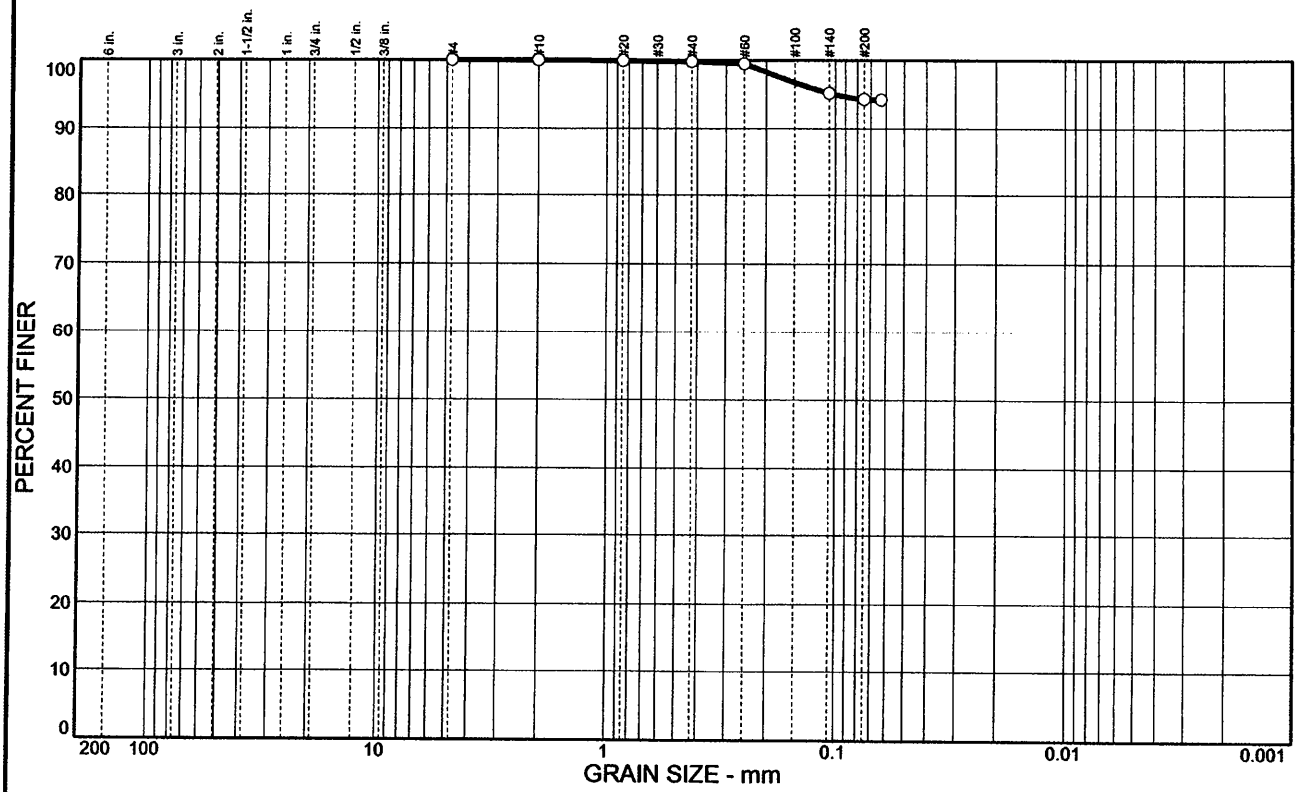
Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			5.7	94.3		MH	A-7-5(158)	76	208

SIEVE inches size	PERCENT FINER ○		
GRAIN SIZE			
D_{60}			
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.8		
#60	99.5		
#140	95.2		
#200	94.3		
#230	94.2		

SOIL DESCRIPTION

○ SILT, mostly silt, few fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-15

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

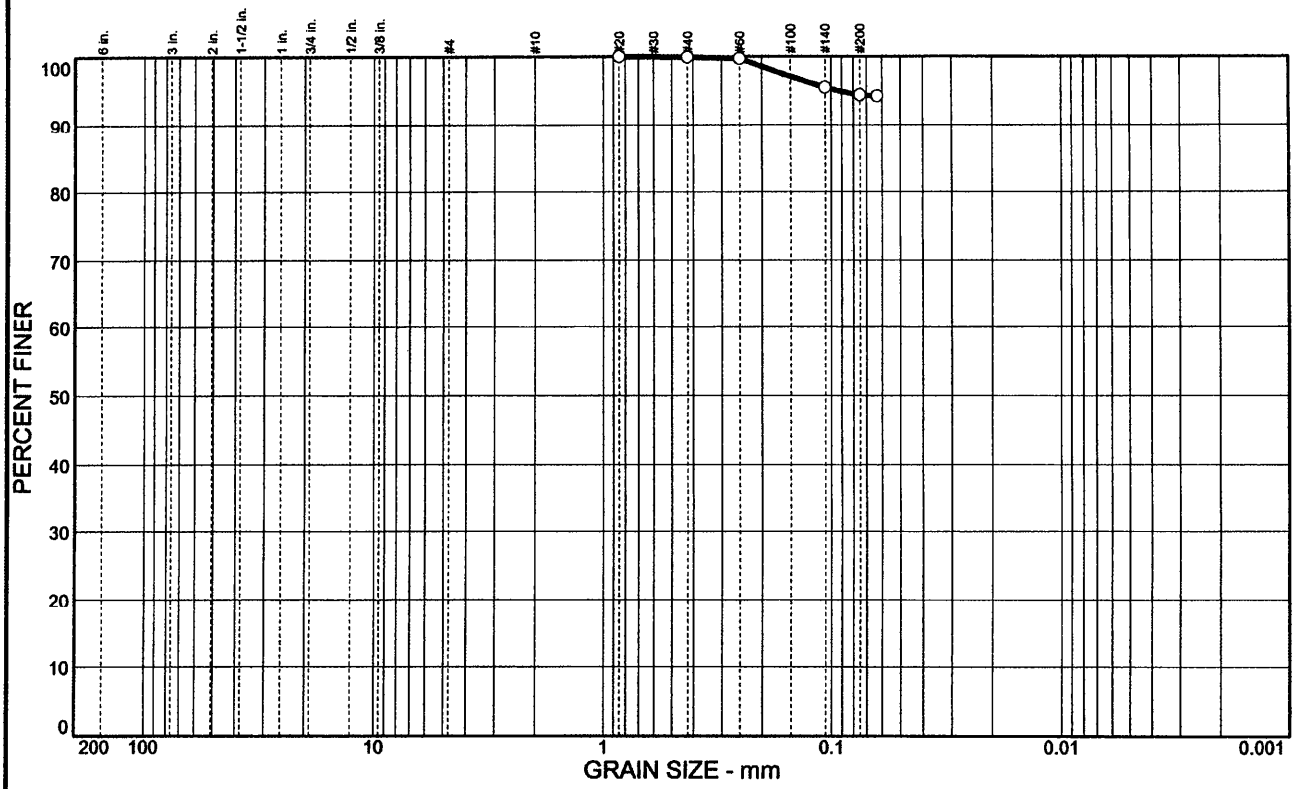
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michaelfld

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			5.6	94.4		CH	A-7-5(156)	66	199

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#20	100.0		
#40	99.9		
#60	99.7		
#140	95.5		
#200	94.4		
#230	94.2		

SOIL DESCRIPTION

○ CLAY, mostly clay, few fine sand size quartz, dark gray

REMARKS:

○

○ Source: E-CH03-16

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

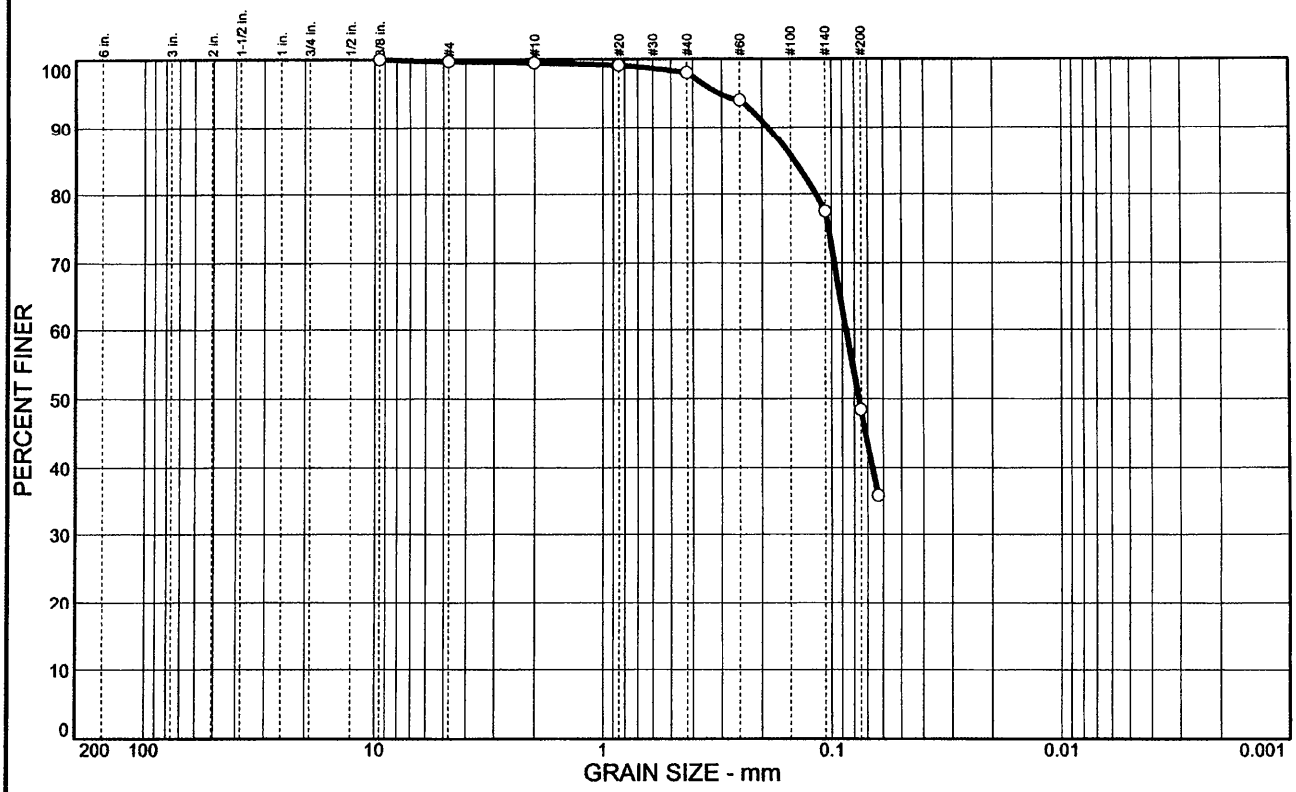
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.3	51.3	48.4		SM	A-7-5(4)	32	45

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
	GRAIN SIZE		
D_{60}	0.0866		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	99.7		
#10	99.5		
#20	99.1		
#40	98.0		
#60	94.0		
#140	77.5		
#200	48.4		
#230	35.9		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, some silt, trace medium sand size quartz, gray

REMARKS:

○

○ Source: RS-CH03

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael T. Holm

Grain Size Distribution Report

	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.8	77.6	21.6		SM	A-2-4(0)		

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
GRAIN SIZE			
D_{60}	0.185		
D_{30}	0.0910		
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	99.2		
#10	97.8		
#20	94.7		
#40	81.4		
#60	68.5		
#140	38.0		
#200	21.6		
#230	17.7		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, little silt, little medium sand size quartz, trace coarse sand size shell fragments, gray

REMARKS:

○

○ Source: CC01-2

Law Engineering and Environmental Services, Inc.

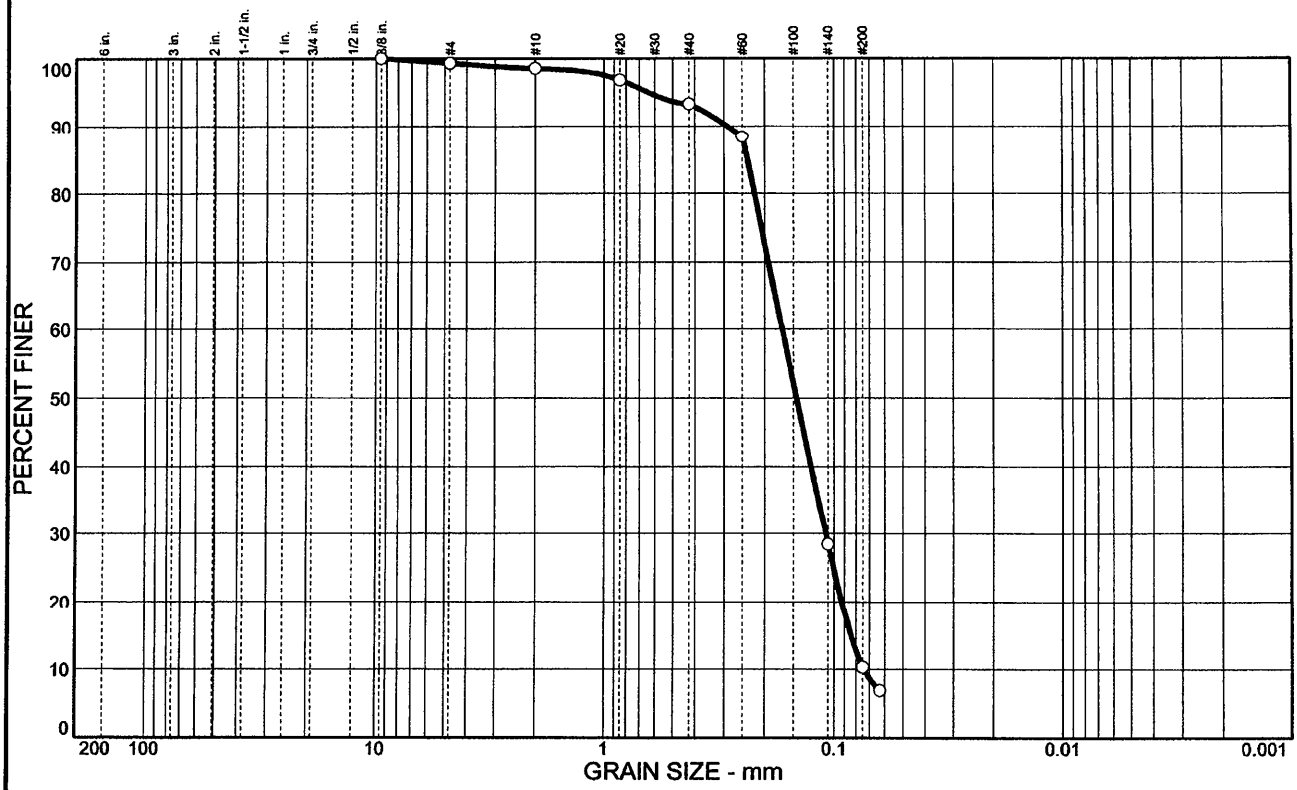
Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.7	89.0	10.3		SP-SM	A-3		

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
GRAIN SIZE			
D_{60}	0.168		
D_{30}	0.109		
D_{10}	0.0742		
COEFFICIENTS			
C_c	0.95		
C_u	2.26		

SIEVE number size	PERCENT FINER ○		
#4	99.3		
#10	98.5		
#20	96.8		
#40	93.3		
#60	88.4		
#140	28.4		
#200	10.3		
#230	6.9		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, few silt, few medium sand size quartz, gray

REMARKS:

○

○ Source: CC03-4

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

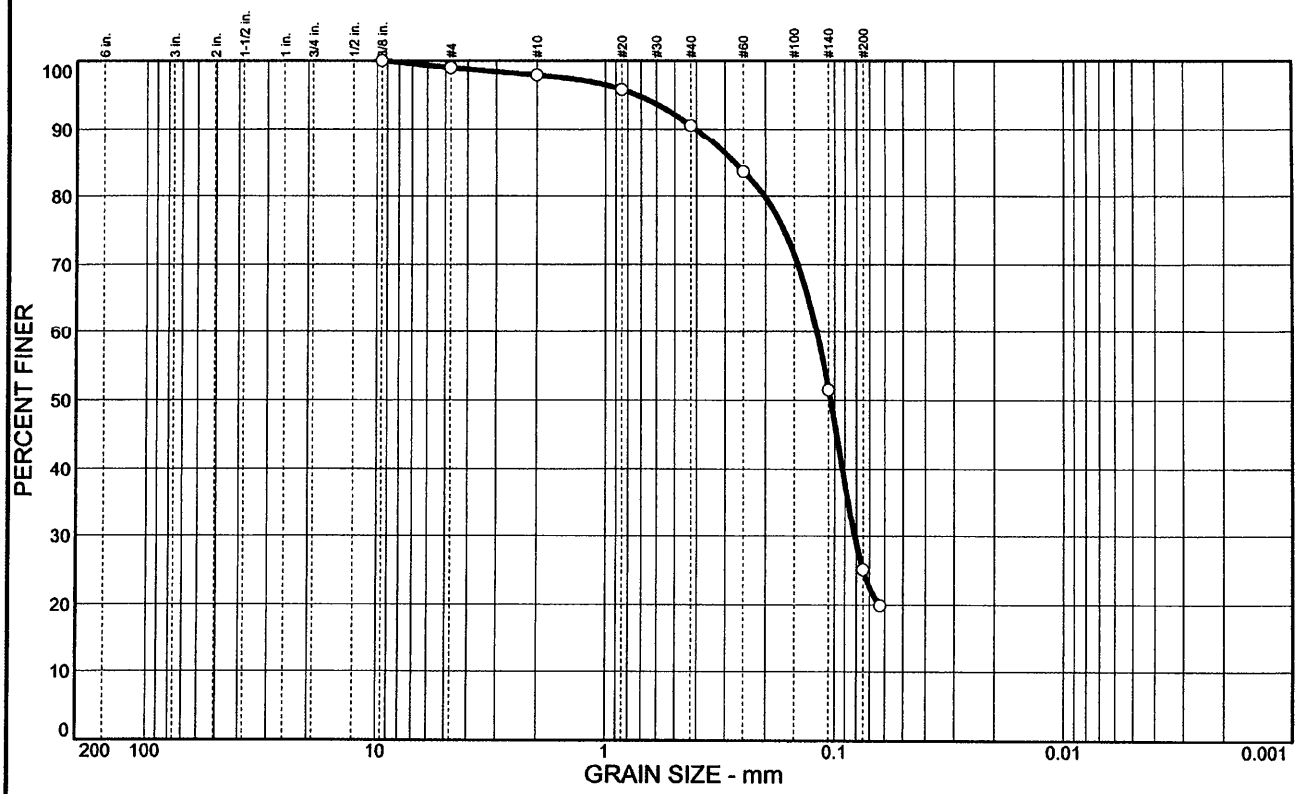
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		1.0	73.9	25.1		SM	A-2-4(0)	26	34

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
GRAIN SIZE			
D_{60}	0.120		
D_{30}	0.0814		
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	99.0		
#10	97.9		
#20	95.8		
#40	90.5		
#60	83.6		
#140	51.5		
#200	25.1		
#230	19.9		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, little silt, few medium sand size quartz, trace coarse sand size shell fragments, trace fine gravel size shell

REMARKS:

○

○ Source: CC05-6

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

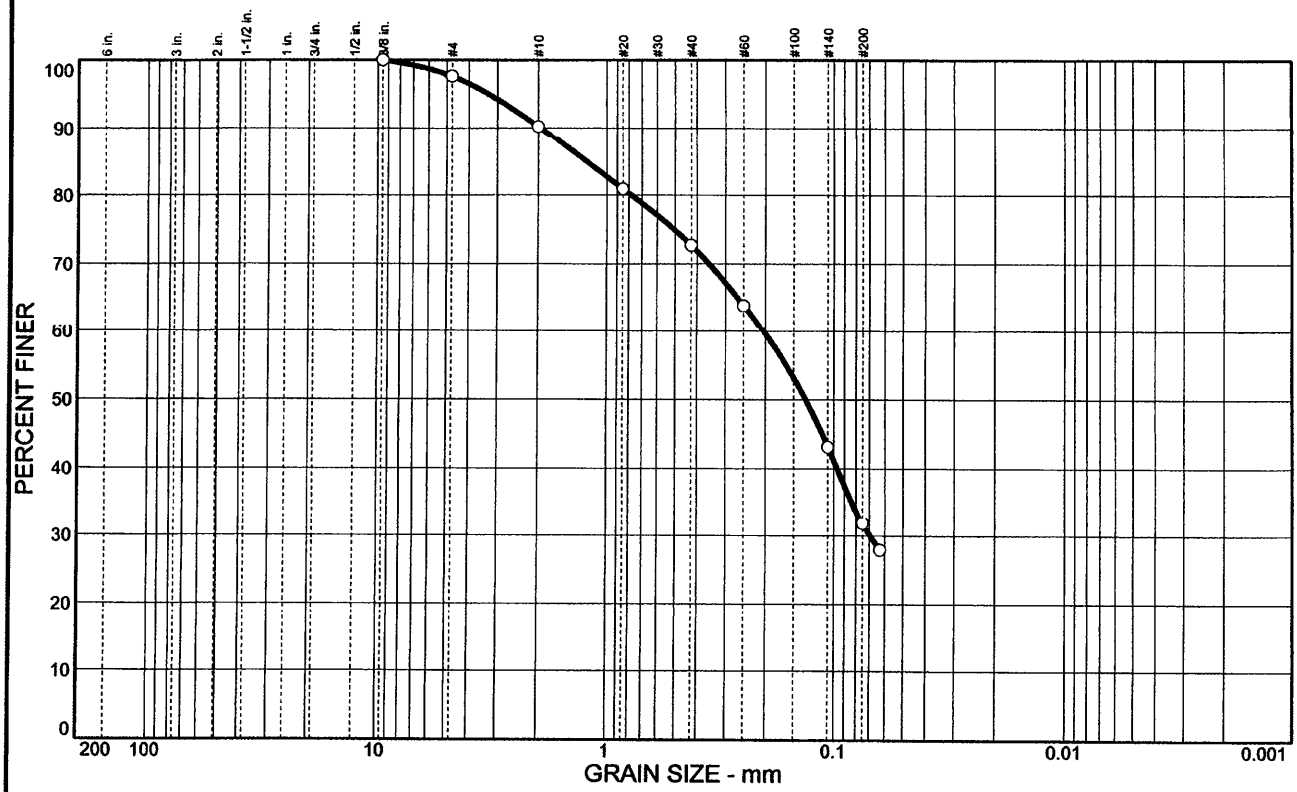
Project No.: 6738-03-4318-02

Plate

Michael J. Holm

Michael J. Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		2.4	65.8	31.8		SM	A-2-7(2)	29	48

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
GRAIN SIZE			
D_{60}	0.204		
D_{30}	0.0696		
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	97.6		
#10	90.2		
#20	80.9		
#40	72.7		
#60	63.9		
#140	43.1		
#200	31.8		
#230	27.9		

SOIL DESCRIPTION

○ SAND, some fine sand size quartz, some silt, little medium sand size quartz, few coarse sand size shell fragments, trace fine gravel size shell

REMARKS:

○

○ Source: B7

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

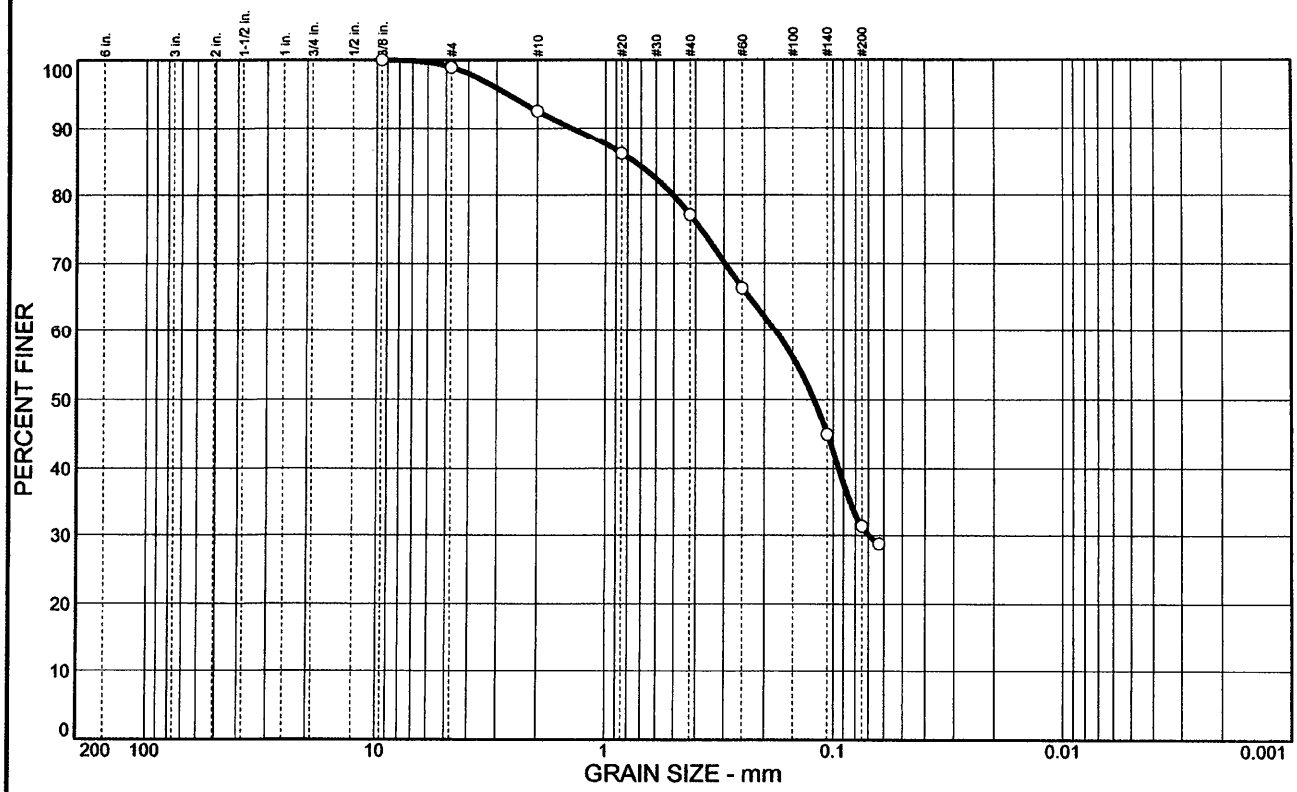
Project No.: 6738-03-4318-02

Plate

Michael J. Holm

Michael J. Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		1.1	67.6	31.3		SC	A-2-7(2)	28	51

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
	GRAIN SIZE		
D_{60}	0.179		
D_{30}	0.0702		
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	98.9		
#10	92.5		
#20	86.1		
#40	77.1		
#60	66.4		
#140	44.9		
#200	31.3		
#230	28.7		

SOIL DESCRIPTION

○ SAND, some fine sand size quartz, some clay, little medium sand size quartz, few coarse sand size shell fragments, trace fine gravel size shell

REMARKS:

○

○ Source: B8

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

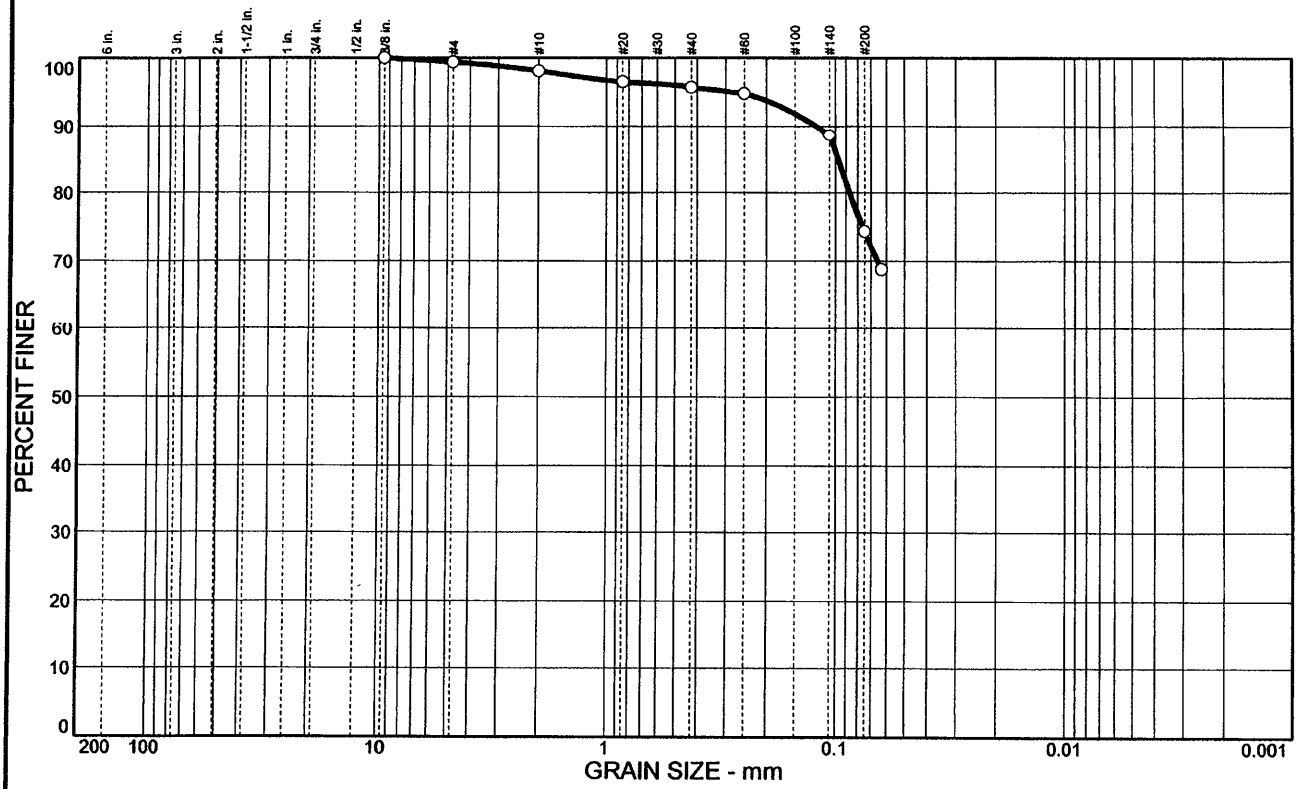
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael Holm.

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.6	25.1	74.3		MH	A-7-5(33)	37	77

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	99.4		
#10	98.1		
#20	96.5		
#40	95.7		
#60	94.8		
#140	88.6		
#200	74.3		
#230	68.8		

SOIL DESCRIPTION

○ SILT, mostly silt, little fine sand size quartz, trace medium sand size quartz, trace coarse sand size shell fragments, gray

REMARKS:

○

○ Source: B9

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

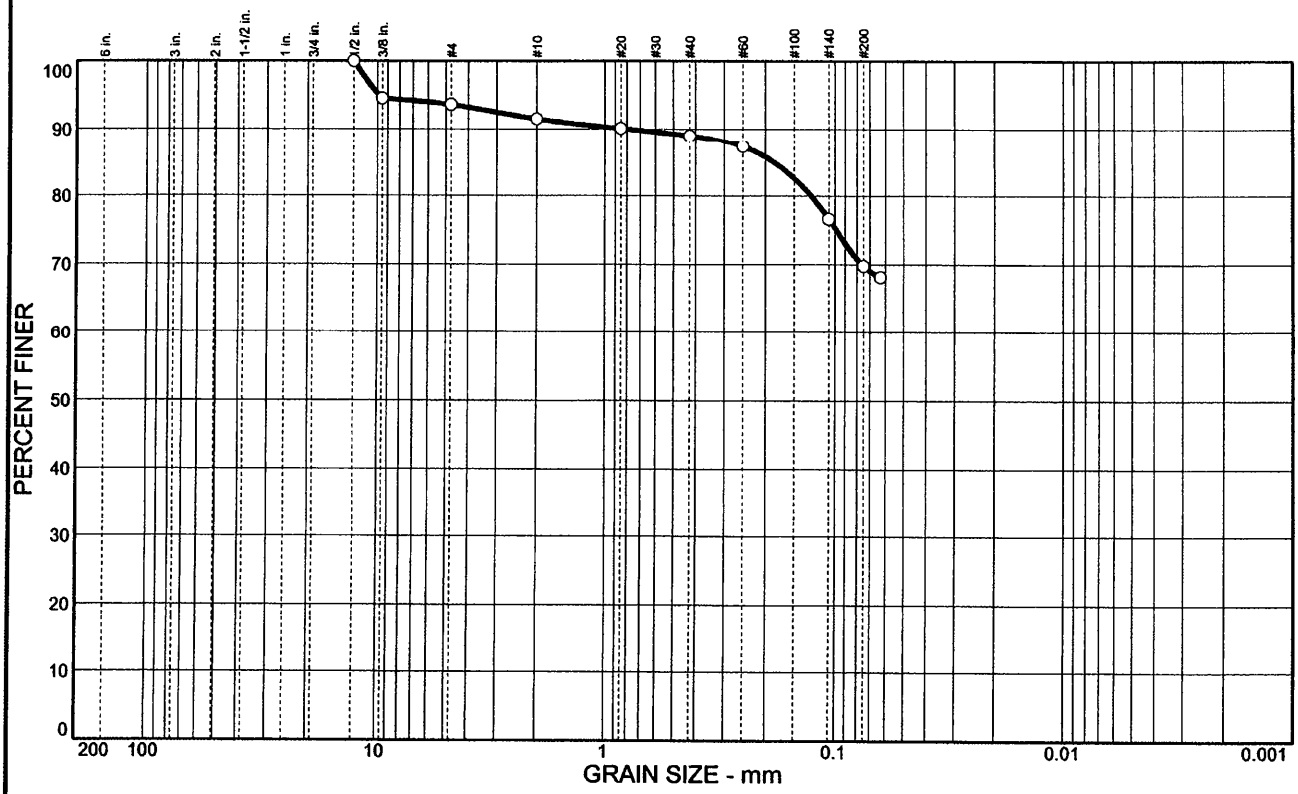
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael J. Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		6.4	23.8	69.8		MH	A-7-5(31)	40	81

SIEVE inches size	PERCENT FINER ○		
1/2	100.0		
3/8	94.5		
	GRAIN SIZE		
D_{60}			
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	93.6		
#10	91.5		
#20	90.1		
#40	89.0		
#60	87.3		
#140	76.6		
#200	69.8		
#230	68.2		

SOIL DESCRIPTION

○ SILT, mostly silt, little fine sand size quartz, few fine gravel size shell fragments, trace medium sand size quartz, trace coarse sand size

REMARKS:

○

○ Source: B10

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

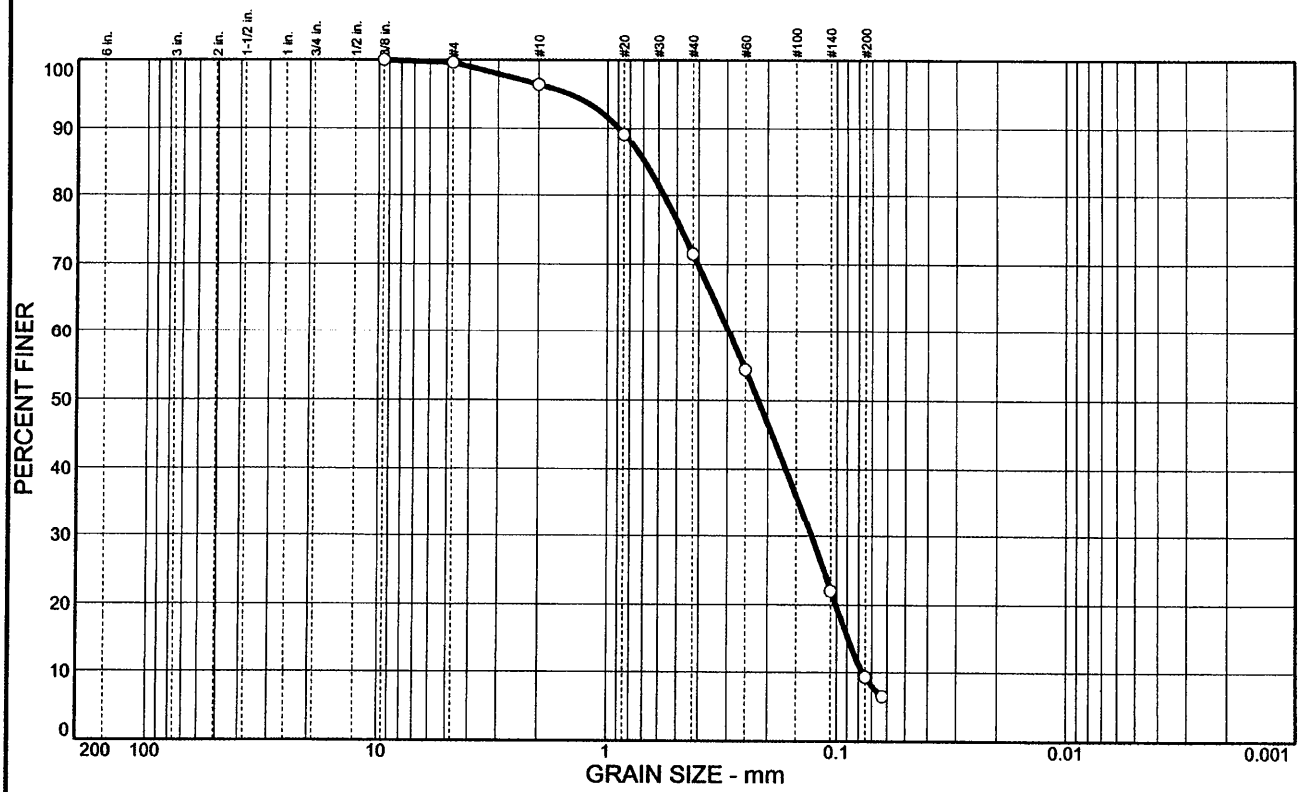
Project No.: 6738-03-4318-02

Plate

Michael J. Holm

Michael J. Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○		0.4	90.3	9.3		SP-SM	A-3		

SIEVE inches size	PERCENT FINER ○		
3/8	100.0		
	GRAIN SIZE		
D_{60}	0.296		
D_{30}	0.129		
D_{10}	0.0771		
	COEFFICIENTS		
C_c	0.73		
C_u	3.83		

SIEVE number size	PERCENT FINER ○		
#4	99.6		
#10	96.4		
#20	89.1		
#40	71.5		
#60	54.4		
#140	22.0		
#200	9.3		
#230	6.5		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, little medium sand size quartz, few silt, trace coarse sand size shell fragments, gray

REMARKS:

○

○ Source: CT6-7

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

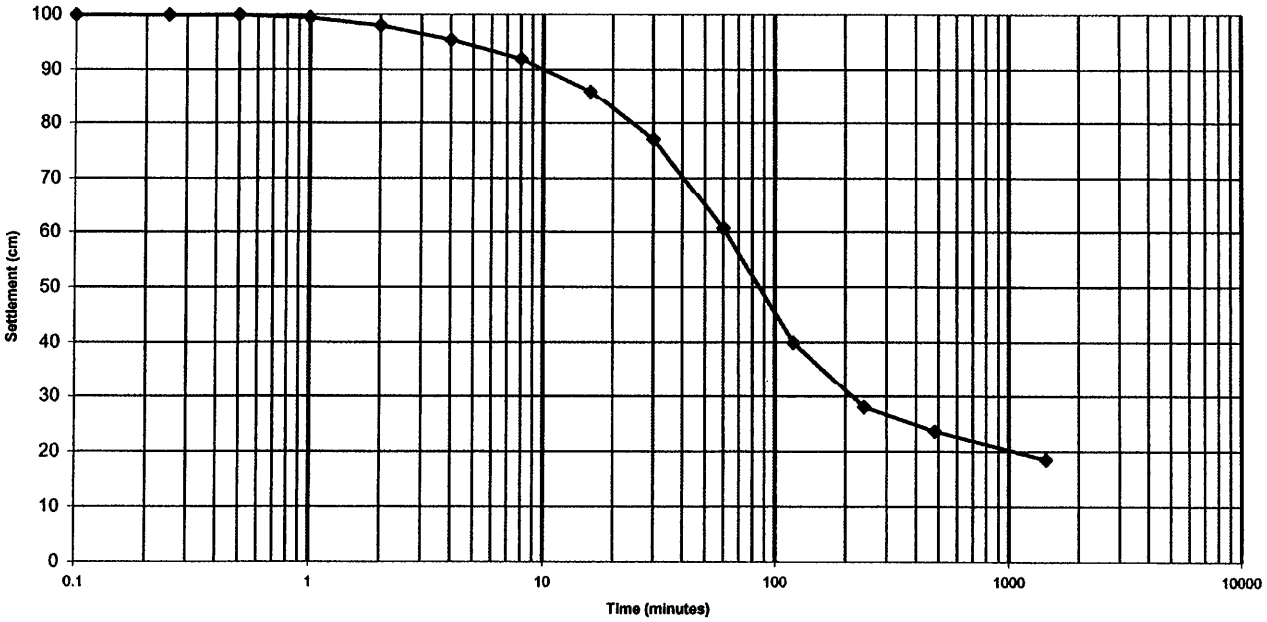
Michael J. Holm

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-1
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	85.9
0.25	99.9	30	77.0
0.5	99.9	60	60.6
1	99.4	120	39.9
2	98.0	240	28.0
4	95.4	480	23.6
8	91.9	1440	18.5

Final Concentration: 540.54 g/L

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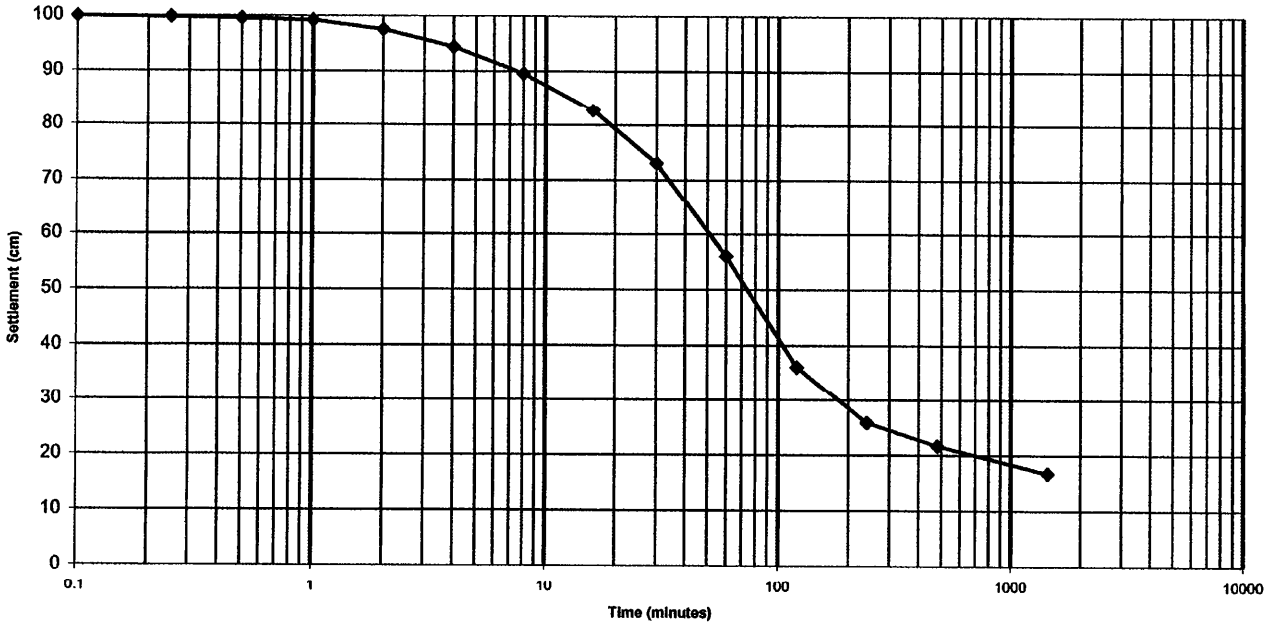
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-2
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	82.7
0.25	99.8	30	73.0
0.5	99.5	60	56.0
1	99.2	120	36.1
2	97.5	240	25.8
4	94.4	480	21.6
8	89.5	1440	16.7

Final Concentration: 598.8 g/L

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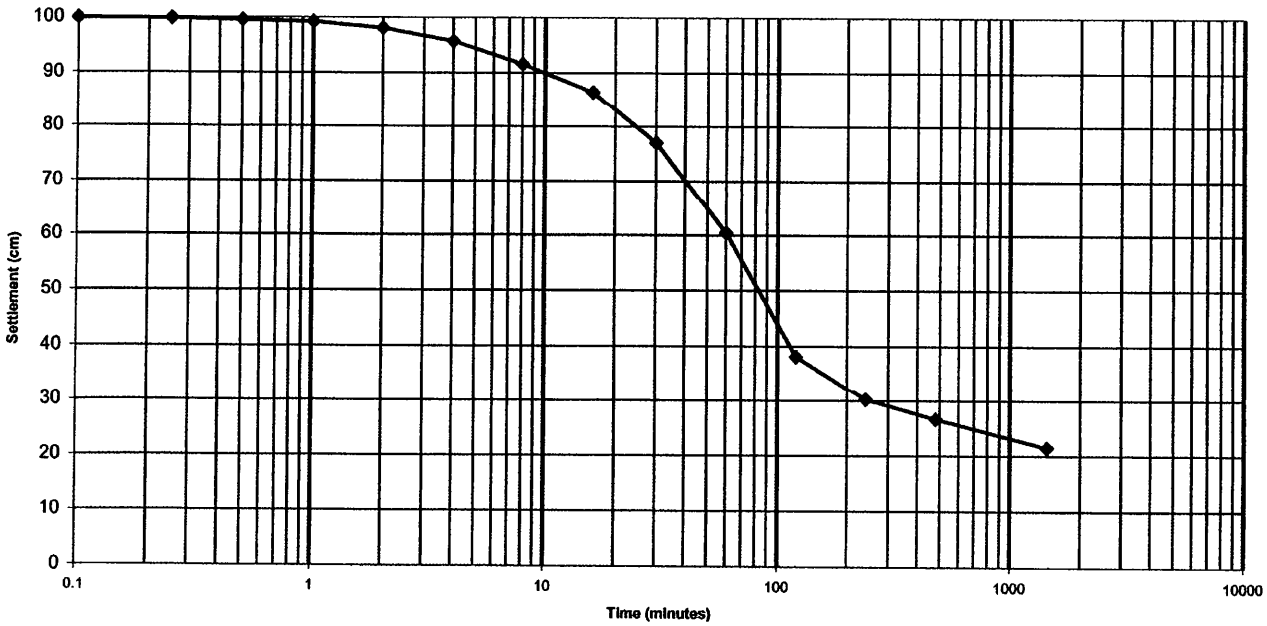
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-3
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	86.4
0.25	99.8	30	77.0
0.5	99.5	60	60.4
1	99.2	120	38.1
2	98.1	240	30.2
4	95.7	480	26.6
8	91.5	1440	21.4

Final Concentration: 467.29 g/L

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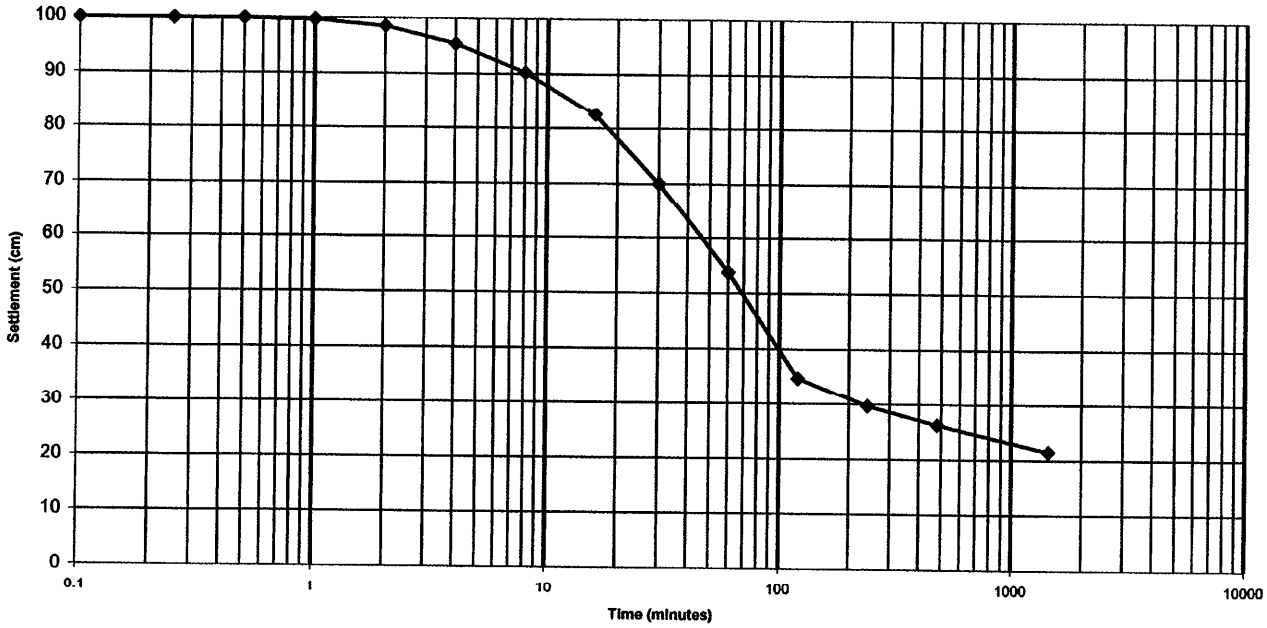
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-4
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	82.5
0.25	99.9	30	70.0
0.5	99.9	60	53.8
1	99.7	120	34.7
2	98.5	240	29.6
4	95.4	480	26.2
8	90.2	1440	21.4

Final Concentration: 467.29 g/L

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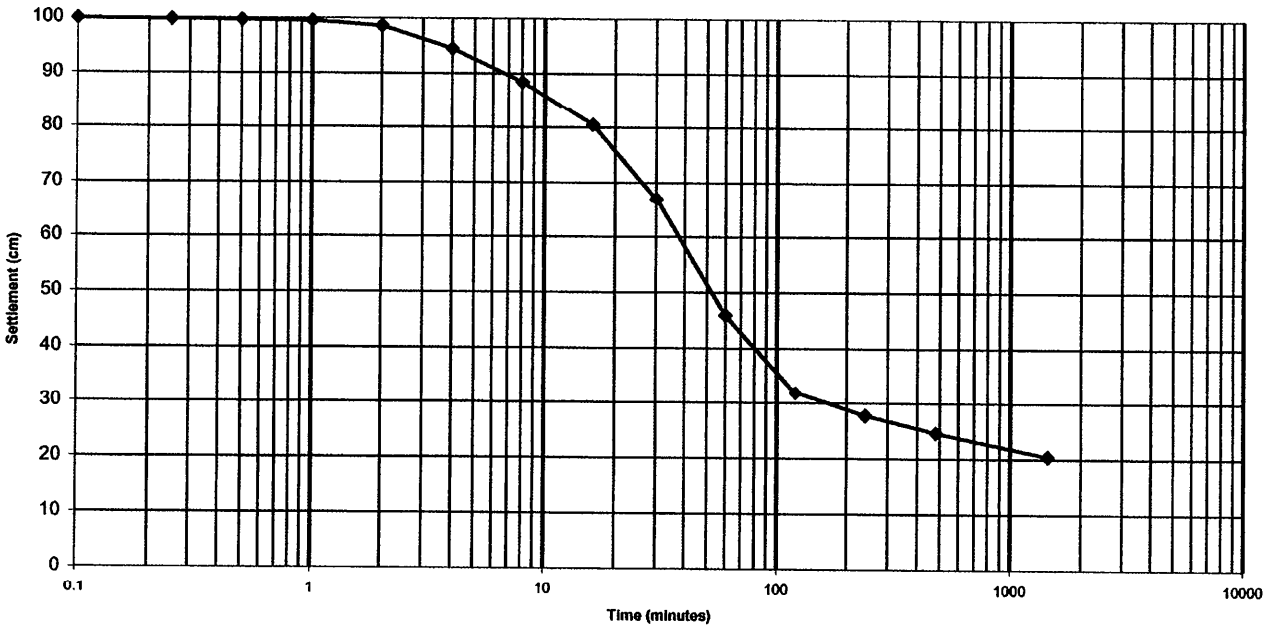
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-5
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	80.5
0.25	99.8	30	67.0
0.5	99.7	60	45.9
1	99.5	120	31.9
2	98.6	240	27.7
4	94.5	480	24.6
8	88.4	1440	20.4

Final Concentration: 490.2 g/L

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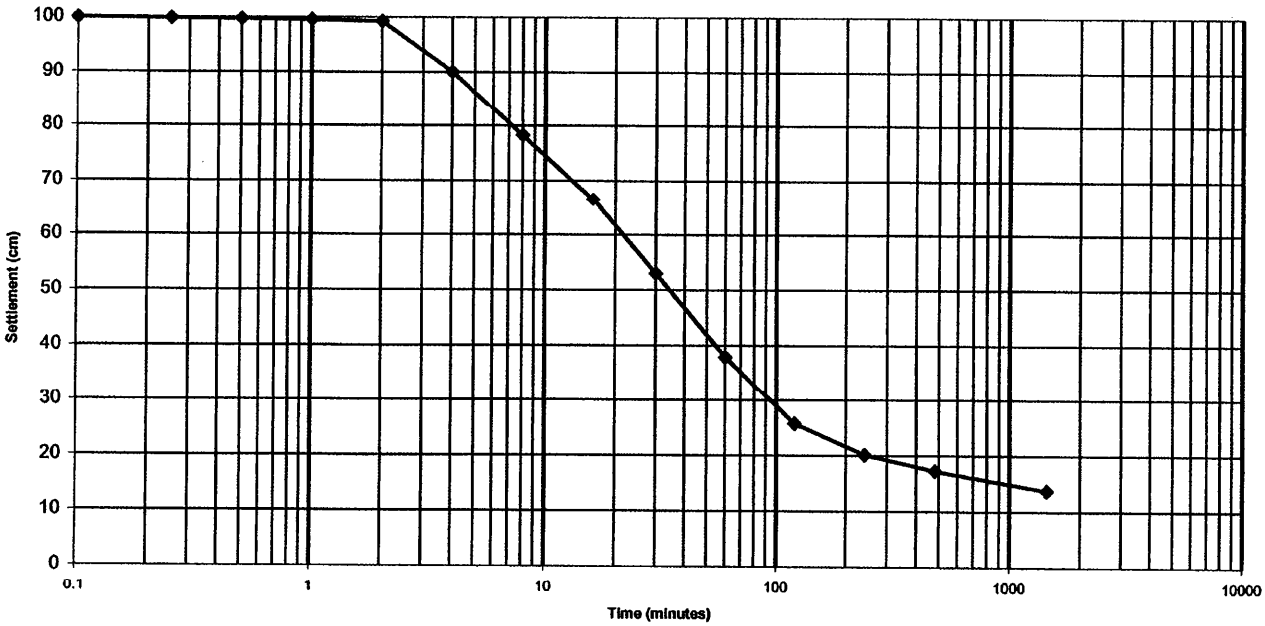
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-6
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	66.5
0.25	99.8	30	53.0
0.5	99.7	60	37.9
1	99.5	120	25.7
2	99.2	240	20.1
4	90.0	480	17.2
8	78.2	1440	13.7

Final Concentration: 729.93 g/L

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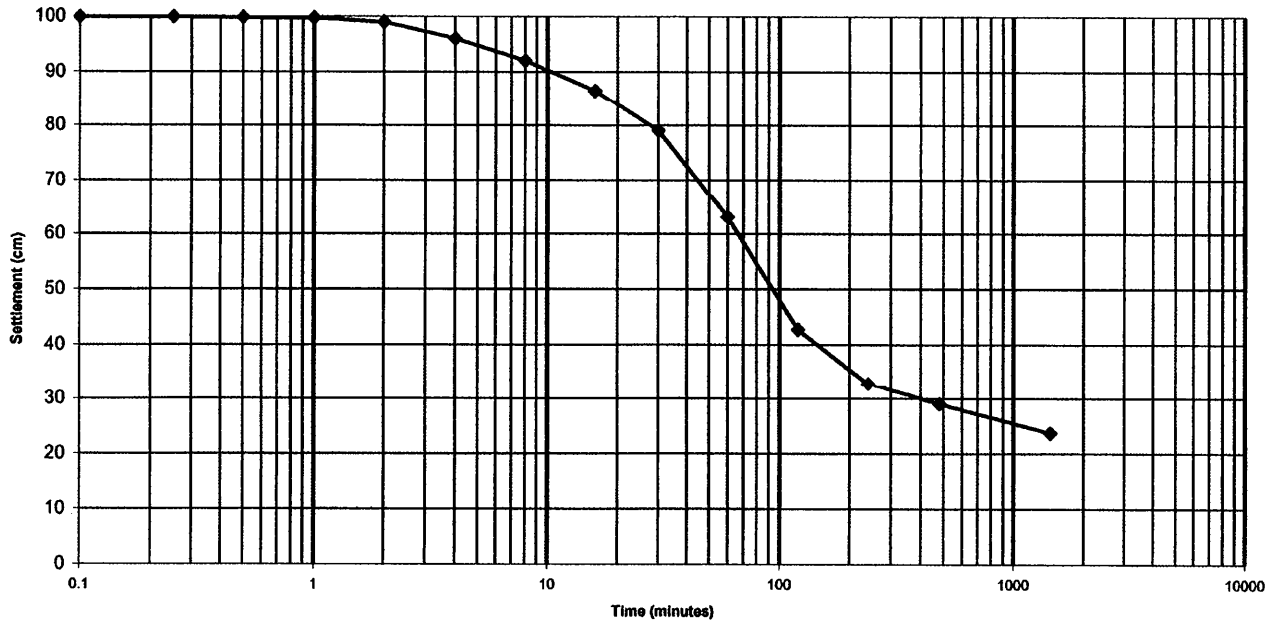
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-7
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	86.5
0.25	99.9	30	79.0
0.5	99.8	60	63.0
1	99.7	120	42.7
2	99.0	240	32.8
4	96.0	480	29.0
8	92.0	1440	23.7

Final Concentration: 421.94 g/L

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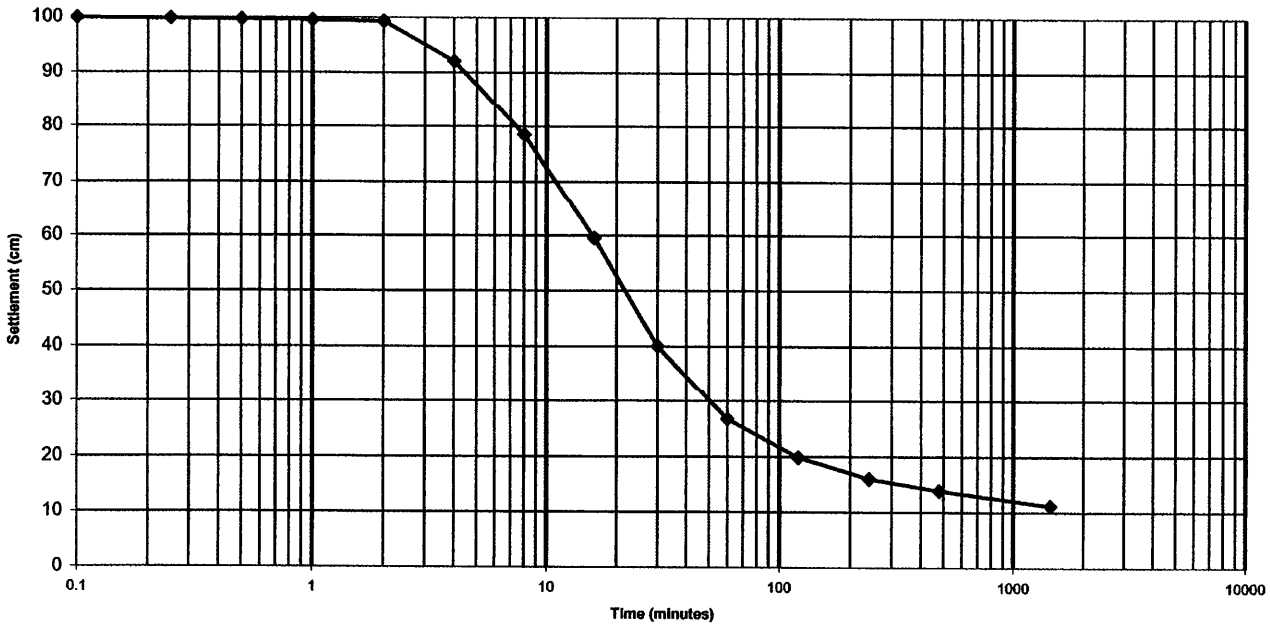
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-8
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	59.5
0.25	99.8	30	40.0
0.5	99.7	60	26.7
1	99.5	120	19.8
2	99.3	240	16.0
4	92.0	480	13.9
8	78.5	1440	11.2

Final Concentration: 892.86 g/L

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REPORT OF SETTLING RATE TESTING

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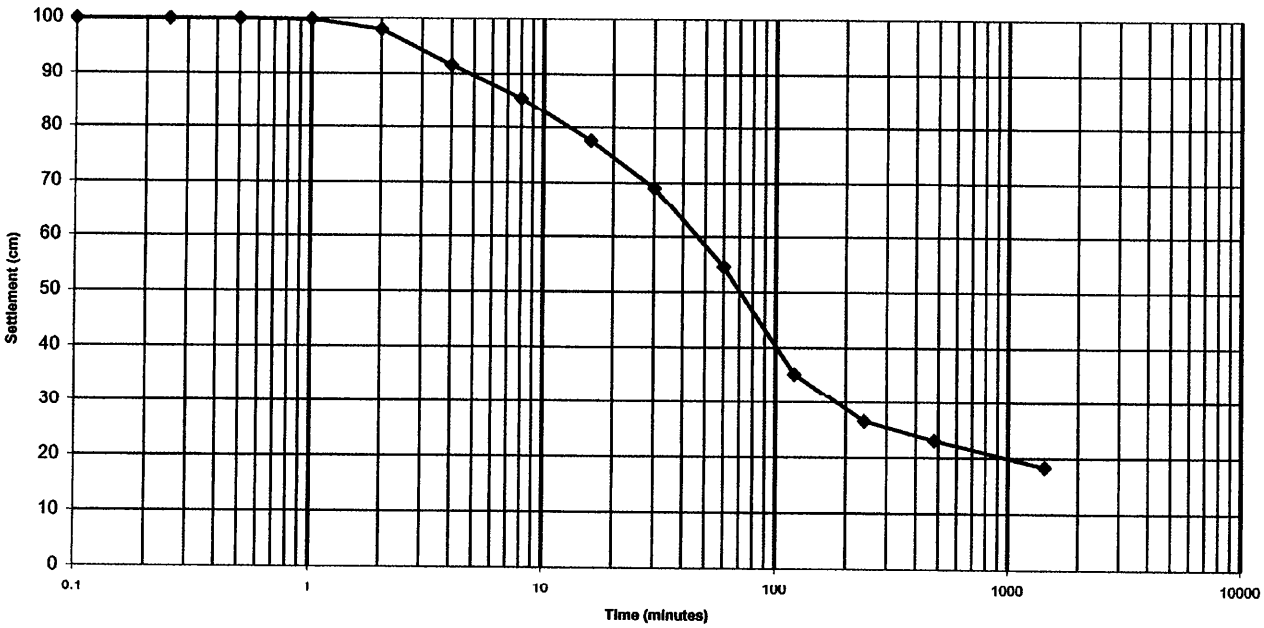
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-9
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	77.6
0.25	99.9	30	69.0
0.5	99.9	60	54.6
1	99.8	120	35.2
2	98.0	240	26.5
4	91.5	480	23.0
8	85.5	1440	18.3

Final Concentration: 546.45 g/L

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REPORT OF SETTLING RATE TESTING

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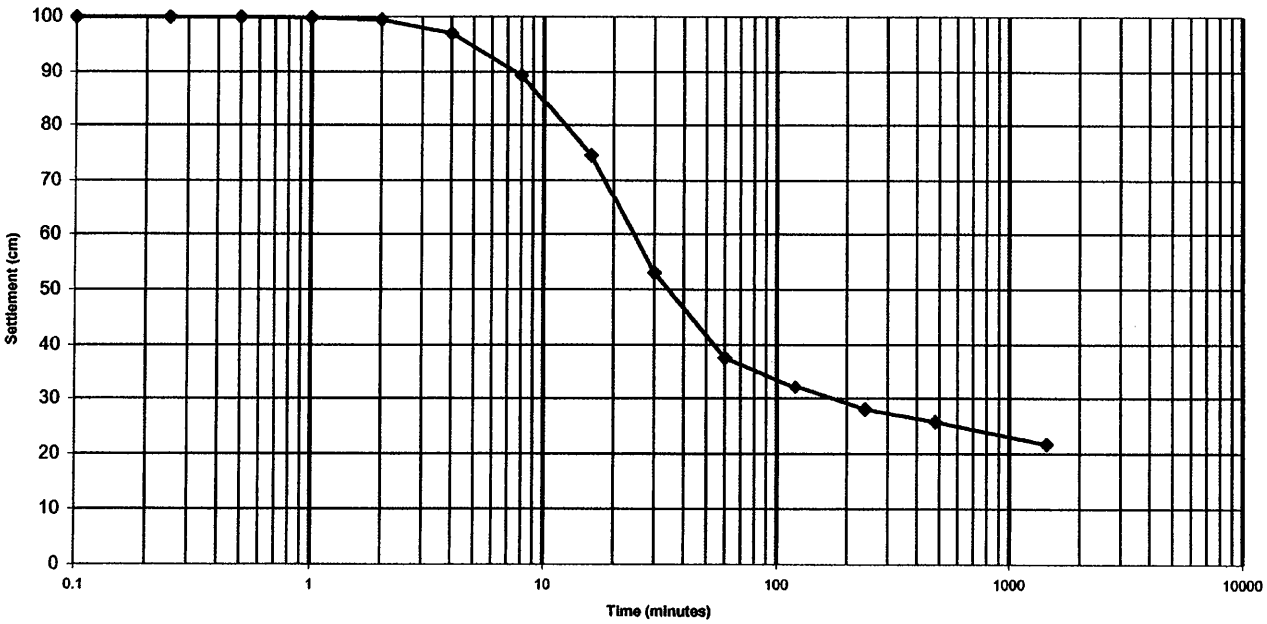
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-10
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	74.5
0.25	99.9	30	53.0
0.5	99.9	60	37.6
1	99.8	120	32.2
2	99.4	240	28.0
4	97.0	480	25.7
8	89.3	1440	21.7

Final Concentration: 460.83 g/L

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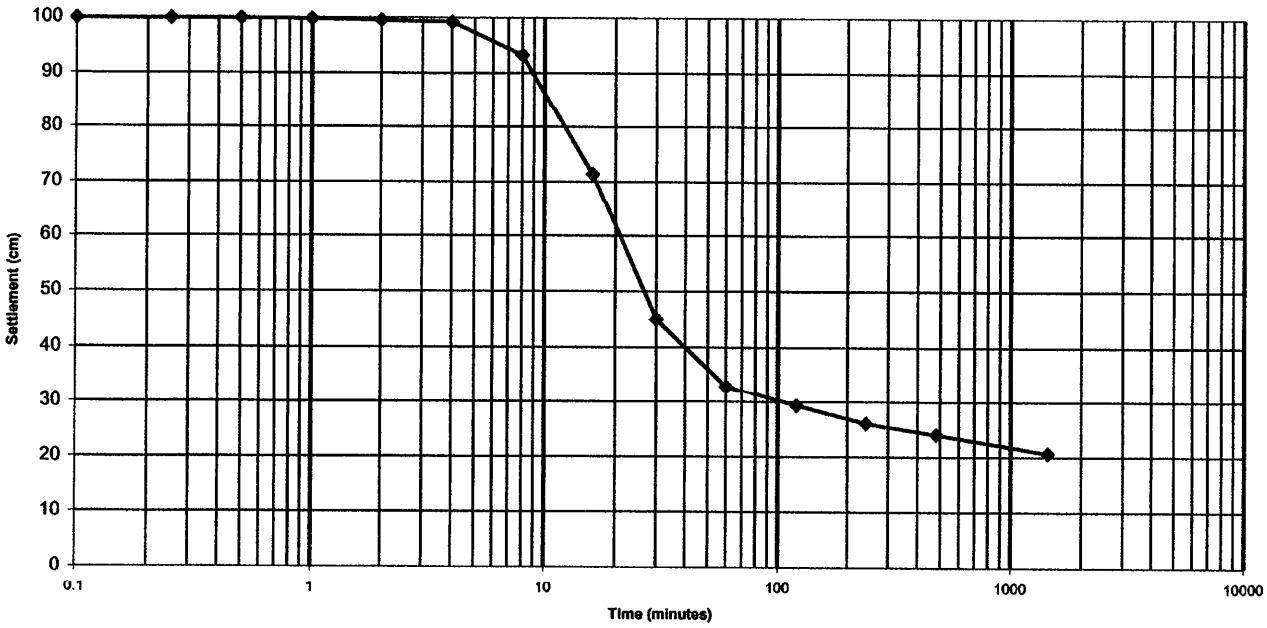
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-11
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	71.4
0.25	99.9	30	45.0
0.5	99.9	60	32.9
1	99.8	120	29.3
2	99.5	240	26.0
4	99.2	480	24.0
8	93.2	1440	20.6

Final Concentration: 485.44 g/L

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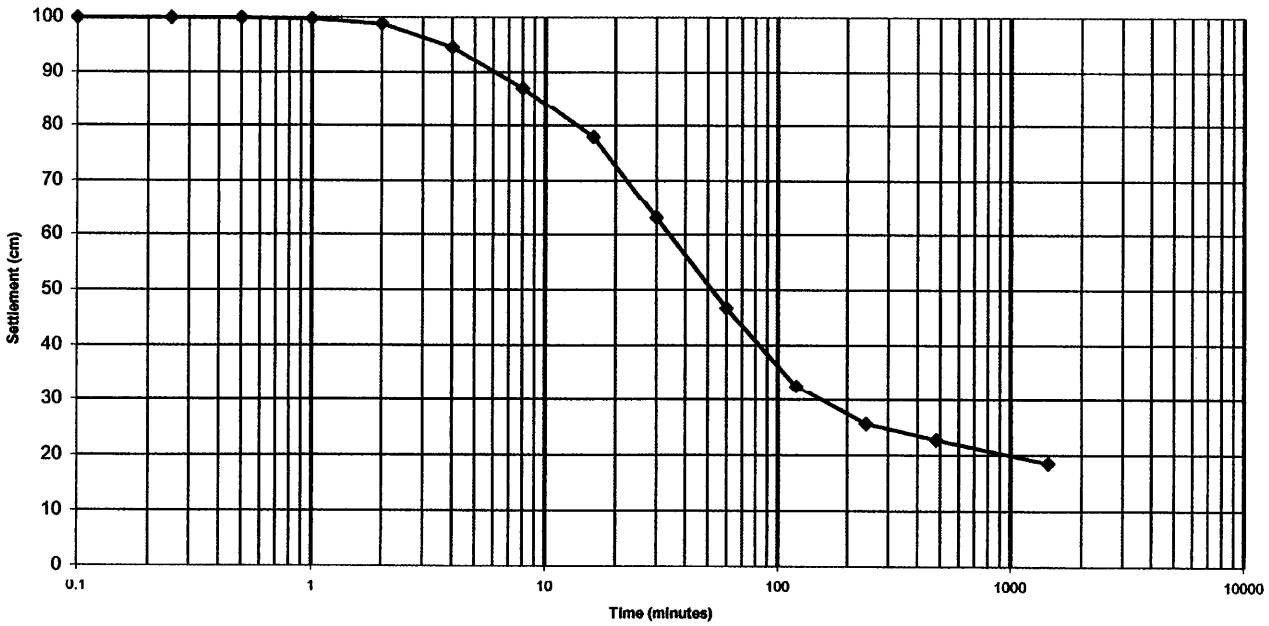
MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-12
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	77.9
0.25	99.9	30	63.0
0.5	99.9	60	46.7
1	99.7	120	32.5
2	98.8	240	25.6
4	94.5	480	22.7
8	87.0	1440	18.5

Final Concentration: 540.54 g/L

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REPORT OF SETTLING RATE TESTING

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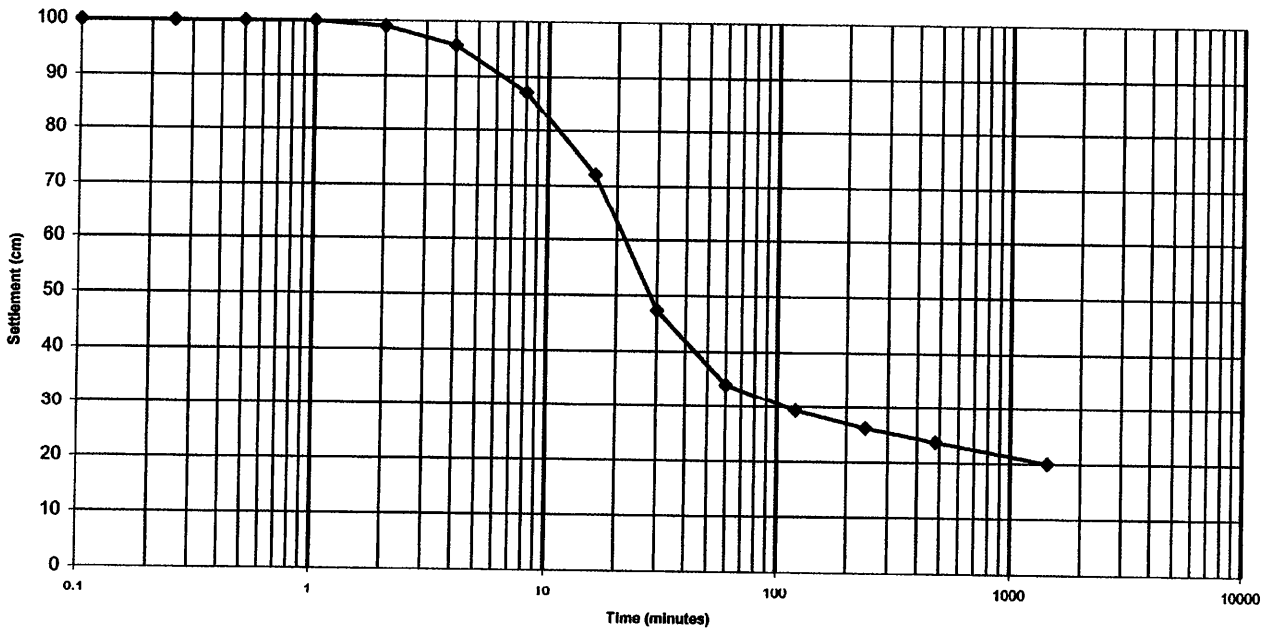
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-13
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	72.0
0.25	99.9	30	47.3
0.5	99.9	60	34.0
1	99.9	120	29.3
2	99.0	240	26.2
4	95.6	480	23.7
8	87.2	1440	20.0

Final Concentration: 500 g/L

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PROJECT: Canaveral Harbor 103 Evaluation
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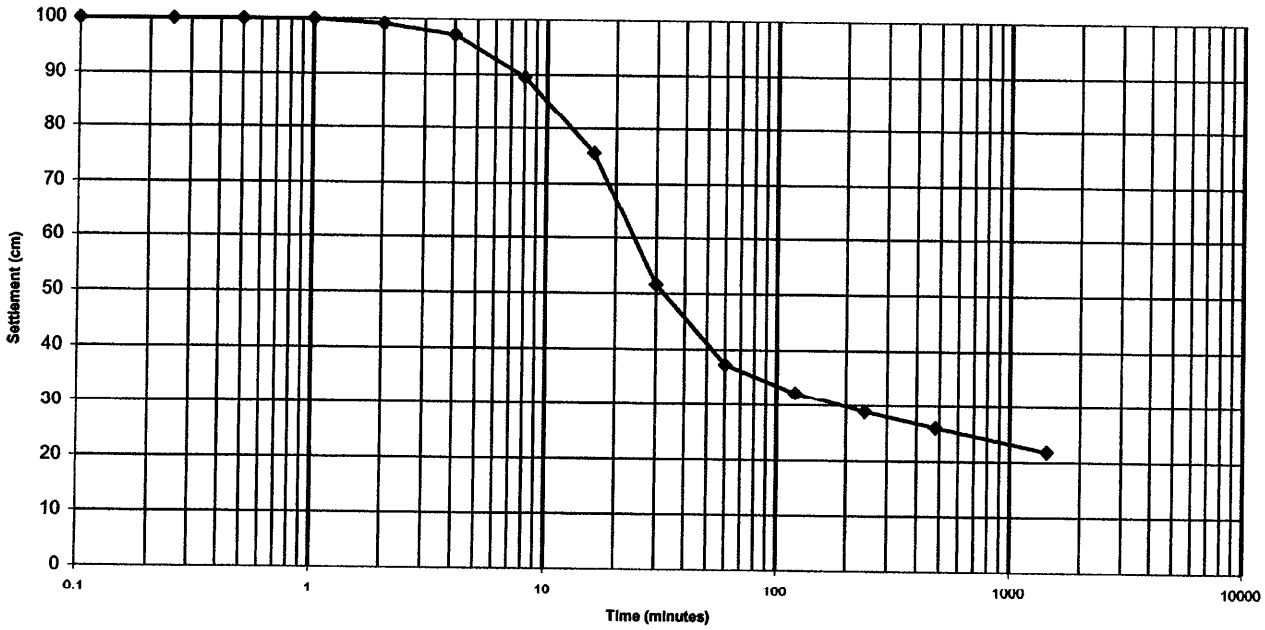
STATION E-CH03-14
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	75.5
0.25	99.9	30	51.6
0.5	99.9	60	37.3
1	99.9	120	32.2
2	99.1	240	28.9
4	97.2	480	26.0
8	89.5	1440	21.8

Final Concentration: 458.72 g/L

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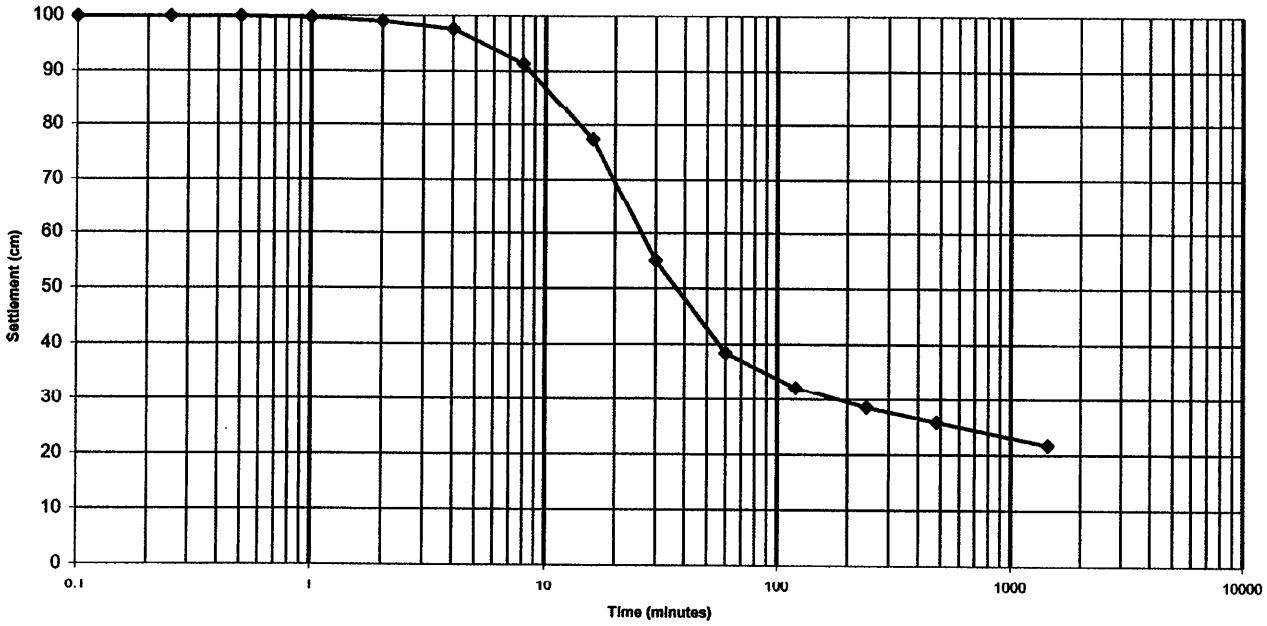
STATION E-CH03-15
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	77.3
0.25	99.9	30	55.0
0.5	99.9	60	38.4
1	99.7	120	32.1
2	99.0	240	28.5
4	97.6	480	25.8
8	91.3	1440	21.7

Final Concentration: 460.83 g/L

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REPORT OF SETTLING RATE TESTING

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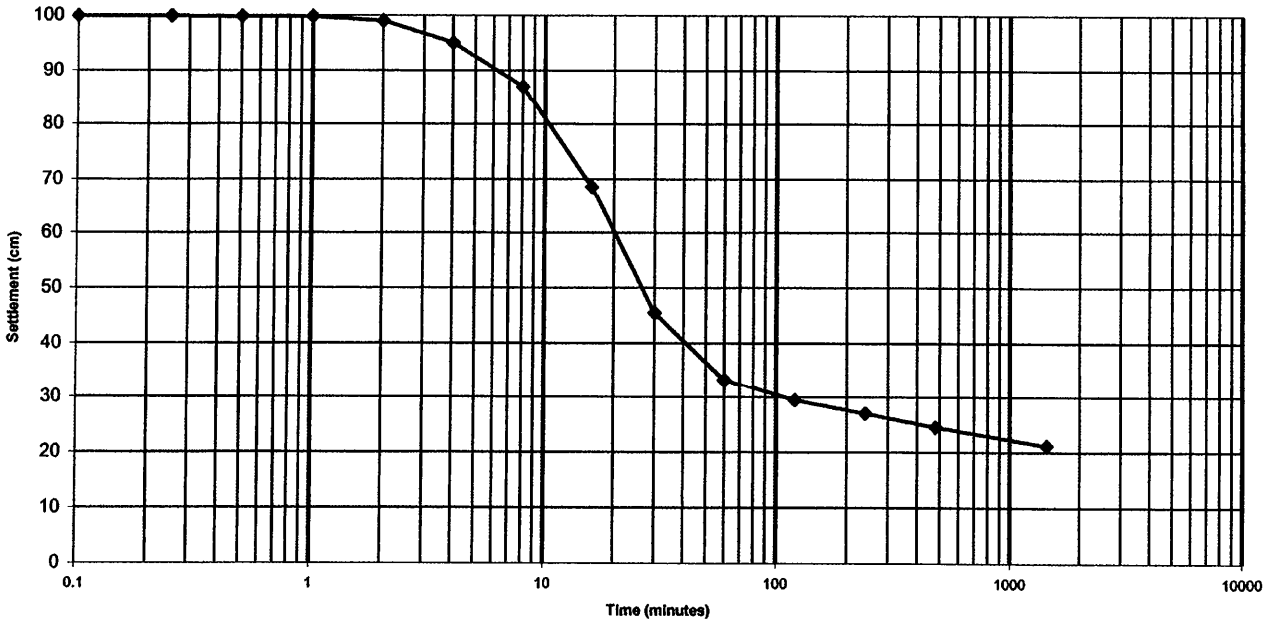
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-16
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	68.5
0.25	99.9	30	45.4
0.5	99.8	60	33.3
1	99.8	120	29.4
2	99.0	240	27.0
4	95.0	480	24.5
8	87.0	1440	21.1

Final Concentration: 473.93 g/L

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REPORT OF SETTLING RATE TESTING

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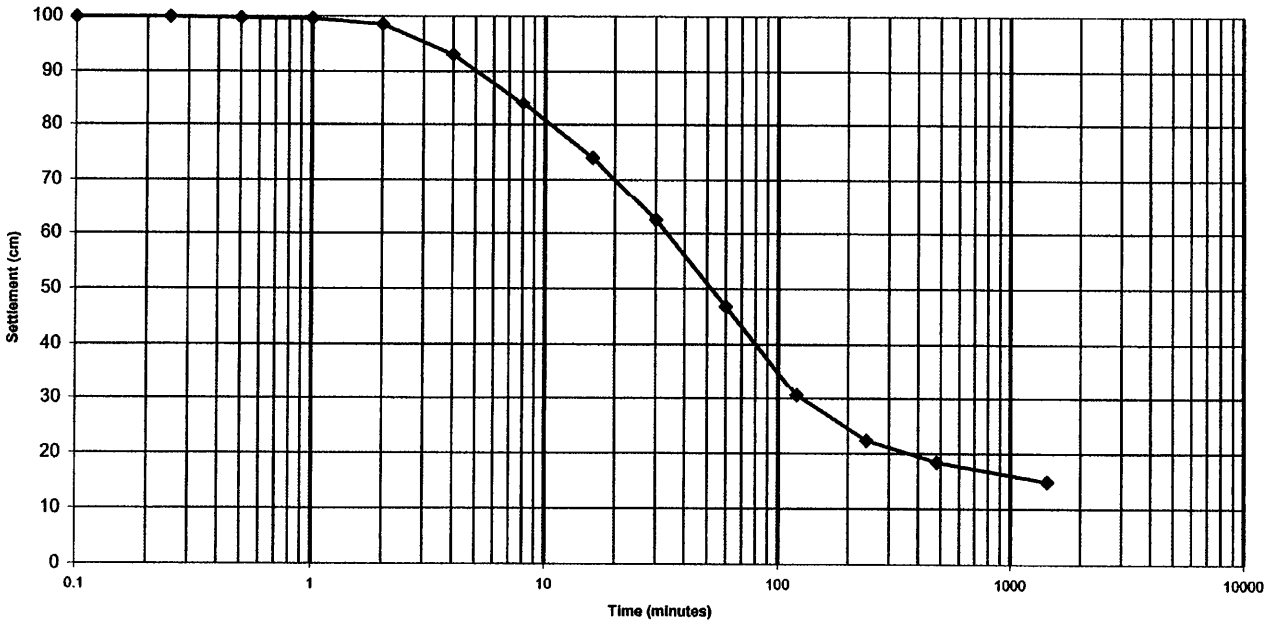
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION RS-CH03
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	74.0
0.25	99.9	30	62.5
0.5	99.7	60	46.8
1	99.6	120	30.6
2	98.5	240	22.3
4	93.0	480	18.4
8	84.0	1440	14.9

Final Concentration: 671.14 g/L

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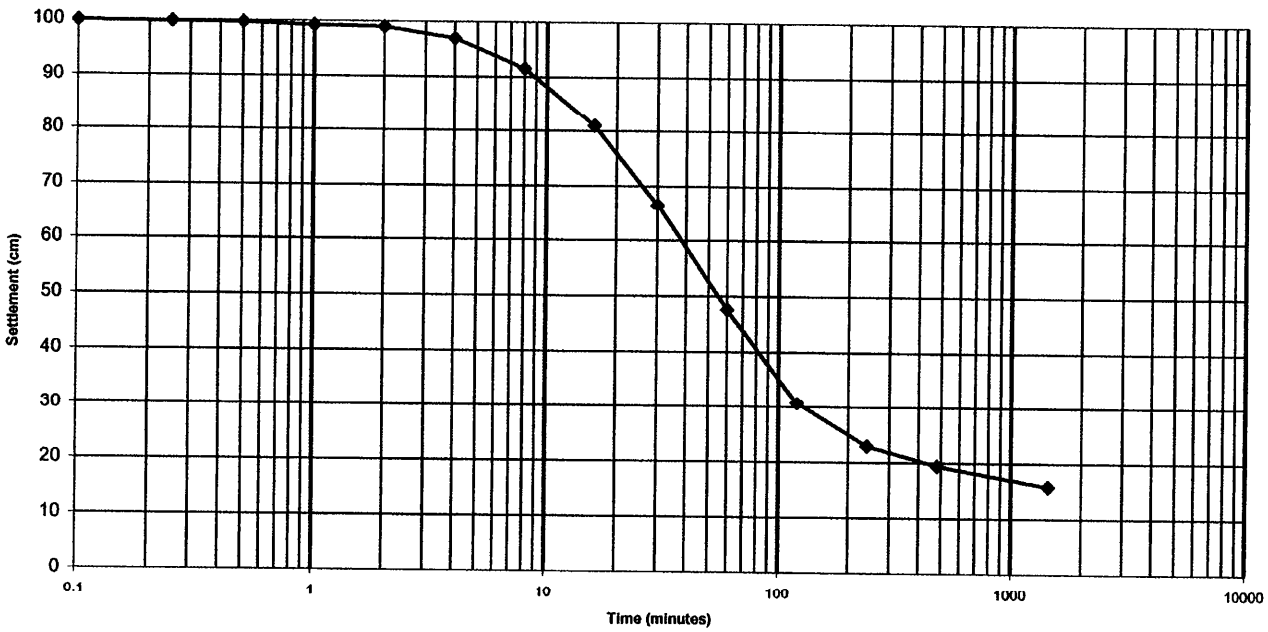
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION B7
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	81.0
0.25	99.8	30	66.5
0.5	99.7	60	47.6
1	99.2	120	30.7
2	99.0	240	22.9
4	97.0	480	19.4
8	91.5	1440	15.8

Final Concentration: 632.91 g/L

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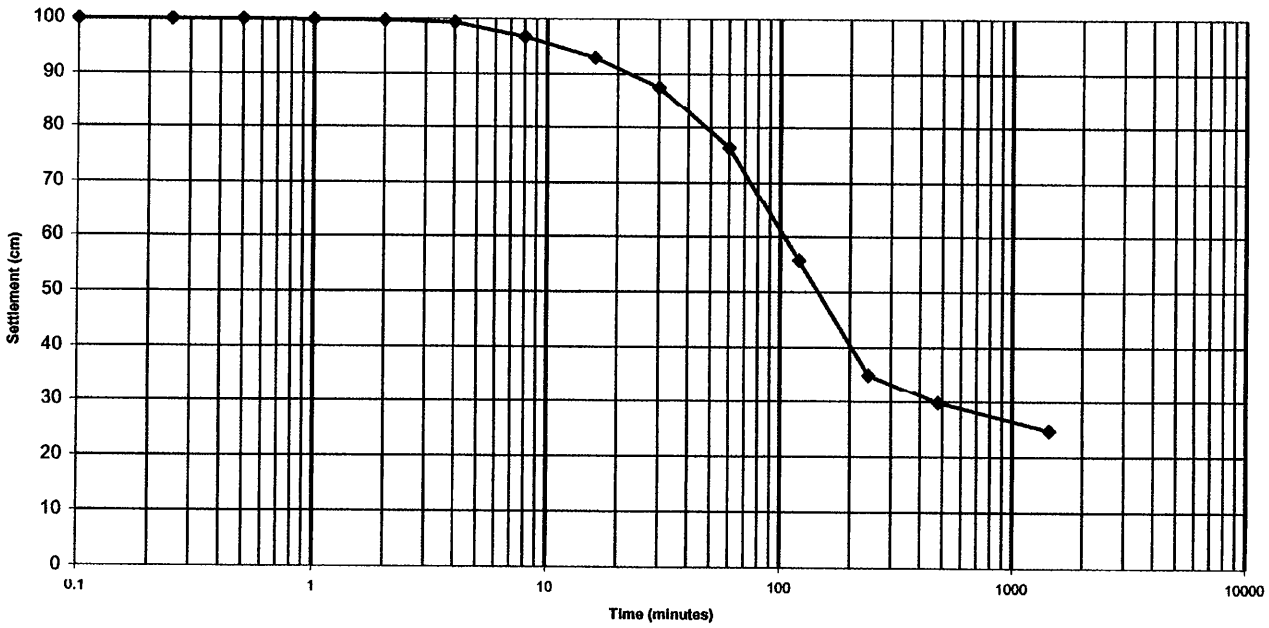
REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION B8
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	92.9
0.25	99.9	30	87.5
0.5	99.9	60	76.3
1	99.8	120	55.7
2	99.7	240	34.9
4	99.3	480	29.8
8	96.7	1440	24.7

Final Concentration: 404.86 g/L

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REPORT OF SETTLING RATE TESTING

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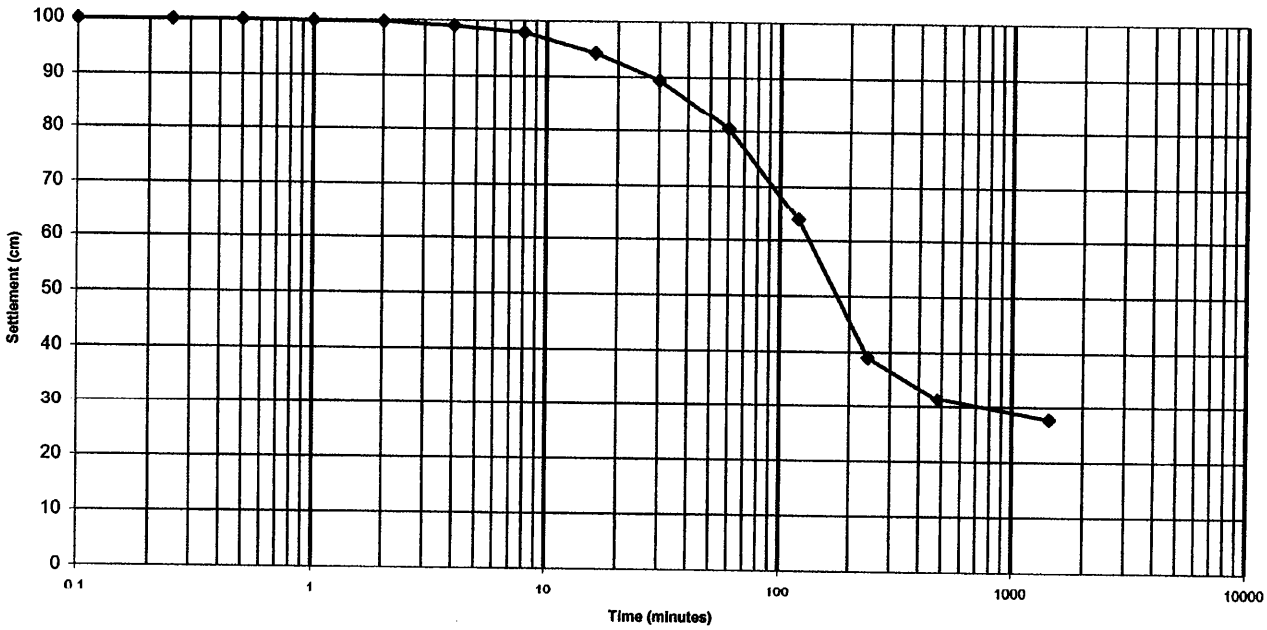
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION B9
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	94.3
0.25	99.9	30	89.4
0.5	99.9	60	80.5
1	99.8	120	63.8
2	99.7	240	39.0
4	99.0	480	31.4
8	97.9	1440	27.7

Final Concentration: 361.01 g/L

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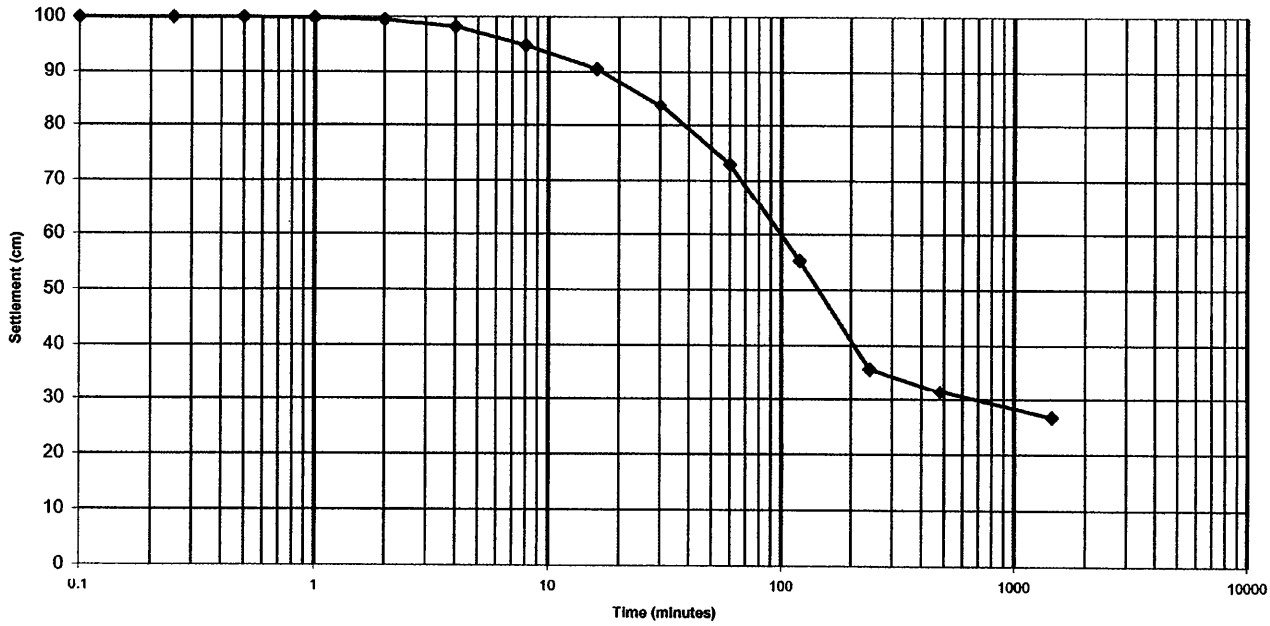
CLIENT: Anamar Environmental, Inc.

STATION B10
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	90.5
0.25	99.9	30	83.8
0.5	99.9	60	72.9
1	99.8	120	55.2
2	99.4	240	35.7
4	98.2	480	31.5
8	94.8	1440	26.7

Final Concentration: 374.53 g/L

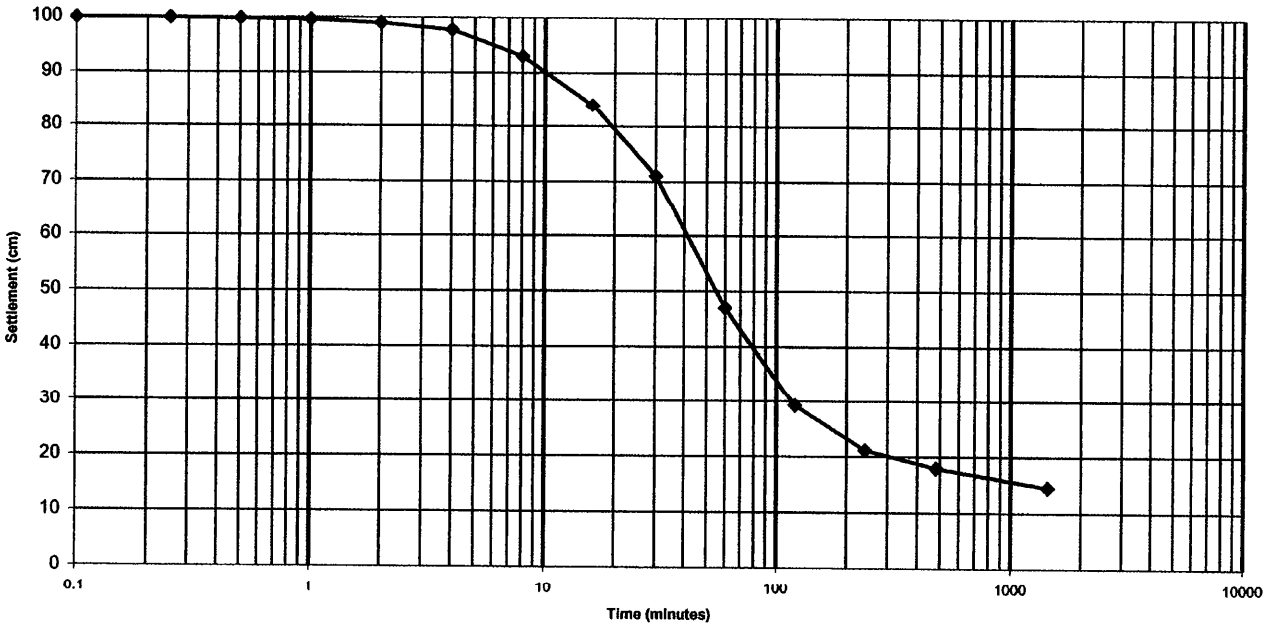
MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION CC01-2
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	84.0
0.25	99.9	30	71.0
0.5	99.8	60	47.0
1	99.6	120	29.2
2	99.0	240	21.1
4	97.8	480	17.9
8	93.0	1440	14.5

Final Concentration: 689.66 g/L

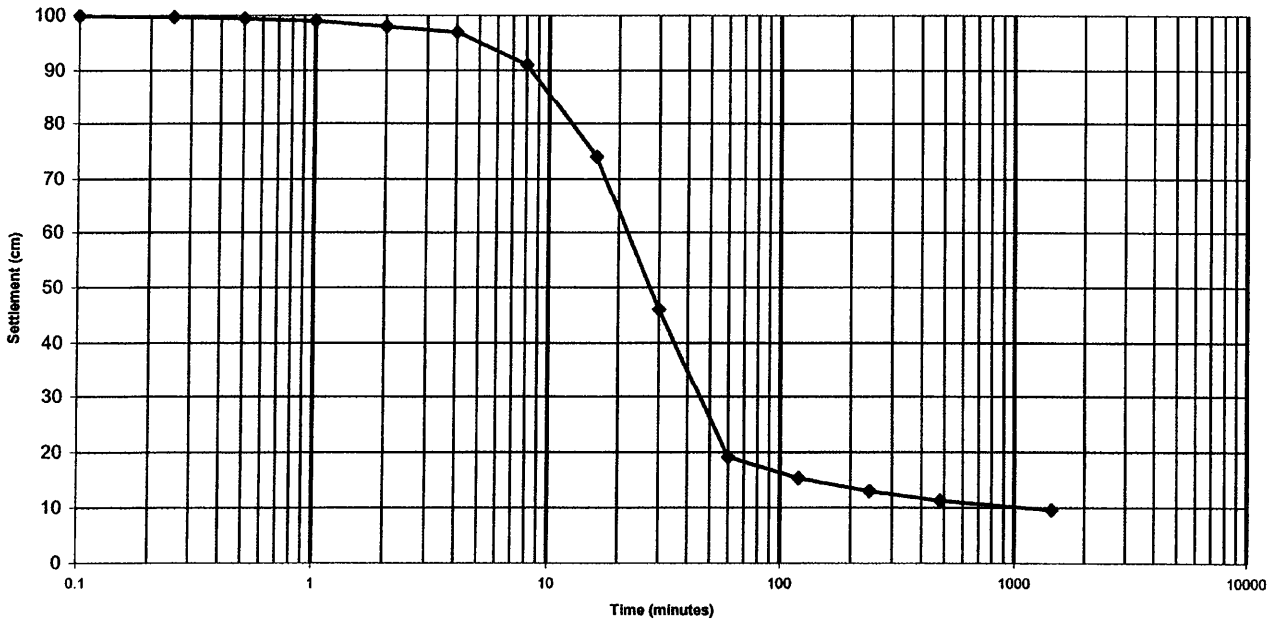
MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION CC03-4
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	74.0
0.25	99.7	30	46.0
0.5	99.4	60	19.1
1	99.0	120	15.3
2	98.0	240	13.0
4	97.0	480	11.3
8	91.0	1440	9.6

Final Concentration: 1041.7 g/L

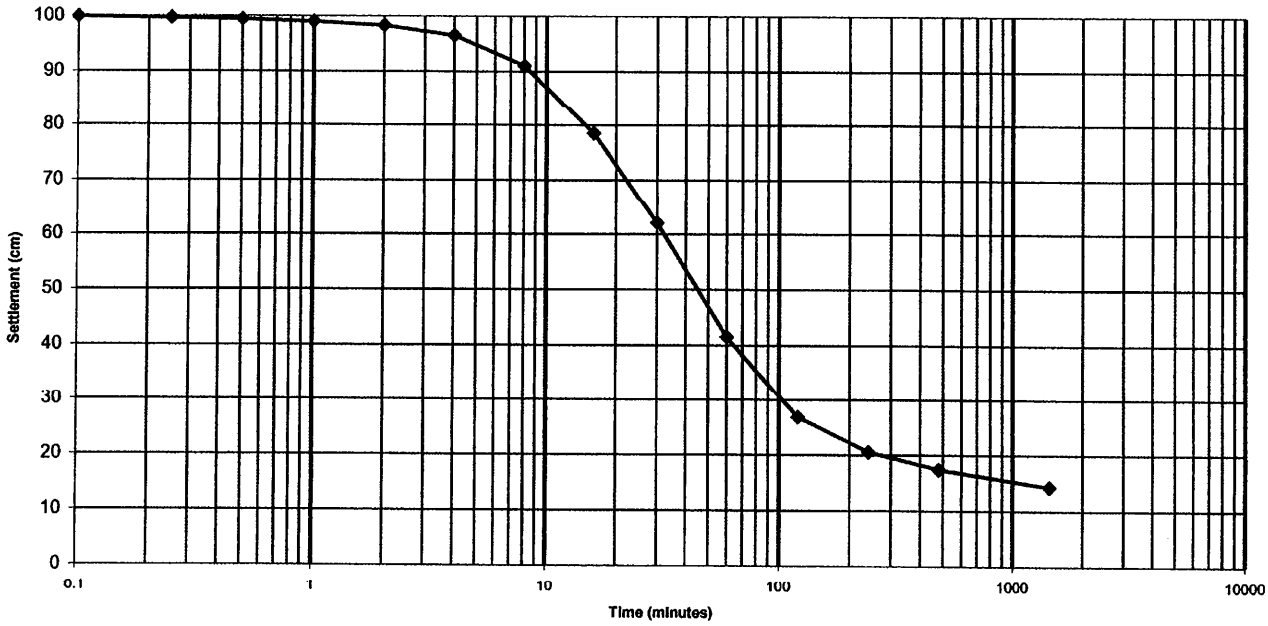
MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION CC05-6
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	78.5
0.25	99.7	30	62.0
0.5	99.4	60	41.5
1	99.0	120	26.8
2	98.3	240	20.5
4	96.5	480	17.4
8	91.0	1440	14.3

Final Concentration: 699.3 g/L

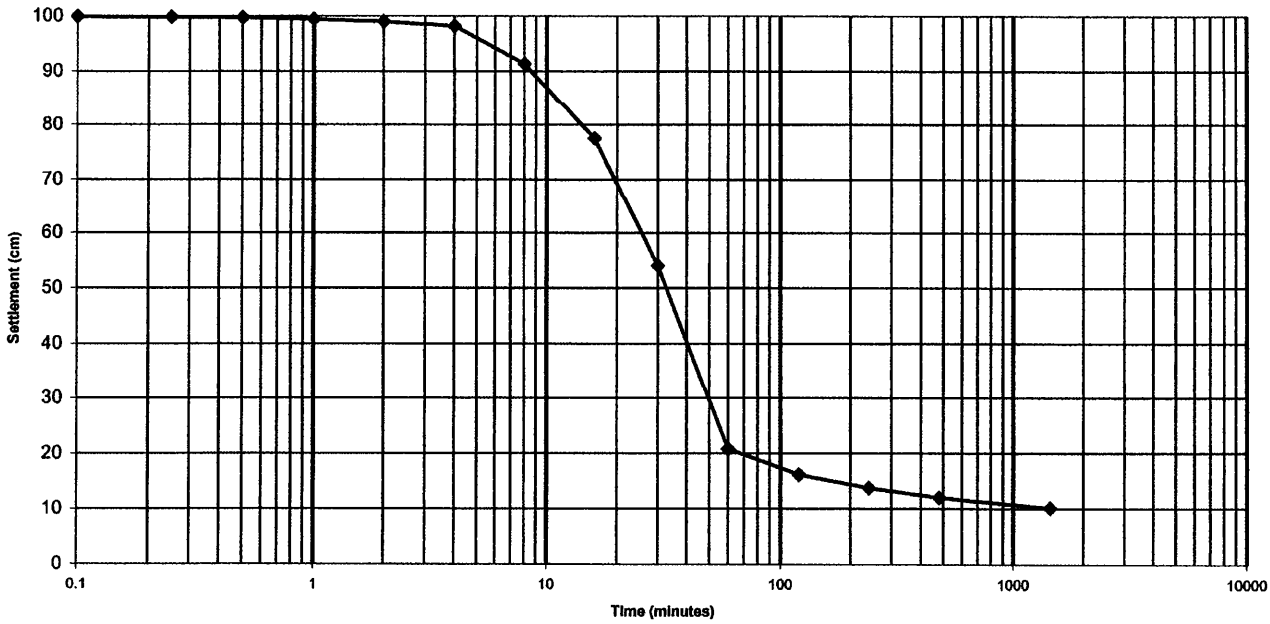
MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION CT6-7
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	77.5
0.25	99.8	30	54.0
0.5	99.7	60	20.7
1	99.4	120	16.1
2	99.0	240	13.7
4	98.2	480	12.0
8	91.3	1440	10.1

Final Concentration: 990.1 g/L

MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

Project:	Canaveral Harbor 103 Evaluation	Project Number:	6738-03-4318-02
Client:	Anamar Environmental Inc.	Date:	May 30, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering and Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on May 22, 2003. The results are outlined below and on the attached sheets.

Sample Number	Moisture Content (%)	Percent Solids (%)	Specific Gravity	Atterberg Limits		
				Liquid Limit	Plastic Limit	Plasticity Index
E-CH03-19	46.0	68.5	2.659	30	28	2
E-CH03-20	98.9	50.3	2.648	56	27	29
E-CH03-21/22	83.7	54.4	2.652	45	32	13

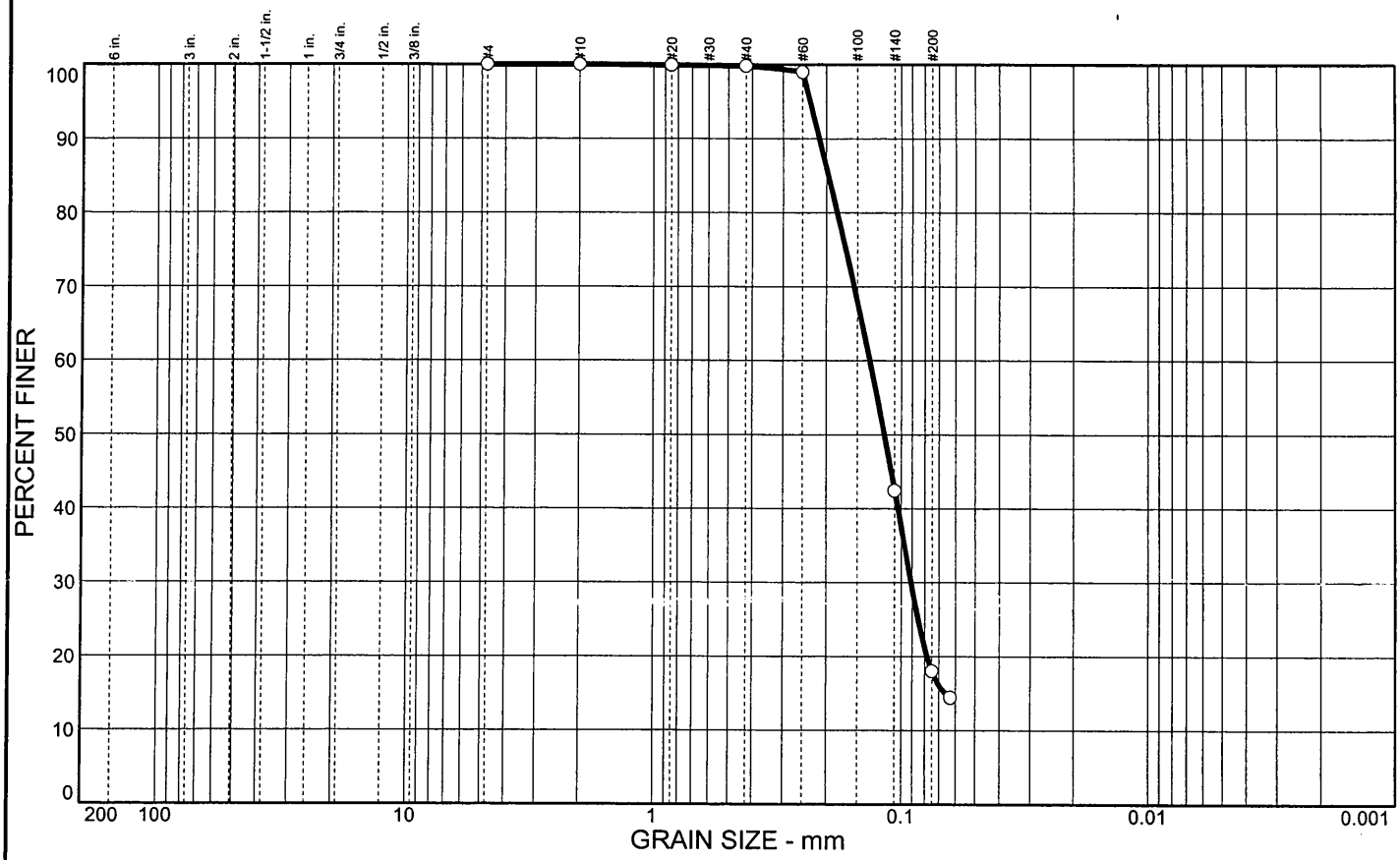
Reviewed By:

Michael J. Holm

Michael J. Holm

MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			82.0	18.0		SM	A-2-4(0)	28	30

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}	0.134		
D_{30}	0.0911		
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#4	100.0		
#10	100.0		
#20	99.9		
#40	99.8		
#60	99.0		
#140	42.4		
#200	18.0		
#230	14.4		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, little silt, dark gray

REMARKS:

○

○ Source: E-CH03-19

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

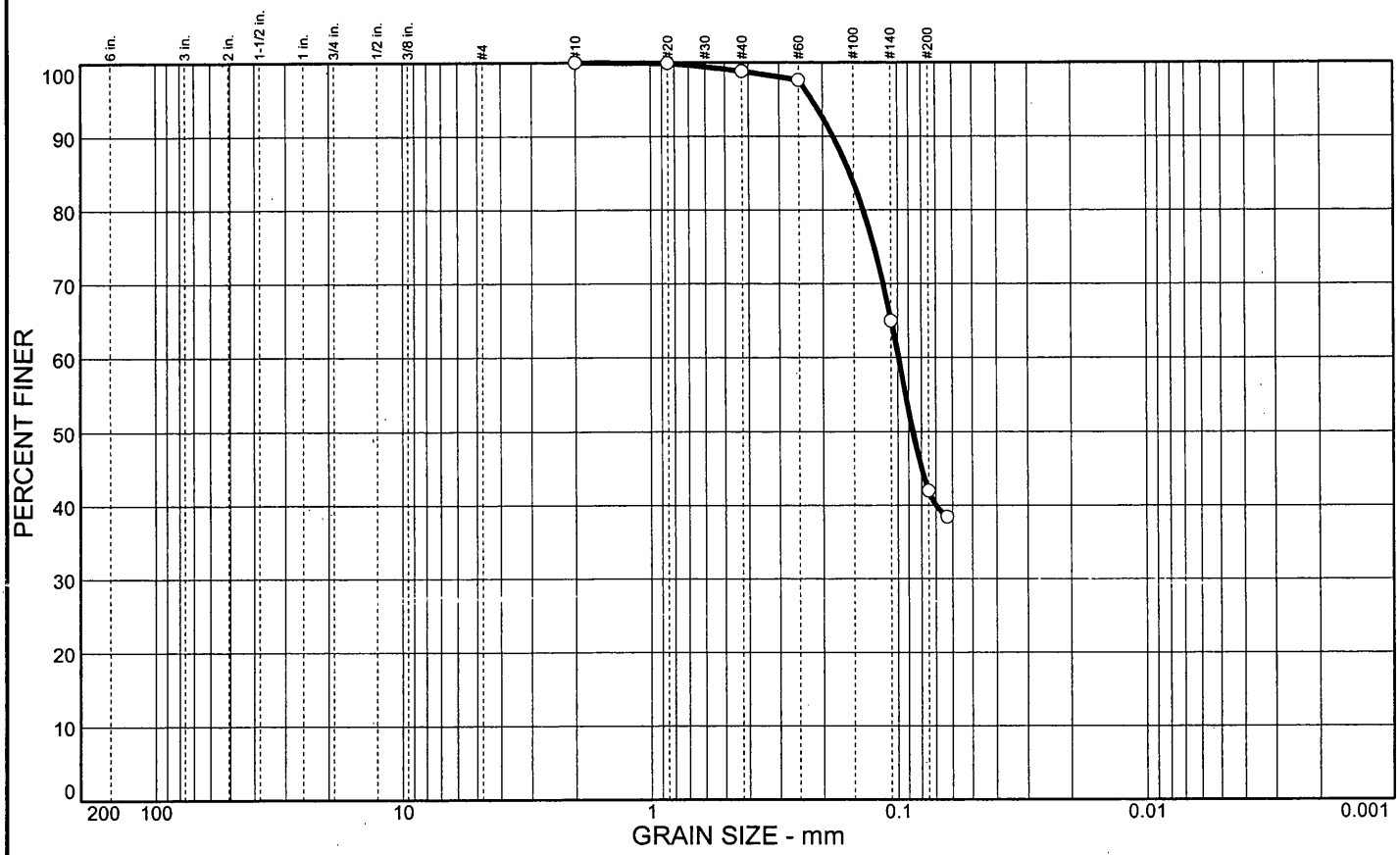
Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael J. Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			58.0	42.0		SC	A-7-6(7)	27	56

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}	0.0990		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#10	100.0		
#20	99.9		
#40	98.8		
#60	97.6		
#140	65.0		
#200	42.0		
#230	38.4		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, some clay, dark gray

REMARKS:

○

○ Source: E-CH03-20

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

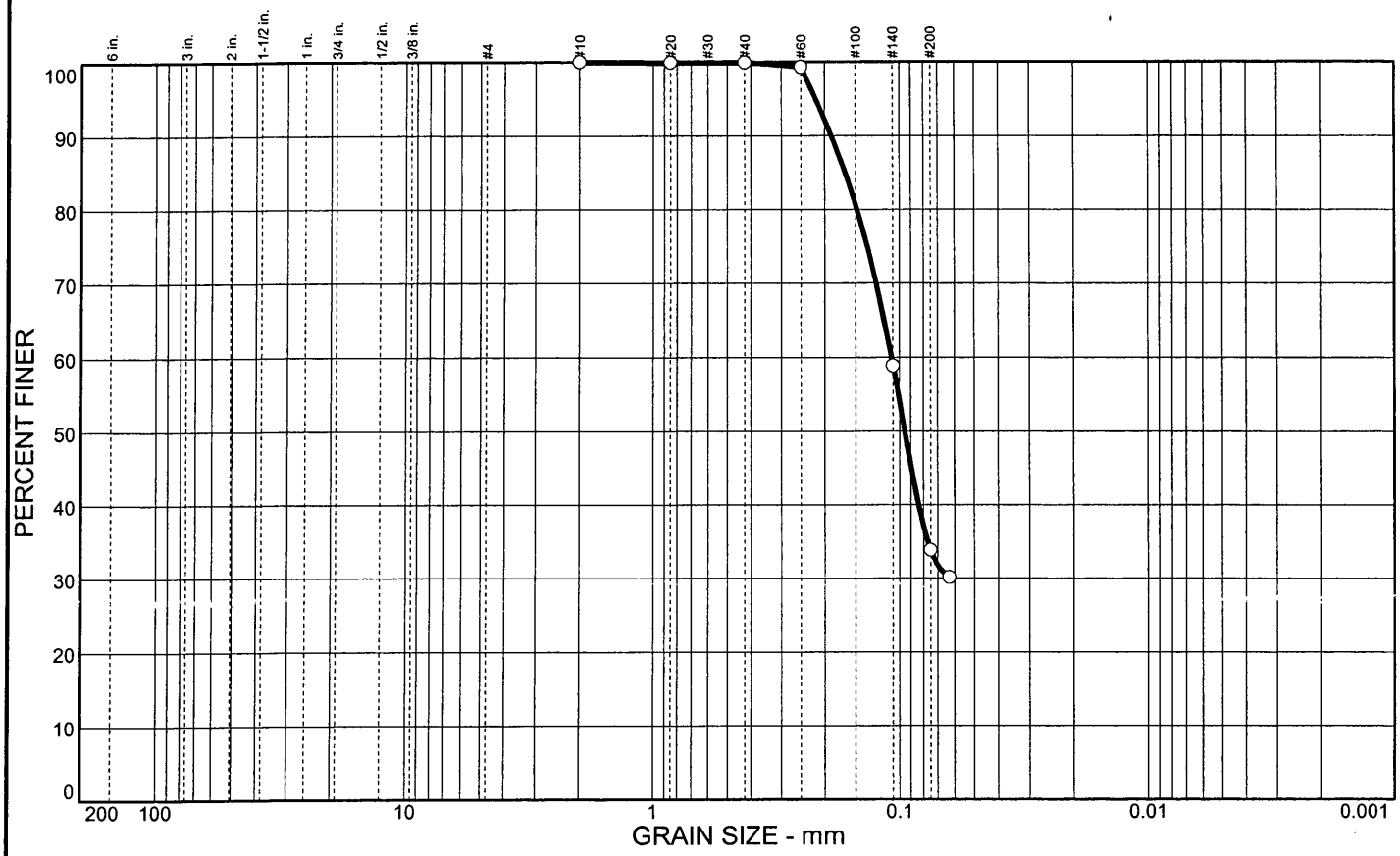
Project No.: 6738-03-4318-02

Plate

Michael J. Holm

Michael J. Holm

Grain Size Distribution Report



	% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY	USCS	AASHTO	PL	LL
○			66.2	33.8		SM	A-2-7(1)	32	45

SIEVE inches size	PERCENT FINER ○		
	GRAIN SIZE		
D_{60}	0.108		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ○		
#10	100.0		
#20	99.9		
#40	99.9		
#60	99.3		
#140	58.9		
#200	33.8		
#230	30.1		

SOIL DESCRIPTION

○ SAND, mostly fine sand size quartz, some silt, dark gray

REMARKS:

○

○ Source: E-CH03-21/22

Law Engineering and Environmental Services, Inc.

Client: Anamar Environmental Inc.

Project: Canaveral Harbor 103 Evaluation

Project No.: 6738-03-4318-02

Plate

Michael J. Holm

MACTEC

REPORT OF SOIL TESTING

Project: Canaveral Harbor 103 Evaluation

Project Number: 6738-03-4318-02

Client: Anamar Environmental

Date: May 28, 2003

As requested by Ms. Nadia Lombardero of Anamar Environmental Chemistry, Inc., MACTEC Engineering & Consulting Inc. has completed Grain Size Analysis, Moisture Content, Settling Rate, Specific Gravity, Atterberg Limits and Percent Solid testing of the twenty five samples delivered to our Jacksonville office on May 22, 2003. The results are outlined below and on the attached sheets.

Sample Number	Sample ID	Percent Solids (%)	Moisture Content (%)	Wet Bulk Density (pcf)	Dry Bulk Density (pcf)
E-CH03-19		68.5	46.0	109.5	75.0
E-CH03-20		50.3	98.9	90.1	45.3
E-CH03-21/22		54.4	83.7	93.5	50.9

Respectfully Submitted

Michael J. Hall

Michael J. Hall

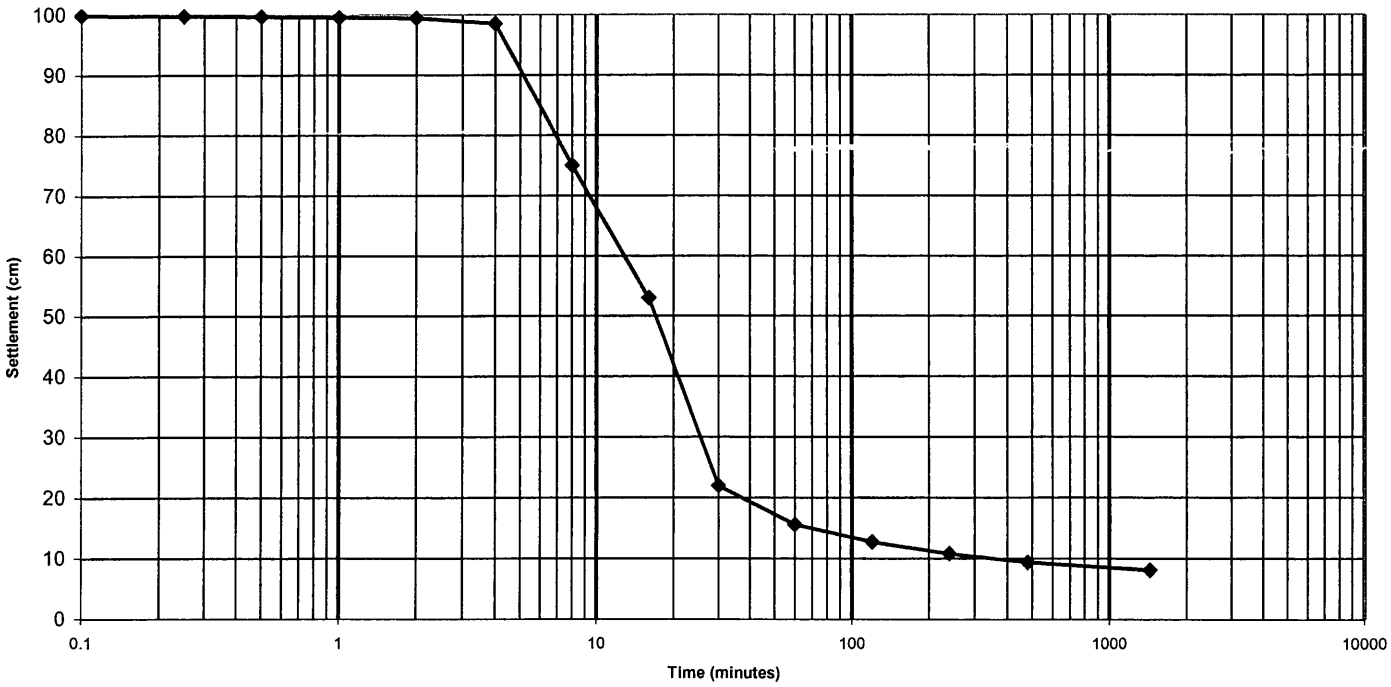
MACTEC Engineering and Consulting Inc.
3901 Carmichael Avenue
Jacksonville, FL 32207
(904)396-5173

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-19
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	53.0
0.25	99.8	30	21.9
0.5	99.7	60	15.6
1	99.5	120	12.7
2	99.4	240	10.8
4	98.5	480	9.4
8	75.0	1440	8.1

Final Concentration: 1234.6 g/L

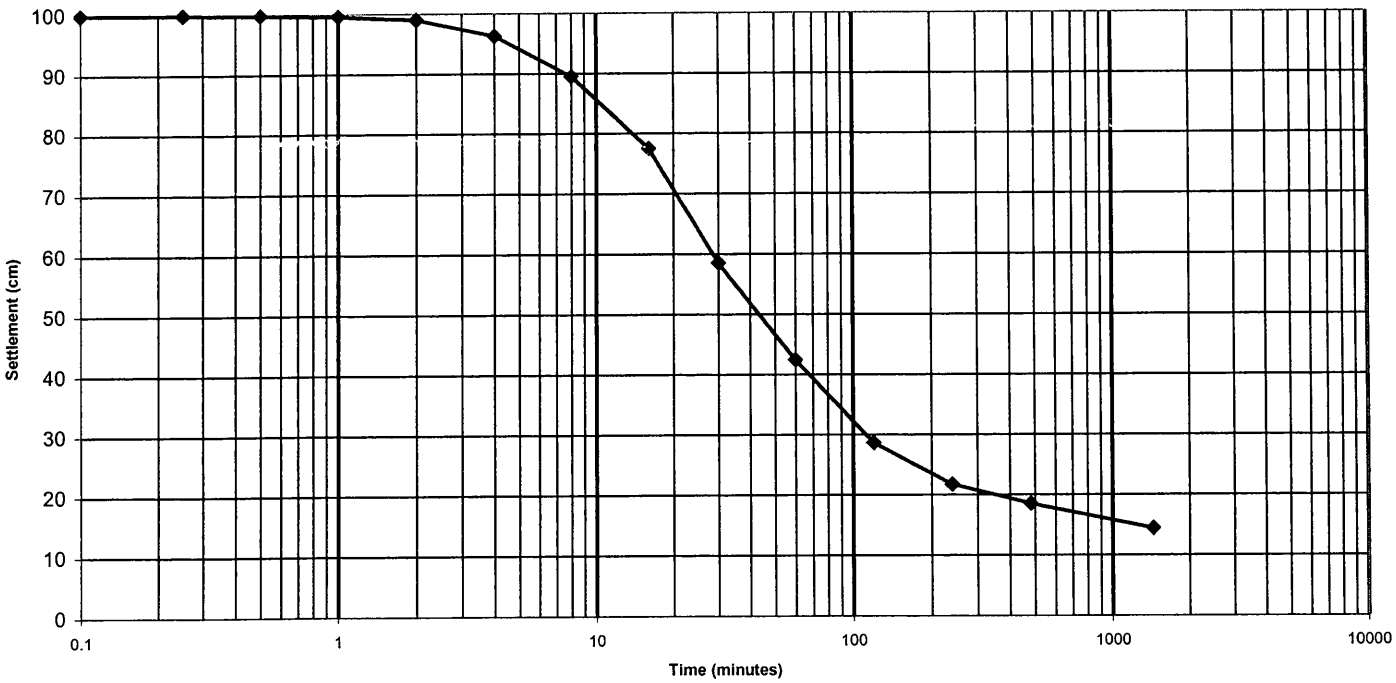
MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-20
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	77.5
0.25	99.9	30	58.5
0.5	99.8	60	42.4
1	99.6	120	28.6
2	99.0	240	21.7
4	96.3	480	18.5
8	89.5	1440	14.4

Final Concentration: 694.44 g/L

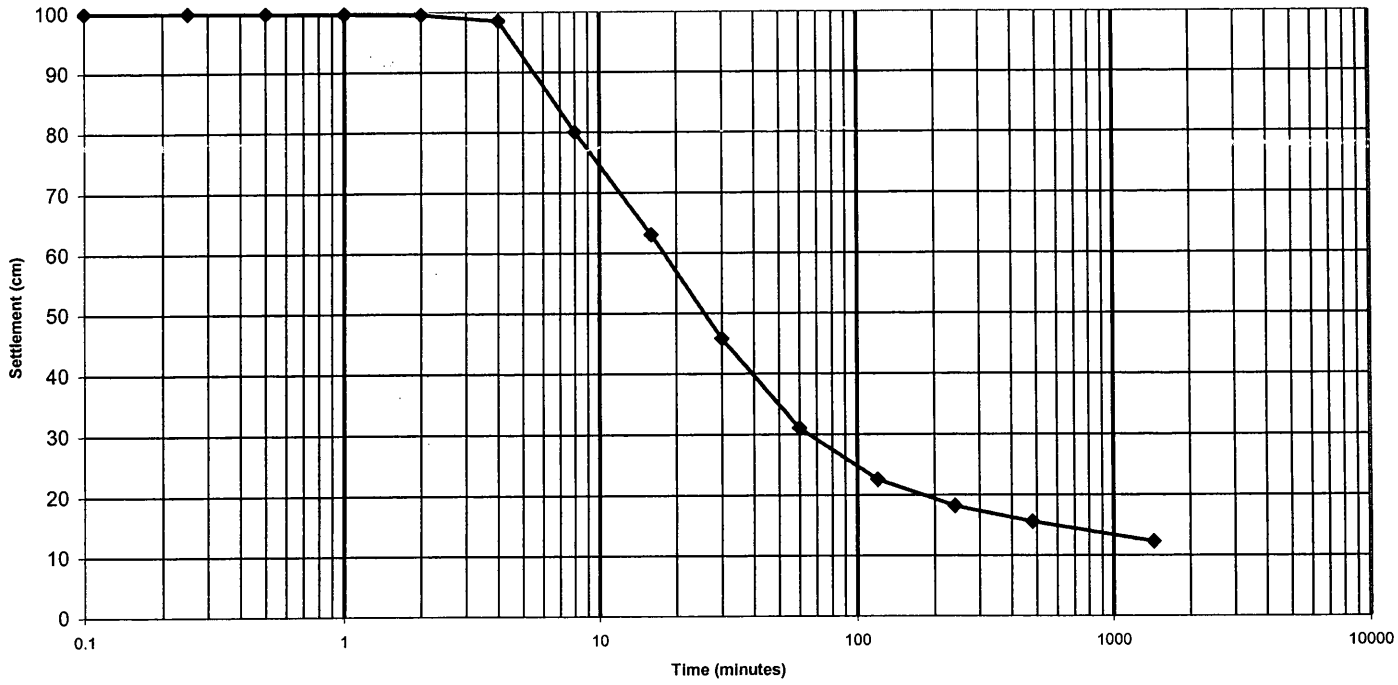
MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

MACTEC

REPORT OF SETTLING RATE TESTING

MACTEC PROJECT NO: 6738-03-4318-02
PROJECT: Canaveral Harbor 103 Evaluation
CLIENT: Anamar Environmental, Inc.

STATION E-CH03-21/22
SAMPLE NO:
CONCENTRATION: 100 g/L



TIME (min)	INTERFACE (cm)	TIME (min)	INTERFACE (cm)
0.1	99.9	16	63.0
0.25	99.9	30	45.8
0.5	99.8	60	31.0
1	99.7	120	22.5
2	99.5	240	18.2
4	98.5	480	15.6
8	80.0	1440	12.3

Final Concentration: 813.01 g/L

MACTEC Engineering and Consulting, Inc.
3901 Carmichael Avenue
Jacksonville, Florida 32207
(904) 396-5173

Appendix C

Chemistry Data

C 1

Sediment, Elutriate and Water Chemistry Data

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 16, 2003 Service Request No: K2302596

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 8, 2003. For your reference, these analyses have been assigned our service request number K2302596.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Received:**	4/8/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One water sample was received for analysis at Columbia Analytical Services on 4/8/03. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of this sample were observed.

Total Metals

Several alternative procedures were used due to difficulties encountered that were primarily related to the associated elutriate samples. Arsenic was analyzed using EPA Method 7062 (Hydride/AAS). Although the Reductive Precipitation/ICP-MS procedure performs very well in typical seawater and other complex salt matrices, an interference was observed in some of the elutriate samples. Therefore, all samples were analyzed by Hydride/AAS.

Iron and Aluminum were initially planned for analysis by EPA Method 6010 (ICP-AES). To circumvent interferences, the Iron was analyzed by EPA Method 7381 (GFAAS) and Aluminum was analyzed by EPA Method 200.8 (ICP-MS after appropriate dilution of the digestate).

No other anomalies associated with the analysis of this sample were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of this sample were observed.

Organotin Compounds

No anomalies associated with the analysis of this sample were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Lab Control Sample Exceptions:
The upper control criterion was exceeded for the following analytes in Duplicate Laboratory Control Sample (DLCS) KWG0304981-2: Dibenz(a,h)anthracene and Benzo(g,h,i)perylene. The analytes in question were not detected above the MRL in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Approved by T. Clk **Date** 5/15/03

Sample Notes and Discussion:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of this sample were observed.

Approved by A. Clt **Date** 5/15/03

Chain of Custody Documentation

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody

K2302596

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
Offshore water	04/ 3 /03	1132	sea water	various	7	Per Contract		Please add total sulfites to the list of analytes needed.
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
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	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		

Precleaned Containers Relinquished by: Columbia Analytical
Date: 3/21/03 Time: 1132 by UPS
Samples Relinquished by: C. M. Steen
Date: 4/7/03 Time: 13:40

Received by: Jeff Rappaport
Date: 3/21/03 Time: 1132
Received by: Jon Allen 4/8/03 1030
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

COE

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

Cape Canaveral Samples							
SEDIMENTS/SOILS	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ALUMINUM	9	11	9	29	0.5 mg/kg	Columbia	
ANTIMONY	9	11	9	29	0.3 mg/kg	Columbia	
ARSENIC	9	11	9	29	0.5 mg/kg	Columbia	
CADMIUM	9	11	9	29	0.1 mg/kg	Columbia	
CHROMIUM	9	11	9	29	0.2 mg/kg	Columbia	
COPPER	9	11	9	29	0.1 mg/kg	Columbia	
IRON	9	11	9	29	1.5 mg/kg	Columbia	
MERCURY	9	11	9	29	0.05 mg/kg	Columbia	
NICKEL	9	11	9	29	0.1 mg/kg	Columbia	
SILVER	9	11	9	29	0.1 mg/kg	Columbia	
ZINC	9	11	9	29	0.2 mg/kg	Columbia	
CYANIDE	0	11	9	20	1.0mg/kg	Columbia	
TOTAL AMMONIA	0	11	9	20	0.1 mg/kg	Columbia	
TOC	9	11	9	29	0.10%	Columbia	
OIL AND GREASE	0	11	9	20	1.0 ppm	Columbia	
PAH'S	9	11	9	29	0.02 mg/kg	Columbia	
ORGANOTIN	9	11	9	29	0.01 mg/kg	Columbia	
%SOLIDS	8	9	8	25	n/a	LAW	
GRAIN SIZE DIST.	8	9	8	25	n/a	LAW	
SPECIFIC GRAVITY	8	9	8	25	n/a	LAW	
ATTERBURG LIMITS	8	9	8	25	n/a	LAW	
SETTLING RATES	8	9	8	25	n/a	LAW	
10 DAY SEDIMENT BIOASSAY	8	2	9	19	n/a	ESE	
28 DAY SED. BIOACCUMULATION	8	2	9	19	n/a	ESE	
WATER/ELUTRIATE	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ANTIMONY	9	12	9	30	3.5 ug/l	Columbia	
ALUMINUM	9	2	0	11	0.5 ug/l	Columbia	Reference Station and control Sediment elutriate need aluminum and iron
ARSENIC	9	12	9	30	1.0 ug/l	Columbia	
CADMIUM	9	12	9	30	0.5 ug/l	Columbia	
CHROMIUM	9	12	9	30	0.5 ug/l	Columbia	

Total Sulfites → Sulfide - 376.2

Metals = ICP-2 (Fe, Al), Hg, Red. Ppt., ICP-MS-1 (Sb), ICP-MS-8 (As, Cd, Cr, Cu, Pb, Ni, Ag, Zn)

COPPER	9	12	9	30	2.5 ug/l	Columbia	
LEAD	9	12	9	30	2.5 ug/l	Columbia	
IRON	9	0	0	9	0.5 ug/l	Columbia	
MERCURY	9	12	9	30	0.2 ug/l	Columbia	
NICKEL	9	12	9	30	0.2 ug/l	Columbia	
SILVER	9	12	9	30	1.0 ug/l	Columbia	
ZINC	9	12	9	30	1.5 ug/l	Columbia	
CYANIDE	0	12	9	21	1.0 ppm	Columbia	
TOTAL AMMONIA	0	12	9	21	0.10 ppm	Columbia	
TOC	9	12	9	30	0.10%	Columbia	
OIL AND GREASE	0	12	9	21	1.0 ppm	Columbia	
PAH's	9	12	9	30	0.02 ppm	Columbia	
ORGANOTIN	9	12	9	30	0.1 ppm	Columbia	
96-HR ELUTRIATE ACUTE BIOASSAY	9	2	9	20	n/a	ESE	

Sediments:
COE Samples: 8 sites, 1 dupe, 1 reference, 1 control sediment (Chem and Phys). (No Phys on control or duplicate sediment) = 11
NAVY Samples: 8 sites, 1 dupe (Chem, Phys, and Tox) Include Ref and Control on Tox) = 9 or (11 for Tox)
Port Authority:
4 Vibracore Samples (Chem, Phys, and Tox) = 4
6 Upland samples and one dupe to be combined into 4 samples (Chem, Phys, and Tox) = 4
2 Upland samples to be combined into 1 samples (Chem and Phys) = 1

Elutriates:
Same as above except for the COE Samples:
COE: 8 sites, 1 dupe, 1 reference, 1 control sediment elutriate, 1 site water = 12

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Ana mar Work Order K23 2596

Cooler received on 4/8/03 and opened on 4/8/03 by TBlack

1. Were custody seals on outside of cooler? (Y) N
   If yes, how many and where? 1 front
2. Were seals intact and signature & date correct? (Y) N
3. Is the shipper's airbill available and filed? If no, record airbill number: 1Z 364 548 01 40 888 996 Y N
4. COC #
   Temperature of cooler(s) upon receipt: 5.2
   Temperature Blank: 2.7
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present loose ice - bmap
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y (N)
9. Did all bottle labels and tags agree with custody papers? Y (N)
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? (Y) N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? (Y) N

Explain any discrepancies: No bottles labeled - Used process of elimination ~~of~~ bottle count to label.

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03

Ammonia as Nitrogen

Units : mg/L (ppm)
Basis : NA

Analysis Method : 350.1
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
Offshore Water	K2302596-001	0.05	0.02	1	04/09/03	ND	
Method Blank	K2302596-MB	0.05	0.02	1	04/09/03	ND	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03
Date Extracted : NA
Date Analyzed : 04/09/03

Duplicate Summary
Inorganic Parameters

Sample Name : Offshore Water
Lab Code : K2302596-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	350.1	0.05	ND	ND	ND	-	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03
Date Extracted : NA
Date Analyzed : 04/09/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : Offshore Water
Lab Code : K2302596-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	350.1	0.05	2.00	ND	1.99	100	75-125	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302596
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/09/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302596-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	2.29	2.29	100	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/09/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 4 Result	2.00	1.97	99
CCV 5 Result	2.00	1.97	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 4 Result	0.05	ND
CCB 5 Result	0.05	ND

Approved By: _____ Date: 4/30/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03

Sulfide, Total

Units : mg/L (ppm)
Basis : NA

Analysis Method : 376.2
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
Offshore Water	K2302596-001	0.05	0.004	1	04/10/03	ND	
Method Blank	K2302596-MB	0.05	0.004	1	04/10/03	ND	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03
Date Extracted : NA
Date Analyzed : 04/10/03

Duplicate Summary
Inorganic Parameters

Sample Name : Offshore Water
Lab Code : K2302596-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.05	ND	ND	ND	-	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03
Date Extracted : NA
Date Analyzed : 04/10/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : Offshore Water
Lab Code : K2302596-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	376.2	0.05	0.98	ND	0.87	89	75-125	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302596
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/10/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302596-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	mg/L (ppm)	376.2	0.98	0.96	98	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/10/03

Sulfide
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.98	0.97	99
CCV 2 Result	0.98	0.97	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND

Approved By: _____ Date: 4/30/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03

Carbon, Total Organic

Units : mg/L (ppm)
Basis : NA

Analysis Method : 415.1
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
Offshore Water	K2302596-001	0.5	0.2	1	04/28/03	1.9	
Method Blank	K2302596-MB	0.5	0.2	1	04/28/03	ND	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03
Date Extracted : NA
Date Analyzed : 04/28/03

Duplicate Summary
Inorganic Parameters

Sample Name : Offshore Water
Lab Code : K2302596-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	415.1	0.5	1.9	1.9	1.9	<1	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03
Date Extracted : NA
Date Analyzed : 04/28/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : Offshore Water
Lab Code : K2302596-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	415.1	0.5	25.0	1.9	24.3	90	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302596
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/28/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302596-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	mg/L (ppm)	415.1	27.1	26.6	98	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/28/03

Carbon, Total Organic
EPA Method 415.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	25.0	24.9	100
CCV 2 Result	25.0	25.2	101

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.5	ND
CCB 2 Result	0.5	ND

Approved By: _____ Date: 4/30/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : 04/03/03
Date Received : 04/08/03

Cyanide, Total

Units : mg/L (ppm)
Basis : NA

Analysis Method : 335.2
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
Offshore Water	K2302596-001	0.01	0.003	1	04/16/03	ND	
Method Blank	K2302596-MB	0.01	0.003	1	04/16/03	ND	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/16/03

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K2302785-006DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	335.2	0.01	ND	ND	ND	-	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302596
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/16/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K2302785-006MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	335.2	0.01	0.10	ND	0.09	90	75-125	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302596
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/16/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302596-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	mg/L (ppm)	335.2	0.75	0.77	103	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/21/03

Cyanide, Total
EPA Method 335.2
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 4 Result	100	105	105
CCV 5 Result	100	105	105

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 4 Result	10	ND
CCB 5 Result	10	ND

Approved By: _____ Date: 4/30/03

COMBOQCD/042695

Metals

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Sample No.	Lab Sample ID.
Batch QCD	K2302556-005D
Batch QCS	K2302556-005S
Offshore Water	K2302596-001
Offshore WaterD	K2302596-001D
Offshore WaterS	K2302596-001S
Method Blank	K2302596-MB
Batch QC3D	K2302650-001D
Batch QC3S	K2302650-001S
Batch QC4D	K2302785-001D
Batch QC4S	K2302785-001S
Batch QCD	K2302961-001D
Batch QCS	K2302961-001S

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/15/03

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302596
Project No.:	NA	Date Collected:	04/03/03
Project Name:	Canaveral Harbor 103 Evaluation	Date Received:	04/08/03
Matrix:	WATER	Units:	µg/L
		Basis:	NA

Sample Name: Offshore Water Lab Code: K2302596-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	4/30/03	5/1/03	32.7		
Antimony	200.8	1.00	0.12	1	4/14/03	4/18/03	1.40		
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	0.5	U	
Cadmium	200.8	0.05	0.02	1	4/22/03	4/24/03	0.03	B	
Chromium	200.8	0.5	0.5	1	4/22/03	4/24/03	0.5	U	
Copper	200.8	0.25	0.05	1	4/22/03	4/24/03	0.56		
Iron	7381	10.0	10.0	10	5/6/03	5/14/03	37.5		
Lead	200.8	0.05	0.05	1	4/22/03	4/24/03	0.11		
Mercury	7470A	0.2	0.1	1	4/15/03	4/16/03	0.1	U	
Nickel	200.8	0.2	0.1	1	4/22/03	4/24/03	0.2		
Silver	200.8	0.05	0.02	1	4/22/03	4/24/03	0.02	U	
Zinc	200.8	1.3	0.5	1	4/22/03	4/24/03	2.0		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302596
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor 103 Evaluation	Date Received:	NA
Matrix:	WATER	Units:	µg/L
		Basis:	NA

Sample Name: Method Blank Lab Code: K2302596-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	4/30/03	5/1/03	9.5	B	
Antimony	200.8	1.00	0.12	1	4/14/03	4/18/03	0.22	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	0.5	U	
Cadmium	200.8	0.05	0.02	1	4/22/03	4/24/03	0.02	U	
Chromium	200.8	0.5	0.5	1	4/22/03	4/24/03	0.5	U	
Copper	200.8	0.25	0.05	1	4/22/03	4/24/03	0.05	U	
Iron	7381	10.0	10.0	10	5/6/03	5/14/03	10.0	U	
Lead	200.8	0.05	0.05	1	4/22/03	4/24/03	0.05	U	
Mercury	7470A	0.2	0.1	1	4/15/03	4/16/03	0.1	U	
Nickel	200.8	0.2	0.1	1	4/22/03	4/24/03	0.1	U	
Silver	200.8	0.05	0.02	1	4/22/03	4/24/03	0.02	U	
Zinc	200.8	1.3	0.5	1	4/22/03	4/24/03	0.5	U	

% Solids: 0.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	200	39.7	99	25.0	24.6	98	24.6	98	200.8
Antimony	25.0	24.4	98	25.0	25.3	101	24.6	98	200.8
Arsenic	5.0	4.87	97	5.0	5.18	104	5.44	109	7062
Cadmium	25.0	25.2	101	25.0	25.0	100	25.6	102	200.8
Chromium	20.0	18.4	92	25.0	23.7	95	25.5	102	200.8
Copper	25.0	23.6	94	25.0	23.9	96	24.0	96	200.8
Iron	12.5	12.4	99	15.0	16.4	109	10.4	104	7381
Lead	50.0	48.7	97	25.0	24.9	100	25.2	101	200.8
Mercury	5.0	5.25	105	5.0	5.07	101	5.03	101	7470A
Nickel	50.0	46.7	93	25.0	23.3	93	23.5	94	200.8
Silver	25.0	24.9	100	25.0	25.3	101	25.4	102	200.8
Zinc	50.0	47.3	95	25.0	24.5	98	24.4	98	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				5.0	5.22	104	5.12	102	7062
Cadmium				25.0	24.7	99	24.8	99	200.8
Chromium				25.0	25.5	102			200.8
Copper				25.0	22.0	88			200.8
Iron				10.0	9.84	98	10.1	101	7381
Lead				25.0	24.2	97			200.8
Mercury				5.0	5.12	102	5.28	106	7470A
Nickel				25.0	21.8	87			200.8
Silver				25.0	24.1	96			200.8
Zinc				25.0	23.0	92			200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				5.0	4.95	99	5.00	100	7062
Cadmium				25.0	25.0	100			200.8
Iron				10.0	10.1	100			7381
Mercury				5.0	5.44	109	5.46	109	7470A

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				5.0	4.97	99			7062

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				2.0	2.02	101		
Antimony				0.05	0.06	130		
Arsenic	0.50	0.4	78					
Cadmium				0.50	0.46	92		
Chromium				2.0	2.39	120		
Copper				1.0	0.99	99		
Iron	5.0	6.8	136					
Lead				0.20	0.21	103		
Mercury	0.20	0.2	99					
Nickel				2.0	1.95	98		
Silver				0.20	0.19	94		
Zinc				5.0	5.02	100		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	0.6	U	0.6	U	0.6	U							200.8
Antimony	0.03	B	0.02	B	0.02	B							200.8
Arsenic	0.3	U	0.3	U	0.4	B	0.3	B					7062
Cadmium	0.07	U	0.07	U	0.07	U	0.07	U					200.8
Chromium	2.0	U	2.0	U	2.0	U	2.0	U					200.8
Copper	0.20	U	0.20	U	0.20	U	0.20	U					200.8
Iron	1.0	U	1.0	U	1.0	U	1.0	U					7381
Lead	0.20	U	0.20	U	0.20	U	0.20	U					200.8
Mercury	0.1	U	0.1	U	0.1	U	0.1	U					7470A
Nickel	0.4	U	0.4	U	0.4	U	0.4	U					200.8
Silver	0.08	U	0.08	U	0.08	U	0.08	U					200.8
Zinc	2.0	U	2.0	U	2.0	U	2.0	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Arsenic			0.3	U	0.3	U	0.3	U						7062
Cadmium			0.07	U	0.07	U								200.8
Iron			1.0	U	1.0	U								7381
Mercury			0.1	U	0.1	U	0.1	U						7470A

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Arsenic			0.3	U									7062

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Offshore WaterS Lab Code: K2302596-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	70 - 130	376		1.40		400	94		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QCS Lab Code: K2302556-005S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Cadmium	51 - 127	1.86		0.02	B	2.00	92		200.8
Chromium	48 - 136	2.5		0.2	U	2.0	127		200.8
Copper	47 - 113	1.80		0.19		2.00	81		200.8
Iron	75 - 125	1070		10.0	U	1000	107		7381
Lead	61 - 120	1.90		0.13		2.00	89		200.8
Nickel	1 - 111	1.5		0.4		2.0	57		200.8
Silver	66 - 112	1.50		0.01	U	2.00	75		200.8
Zinc	36 - 143	2.5		1.0		2.0	72		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302596
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QC2S
Lab Code: K2302961-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	99.0		8.2	B	100	91		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QC3S Lab Code: K2302650-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	74 - 120	1.0		0.1	U	1.0	99		7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QC4S Lab Code: K2302785-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	75 - 125	75.6		56.2		16.0	121		7062

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Offshore WaterD Lab Code: K2302596-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony		1.40		1.53		9		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QCD Lab Code: K2302556-005D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Cadmium		0.02	B	0.02		22		200.8
Chromium		0.2	U	0.4		200.0		200.8
Copper		0.19		0.23		21		200.8
Iron		10.0	U	10.0	U			7381
Lead	20	0.13		0.12		4		200.8
Nickel		0.4		0.5		21		200.8
Silver		0.01	U	0.01	U			200.8
Zinc		1.0		1.1		6		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

- 6 -

DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302596
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QC2D
Lab Code: K2302961-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		8.2	B	7.2	B	13		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QC3D Lab Code: K2302650-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.1	U	0.1	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QC4D Lab Code: K2302785-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic	20	56.2		47.6		17		7062

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Aluminum	100	95.8	96					
Antimony	400	392	98					
Arsenic	16.0	14.8	93					
Cadmium	2.00	2.09	104					
Chromium	2.00	1.96	98					
Copper	2.00	1.92	96					
Iron	2500	2640	106					
Lead	2.00	2.04	102					
Mercury	5.00	5.10	102					
Nickel	2.00	1.88	94					
Silver	2.00	1.97	99					
Zinc	2.00	2.19	110					

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.2	0.1	7470A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.05	0.01	200.8

Comments

METALS

-10-

METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	27		1.0	0.6	200.8
Cadmium	111		0.20	0.07	200.8
Chromium	52		2.0	2.0	200.8
Copper	65		1.00	0.20	200.8
Lead	208		0.20	0.20	200.8
Nickel	60		0.8	0.4	200.8
Silver	107		0.20	0.08	200.8
Zinc	66		5.0	2.0	200.8

Comments:

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: Varian-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	193.60		0.5	0.3	7062

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: Varian-5 (GFAA) AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Iron	259.90	BZ	1.0	1.0	7381

Comments

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	15.00	700.0	200.8
Cadmium	15.00	1000.0	200.8
Chromium	15.00	1000.0	200.8
Copper	15.00	1000.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	1000.0	200.8
Silver	15.00	100.0	200.8
Zinc	15.00	1000.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: AA

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302785-001D	5/12/03	EPA 3010A	50	50
K2302785-001S	5/12/03	EPA 3010A	50	50
LCSW	5/12/03	EPA 3010A	50	50
K2302596-MB	5/12/03	EPA 3010A	50	50
K2302596-001	5/12/03	EPA 3010A	25	25

K2302650-001D	4/15/03	METHOD	20	20
K2302650-001S	4/15/03	METHOD	20	20
LCSW	4/15/03	METHOD	20	20
K2302596-MB	4/15/03	METHOD	20	20
K2302596-001	4/15/03	METHOD	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: F

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302961-001D	5/6/03	CLAA	20	20
K2302961-001S	5/6/03	CLAA	20	20
LCSW	5/6/03	CLAA	20	20
K2302596-MB	5/6/03	CLAA	20	20
K2302596-001	5/6/03	CLAA	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302556-005D	4/22/03	RED. PPT	1,000	100
K2302556-005S	4/22/03	RED. PPT	1,000	100
LCSW	4/22/03	RED. PPT	1,000	100
K2302596-MB	4/22/03	RED. PPT	1,000	100
K2302596-001	4/22/03	RED. PPT	400	100
K2302961-001D	4/30/03	CLFAA	20	20
K2302961-001S	4/30/03	CLFAA	20	20
LCSW	4/30/03	CLFAA	20	20
K2302596-MB	4/30/03	CLFAA	20	20
K2302596-001	4/30/03	CLFAA	20	20
LCSW	4/14/03	CLFAA	2.5	50
K2302596-MB	4/14/03	CLFAA	2.5	50
K2302596-001	4/14/03	CLFAA	2.5	50
K2302596-001D	4/14/03	CLFAA	2.5	50
K2302596-001S	4/14/03	CLFAA	2.5	50

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	14:04																									
S0.5	1.00	14:08																									
S1	1.00	14:12																									
S5	1.00	14:16																									
S7.5	1.00	14:20				X																					
S10	1.00	14:24																									
ICV	1.00	14:28				X																					
ICB	1.00	14:32				X																					
CCV1	1.00	14:36				X																					
CCB1	1.00	14:40				X																					
CRI	1.00	14:44				X																					
K2302596-MB	2.00	14:48				X																					
LCSW	2.00	14:52				X																					
ZZZZZZ	10.00	14:56																									
K2302785-001D	10.00	15:00				X																					
K2302785-001S	10.00	15:04				X																					
ZZZZZZ	10.00	15:08																									
ZZZZZZ	10.00	15:12																									
ZZZZZZ	10.00	15:16																									
CCV2	1.00	15:20				X																					
CCB2	1.00	15:24				X																					
ZZZZZZ	1.00	15:28																									
ZZZZZZ	2.00	15:32																									
ZZZZZZ	10.00	15:36																									
ZZZZZZ	20.00	15:40																									
ZZZZZZ	2.00	15:44																									
ZZZZZZ	10.00	15:48																									
ZZZZZZ	10.00	15:52																									
K2302596-001	2.00	15:56				X																					
ZZZZZZ	2.00	16:00																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	2.00	16:04																									
ZZZZZZ	10.00	16:08																									
CCV3	1.00	16:12				X																					
CCB3	1.00	16:16				X																					
ZZZZZZ	10.00	16:20																									
ZZZZZZ	10.00	16:24																									
ZZZZZZ	2.00	16:28																									
ZZZZZZ	2.00	16:32																									
ZZZZZZ	2.00	16:36																									
ZZZZZZ	2.00	16:40																									
ZZZZZZ	10.00	16:44																									
ZZZZZZ	2.00	16:48																									
ZZZZZZ	2.00	16:52																									
ZZZZZZ	2.00	16:56																									
CCV4	1.00	17:00				X																					
CCB4	1.00	17:04				X																					
ZZZZZZ	1.00	17:08																									
ZZZZZZ	1.00	17:12																									
CCV5	1.00	17:16				X																					
CCB5	1.00	17:20				X																					
ZZZZZZ	2.00	17:24																									
ZZZZZZ	2.00	17:28																									
ZZZZZZ	2.00	17:32																									
ZZZZZZ	2.00	17:36																									
ZZZZZZ	2.00	17:40																									
ZZZZZZ	2.00	17:44																									
ZZZZZZ	2.00	17:48																									
ZZZZZZ	2.00	17:52																									
ZZZZZZ	2.00	17:56																									
ZZZZZZ	4.00	18:00																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV6	1.00	18:04				X																					
CCB6	1.00	18:08				X																					
ZZZZZZ	2.00	18:12																									
ZZZZZZ	2.00	18:16																									
ZZZZZZ	2.00	18:20																									
CCV7	1.00	18:24				X																					
CCB7	1.00	18:28				X																					

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-5 (GFAA) Method: F

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	10:04												X													
S5	1.00	10:08												X													
S10	1.00	10:12												X													
S15	1.00	10:16												X													
S20	1.00	10:20												X													
ICV	1.00	10:24												X													
ICB	1.00	10:28												X													
CCV1	1.00	10:32												X													
CCB1	1.00	10:36												X													
ZZZZZZ	1.00	10:40																									
ZZZZZZ	1.00	10:44																									
CCV2	1.00	10:48												X													
CCB2	1.00	10:52												X													
CRI	1.00	10:56												X													
K2302596-MB	10.00	11:00												X													
LCSW	200.00	11:04												X													
ZZZZZZ	10.00	11:08																									
ZZZZZZ	10.00	11:12																									
K2302961-001D	10.00	11:16												X													
K2302961-001S	100.00	11:20												X													
K2302596-001	10.00	11:24												X													
CCV3	1.00	11:28												X													
CCB3	1.00	11:32												X													
ZZZZZZ	1.00	11:36																									
ZZZZZZ	1.00	11:40																									
ZZZZZZ	10.00	11:44																									
ZZZZZZ	1.00	11:48																									
ZZZZZZ	10.00	11:52																									
ZZZZZZ	200.00	11:56																									
ZZZZZZ	10.00	12:00																									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-5 (GFAA) Method: F

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	10.00	12:04																									
ZZZZZZ	10.00	12:08																									
ZZZZZZ	10.00	12:12																									
ZZZZZZ	10.00	12:16																									
ZZZZZZ	100.00	12:20																									
CCV4	1.00	12:24												X													
CCB4	1.00	12:28												X													
ZZZZZZ	10.00	12:32																									
ZZZZZZ	10.00	12:36																									
ZZZZZZ	10.00	12:40																									
ZZZZZZ	10.00	12:44																									
ZZZZZZ	10.00	12:48																									
ZZZZZZ	100.00	12:52																									
ZZZZZZ	10.00	12:56																									
ZZZZZZ	10.00	13:00																									
ZZZZZZ	10.00	13:04																									
ZZZZZZ	10.00	13:08																									
CCV5	1.00	13:12												X													
CCB5	1.00	13:16												X													

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/16/03 End Date: 4/16/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	13:07																X									
STANDARD #1	1.00	13:09																X									
STANDARD #2	1.00	13:10																X									
STANDARD #3	1.00	13:12																X									
STANDARD #4	1.00	13:14																X									
STANDARD #5	1.00	13:15																X									
ICV	1.00	13:17																X									
ICB	1.00	13:18																X									
CCV1	1.00	13:20																X									
CCB1	1.00	13:22																X									
CRA	1.00	13:23																X									
K2302596-MB	1.00	13:25																X									
LCSW	1.00	13:26																X									
ZZZZZZ	1.00	13:28																									
ZZZZZZ	1.00	13:30																									
ZZZZZZ	1.00	13:31																									
ZZZZZZ	1.00	13:33																									
ZZZZZZ	1.00	13:34																									
ZZZZZZ	1.00	13:36																									
ZZZZZZ	1.00	13:38																									
CCV2	1.00	13:39																X									
CCB2	1.00	13:41																X									
ZZZZZZ	1.00	13:42																									
ZZZZZZ	1.00	13:44																									
ZZZZZZ	1.00	13:46																									
ZZZZZZ	1.00	13:47																									
ZZZZZZ	1.00	13:49																									
ZZZZZZ	1.00	13:51																									
ZZZZZZ	1.00	13:52																									
ZZZZZZ	1.00	13:54																									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/16/03 End Date: 4/16/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	13:55																									
ZZZZZZ	1.00	13:57																									
CCV3	1.00	13:59																X									
CCB3	1.00	14:00																X									
ZZZZZZ	1.00	14:02																									
K2302650-001D	1.00	14:03																X									
K2302650-001S	1.00	14:05																X									
K2302596-001	1.00	14:07																X									
ZZZZZZ	1.00	14:08																									
ZZZZZZ	1.00	14:10																									
ZZZZZZ	1.00	14:12																									
ZZZZZZ	1.00	14:13																									
ZZZZZZ	1.00	14:15																									
ZZZZZZ	1.00	14:17																									
CCV4	1.00	14:18																X									
CCB4	1.00	14:20																X									
ZZZZZZ	1.00	14:21																									
ZZZZZZ	1.00	14:23																									
ZZZZZZ	1.00	14:25																									
ZZZZZZ	1.00	14:26																									
ZZZZZZ	1.00	14:28																									
ZZZZZZ	1.00	14:29																									
ZZZZZZ	1.00	14:31																									
CCV5	1.00	14:33																X									
CCB5	1.00	14:34																X									
ZZZZZZ	1.00	14:39																									
CCV6	1.00	14:40																X									
CCB6	1.00	14:42																X									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 4/24/03 End Date: 4/24/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:07							X		X		X		X				X			X				X	
CALIBRATION STANDARD	1.00	08:09							X		X		X		X				X			X				X	
ICV	1.00	08:11							X		X		X		X				X			X				X	
CCV1	1.00	08:14							X		X		X		X				X			X				X	
ICB	1.00	08:19							X		X		X		X				X			X				X	
CCB1	1.00	08:21							X		X		X		X				X			X				X	
CRA	1.00	08:24							X		X		X		X				X			X				X	
K2302596-MB	1.00	08:26							X		X		X		X				X			X				X	
ZZZZZZ	1.00	08:28																									
K2302556-005D	1.00	08:30							X		X		X		X				X			X				X	
K2302556-005S	1.00	08:32							X		X		X		X				X			X				X	
LCSW	1.00	08:34							X		X		X		X				X			X				X	
ZZZZZZ	1.00	08:37																									
ZZZZZZ	1.00	08:39																									
ZZZZZZ	1.00	08:41																									
CCV2	1.00	08:45							X		X		X		X				X			X				X	
CCB2	1.00	08:50							X		X		X		X				X			X				X	
ZZZZZZ	1.00	08:52																									
ZZZZZZ	1.00	08:55																									
ZZZZZZ	1.00	08:57																									
ZZZZZZ	1.00	09:00																									
ZZZZZZ	1.00	09:01																									
ZZZZZZ	1.00	09:04																									
K2302596-001	1.00	09:06							X		X		X		X				X			X				X	
CCV3	1.00	09:09							X		X		X		X				X			X				X	
CCB3	1.00	09:12							X		X		X		X				X			X				X	
CCV4	1.00	10:16							X																		
CCB4	1.00	10:18							X																		
ZZZZZZ	1.00	10:20																									
CCV5	1.00	10:21							X																		

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 4/24/03 End Date: 4/24/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB5	1.00	10:25							X																		

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/1/03 End Date: 5/1/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	09:34		X																							
S25	1.00	09:36		X																							
ICV	5.00	09:37		X																							
CCV1	1.00	09:40		X																							
ICB	1.00	09:42		X																							
CCB1	1.00	09:43		X																							
CRA	1.00	09:44		X																							
K2302596-MB	1.00	09:46		X																							
LCSW	1.00	09:48		X																							
ZZZZZZ	1.00	09:50																									
K2302961-001D	1.00	09:51		X																							
K2302961-001S	1.00	09:52		X																							
K2302596-001	1.00	09:54		X																							
CCV2	1.00	09:55		X																							
CCB2	1.00	09:57		X																							

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302596

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 4/18/03 End Date: 4/18/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	13:32			X																						
25 PPB STD. MS2-99-A	1.00	13:34			X																						
ICV	1.00	13:35			X																						
CCV1	1.00	13:36			X																						
ICB	1.00	13:40			X																						
CCB1	1.00	13:41			X																						
CRA	1.00	13:43			X																						
K2302596-MB	1.00	13:44			X																						
K2302596-001	1.00	13:45			X																						
K2302596-001D	1.00	13:46			X																						
K2302596-001S	1.00	13:47			X																						
LCSW	1.00	13:50			X																						
CCV2	1.00	13:53			X																						
CCB2	1.00	13:56			X																						

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Oil and Grease
Method 1664

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	K230422-WB	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JLS Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	4/3/03
Sample Matrix:	Water	**Date Received:**	4/8/03

Oil and Grease

Sample Name:	Offshore Water	Units:	mg/L (ppm)
Lab Code:	K2302596-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JLS Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	4/22/03
		Date Analyzed:	4/23/03

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K230422-WL, K230422-WL2	Basis:	NA
Test Notes:			

							Percent Recovery				
Analyte	**Prep Method**	**Analysis Method**	**True Value** LCS	**True Value** DLCS	**Result** LCS	**Result** DLCS	LCS	DLCS	CAS Acceptance Limits	**Relative Percent Difference**	**Result Notes**
Oil and Grease, Total (HEM)	METHOD	1664	40	40	39	35	98	88	78-114	11	

Approved By: JLS Date: 4/24/03

DLCS/072898p
02596PHC.MS1 - DLCS 4/24/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 4/23/03

Continuing Calibration Verification (CCV) Summary
EPA Methods 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery	CCV3 Result	Percent Recovery	CCV4 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	2.0	100	1.9	95	2.0	100	2.0	100

Approved By: _____ Date: 4/24/03

CCV 1-4/102194

02596PHC.MS1 - ccv 4/24/03

Page No.:

Organotins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
Offshore Water	K2302596-001	04/03/2003	04/08/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Elizabeth Schneider

Date: 5/6/03 Title: Chemist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/03/2003
Sample Matrix:	Water	**Date Received:**	04/08/2003

Butyltins

Sample Name:	Offshore Water	**Units:**	ug/L
Lab Code:	K2302596-001	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/08/03	04/29/03	KWG0304757	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/08/03	04/29/03	KWG0304757	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/08/03	04/29/03	KWG0304757	
n-Butyltin	ND	U	0.050	0.0065	1	04/08/03	04/29/03	KWG0304757	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	57	41-128	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0304757-4	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/08/03	04/28/03	KWG0304757	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/08/03	04/28/03	KWG0304757	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/08/03	04/28/03	KWG0304757	
n-Butyltin	ND	U	0.050	0.0065	1	04/08/03	04/28/03	KWG0304757	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	61	41-128	04/28/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302596

Surrogate Recovery Summary
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
Offshore Water	K2302596-001	57
Method Blank	KWG0304757-4	61
Batch QC	K2302556-005	54
Batch QCMS	KWG0304757-1	45
Batch QCDMS	KWG0304757-2	49
Lab Control Sample	KWG0304757-3	64

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 41-128

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/08/2003
Sample Matrix:	Water	**Date Analyzed:**	05/01/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K2302556-005	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0304757

Analyte Name	Sample Result	Batch QCMS KWG0304757-1 Matrix Spike			Batch QCDMS KWG0304757-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Tetra-n-butyltin	ND	0.107	0.500	21	0.105	0.500	21	10-110	2	30
Tri-n-butyltin	ND	0.227	0.500	45	0.195	0.500	39	37-138	16	30
Di-n-butyltin	ND	0.220	0.500	44	0.186	0.500	37	29-124	17	30
n-Butyltin	ND	0.215	0.500	43	0.216	0.500	43	10-139	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/08/2003
Sample Matrix:	Water	**Date Analyzed:**	04/29/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	EPA 3520	**Units:**	ug/L
Analysis Method:	Krone	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0304757

	Lab Control Sample KWG0304757-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	0.142	0.500	28	21-115
Tri-n-butyltin	0.276	0.500	55	22-157
Di-n-butyltin	0.243	0.500	49	19-149
n-Butyltin	0.363	0.500	73	23-150

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/08/2003
Sample Matrix:	Water	**Date Analyzed:**	04/28/2003
		Time Analyzed:	23:52

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\042803\0428F023.D
Lab Code:	KWG0304757-4	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0304757

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0304757-3	J:\GC11\DATA\042803\0428F024.D	04/29/03	00:10
Offshore Water	K2302596-001	J:\GC11\DATA\042803\0428F037.D	04/29/03	04:01
Batch QC	K2302556-005	J:\GC11\DATA\050103\0501F004.D	05/01/03	17:35
Batch QCMS	KWG0304757-1	J:\GC11\DATA\050103\0501F005.D	05/01/03	17:52
Batch QCDMS	KWG0304757-2	J:\GC11\DATA\050103\0501F006.D	05/01/03	18:10

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/08/2003
Sample Matrix:	Water	**Date Analyzed:**	04/29/2003
		Time Analyzed:	00:10

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\042803\0428F024.D
Lab Code:	KWG0304757-3	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0304757

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0304757-4	J:\GC11\DATA\042803\0428F023.D	04/28/03	23:52
Offshore Water	K2302596-001	J:\GC11\DATA\042803\0428F037.D	04/29/03	04:01
Batch QC	K2302556-005	J:\GC11\DATA\050103\0501F004.D	05/01/03	17:35
Batch QCMS	KWG0304757-1	J:\GC11\DATA\050103\0501F005.D	05/01/03	17:52
Batch QCDMS	KWG0304757-2	J:\GC11\DATA\050103\0501F006.D	05/01/03	18:10

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D	D	J:\GC11\DATA\042503\0425F105.D
B	J:\GC11\DATA\042503\0425F103.D	E	J:\GC11\DATA\042503\0425F106.D
C	J:\GC11\DATA\042503\0425F104.D	F	J:\GC11\DATA\042503\0425F107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	669	B	50	620	C	100	626	D	500	576	E	1000	588
	F	2000	576												
Tri-n-butyltin	A	10	835	B	50	789	C	100	794	D	500	708	E	1000	729
	F	2000	704												
Di-n-butyltin	A	10	1090	B	50	1050	C	100	975	D	500	895	E	1000	923
	F	2000	895												
n-Butyltin	A	10	1580	B	50	1310	C	100	1350	D	500	1200	E	1000	1250
	F	2000	1210												
Tri-n-propyltin	A	11	562	B	54	569	C	110	595	D	540	539	E	1100	546
	F	2100	532												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.0		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	10.8		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	490	609	634	4	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	760	752	-1	NA	± 30 %	AverageRF
Di-n-butyltin	480	460	970	934	-4	NA	± 30 %	AverageRF
n-Butyltin	490	470	1320	1260	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D\0425R102.D	D	J:\GC11\DATA\042503\0425F105.D\0425R105.D
B	J:\GC11\DATA\042503\0425F103.D\0425R103.D	E	J:\GC11\DATA\042503\0425F106.D\0425R106.D
C	J:\GC11\DATA\042503\0425F104.D\0425R104.D	F	J:\GC11\DATA\042503\0425F107.D\0425R107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	352	B	50	317	C	100	328	D	500	311	E	1000	324
	F	2000	319												
Tri-n-butyltin	A	10	425	B	50	400	C	100	419	D	500	393	E	1000	406
	F	2000	389												
Di-n-butyltin	A	10	553	B	50	500	C	100	520	D	500	490	E	1000	510
	F	2000	485												
n-Butyltin	A	10	631	B	50	613	C	100	674	D	500	623	E	1000	648
	F	2000	615												
Tri-n-propyltin	A	11	296	B	54	289	C	110	290	D	540	280	E	1100	291
	F	2100	286												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.4		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.7		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	1.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D\0425R108.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	325	326	0	NA	± 30 %	AverageRF
Tri-n-butyltin	480	450	405	378	-7	NA	± 30 %	AverageRF
Di-n-butyltin	480	450	510	479	-6	NA	± 30 %	AverageRF
n-Butyltin	490	490	634	634	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/28/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

File ID: J:\GC11\DATA\042803\0428F016.D

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305908
Units: ng/ml
Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	410	609	504	-17	NA	± 25 %	AverageRF
Tri-n-butyltin	500	410	760	624	-18	NA	± 25 %	AverageRF
Di-n-butyltin	500	410	970	797	-18	NA	± 25 %	AverageRF
n-Butyltin	500	400	1320	1070	-19	NA	± 25 %	AverageRF
Tri-n-propyltin	540	460	557	477	-14	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	04/28/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305908
		Units:	ng/ml
File ID:	J:\GC11\DATA\042803\0428F016.D\0428R016.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	325	311	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	405	389	-4	NA	± 25 %	AverageRF
Di-n-butyltin	500	480	510	485	-5	NA	± 25 %	AverageRF
n-Butyltin	500	500	634	631	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	510	289	273	-5	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305908
		Units:	ng/ml
File ID:	J:\GC11\DATA\042803\0428F030.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	420	609	514	-16	NA	± 25 %	AverageRF
Tri-n-butyltin	500	430	760	660	-13	NA	± 25 %	AverageRF
Di-n-butyltin	500	420	970	816	-16	NA	± 25 %	AverageRF
n-Butyltin	500	420	1320	1100	-16	NA	± 25 %	AverageRF
Tri-n-propyltin	540	460	557	475	-15	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305908
Units: ng/ml

File ID: J:\GC11\DATA\042803\0428F030.D\0428R030.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	321	-1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	401	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	501	-2	NA	± 25 %	AverageRF
n-Butyltin	500	500	634	639	1	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	289	283	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305908
		Units:	ng/ml
File ID:	J:\GC11\DATA\042803\0428F039.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	609	533	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	440	760	676	-11	NA	± 25 %	AverageRF
Di-n-butyltin	500	430	970	834	-14	NA	± 25 %	AverageRF
n-Butyltin	500	420	1320	1120	-15	NA	± 25 %	AverageRF
Tri-n-propyltin	540	490	557	514	-8	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305908
		Units:	ng/ml
File ID:	J:\GC11\DATA\042803\0428F039.D\0428R039.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	500	325	325	0	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	405	408	1	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	501	-2	NA	± 25 %	AverageRF
n-Butyltin	500	520	634	654	3	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	289	293	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 05/01/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0306168
Units: ng/ml

File ID: J:\GC11\DATA\050103\0501F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	450	609	550	-10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	760	688	-9	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	872	-10	NA	± 25 %	AverageRF
n-Butyltin	500	430	1320	1140	-13	NA	± 25 %	AverageRF
Tri-n-propyltin	540	530	557	556	0	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 05/01/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0306168
Units: ng/ml

File ID: J:\GC11\DATA\050103\0501F002.D\0501R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	325	305	-6	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	405	387	-5	NA	± 25 %	AverageRF
Di-n-butyltin	500	460	510	470	-8	NA	± 25 %	AverageRF
n-Butyltin	500	480	634	607	-4	NA	± 25 %	AverageRF
Tri-n-propyltin	540	510	289	276	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 05/01/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0306168
Units: ng/ml

File ID: J:\GC11\DATA\050103\0501F008.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	400	609	490	-19	NA	± 25 %	AverageRF
Tri-n-butyltin	500	410	760	620	-18	NA	± 25 %	AverageRF
Di-n-butyltin	500	390	970	765	-21	NA	± 25 %	AverageRF
n-Butyltin	500	380	1320	993	-25	NA	± 25 %	AverageRF
Tri-n-propyltin	540	440	557	463	-17	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 05/01/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0306168
Units: ng/ml

File ID: J:\GC11\DATA\050103\0501F008.D\0501R008.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	325	297	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	460	405	376	-7	NA	± 25 %	AverageRF
Di-n-butyltin	500	460	510	467	-8	NA	± 25 %	AverageRF
n-Butyltin	500	470	634	595	-6	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	289	272	-6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305908
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0428F001.D	Instrument Blank	KWG0305908-1	4/28/2003	17:20		4/28/2003	17:32
0428F002.D	Continuing Calibration Verification	KWG0305908-2	4/28/2003	17:38		4/28/2003	17:50
0428F003.D	ZZZZZZ	ZZZZZZ	4/28/2003	17:56		4/28/2003	18:08
0428F004.D	ZZZZZZ	ZZZZZZ	4/28/2003	18:14		4/28/2003	18:26
0428F005.D	ZZZZZZ	ZZZZZZ	4/28/2003	18:32		4/28/2003	18:44
0428F006.D	ZZZZZZ	ZZZZZZ	4/28/2003	18:49		4/28/2003	19:01
0428F007.D	ZZZZZZ	ZZZZZZ	4/28/2003	19:07		4/28/2003	19:19
0428F008.D	ZZZZZZ	ZZZZZZ	4/28/2003	19:25		4/28/2003	19:37
0428F009.D	ZZZZZZ	ZZZZZZ	4/28/2003	19:43		4/28/2003	19:55
0428F010.D	ZZZZZZ	ZZZZZZ	4/28/2003	20:00		4/28/2003	20:12
0428F011.D	ZZZZZZ	ZZZZZZ	4/28/2003	20:18		4/28/2003	20:30
0428F015.D	Instrument Blank	KWG0305908-3	4/28/2003	21:29		4/28/2003	21:41
0428F016.D	Continuing Calibration Verification	KWG0305908-4	4/28/2003	21:47		4/28/2003	21:59
0428F023.D	Method Blank	KWG0304757-4	4/28/2003	23:52		4/29/2003	00:04
0428F024.D	Lab Control Sample	KWG0304757-3	4/29/2003	00:10		4/29/2003	00:22
0428F025.D	ZZZZZZ	ZZZZZZ	4/29/2003	00:27		4/29/2003	00:39
0428F026.D	ZZZZZZ	ZZZZZZ	4/29/2003	00:45		4/29/2003	00:57
0428F027.D	ZZZZZZ	ZZZZZZ	4/29/2003	01:03		4/29/2003	01:15
0428F028.D	ZZZZZZ	ZZZZZZ	4/29/2003	01:21		4/29/2003	01:33
0428F029.D	Instrument Blank	KWG0305908-5	4/29/2003	01:38		4/29/2003	01:50
0428F030.D	Continuing Calibration Verification	KWG0305908-6	4/29/2003	01:56		4/29/2003	02:08
0428F031.D	ZZZZZZ	ZZZZZZ	4/29/2003	02:14		4/29/2003	02:26
0428F032.D	ZZZZZZ	ZZZZZZ	4/29/2003	02:32		4/29/2003	02:44
0428F036.D	ZZZZZZ	ZZZZZZ	4/29/2003	03:44		4/29/2003	03:56
0428F037.D	Offshore Water	K2302596-001	4/29/2003	04:01		4/29/2003	04:13
0428F038.D	Instrument Blank	KWG0305908-7	4/29/2003	04:19		4/29/2003	04:31
0428F039.D	Continuing Calibration Verification	KWG0305908-8	4/29/2003	04:37		4/29/2003	04:49

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0306168
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0501F001.D	Instrument Blank	KWG0306168-1	5/1/2003	16:41		5/1/2003	16:53
0501F002.D	Continuing Calibration Verification	KWG0306168-2	5/1/2003	16:59		5/1/2003	17:11
0501F003.D	ZZZZZZ	ZZZZZZ	5/1/2003	17:17		5/1/2003	17:29
0501F004.D	Batch QC	K2302556-005	5/1/2003	17:35		5/1/2003	17:47
0501F005.D	Batch QCMS	KWG0304757-1	5/1/2003	17:52		5/1/2003	18:04
0501F006.D	Batch QCDMS	KWG0304757-2	5/1/2003	18:10		5/1/2003	18:22
0501F007.D	Instrument Blank	KWG0306168-3	5/1/2003	18:28		5/1/2003	18:40
0501F008.D	Continuing Calibration Verification	KWG0306168-4	5/1/2003	18:46		5/1/2003	18:58

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302596
Date Extracted: 04/08/2003

Extraction Prep Log
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Extraction Lot: KWG0304757
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Offshore Water	K2302596-001	04/03/03	04/08/03	500ml	0.5ml	NA	
Method Blank	KWG0304757-4	NA	NA	500ml	0.5ml	NA	
Batch QC	K2302556-005	NA	NA	500ml	0.5ml	NA	
Batch QCMS	KWG0304757-1	NA	NA	500ml	0.5ml	NA	
Batch QCDMS	KWG0304757-2	NA	NA	500ml	0.5ml	NA	
Lab Control Sample	KWG0304757-3	NA	NA	500ml	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
Offshore Water	K2302596-001	04/03/2003	04/08/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 4/23/03

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/03/2003
Sample Matrix:	Water	**Date Received:**	04/08/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	Offshore Water	**Units:**	ug/L
Lab Code:	K2302596-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0043**	J	0.020	0.0032	1	04/10/03	04/18/03	KWG0304981	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/10/03	04/18/03	KWG0304981	
Acenaphthylene	ND	U	0.020	0.0018	1	04/10/03	04/18/03	KWG0304981	
Acenaphthene	ND	U	0.020	0.0020	1	04/10/03	04/18/03	KWG0304981	
Dibenzofuran	ND	U	0.020	0.0071	1	04/10/03	04/18/03	KWG0304981	
Fluorene	ND	U	0.020	0.0026	1	04/10/03	04/18/03	KWG0304981	
Phenanthrene	ND	U	0.020	0.0032	1	04/10/03	04/18/03	KWG0304981	
Anthracene	ND	U	0.020	0.0011	1	04/10/03	04/18/03	KWG0304981	
Fluoranthene	ND	U	0.020	0.0024	1	04/10/03	04/18/03	KWG0304981	
Pyrene	ND	U	0.020	0.0023	1	04/10/03	04/18/03	KWG0304981	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/10/03	04/18/03	KWG0304981	
Chrysene	ND	U	0.020	0.0013	1	04/10/03	04/18/03	KWG0304981	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/10/03	04/18/03	KWG0304981	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/10/03	04/18/03	KWG0304981	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/10/03	04/18/03	KWG0304981	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/10/03	04/18/03	KWG0304981	
Dibenz(a,h)anthracene	**0.0024**	J	0.020	0.0017	1	04/10/03	04/18/03	KWG0304981	*
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/10/03	04/18/03	KWG0304981	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	62	34-115	04/18/03	Acceptable
Fluorene-d10	60	43-96	04/18/03	Acceptable
Fluoranthene-d10	39	20-131	04/18/03	Acceptable
Terphenyl-d14	78	13-146	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0304981-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	0.0032	1	04/10/03	04/17/03	KWG0304981	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/10/03	04/17/03	KWG0304981	
Acenaphthylene	ND	U	0.020	0.0018	1	04/10/03	04/17/03	KWG0304981	
Acenaphthene	ND	U	0.020	0.0020	1	04/10/03	04/17/03	KWG0304981	
Dibenzofuran	ND	U	0.020	0.0071	1	04/10/03	04/17/03	KWG0304981	
Fluorene	ND	U	0.020	0.0026	1	04/10/03	04/17/03	KWG0304981	
Phenanthrene	**0.0059**	J	0.020	0.0032	1	04/10/03	04/17/03	KWG0304981	
Anthracene	ND	U	0.020	0.0011	1	04/10/03	04/17/03	KWG0304981	
Fluoranthene	**0.0047**	J	0.020	0.0024	1	04/10/03	04/17/03	KWG0304981	
Pyrene	**0.0035**	J	0.020	0.0023	1	04/10/03	04/17/03	KWG0304981	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/10/03	04/17/03	KWG0304981	
Chrysene	ND	U	0.020	0.0013	1	04/10/03	04/17/03	KWG0304981	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/10/03	04/17/03	KWG0304981	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/10/03	04/17/03	KWG0304981	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/10/03	04/17/03	KWG0304981	
Indeno(1,2,3-cd)pyrene	**0.0039**	J	0.020	0.0021	1	04/10/03	04/17/03	KWG0304981	
Dibenz(a,h)anthracene	**0.0045**	J	0.020	0.0017	1	04/10/03	04/17/03	KWG0304981	*
Benzo(g,h,i)perylene	**0.0048**	J	0.020	0.0037	1	04/10/03	04/17/03	KWG0304981	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	80	34-115	04/17/03	Acceptable
Fluorene-d10	78	43-96	04/17/03	Acceptable
Fluoranthene-d10	98	20-131	04/17/03	Acceptable
Terphenyl-d14	112	13-146	04/17/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302596

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
Offshore Water	K2302596-001	62	60	39	78
Method Blank	KWG0304981-3	80	78	98	112
Lab Control Sample	KWG0304981-1	78	74	100	95
Duplicate Lab Control Sample	KWG0304981-2	87	81	102	96

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/17/2003
Time Analyzed: 16:13

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041703\0417F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305447-2
Analysis Lot: KWG0305447

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	312,417	5.22	170,493	7.54	269,495	10.35
	Upper Limit ==>	624,834	5.72	340,986	8.04	538,990	10.85
	Lower Limit ==>	156,209	4.72	85,247	7.04	134,748	9.85
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0304981-3	299,423	5.22	150,551	7.54	223,979	10.35
Lab Control Sample	KWG0304981-1	291,667	5.22	157,961	7.54	243,931	10.35
Duplicate Lab Control Sample	KWG0304981-2	261,612	5.22	142,337	7.54	218,099	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/17/2003
Time Analyzed: 16:13

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041703\0417F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305447-2
Analysis Lot: KWG0305447

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	293,674	16.38	165,776	20.12
	Upper Limit ==>	587,348	16.88	331,552	20.62
	Lower Limit ==>	146,837	15.88	82,888	19.62
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0304981-3	217,600	16.38	102,492	20.11
Lab Control Sample	KWG0304981-1	277,754	16.37	163,576	20.11
Duplicate Lab Control Sample	KWG0304981-2	250,936	16.37	158,290	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/18/2003
Time Analyzed: 10:11

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041803\0418F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305455-2
Analysis Lot: KWG0305455

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	291,195	5.22	158,247	7.54	256,976	10.35
	Upper Limit ==>	582,390	5.72	316,494	8.04	513,952	10.85
	Lower Limit ==>	145,598	4.72	79,124	7.04	128,488	9.85
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Offshore Water	K2302596-001	320,070	5.22	164,291	7.54	246,825	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	04/18/2003
		Time Analyzed:	10:11

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\041803\0418F003.D	**Lab Code:**	KWG0305455-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305455
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	275,972	16.37	157,998	20.12
	Upper Limit ==>	551,944	16.87	315,996	20.62
	Lower Limit ==>	137,986	15.87	78,999	19.62
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Offshore Water	K2302596-001	242,856	16.37	114,468	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/10/2003
Sample Matrix:	Water	**Date Analyzed:**	04/17/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3520C	**Units:**	ug/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0304981

	Lab Control Sample KWG0304981-1 Lab Control Spike			Duplicate Lab Control Sample KWG0304981-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	4.30	5.00	86	4.41	5.00	88	37-95	3	30
2-Methylnaphthalene	4.34	5.00	87	4.47	5.00	89	26-110	3	30
Acenaphthylene	4.56	5.00	91	4.66	5.00	93	44-103	2	30
Acenaphthene	4.58	5.00	92	4.66	5.00	93	41-97	2	30
Dibenzofuran	4.75	5.00	95	4.89	5.00	98	17-130	3	30
Fluorene	4.91	5.00	98	5.02	5.00	100	46-102	2	30
Phenanthrene	4.73	5.00	95	4.88	5.00	98	47-101	3	30
Anthracene	3.56	5.00	71	3.87	5.00	77	45-104	8	30
Fluoranthene	5.43	5.00	109	5.51	5.00	110	51-112	2	30
Pyrene	4.62	5.00	92	4.66	5.00	93	45-111	1	30
Benz(a)anthracene	4.56	5.00	91	4.74	5.00	95	50-111	4	30
Chrysene	4.95	5.00	99	5.09	5.00	102	51-108	3	30
Benzo(b)fluoranthene	4.78	5.00	96	4.85	5.00	97	54-114	2	30
Benzo(k)fluoranthene	4.76	5.00	95	4.73	5.00	95	51-117	1	30
Benzo(a)pyrene	3.81	5.00	76	4.40	5.00	88	51-119	14	30
Indeno(1,2,3-cd)pyrene	5.62	5.00	112	6.17	5.00	123	43-127	9	30
Dibenz(a,h)anthracene	5.65	5.00	113	6.24	5.00	125 *	47-119	10	30
Benzo(g,h,i)perylene	5.60	5.00	112	6.04	5.00	121 *	44-115	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302596
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/10/2003
Sample Matrix:	Water	**Date Analyzed:**	04/17/2003
		Time Analyzed:	17:26

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\041703\0417F005.D
Lab Code:	KWG0304981-3	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0304981

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0304981-1	J:\MS11\DATA\041703\0417F010.D	04/17/03	20:23
Duplicate Lab Control Sample	KWG0304981-2	J:\MS11\DATA\041703\0417F011.D	04/17/03	20:59
Offshore Water	K2302596-001	J:\MS11\DATA\041803\0418F007.D	04/18/03	12:37

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302596
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0304981-1	**Lab Code:**	KWG0304981-2
File ID:	J:\MS11\DATA\041703\0417F010.D	**File ID:**	J:\MS11\DATA\041703\0417F011.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/10/2003	**Date Extracted:**	04/10/2003
Date Analyzed:	04/17/2003	**Date Analyzed:**	04/17/2003
Time Analyzed:	20:23	**Time Analyzed:**	20:59

Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0304981

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0304981-3	J:\MS11\DATA\041703\0417F005.D	04/17/03	17:26
Offshore Water	K2302596-001	J:\MS11\DATA\041803\0418F007.D	04/18/03	12:37

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/17/2003
Time Analyzed: 15:52

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041703\0417F002.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305447

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.3	396032	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.5	452352	PASS
70	69	0	2	0.5	2397	PASS
127	198	10	80	44.0	593472	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	61.3	1349632	PASS
199	198	5	9	6.8	91816	PASS
275	198	10	60	31.7	428352	PASS
365	442	1	50	2.4	53128	PASS
441	443	0	100	73.5	326336	PASS
442	442	100	100	100.0	2202112	PASS
443	442	15	24	20.2	444160	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305447-2	J:\MS11\DATA\041703\0417F003.D	04/17/2003	16:13	
Method Blank	KWG0304981-3	J:\MS11\DATA\041703\0417F005.D	04/17/2003	17:26	
Lab Control Sample	KWG0304981-1	J:\MS11\DATA\041703\0417F010.D	04/17/2003	20:23	
Duplicate Lab Control Sample	KWG0304981-2	J:\MS11\DATA\041703\0417F011.D	04/17/2003	20:59	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/18/2003
Time Analyzed: 09:49

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041803\0418F002.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305455

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.1	410240	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.1	466496	PASS
70	69	0	2	0.5	2366	PASS
127	198	10	80	43.9	619136	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	61.1	1410048	PASS
199	198	5	9	6.9	96736	PASS
275	198	10	60	31.6	445952	PASS
365	442	1	50	2.4	54808	PASS
441	443	0	100	75.0	350336	PASS
442	442	100	100	100.0	2309120	PASS
443	442	15	24	20.2	467072	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305455-2	J:\MS11\DATA\041803\0418F003.D	04/18/2003	10:11	
Offshore Water	K2302596-001	J:\MS11\DATA\041803\0418F007.D	04/18/2003	12:37	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302596
Project: Canaveral Harbor 103 Evaluation **Calibration Date:** 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533 **Column:** MS
Instrument ID: MS11

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/17/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305447
Units: ng/ml

File ID: J:\MS11\DATA\041703\0417F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.658	0	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.72	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	1	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.55	3	NA	± 20 %	AverageRF
Fluorene	2000	2000	0.01	1.22	1.25	2	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.12	-5	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	1.09	1.06	-2	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.12	-12	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.949	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.05	-5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1800	0.01	1.73	1.52	-12	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.91	-3	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.29	-4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.898	0	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.01	0.952	1.00	5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2100	0.01	1.15	1.22	6	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.737	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.03	-2	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	2000	0.01	1.01	1.00	-1	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.823	-10	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596
Date Analyzed: 04/18/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305455
Units: ng/ml

File ID: J:\MS11\DATA\041803\0418F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.658	0	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.75	0	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.58	5	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.26	3	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.11	-6	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.06	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.22	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.944	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.05	-5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.51	-13	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.87	-5	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.28	-5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.902	0.877	-3	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.01	0.952	0.978	3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2100	0.01	1.15	1.19	3	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.737	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.04	0	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.985	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.815	-11	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302596

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305447
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0417F002.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305447-1	4/17/2003	15:52		4/17/2003	16:05
0417F003.D	Continuing Calibration Verification	KWG0305447-2	4/17/2003	16:13		4/17/2003	16:39
0417F004.D	Instrument Blank	KWG0305447-3	4/17/2003	16:50		4/17/2003	17:16
0417F005.D	Method Blank	KWG0304981-3	4/17/2003	17:26		4/17/2003	17:52
0417F008.D	ZZZZZZ	ZZZZZZ	4/17/2003	19:12		4/17/2003	19:38
0417F009.D	ZZZZZZ	ZZZZZZ	4/17/2003	19:48		4/17/2003	20:14
0417F010.D	Lab Control Sample	KWG0304981-1	4/17/2003	20:23		4/17/2003	20:49
0417F011.D	Duplicate Lab Control Sample	KWG0304981-2	4/17/2003	20:59		4/17/2003	21:25
0417F012.D	ZZZZZZ	ZZZZZZ	4/17/2003	21:35		4/17/2003	22:01

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302596
Project: Canaveral Harbor 103 Evaluation

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0305455
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0418F002.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305455-1	4/18/2003	09:49		4/18/2003	10:02
0418F003.D	Continuing Calibration Verification	KWG0305455-2	4/18/2003	10:11		4/18/2003	10:37
0418F004.D	Instrument Blank	KWG0305455-3	4/18/2003	10:47		4/18/2003	11:13
0418F005.D	ZZZZZZ	ZZZZZZ	4/18/2003	11:24		4/18/2003	11:50
0418F006.D	ZZZZZZ	ZZZZZZ	4/18/2003	12:01		4/18/2003	12:27
0418F007.D	Offshore Water	K2302596-001	4/18/2003	12:37		4/18/2003	13:03
0418F008.D	ZZZZZZ	ZZZZZZ	4/18/2003	13:13		4/18/2003	13:39
0418F009.D	ZZZZZZ	ZZZZZZ	4/18/2003	13:50		4/18/2003	14:16
0418F010.D	ZZZZZZ	ZZZZZZ	4/18/2003	14:26		4/18/2003	14:52
0418F011.D	ZZZZZZ	ZZZZZZ	4/18/2003	15:03		4/18/2003	15:29
0418F012.D	ZZZZZZ	ZZZZZZ	4/18/2003	15:39		4/18/2003	16:05
0418F013.D	ZZZZZZ	ZZZZZZ	4/18/2003	16:15		4/18/2003	16:41
0418F014.D	ZZZZZZ	ZZZZZZ	4/18/2003	16:52		4/18/2003	17:18
0418F015.D	ZZZZZZ	ZZZZZZ	4/18/2003	17:28		4/18/2003	17:54
0418F016.D	ZZZZZZ	ZZZZZZ	4/18/2003	18:03		4/18/2003	18:29
0418F017.D	ZZZZZZ	ZZZZZZ	4/18/2003	18:39		4/18/2003	19:05
0418F018.D	ZZZZZZ	ZZZZZZ	4/18/2003	19:15		4/18/2003	19:41
0418F019.D	ZZZZZZ	ZZZZZZ	4/18/2003	19:50		4/18/2003	20:16
0418F020.D	ZZZZZZ	ZZZZZZ	4/18/2003	20:26		4/18/2003	20:52
0418F021.D	ZZZZZZ	ZZZZZZ	4/18/2003	21:01		4/18/2003	21:27
0418F022.D	ZZZZZZ	ZZZZZZ	4/18/2003	21:37		4/18/2003	22:03

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302596
Date Extracted: 04/10/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0304981
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Offshore Water	K2302596-001	04/03/03	04/08/03	1050ml	1ml	NA	
Method Blank	KWG0304981-3	NA	NA	1000ml	1ml	NA	
Lab Control Sample	KWG0304981-1	NA	NA	1000ml	1ml	NA	
Duplicate Lab Control Sample	KWG0304981-2	NA	NA	1000ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 21, 2003 Service Request No: K2302965

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 22, 2003. For your reference, these analyses have been assigned our service request number K2302965.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/cb

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Received:**	4/22/03
Sample Matrix:	Sediment		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One sediment sample was received for analysis at Columbia Analytical Services on 4/22/03. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Total Cyanide by EPA Method 9010:
The reporting limit is elevated for Cyanide in sample CH-Control-Sed because the sample required dilution. The distillate contained a significant amount of carbonate from distillation of carbon dioxide from the bulk sediment sample. The carbonate prevented analysis of the distillate without dilution.

The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) analyses of Cyanide for sample CH-Control-Sed yield relatively low recoveries. Carbonate in the bulk sediment was suspected as the cause of the matrix interference. No further corrective action was appropriate.

Total Sulfides by EPA Method 9030M:
The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries of Sulfides for sample CH-Control-Sed were outside control criteria because of suspected matrix interference (i.e. carbonate in the bulk sediment). The sample was reanalyzed one day past hold and yielded similar results. The results of the original analysis are reported. No further corrective action was appropriate.

The spike recovery of Sulfides for the Laboratory Control Sample (LCS) was outside the lower control criterion. The error associated with reduced recovery equates to a potential low bias. The associated field sample was reanalyzed one day past hold and the LCS produced acceptable recovery. The results from the reanalysis were similar to that of the original analysis. The results of the original analysis are reported. The data is flagged to indicate the problem.

No other anomalies associated with the analysis of this sample were observed.

Total Metals

The control criteria for matrix spike recoveries of Aluminum and Iron for sample CH-Control-Sed are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The matrix spike recovery of Antimony for sample CH-Control-Sed was below the CAS control criterion. Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals

Approved by T. Cl **Date** 5/21/03

analyses. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. Since low recoveries result from a method defect and can be magnified by certain matrix components, no corrective action is appropriate other than using alternative procedures, which specifically target Antimony. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicate the analysis was in control.

No other anomalies associated with the analysis of this sample were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of this sample were observed.

Organotin Compounds

Surrogate Exceptions:
The lower control criterion was exceeded for the following surrogate in Method Blank KWG0305876-4: Tri-n-propyltin. The problem indicates a potential low bias in the Method Blank. However, the associated sample yielded acceptable surrogate recovery and no Organotin was detected. Therefore, the problem was isolated to the Method Blank. The results from the original analysis are reported. The data is flagged to indicate the problem.

No other anomalies associated with the analysis of this sample were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Surrogate Exceptions:
The control criteria were exceeded for the following surrogate in CH-Control-Sed: Biphenyl-d10 (33% recovery versus 39% control limit). Three other surrogates were evaluated for this analysis and all were within acceptance criteria. No further corrective action was taken.

Matrix Spike Recovery Exceptions:
The matrix spike recoveries of Naphthalene and 2-Methylnaphthalene for sample CH-Control-SedMS were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. No further corrective action was appropriate.

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) was outside control criteria for a number of analytes for the replicate matrix spike analysis of sample CH-Control-Sed. All recoveries for the Matrix Spike (MS) and Matrix Spike Duplicate (MSD) were within acceptance criteria. In addition, all recoveries for the associated Laboratory Control Sample (LCS) and Duplicate Laboratory Control Sample (DLCS) were within acceptance limits, indicating the analytical batch was in control.

No other anomalies associated with the analysis of this sample were observed.

Approved by _____ **Date** 5/21/03

Chain of Custody Documentation

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custory

1(23029165

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
CH-Control-Sed	04/17/03	1705	Sediment	16 oz glass jars	2	Per Contract		Sediment Received from
CH-Control-Elut.	04/17/03	0955	Elutriate	various	7	Per Contract		Marine - CSC
	04/ /03					Per Contract		
	04/ /03					Per Contract		PPB performed elutriation
	04/ /03					Per Contract		
	04/ /03					Per Contract		Collection of sea water
	04/ /03					Per Contract		for elutriation (0955
	04/ /03					Per Contract		4/17/03) indicates
	04/ /03					Per Contract		start of holding time
	04/ /03					Per Contract		for elutriate sample
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		Note: As per Nadia
	04/ /03					Per Contract		Lombardero, sample
	04/ /03					Per Contract		dates are 4/17/03
	04/ /03					Per Contract		for both the sediment
	04/ /03					Per Contract		and the Elutriate.
	04/ /03					Per Contract		
	04/ /03					Per Contract		4/22/03
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		

~~Precleaned Containers~~ Relinquished by: [signature]
Date: 4/21/03 Time: 1540
Samples Relinquished by: [signature]
Date: 4/21/03 Time: 1645

Received by: [signature]
Date: 4/21/03 Time: 1540
Received by: [signature]
Date: 4/22/03 Time: 1000

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Anamar Work Order K23 02965

Cooler received on 4/22/03 and opened on 4/22/03 by [illegible]

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: (Y) N
4. COC #
   Temperature of cooler(s) upon receipt: 4.5
   Temperature Blank: 2.1
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present bmap - loose ice
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? (Y) N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103
Sample Matrix: Sediment

Service Request: K2302965

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	04/17/2003	04/22/2003	04/22/2003	74.2	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103	**Date Collected:**	04/17/2003
Sample Matrix:	Sediment	**Date Received:**	04/22/2003
		Date Analyzed:	04/22/2003

Duplicate Sample Summary

Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	WET
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
CH-Control-Sed	K2302965-001	74.2	73.8	74.0	<1	

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Sulfide, Total

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9030M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	22	13	10	NA	04/30/03	165	
Method Blank	K2302965-MB	2.2	1.3	1	NA	04/30/03	ND	

M Modified for analysis of soil.

Approved By: MJ Smith Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Sulfide, Total

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9030M	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	16	10	10	NA	04/30/03	123	
Method Blank	K2302965-MB	1.6	1.0	1	NA	04/30/03	ND	

M Modified for analysis of soil.

Approved By: MJ Fitt Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Collected: 04/17/03
Date Received: 04/22/03
Date Extracted: NA
Date Analyzed: 04/30/03

Duplicate Summary
Inorganic Parameters

Sample Name: CH-Control-Sed
Lab Code: K2302965-001DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	NONE	9030M	22	165	159	162	4	

Approved By: MJ Fitt Date: 5/15/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03
		Date Extracted:	NA
		Date Analyzed:	04/30/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	CH-Control-Sed	Units:	mg/Kg (ppm)
Lab Code:	K2302965-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	NONE	9030M	176	1020	165	1510	132	60-130	*

Approved By: MY Fit Date: 5/15/03

MS/020597p

02965WET.MF7 - MS 05/15/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	04/30/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2302965-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	NONE	9030M	0.90	0.36	40	60-130	*

Approved By: MJ Fitt Date: 5/15/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/30/03

Sulfide, Total
EPA Method 9030M
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.90	0.90	100
CCV 2 Result	0.90	0.90	100

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.1	ND
CCB 2 Result	0.1	ND

Approved By: [signature] Date: 5/15/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Ammonia as Nitrogen

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	350.1M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	0.4	0.2	1	NA	04/24/03	2.0	
Method Blank	K2302965-MB	0.4	0.2	1	NA	04/24/03	ND	

M Modified for analysis of soil.
* Analysis was performed on a 2M KCl extract.

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Ammonia as Nitrogen

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	350.1M	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	0.3	0.1	1	NA	04/24/03	1.5	
Method Blank	K2302965-MB	0.3	0.1	1	NA	04/24/03	ND	

M Modified for analysis of soil.
* Analysis was performed on a 2M KCl extract.

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Collected: 04/17/03
Date Received: 04/22/03
Date Extracted: NA
Date Analyzed: 04/24/03

Duplicate Summary
Inorganic Parameters

Sample Name: CH-Control-Sed
Lab Code: K2302965-001DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	NONE	350.1M	0.4	2.0	2.1	2.1	5	

Approved By: MA Pitt Date: 5/15/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03
		Date Extracted:	NA
		Date Analyzed:	04/24/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	CH-Control-Sed	Units:	mg/Kg (ppm)
Lab Code:	K2302965-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1M	20	647	2.0	707	109	75-125	

Approved By: _____ Date: 5/15/03

MS/020597p

02965WET.MF5 - MS 05/15/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	04/24/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2302965-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1M	2.29	2.29	100	85-115	

Approved By: MY F M Date: 5/15/03

LCS/020597p

02965WET.MF5 - LCS 05/15/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/24/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 6 Result	2.00	1.98	99
CCV 7 Result	2.00	1.97	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 6 Result	0.05	ND
CCB 7 Result	0.05	ND

Approved By: MJ Dt Date: 5/15/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	0.05	0.02	1	NA	05/10/03	0.66	
Method Blank	K2302965-MB	0.05	0.02	1	NA	05/10/03	ND	

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	0.05	0.02	1	NA	05/10/03	0.49	
Method Blank	K2302965-MB	0.05	0.02	1	NA	05/10/03	ND	

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03
		Date Extracted:	NA
		Date Analyzed:	05/10/03

Duplicate Summary
Inorganic Parameters

Sample Name:	CH-Control-Sed	Units:	PERCENT
Lab Code:	K2302965-001DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.05	0.66	0.62	0.64	6	

Approved By: MJ Smith Date: 5/15/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03
		Date Extracted:	NA
		Date Analyzed:	05/10/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	CH-Control-Sed	Units:	PERCENT
Lab Code:	K2302965-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.05	9.41	0.66	9.75	97	75-125	

Approved By: _____ Date: 5/15/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/10/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2302965-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.57	0.63	111	85-115	

Approved By: [signature] Date: 5/15/03

LCS/020597p

02965WET.MF3 - LCS 05/15/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/10/03

Carbon, Total Organic
ASTM Method D4129-82M
Units: PERCENT

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 3 Result	20.0	19.6	98
CCV 4 Result	20.0	20.2	101

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 3 Result	0.05	ND
CCB 4 Result	0.05	ND

Approved By: MJ Fitt Date: 5/15/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Cyanide, Total

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9010	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	1	0.25	5	NA	04/30/03	ND	i
Method Blank	K2302965-MB	0.2	0.05	1	NA	04/30/03	ND	

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03

Cyanide, Total

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9010	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
CH-Control-Sed	K2302965-001	1	0.2	5	NA	04/30/03	ND	i
Method Blank	K2302965-MB	0.2	0.04	1	NA	04/30/03	ND	

Approved By: MJ F Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03
		Date Extracted:	NA
		Date Analyzed:	04/30/03

Duplicate Summary
Inorganic Parameters

Sample Name:	CH-Control-Sed	Units:	mg/Kg (ppm)
Lab Code:	K2302965-001DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	NONE	9010	1	ND	ND	ND	-	i

Approved By: _____ Date: 5/15/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/03
Sample Matrix:	Sediment	**Date Received:**	04/22/03
		Date Extracted:	NA
		Date Analyzed:	04/30/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	CH-Control-Sed	Units:	mg/Kg (ppm)
Lab Code:	K2302965-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	9010	0.2	2.5	ND	1.9	76	75-125	

Approved By: MI Fitt Date: 5/15/03

MS/020597p

02965WET.MF1 - MS 05/14/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	04/30/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2302965-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	9010	26.6	26.3	99	85-115	

Approved By: _____ Date: 5/15/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Collected: NA
Date Received: NA
Date Analyzed: 04/30/03

Cyanide, Total
EPA Method 9010
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 4 Result	100	106	106
CCV 5 Result	100	102	102
CCV 7 Result	100	105	105
CCV 8 Result	100	103	103

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 4 Result	10	ND
CCB 5 Result	10	ND
CCB 7 Result	10	ND
CCB 8 Result	10	ND

Approved By: _____ Date: 5/15/03

COMBOQCD/042695

Metals

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Sample No.	Lab Sample ID.
CH-Control-Sed	K2302965-001
CH-Control-SedD	K2302965-001D
CH-Control-SedS	K2302965-001S
Method Blank	K2302965-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/15/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: SEDIMENT

Service Request: K2302965
Date Collected: 04/17/03
Date Received: 04/22/03
Units: MG/KG
Basis: Dry

Sample Name: CH-Control-Sed
Lab Code: K2302965-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	7.4	5.9	2	5/6/03	5/9/03	4690		
Antimony	200.8	0.04	0.02	5	5/6/03	5/8/03	0.03	B	N
Arsenic	200.8	0.4	0.1	5	5/6/03	5/14/03	1.6		
Cadmium	200.8	0.037	0.004	5	5/6/03	5/14/03	0.019	B	
Chromium	200.8	0.15	0.03	5	5/6/03	5/14/03	6.14		
Copper	200.8	0.07	0.05	5	5/6/03	5/14/03	2.56		
Iron	6010B	3.0	0.7	2	5/6/03	5/9/03	4560		
Mercury	7471A	0.02	0.01	1	5/6/03	5/7/03	0.01	B	
Nickel	200.8	0.15	0.02	5	5/6/03	5/14/03	2.13		
Silver	200.8	0.01	0.01	5	5/6/03	5/8/03	0.02		
Zinc	200.8	0.4	0.1	5	5/6/03	5/14/03	6.8		

% Solids: 74.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302965
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: Method Blank
Lab Code: K2302965-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	8.0	2	5/6/03	5/9/03	8.0	U	
Antimony	200.8	0.05	0.03	5	5/6/03	5/8/03	0.03	U	N
Arsenic	200.8	0.5	0.2	5	5/6/03	5/14/03	0.2	U	
Cadmium	200.8	0.050	0.006	5	5/6/03	5/14/03	0.006	U	
Chromium	200.8	0.20	0.04	5	5/6/03	5/14/03	0.09	B	
Copper	200.8	0.10	0.07	5	5/6/03	5/14/03	0.07	U	
Iron	6010B	4.0	1.0	2	5/6/03	5/9/03	1.0	U	
Mercury	7471A	0.02	0.01	1	5/6/03	5/7/03	0.01	U	
Nickel	200.8	0.20	0.03	5	5/6/03	5/14/03	0.04	B	
Silver	200.8	0.02	0.02	5	5/6/03	5/8/03	0.02	U	
Zinc	200.8	0.5	0.1	5	5/6/03	5/14/03	0.1	B	

% Solids: 100.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: SEDIMENT

Service Request: K2302965
Date Collected: 04/17/03
Date Received: 04/22/03
Units: MG/KG
Basis: Wet

Sample Name: CH-Control-Sed
Lab Code: K2302965-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.5	4.4	2	5/6/03	5/9/03	3480		
Antimony	200.8	0.03	0.02	5	5/6/03	5/8/03	0.03	B	N
Arsenic	200.8	0.3	0.1	5	5/6/03	5/14/03	1.2		
Cadmium	200.8	0.028	0.003	5	5/6/03	5/14/03	0.014	B	
Chromium	200.8	0.11	0.02	5	5/6/03	5/14/03	4.56		
Copper	200.8	0.06	0.04	5	5/6/03	5/14/03	1.90		
Iron	6010B	2.2	0.5	2	5/6/03	5/9/03	3380		
Mercury	7471A	0.01	0.01	1	5/6/03	5/7/03	0.01	B	
Nickel	200.8	0.11	0.02	5	5/6/03	5/14/03	1.58		
Silver	200.8	0.01	0.01	5	5/6/03	5/8/03	0.01		
Zinc	200.8	0.3	0.1	5	5/6/03	5/14/03	5.0		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302965
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2302965-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	8.0	2	5/6/03	5/9/03	8.0	U	
Antimony	200.8	0.05	0.03	5	5/6/03	5/8/03	0.03	U	N
Arsenic	200.8	0.5	0.2	5	5/6/03	5/14/03	0.2	U	
Cadmium	200.8	0.050	0.006	5	5/6/03	5/14/03	0.006	U	
Chromium	200.8	0.20	0.04	5	5/6/03	5/14/03	0.09	B	
Copper	200.8	0.10	0.07	5	5/6/03	5/14/03	0.07	U	
Iron	6010B	4.0	1.0	2	5/6/03	5/9/03	1.0	U	
Mercury	7471A	0.02	0.01	1	5/6/03	5/7/03	0.01	U	
Nickel	200.8	0.20	0.03	5	5/6/03	5/14/03	0.04	B	
Silver	200.8	0.02	0.02	5	5/6/03	5/8/03	0.02	U	
Zinc	200.8	0.5	0.1	5	5/6/03	5/14/03	0.1	B	

% Solids: NA

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	5050	101	5000	4940	99	4980	100	6010B
Antimony	25.0	23.9	96	25.0	24.8	99	24.9	100	200.8
Arsenic	25.0	23.4	94	25.0	24.8	99	24.2	97	200.8
Cadmium	12.5	12.0	96	25.0	25.2	101	24.5	98	200.8
Chromium	10.0	9.40	94	25.0	24.8	99	24.4	98	200.8
Copper	12.5	11.8	94	25.0	24.7	99	24.8	99	200.8
Iron	2500	2470	99	5000	4930	99	5000	100	6010B
Mercury	5.0	5.46	109	5.0	5.15	103	5.21	104	7471A
Nickel	25.0	23.3	93	25.0	24.7	99	24.4	98	200.8
Silver	12.5	12.1	97	25.0	24.5	98	24.8	99	200.8
Zinc	25.0	23.8	95	25.0	25.1	100	24.5	98	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5080	102	5090	102	6010B
Antimony				25.0	24.7	99	24.7	99	200.8
Arsenic				25.0	23.4	94	23.4	94	200.8
Cadmium				25.0	24.0	96	23.9	96	200.8
Chromium				25.0	24.0	96	23.7	95	200.8
Copper				25.0	23.7	95	23.3	93	200.8
Iron				5000	5080	102	5110	102	6010B
Mercury				5.0	5.16	103			7471A
Nickel				25.0	23.3	93	23.1	92	200.8
Silver				25.0	23.8	95	24.0	96	200.8
Zinc				25.0	24.0	96	23.6	94	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5220	104			6010B
Antimony				25.0	24.5	98	24.5	98	200.8
Arsenic				25.0	23.2	93			200.8
Cadmium				25.0	23.6	94			200.8
Chromium				25.0	23.6	94			200.8
Copper				25.0	23.0	92			200.8
Iron				5000	5240	105			6010B
Nickel				25.0	22.9	92			200.8
Silver				25.0	24.1	96	24.2	97	200.8
Zinc				25.0	23.4	94			200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	5.0	5.16	103	5.0	4.91	98	4.82	96	7471A

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	60.0	120		
Antimony				0.10	0.11	106		
Arsenic				1.0	0.95	95		
Cadmium				0.10	0.090	90		
Chromium				0.40	0.40	101		
Copper				0.20	0.20	98		
Iron				20	17.4	87		
Mercury	0.20	0.22	109					
Nickel				0.40	0.39	98		
Silver				0.04	0.05	113		
Zinc				1.0	1.11	111		

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.20	0.22	111					

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum	40.0	U	40.0	U	40.0	U	40.0	U					6010B
Antimony	0.06	U	0.06	U	0.06	U	0.06	U					200.8
Arsenic	0.4	U	0.4	U	0.4	U	0.4	U					200.8
Cadmium	0.012	U	0.012	U	0.01	U	0.012	U					200.8
Chromium	0.08	U	0.08	U	0.08	U	0.08	U					200.8
Copper	0.14	U	0.14	U	0.15	B	0.14	U					200.8
Iron	5.0	U	5.0	U	5.0	U	5.0	U					6010B
Mercury	0.10	U	0.10	U	0.10	U	0.10	U					7471A
Nickel	0.06	U	0.06	U	0.06	U	0.06	U					200.8
Silver	0.04	U	0.04	U	0.04	U	0.04	U					200.8
Zinc	0.2	U	0.2	U	0.2	U	0.2	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum			40.0	U	40.0	U								6010B
Antimony			0.06	U	0.06	U	0.06	U						200.8
Arsenic			0.4	U	0.4	U								200.8
Cadmium			0.012	U	0.01	U								200.8
Chromium			0.08	U	0.08	U								200.8
Copper			0.14	U	0.14	U								200.8
Iron			5.0	U	5.5	B								6010B
Nickel			0.06	U	0.06	U								200.8
Silver			0.04	U	0.04	U	0.04	U						200.8
Zinc			0.2	U	0.2	U								200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Mercury	0.10	U	0.10	U	0.10	U							7471A

METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Arsenic		20	-0.0	17.9	90			
Cadmium		20	0.447	19.2	96			
Chromium		20	0.20	18.2	91			
Copper		20	0.22	17.6	88			
Nickel		20	0.19	17.5	87			
Zinc		20	0.5	18.4	92			

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA ICP-OES 6.2 ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	503000	506000	101	516000	518000	104
Iron	200000	200000	178000	179000	90	185000	186000	93

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation Basis: Dry

Matrix: SEDIMENT % Solids: 74.2

Sample Name: CH-Control-SedS Lab Code: K2302965-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		3100		4690		296	-537		6010B
Antimony	70 - 130	17.9		0.03	B	74.0	24	N	200.8
Arsenic	70 - 130	270		1.6		298	90		200.8
Cadmium	70 - 130	5.770		0.019	B	7.450	77		200.8
Chromium	70 - 130	35.7		6.14		29.8	99		200.8
Copper	70 - 130	32.4		2.56		37.2	80		200.8
Iron		4450		4560		148	-74		6010B
Mercury	71 - 124	0.44		0.01	B	0.46	93		7471A
Nickel	70 - 130	61.8		2.13		74.5	80		200.8
Silver	70 - 130	5.19		0.02		7.40	70		200.8
Zinc	70 - 130	67.6		6.8		74.5	82		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation Basis: Dry

Matrix: SEDIMENT % Solids: 74.2

Sample Name: CH-Control-SedD Lab Code: K2302965-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	4690		4590		2		6010B
Antimony		0.03	B	0.04	B	3		200.8
Arsenic		1.6		1.6		2		200.8
Cadmium		0.019	B	0.021	B	10		200.8
Chromium	30	6.14		5.56		10		200.8
Copper	30	2.56		2.50		2		200.8
Iron	30	4560		4590		1		6010B
Mercury		0.01	B	0.01	B	12		7471A
Nickel	30	2.13		2.03		5		200.8
Silver		0.02		0.01	U	200.0		200.8
Zinc	30	6.8		6.5		5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 7 -
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L True	Aqueous mg/L Found	Aqueous mg/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	C	Limits		%R
Aluminum				8270	9010		4200	12300	109
Antimony				32.6	21.0		0.0500	68.1	64
Arsenic				187	183		139	235	98
Cadmium				67.9	67.6		52.0	83.6	100
Chromium				144	150		115	173	104
Copper				91.3	84.2		74.8	108	92
Iron				12700	12600		7470	17900	99
Mercury				1.49	1.41		0.852	2.12	94
Nickel				78.0	70.7		61.1	94.9	91
Silver				90.0	86.7		67.0	113	96
Zinc				283	273		219	347	96

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.20	0.10	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.10	0.06	200.8
Arsenic	75		1.0	0.4	200.8
Cadmium	111		0.100	0.012	200.8
Chromium	52		0.40	0.08	200.8
Copper	65		0.20	0.14	200.8
Nickel	60		0.40	0.06	200.8
Silver	107		0.04	0.04	200.8
Zinc	66		1.0	0.2	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: TJA ICP-OES 6.2

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	308.20		50.0	40.0	6010B
Iron	259.90		20.0	5.0	6010B

Comments

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	308.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	193.6	0.0046000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.6	0.0000000	0.0000000	0.0004500	0.0003400	0.0000000
Cadmium	228.8	0.0000000	0.0000000	-0.0000600	0.0000000	0.0250000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000300	0.0000000	0.0000000
Cobalt	228.6	-0.0000200	0.0000000	0.0000370	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	-0.0000800	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0014000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	383.2	0.0000000	0.0000000	0.0041000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	-0.0002000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	-0.0000700	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000600	0.0000000	0.0000000
Phosphorus	214.9	0.0069000	0.0000000	0.0056000	0.0041000	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	-0.0001000	0.0000000	0.0000000
Silicon	288.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	-0.0003000	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0062000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	-0.0001000	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.4	0.0000000	0.0000000	0.0000500	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000410	0.0000000	0.0000000

Comments:

METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Mn	Mo	Ni
Aluminum	308.2	-0.0170000	0.0000000	0.0000000	0.0230000	0.0000000
Antimony	206.8	-0.0032100	0.0200000	0.0000000	0.0049000	-0.0070300
Arsenic	193.6	0.0000000	0.0012000	-0.0015000	0.0008360	0.0000000
Barium	493.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	-0.0000470	0.0000000
Boron	249.6	0.0009000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.8	-0.0059400	0.0000000	0.0000000	0.0000000	-0.0004600
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0003200	0.0000000
Cobalt	228.6	0.0000000	0.0005500	0.0000000	0.0003050	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	-0.0068000	-0.0008800	0.0000000
Lead	220.3	-0.0078200	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	383.2	-0.0029000	-0.0013600	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0004260	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001700
Nickel	231.6	0.0005200	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.9	0.0000000	0.0000000	0.0000000	0.0076000	0.0000000
Potassium	766.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0007400	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	288.1	0.0000000	-0.0025000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0002100	0.0000000	0.0000000
Sodium	588.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	421.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0111000	0.0000000	0.0000000
Tin	189.9	0.0000000	-0.0100000	0.0000000	0.0000000	0.0000000
Titanium	334.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.4	0.0000000	-0.0058400	-0.0001000	-0.0092000	0.0000000
Zinc	213.8	-0.0000630	0.0000000	0.0000000	-0.0002000	0.0044800

Comments:

METALS
-11B-
ICP INTERELEMENT CORRECTION FACTORS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA ICP-OES 6.2 Date:

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ti	V			
Aluminum	308.2	-0.0004000	-0.0028000			
Antimony	206.8	0.0000000	-0.0070000			
Arsenic	193.6	0.0000000	0.0099000			
Barium	493.4	0.0000000	0.0000000			
Beryllium	313.0	0.0000200	0.0011000			
Boron	249.6	0.0000000	0.0000000			
Cadmium	228.8	0.0000000	0.0000900			
Calcium	317.9	0.0000000	0.0005000			
Chromium	267.7	0.0000400	0.0006000			
Cobalt	228.6	0.0018000	0.0000000			
Copper	324.7	-0.0007000	-0.0001000			
Iron	259.9	-0.0011000	0.0003000			
Lead	220.3	0.0007000	0.0000000			
Magnesium	383.2	-0.0042000	0.0000000			
Manganese	257.6	0.0000000	-0.0000700			
Molybdenum	202.0	0.0000000	0.0000000			
Nickel	231.6	0.0000000	0.0000000			
Phosphorus	214.9	0.0000000	0.0000000			
Potassium	766.5	0.0000000	0.0000000			
Selenium	196.0	0.0000000	0.0000000			
Silicon	288.1	0.0000000	0.0000000			
Silver	328.0	0.0000000	-0.0091000			
Sodium	588.9	0.0000000	0.0000000			
Strontium	421.5	0.0000000	0.0000000			
Thallium	190.8	-0.0005000	0.0000000			
Tin	189.9	0.0072000	0.0000000			
Titanium	334.9	0.0000000	0.0000000			
Vanadium	292.4	0.0003000	0.0000000			
Zinc	213.8	-0.0000200	0.0000000			

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	200.8
Arsenic	15.00	1000.0	200.8
Cadmium	15.00	1000.0	200.8
Chromium	15.00	1000.0	200.8
Copper	15.00	400.0	200.8
Nickel	15.00	700.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	700.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA ICP-OES 6.2

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Iron	5.00	500000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302965-001	5/6/03	EPA 3050B	1.83	100
K2302965-001D	5/6/03	EPA 3050B	1.82	100
K2302965-001S	5/6/03	EPA 3050B	1.82	100
LCSS	5/6/03	EPA 3050B	1.00	100
K2302965-MB	5/6/03	EPA 3050B	1.00	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302965-001	5/6/03	METHOD	1.35	100
K2302965-001D	5/6/03	METHOD	1.41	100
K2302965-001S	5/6/03	METHOD	1.46	100
LCSS	5/6/03	METHOD	0.550	100
K2302965-MB	5/6/03	METHOD	1.00	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302965-001	5/6/03	EPA 3050B	1.81	100
K2302965-001D	5/6/03	EPA 3050B	1.81	100
K2302965-001S	5/6/03	EPA 3050B	1.81	100
LCSS	5/6/03	EPA 3050B	1.00	100
K2302965-MB	5/6/03	EPA 3050B	1.00	100

K2302965-001	5/6/03	EPA 3050B	1.83	100
K2302965-001D	5/6/03	EPA 3050B	1.82	100
K2302965-001S	5/6/03	EPA 3050B	1.82	100
LCSS	5/6/03	EPA 3050B	1.00	100
K2302965-MB	5/6/03	EPA 3050B	1.00	100

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/7/03 End Date: 5/7/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	10:08																X									
STANDARD #1	1.00	10:10																X									
STANDARD #2	1.00	10:11																X									
STANDARD #3	1.00	10:13																X									
STANDARD #4	1.00	10:15																X									
STANDARD #5	1.00	10:16																X									
ICV	1.00	10:18																X									
ICB	1.00	10:20																X									
CCV1	1.00	10:21																X									
CCB1	1.00	10:23																X									
CRA	1.00	10:24																X									
K2302965-MB	1.00	10:26																X									
LCSS	1.00	10:28																X									
ZZZZZZ	1.00	10:29																									
ZZZZZZ	1.00	10:32																									
ZZZZZZ	1.00	10:35																									
ZZZZZZ	1.00	10:40																									
ZZZZZZ	1.00	10:41																									
ZZZZZZ	1.00	10:43																									
ZZZZZZ	1.00	10:45																									
CCV2	1.00	10:47																X									
CCB2	1.00	10:49																X									
ZZZZZZ	1.00	10:50																									
ZZZZZZ	1.00	10:53																									
ZZZZZZ	1.00	10:55																									
ZZZZZZ	1.00	10:57																									
ZZZZZZ	1.00	10:59																									
ZZZZZZ	1.00	11:01																									
ZZZZZZ	1.00	11:02																									
ZZZZZZ	1.00	11:04																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/7/03 End Date: 5/7/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	11:06																									
ZZZZZZ	1.00	11:07																									
CCV3	1.00	11:09																X									
CCB3	1.00	11:10																X									
ZZZZZZ	1.00	11:12																									
ZZZZZZ	1.00	11:14																									
ZZZZZZ	1.00	11:15																									
ZZZZZZ	1.00	11:17																									
ZZZZZZ	1.00	11:18																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/7/03 End Date: 5/7/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	11:23																X									
STANDARD #1	1.00	11:25																X									
STANDARD #2	1.00	11:26																X									
STANDARD #3	1.00	11:28																X									
STANDARD #4	1.00	11:30																X									
STANDARD #5	1.00	11:31																X									
ICV2	1.00	11:33																X									
ICB2	1.00	11:35																X									
CCV1	1.00	11:36																X									
CCB1	1.00	11:38																X									
CRA2	1.00	11:39																X									
ZZZZZZ	1.00	11:41																									
K2302965-001	1.00	11:43																X									
K2302965-001D	1.00	11:44																X									
K2302965-001S	1.00	11:46																X									
ZZZZZZ	1.00	11:48																									
ZZZZZZ	1.00	11:49																									
ZZZZZZ	1.00	11:51																									
ZZZZZZ	1.00	11:53																									
ZZZZZZ	1.00	11:54																									
CCV2	1.00	11:56																X									
CCB2	1.00	11:57																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 5/9/03 End Date: 5/9/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-STD1-BLANK	1.00	06:47		X										X													
CAL-STD3	1.00	06:49		X										X													
CAL-STD2	1.00	06:50																									
CAL-STD4	1.00	06:52																									
ICV	1.00	06:55		X										X													
ZZZZZZ	1.00	06:57																									
ICB	1.00	06:59		X										X													
CCV1	1.00	07:03		X										X													
ZZZZZZ	1.00	07:07																									
CCB1	1.00	07:11		X										X													
CRDL1	1.00	07:22		X										X													
ICSA	1.00	07:25		X										X													
ICSAB	1.00	07:27		X										X													
K2302965-MB	2.00	07:31		X										X													
LCSS	2.00	07:38		X										X													
ZZZZZZ	1.00	07:40																									
ZZZZZZ	1.00	07:42																									
ZZZZZZ	5.00	07:45																									
ZZZZZZ	1.00	07:50																									
ZZZZZZ	1.00	07:57																									
CCV2	1.00	07:59		X										X													
CCB2	1.00	08:02		X										X													
ZZZZZZ	1.00	08:04																									
ZZZZZZ	1.00	08:06																									
ZZZZZZ	1.00	08:08																									
ZZZZZZ	1.00	08:10																									
ZZZZZZ	1.00	08:15																									
ZZZZZZ	1.00	08:17																									
ZZZZZZ	1.00	08:19																									
K2302965-001	2.00	08:22		X										X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA ICP-OES 6.2 Method: P

Start Date: 5/9/03 End Date: 5/9/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302965-001D	2.00	08:23		X										X													
K2302965-001S	2.00	08:25		X										X													
CCV3	1.00	08:29		X										X													
CCB3	1.00	08:31		X										X													
ZZZZZZ	1.00	08:35																									
ZZZZZZ	1.00	08:37																									
ZZZZZZ	1.00	08:39																									
ZZZZZZ	1.00	08:41																									
ZZZZZZ	5.00	08:43																									
ZZZZZZ	1.00	08:45																									
ZZZZZZ	1.00	08:48																									
ZZZZZZ	1.00	08:50																									
ZZZZZZ	1.00	08:52																									
ZZZZZZ	1.00	08:59																									
CCV4	1.00	09:02		X										X													
CCB4	1.00	09:06		X										X													
ZZZZZZ	1.00	09:08																									
ZZZZZZ	1.00	09:10																									
ZZZZZZ	5.00	09:13																									
ZZZZZZ	1.00	09:15																									
ZZZZZZ	1.00	09:20																									
ICSA	1.00	09:23		X										X													
ICSAB	1.00	09:25		X										X													
CCV5	1.00	09:28		X										X													
CCB5	1.00	09:31		X										X													

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:19				X			X		X		X						X							X	
25 PPB STD. MS3-9-E	1.00	08:23				X			X		X		X						X							X	
ICV	1.00	08:27				X			X		X		X						X							X	
CCV1	1.00	08:31				X			X		X		X						X							X	
ICB	1.00	08:35				X			X		X		X						X							X	
CCB1	1.00	08:38				X			X		X		X						X							X	
CRA	1.00	08:42				X			X		X		X						X							X	
ICSA	1.00	08:48				X			X		X		X						X							X	
ICSAB	1.00	08:52				X			X		X		X						X							X	
ZZZZZZ	1.00	08:57																									
ZZZZZZ	1.00	09:02																									
ZZZZZZ	1.00	09:08																									
ZZZZZZ	1.00	09:13																									
ZZZZZZ	1.00	09:17																									
ZZZZZZ	1.00	09:21																									
ZZZZZZ	1.00	09:25																									
CCV2	1.00	09:30				X			X		X		X						X							X	
CCB2	1.00	09:34				X			X		X		X						X							X	
ZZZZZZ	1.00	09:40																									
ZZZZZZ	1.00	09:43																									
LCSS	20.00	09:51				X			X		X		X						X							X	
K2302965-MB	5.00	09:56				X			X		X								X							X	
ZZZZZZ	1.00	10:00																									
ZZZZZZ	1.00	10:05																									
ZZZZZZ	1.00	10:31																									
ZZZZZZ	1.00	10:35																									
ZZZZZZ	1.00	10:39																									
ZZZZZZ	1.00	10:43																									
CCV3	1.00	10:48				X			X		X		X						X							X	
CCB3	1.00	10:53				X			X		X		X						X							X	

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	11:05																									
ZZZZZZ	1.00	11:11																									
ZZZZZZ	1.00	11:15																									
ZZZZZZ	1.00	11:22																									
ZZZZZZ	1.00	11:25																									
ZZZZZZ	1.00	11:30																									
ZZZZZZ	1.00	11:33																									
ZZZZZZ	1.00	11:37																									
ZZZZZZ	1.00	11:40																									
ZZZZZZ	1.00	11:44																									
CCV4	1.00	11:50				X			X		X		X						X							X	
CCB4	1.00	11:57				X			X		X		X						X							X	
K2302965-MB	5.00	12:01											X														
ZZZZZZ	1.00	12:04																									
K2302965-001	5.00	12:38				X			X		X		X						X							X	
K2302965-001D	5.00	12:42				X			X		X		X						X							X	
K2302965-001S	5.00	12:45				X			X		X																
ZZZZZZ	1.00	12:49																									
K2302965-001S	25.00	12:59											X						X							X	
ZZZZZZ	1.00	13:04																									
CCV5	1.00	13:10				X			X		X		X						X							X	
CCB5	1.00	13:15				X			X		X		X						X							X	

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:18			X																	X					
25 PPB STD. MS3-8-A	1.00	08:19			X																	X					
ICV	1.00	08:21			X																	X					
CCV1	1.00	08:22			X																	X					
ICB	1.00	08:25			X																	X					
CCB1	1.00	08:26			X																	X					
CRA	1.00	08:28			X																	X					
ZZZZZZ	1.00	08:29																									
CCV2	1.00	08:33			X																	X					
CCB2	1.00	08:35			X																	X					
ZZZZZZ	1.00	08:47																									
ZZZZZZ	1.00	08:48																									
ZZZZZZ	1.00	08:49																									
ZZZZZZ	1.00	08:51																									
ZZZZZZ	1.00	08:52																									
ZZZZZZ	1.00	08:56																									
ZZZZZZ	1.00	08:57																									
ZZZZZZ	1.00	08:58																									
ZZZZZZ	1.00	08:59																									
ZZZZZZ	1.00	09:00																									
CCV3	1.00	09:01			X																	X					
CCB3	1.00	09:08			X																	X					
ZZZZZZ	1.00	09:10																									
ZZZZZZ	1.00	09:11																									
ZZZZZZ	1.00	09:12																									
ZZZZZZ	1.00	09:13																									
ZZZZZZ	1.00	09:14																									
ZZZZZZ	1.00	09:16																									
ZZZZZZ	1.00	09:17																									
ZZZZZZ	1.00	09:18																									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	09:19																									
ZZZZZZ	1.00	09:20																									
CCV4	1.00	09:22			X																	X					
CCB4	1.00	09:25			X																	X					
K2302965-MB	5.00	09:27			X																	X					
ZZZZZZ	1.00	09:29																									
ZZZZZZ	1.00	09:30																									
ZZZZZZ	1.00	09:31																									
LCSS	20.00	09:32			X																	X					
ZZZZZZ	1.00	09:35																									
ZZZZZZ	1.00	09:36																									
ZZZZZZ	1.00	09:37																									
ZZZZZZ	1.00	09:38																									
ZZZZZZ	1.00	09:39																									
CCV5	1.00	09:42			X																	X					
CCB5	1.00	09:45			X																	X					
ZZZZZZ	1.00	09:47																									
ZZZZZZ	1.00	09:48																									
K2302965-001	5.00	09:50			X																	X					
K2302965-001D	5.00	09:51			X																	X					
K2302965-001S	5.00	09:52			X																	X					
ZZZZZZ	1.00	09:55																									
CCV6	1.00	09:57			X																	X					
CCB6	1.00	09:59			X																	X					

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1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 19, 2003 Service Request No: K2302965

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed are additional pages for the sample(s) submitted to our laboratory on April 22, 2003. For your reference, these analyses have been assigned our service request number K2302965.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Sample No.	Lab Sample ID.
CH-Control-Sed	K2302965-001
CH-Control-SedD	K2302965-001D
CH-Control-SedS	K2302965-001S
Method Blank	K2302965-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: Lead Only

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 6/17/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302965
Project No.:	NA	Date Collected:	04/17/03
Project Name:	Canaveral Harbor 103 Evaluation	Date Received:	04/22/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: CH-Control-Sed Lab Code: K2302965-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.04	0.01	5	5/6/03	5/14/03	3.27		

% Solids: 74.2

Comments:

00005

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302965
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: Method Blank
Lab Code: K2302965-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	5/6/03	5/14/03	0.02	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	25.0	23.6	94	25.0	25.3	101	25.1	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				25.0	24.7	99	24.5	98	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				25.0	24.5	98			200.8

00009

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Lead				0.04	0.04	103		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Lead	0.04	U	0.04	U	0.04	U	0.04	U					200.8

00011

METALS
-3-
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Lead			0.04	U	0.04	U							200.8

00012

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation Basis: Dry

Matrix: SEDIMENT % Solids: 74.2

Sample Name: CH-Control-SedS Lab Code: K2302965-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	70 - 130	85.5		3.27		74.5	111		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302965
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation
Basis: Dry
Matrix: SEDIMENT
% Solids: 74.2

Sample Name: CH-Control-SedD
Lab Code: K2302965-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead	30	3.27		2.85		14		200.8

00014

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

-7-

LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Lead				125	132		95.2 155	106

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Lead	208		0.10	0.04	200.8

Comments

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Lead	15.00	300.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302965-001	5/6/03	EPA 3050B	1.81	100
K2302965-001D	5/6/03	EPA 3050B	1.81	100
K2302965-001S	5/6/03	EPA 3050B	1.81	100
LCSS	5/6/03	EPA 3050B	1.00	100
K2302965-MB	5/6/03	EPA 3050B	1.00	100

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:19													X												
25 PPB STD.	1.00	08:23													X												
ICV	1.00	08:27													X												
CCV1	1.00	08:31													X												
ICB	1.00	08:35													X												
CCB1	1.00	08:38													X												
CRA	1.00	08:42													X												
ICSA	1.00	08:48													X												
ICSAB	1.00	08:52													X												
ZZZZZZ	5.00	08:57																									
ZZZZZZ	20.00	09:02																									
ZZZZZZ	5.00	09:08																									
ZZZZZZ	5.00	09:13																									
ZZZZZZ	25.00	09:17																									
ZZZZZZ	5.00	09:21																									
ZZZZZZ	5.00	09:25																									
CCV2	1.00	09:30													X												
CCB2	1.00	09:34													X												
ZZZZZZ	5.00	09:40																									
ZZZZZZ	5.00	09:43																									
LCSS	20.00	09:51													X												
K2302965-MB	5.00	09:56													X												
ZZZZZZ	5.00	10:00																									
ZZZZZZ	5.00	10:05																									
ZZZZZZ	25.00	10:31																									
ZZZZZZ	5.00	10:35																									
ZZZZZZ	5.00	10:39																									
ZZZZZZ	5.00	10:43																									
CCV3	1.00	10:48													X												
CCB3	1.00	10:53													X												

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	11:05																									
ZZZZZZ	5.00	11:11																									
ZZZZZZ	5.00	11:15																									
ZZZZZZ	5.00	11:22																									
ZZZZZZ	5.00	11:25																									
ZZZZZZ	5.00	11:30																									
ZZZZZZ	5.00	11:33																									
ZZZZZZ	5.00	11:37																									
ZZZZZZ	5.00	11:40																									
ZZZZZZ	5.00	11:44																									
CCV4	1.00	11:50													X												
CCB4	1.00	11:57													X												
ZK2302965-MB	5.00	12:01																									
ZZZZZZ	25.00	12:04																									
K2302965-001	5.00	12:38													X												
K2302965-001D	5.00	12:42													X												
K2302965-001S	5.00	12:45													X												
ZZZZZZ	5.00	12:49																									
ZK2302965-001S	25.00	12:59																									
ZZZZZZ	10.00	13:04																									
CCV5	1.00	13:10													X												
CCB5	1.00	13:15													X												

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 30, 2003 Service Request No: K2302965

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed is the additional data for the sample(s) submitted to our laboratory on April 22, 2003. For your reference, these analyses have been assigned our service request number K2302965.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302965

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Sample No.	Lab Sample ID.
CH-Control-Sed	K2302965-001
CH-Control-SedD	K2302965-001D
CH-Control-SedS	K2302965-001S
Method Blank	K2302965-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments: Lead Only

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 7/30/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: SEDIMENT

Service Request: K2302965
Date Collected: 04/17/03
Date Received: 04/22/03
Units: MG/KG
Basis: Wet

Sample Name: CH-Control-Sed
Lab Code: K2302965-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.03	0.01	5	5/6/03	5/14/03	2.42		

% Solids: NA

Comments:

00003

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302965
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2302965-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	5/6/03	5/14/03	0.02	U	

% Solids: NA

Comments:

Oil & Grease

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	4/17/03
Sample Matrix:	Sediment	**Date Received:**	4/22/03

Oil and Grease

Sample Name:	CH-Control-Sed	Units:	mg/Kg (ppm)
Lab Code:	K2302965-001	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/6/03	5/7/03	80	J

Approved By: JLS Date: 5/7/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	4/17/03
Sample Matrix:	Sediment	**Date Received:**	4/22/03

Oil and Grease

Sample Name:	CH-Control-Sed	Units:	mg/Kg (ppm)
Lab Code:	K2302965-001	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/6/03	5/7/03	60	J

Approved By: M Gula Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	K230506-SB	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/6/03	5/7/03	ND	

Approved By: MS Date: 5/7/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	5/6/03
		Date Analyzed:	5/7/03

Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K230506-SL1	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	2000	2000	100	78-114	

Approved By: _____ Date: 5/7/03

LCS/071499p
02965PHC.CQ1 - LCS 5/7/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	4/17/03
Sample Matrix:	Sediment	**Date Received:**	4/22/03
		Date Extracted:	5/6/03
		Date Analyzed:	5/7/03

Matrix Spike/Duplicate Matrix Spike Summary
Oil and Grease

Sample Name:	CH-Control-Sed	Units:	mg/Kg (ppm)
Lab Code:	K2302965-001MS, K2302965-001DMS	Basis:	Dry
Test Notes:			

				Spike Level		Sample	Spike Result		Percent Recovery		CAS Acceptance	Relative
Analyte	**Prep Method**	**Analysis Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Percent Difference**
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	2700	2700	80	2700	2700	97	97	78-114	<1

Approved By: JLS Date: 5/7/03

DMS/072898D02965PHC.CQ1 - DMS 5/7/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 5/7/03

Continuing Calibration Verification (CCV) Summary
EPA Method 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	2.1	105	1.9	95

Approved By: JLS Date: 5/7/03

CCV 1-4/102194

02965PHC.CQ1 - ccv 5/7/03

Page No.:

Organotins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
CH-Control-Sed	K2302965-001	04/17/2003	04/22/2003
CH-Control-SedMS	KWG0305876-5	04/17/2003	04/22/2003
CH-Control-SedDMS	KWG0305876-6	04/17/2003	04/22/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Todd Poyhak

Date: 5/21/03 Title: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Collected: 04/17/2003
Date Received: 04/22/2003

Butyltins

Sample Name: CH-Control-Sed
Lab Code: K2302965-001

Units: ug/Kg
Basis: Dry

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.4	1.1	1	04/28/03	05/20/03	KWG0305876	
Tri-n-butyltin	ND	U	1.4	0.49	1	04/28/03	05/20/03	KWG0305876	
Di-n-butyltin	ND	U	1.4	0.99	1	04/28/03	05/20/03	KWG0305876	
n-Butyltin	ND	U	1.4	0.64	1	04/28/03	05/20/03	KWG0305876	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	66	22-113	05/20/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Collected: NA
Date Received: NA

Butyltins

Sample Name: Method Blank
Lab Code: KWG0305876-4

Units: ug/Kg
Basis: Dry

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/28/03	05/20/03	KWG0305876	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/28/03	05/20/03	KWG0305876	
Di-n-butyltin	ND	U	1.0	0.73	1	04/28/03	05/20/03	KWG0305876	
n-Butyltin	ND	U	1.0	0.47	1	04/28/03	05/20/03	KWG0305876	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	11	22-113	05/20/03	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Collected: 04/17/2003
Date Received: 04/22/2003

Butyltins

Sample Name: CH-Control-Sed
Lab Code: K2302965-001

Units: ug/Kg
Basis: Wet

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/28/03	05/20/03	KWG0305876	
Tri-n-butyltin	ND	U	0.98	0.36	1	04/28/03	05/20/03	KWG0305876	
Di-n-butyltin	ND	U	0.98	0.73	1	04/28/03	05/20/03	KWG0305876	
n-Butyltin	ND	U	0.98	0.47	1	04/28/03	05/20/03	KWG0305876	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	66	22-113	05/20/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Collected: NA
Date Received: NA

Butyltins

Sample Name: Method Blank
Lab Code: KWG0305876-4

Units: ug/Kg
Basis: Wet

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/28/03	05/20/03	KWG0305876	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/28/03	05/20/03	KWG0305876	
Di-n-butyltin	ND	U	1.0	0.73	1	04/28/03	05/20/03	KWG0305876	
n-Butyltin	ND	U	1.0	0.47	1	04/28/03	05/20/03	KWG0305876	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	11	22-113	05/20/03	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	
CH-Control-Sed	K2302965-001	66	
Method Blank	KWG0305876-4	11	*
CH-Control-SedMS	KWG0305876-5	99	
CH-Control-SedDMS	KWG0305876-6	89	
Lab Control Sample	KWG0305876-3	27	

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 22-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/28/2003
Sample Matrix:	Sediment	**Date Analyzed:**	05/20/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	CH-Control-Sed	**Units:**	ug/Kg
Lab Code:	K2302965-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305876

		CH-Control-SedMS KWG0305876-5 Matrix Spike			CH-Control-SedDMS KWG0305876-6 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	43.0	66.1	65	40.5	66.0	61	25-125	6	50
Tri-n-butyltin	ND	45.8	66.1	69	42.4	66.0	64	12-138	8	50
Di-n-butyltin	ND	44.8	66.1	68	39.7	66.0	60	10-155	12	50
n-Butyltin	ND	12.8	66.1	19	10.5	66.0	16	10-99	20	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Extracted: 04/28/2003
Date Analyzed: 05/20/2003

Lab Control Spike Summary
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0305876

	Lab Control Sample KWG0305876-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	13.8	50.0	28	10-126
Tri-n-butyltin	26.2	50.0	52	30-131
Di-n-butyltin	34.6	50.0	69	23-141
n-Butyltin	18.9	50.0	38	10-127

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/28/2003
Sample Matrix:	Sediment	**Date Analyzed:**	05/20/2003
		Time Analyzed:	18:18

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\052003B\0520F012.D
Lab Code:	KWG0305876-4	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305876

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305876-3	J:\GC11\DATA\052003B\0520F013.D	05/20/03	18:35
CH-Control-Sed	K2302965-001	J:\GC11\DATA\052003B\0520F014.D	05/20/03	18:53
CH-Control-SedMS	KWG0305876-5	J:\GC11\DATA\052003B\0520F015.D	05/20/03	19:11
CH-Control-SedDMS	KWG0305876-6	J:\GC11\DATA\052003B\0520F016.D	05/20/03	19:29

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/28/2003
Sample Matrix:	Sediment	**Date Analyzed:**	05/20/2003
		Time Analyzed:	18:35

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\052003B\0520F013.D
Lab Code:	KWG0305876-3	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305876

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305876-4	J:\GC11\DATA\052003B\0520F012.D	05/20/03	18:18
CH-Control-Sed	K2302965-001	J:\GC11\DATA\052003B\0520F014.D	05/20/03	18:53
CH-Control-SedMS	KWG0305876-5	J:\GC11\DATA\052003B\0520F015.D	05/20/03	19:11
CH-Control-SedDMS	KWG0305876-6	J:\GC11\DATA\052003B\0520F016.D	05/20/03	19:29

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\052003\0520F003.D	D	J:\GC11\DATA\052003\0520F006.D
B	J:\GC11\DATA\052003\0520F004.D	E	J:\GC11\DATA\052003\0520F007.D
C	J:\GC11\DATA\052003\0520F005.D	F	J:\GC11\DATA\052003\0520F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	735	B	50	687	C	100	674	D	500	636	E	1000	641
	F	2000	623												
Tri-n-butyltin	A	10	873	B	50	816	C	100	795	D	500	756	E	1000	734
	F	2000	714												
Di-n-butyltin	A	10	942	B	50	1000	C	100	947	D	500	936	E	1000	908
	F	2000	915												
n-Butyltin	A	10	1240	B	50	1250	C	100	1250	D	500	1210	E	1000	1180
	F	2000	1210												
Tri-n-propyltin	A	11	688	B	54	675	C	110	659	D	540	640	E	1100	633
	F	2100	614												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.2		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	3.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	2.3		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 05/20/2003
Date Analyzed: 05/20/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2630
Units: ng/ml

File ID: J:\GC11\DATA\052003\0520F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	510	666	723	9	NA	± 30 %	AverageRF
Tri-n-butyltin	480	490	781	802	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	520	942	1030	9	NA	± 30 %	AverageRF
n-Butyltin	490	550	1220	1370	12	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\052003\0520F003.D\0520R003.D	D	J:\GC11\DATA\052003\0520F006.D\0520R006.D
B	J:\GC11\DATA\052003\0520F004.D\0520R004.D	E	J:\GC11\DATA\052003\0520F007.D\0520R007.D
C	J:\GC11\DATA\052003\0520F005.D\0520R005.D	F	J:\GC11\DATA\052003\0520F008.D\0520R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	439	B	50	365	C	100	367	D	500	359	E	1000	352
	F	2000	352												
Tri-n-butyltin	A	10	452	B	50	451	C	100	470	D	500	445	E	1000	433
	F	2000	413												
Di-n-butyltin	A	10	526	B	50	562	C	100	568	D	500	556	E	1000	539
	F	2000	516												
n-Butyltin	A	10	726	B	50	751	C	100	759	D	500	728	E	1000	704
	F	2000	654												
Tri-n-propyltin	A	11	376	B	54	345	C	110	350	D	540	355	E	1100	349
	F	2100	337												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	8.9		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	4.3		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	3.9		≤ 20
n-Butyltin	MS	AverageRF	% RSD	5.3		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	3.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 05/20/2003
Date Analyzed: 05/20/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2630
Units: ng/ml

File ID: J:\GC11\DATA\052003\0520F010.D\0520R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	480	372	379	2	NA	± 30 %	AverageRF
Tri-n-butyltin	480	490	444	456	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	500	545	571	5	NA	± 30 %	AverageRF
n-Butyltin	490	520	720	766	6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	666	651	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	781	754	-4	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	942	943	0	NA	± 25 %	AverageRF
n-Butyltin	500	500	1220	1220	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	530	651	649	0	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F002.D\0520R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	450	372	336	-10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	444	418	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	545	514	-6	NA	± 25 %	AverageRF
n-Butyltin	500	460	720	664	-8	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	352	328	-7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F018.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	510	666	681	2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	781	801	3	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	942	976	4	NA	± 25 %	AverageRF
n-Butyltin	500	510	1220	1250	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	560	651	686	5	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F018.D\0520R018.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	530	372	391	5	NA	± 25 %	AverageRF
Tri-n-butyltin	500	540	444	479	8	NA	± 25 %	AverageRF
Di-n-butyltin	500	560	545	607	11	NA	± 25 %	AverageRF
n-Butyltin	500	530	720	768	7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	600	352	392	11	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0307157
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0520F001.D	Instrument Blank	KWG0307157-1	5/20/03	15:02		5/20/03	15:14
0520F002.D	Continuing Calibration Verification	KWG0307157-2	5/20/03	15:20		5/20/03	15:32
0520F003.D	ZZZZZZ	ZZZZZZ	5/20/03	15:38		5/20/03	15:50
0520F004.D	ZZZZZZ	ZZZZZZ	5/20/03	15:56		5/20/03	16:08
0520F005.D	ZZZZZZ	ZZZZZZ	5/20/03	16:13		5/20/03	16:25
0520F006.D	ZZZZZZ	ZZZZZZ	5/20/03	16:31		5/20/03	16:43
0520F009.D	ZZZZZZ	ZZZZZZ	5/20/03	17:24		5/20/03	17:36
0520F010.D	ZZZZZZ	ZZZZZZ	5/20/03	17:42		5/20/03	17:54
0520F011.D	ZZZZZZ	ZZZZZZ	5/20/03	18:00		5/20/03	18:12
0520F012.D	Method Blank	KWG0305876-4	5/20/03	18:18		5/20/03	18:30
0520F013.D	Lab Control Sample	KWG0305876-3	5/20/03	18:35		5/20/03	18:47
0520F014.D	CH-Control-Sed	K2302965-001	5/20/03	18:53		5/20/03	19:05
0520F015.D	CH-Control-SedMS	KWG0305876-5	5/20/03	19:11		5/20/03	19:23
0520F016.D	CH-Control-SedDMS	KWG0305876-6	5/20/03	19:29		5/20/03	19:41
0520F017.D	Instrument Blank	KWG0307157-3	5/20/03	19:46		5/20/03	19:58
0520F018.D	Continuing Calibration Verification	KWG0307157-4	5/20/03	20:04		5/20/03	20:16
0520F019.D	ZZZZZZ	ZZZZZZ	5/21/03	00:25		5/21/03	00:37
0520F020.D	ZZZZZZ	ZZZZZZ	5/21/03	00:42		5/21/03	00:54
0520F021.D	ZZZZZZ	ZZZZZZ	5/21/03	01:00		5/21/03	01:12
0520F022.D	Instrument Blank	KWG0307157-5	5/21/03	01:18		5/21/03	01:30
0520F023.D	Continuing Calibration Verification	KWG0307157-6	5/21/03	01:35		5/21/03	01:47

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Extracted: 04/28/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0305876
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
CH-Control-Sed	K2302965-001	04/17/03	04/22/03	20.53g	1ml	74.2	
Method Blank	KWG0305876-4	NA	NA	20.00g	1ml	NA	
CH-Control-SedMS	KWG0305876-5	04/17/03	04/22/03	20.40g	1ml	74.2	
CH-Control-SedDMS	KWG0305876-6	04/17/03	04/22/03	20.41g	1ml	74.2	
Lab Control Sample	KWG0305876-3	NA	NA	20.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
CH-Control-Sed	K2302965-001	04/17/2003	04/22/2003
CH-Control-SedMS	KWG0305921-3	04/17/2003	04/22/2003
CH-Control-SedDMS	KWG0305921-4	04/17/2003	04/22/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 5/14/03

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/2003
Sample Matrix:	Sediment	**Date Received:**	04/22/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CH-Control-Sed	**Units:**	ug/Kg
Lab Code:	K2302965-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.51**	J	5.0	0.29	1	04/29/03	05/07/03	KWG0305921	
2-Methylnaphthalene	ND	U	5.0	0.29	1	04/29/03	05/07/03	KWG0305921	
Acenaphthylene	ND	U	5.0	0.22	1	04/29/03	05/07/03	KWG0305921	
Acenaphthene	ND	U	5.0	0.29	1	04/29/03	05/07/03	KWG0305921	
Dibenzofuran	ND	U	5.0	0.27	1	04/29/03	05/07/03	KWG0305921	
Fluorene	ND	U	5.0	0.23	1	04/29/03	05/07/03	KWG0305921	
Phenanthrene	**1.0**	J	5.0	0.21	1	04/29/03	05/07/03	KWG0305921	
Anthracene	**0.31**	J	5.0	0.26	1	04/29/03	05/07/03	KWG0305921	
Fluoranthene	**3.6**	J	5.0	0.23	1	04/29/03	05/07/03	KWG0305921	
Pyrene	**3.4**	J	5.0	0.15	1	04/29/03	05/07/03	KWG0305921	
Benz(a)anthracene	**1.9**	J	5.0	0.18	1	04/29/03	05/07/03	KWG0305921	
Chrysene	**2.9**	J	5.0	0.21	1	04/29/03	05/07/03	KWG0305921	
Benzo(b)fluoranthene	**3.2**	J	5.0	0.19	1	04/29/03	05/07/03	KWG0305921	
Benzo(k)fluoranthene	**2.2**	J	5.0	0.21	1	04/29/03	05/07/03	KWG0305921	
Benzo(a)pyrene	**2.5**	J	5.0	0.19	1	04/29/03	05/07/03	KWG0305921	
Indeno(1,2,3-cd)pyrene	**3.6**	J	5.0	0.21	1	04/29/03	05/07/03	KWG0305921	
Dibenz(a,h)anthracene	**0.69**	J	5.0	0.25	1	04/29/03	05/07/03	KWG0305921	
Benzo(g,h,i)perylene	**3.8**	J	5.0	0.14	1	04/29/03	05/07/03	KWG0305921	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	33	39-97	05/07/03	Outside Control Limits
Fluorene-d10	46	43-98	05/07/03	Acceptable
Fluoranthene-d10	54	52-108	05/07/03	Acceptable
Terphenyl-d14	68	61-122	05/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305921-7	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.7	0.21	1	04/29/03	05/06/03	KWG0305921	
2-Methylnaphthalene	ND	U	3.7	0.21	1	04/29/03	05/06/03	KWG0305921	
Acenaphthylene	ND	U	3.7	0.16	1	04/29/03	05/06/03	KWG0305921	
Acenaphthene	ND	U	3.7	0.21	1	04/29/03	05/06/03	KWG0305921	
Dibenzofuran	ND	U	3.7	0.20	1	04/29/03	05/06/03	KWG0305921	
Fluorene	ND	U	3.7	0.17	1	04/29/03	05/06/03	KWG0305921	
Phenanthrene	ND	U	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Anthracene	ND	U	3.7	0.19	1	04/29/03	05/06/03	KWG0305921	
Fluoranthene	ND	U	3.7	0.17	1	04/29/03	05/06/03	KWG0305921	
Pyrene	ND	U	3.7	0.11	1	04/29/03	05/06/03	KWG0305921	
Benz(a)anthracene	ND	U	3.7	0.13	1	04/29/03	05/06/03	KWG0305921	
Chrysene	ND	U	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Benzo(b)fluoranthene	ND	U	3.7	0.14	1	04/29/03	05/06/03	KWG0305921	
Benzo(k)fluoranthene	ND	U	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Benzo(a)pyrene	ND	U	3.7	0.14	1	04/29/03	05/06/03	KWG0305921	
Indeno(1,2,3-cd)pyrene	**0.50**	J	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Dibenz(a,h)anthracene	**0.31**	J	3.7	0.18	1	04/29/03	05/06/03	KWG0305921	
Benzo(g,h,i)perylene	**0.61**	J	3.7	0.10	1	04/29/03	05/06/03	KWG0305921	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	64	39-97	05/06/03	Acceptable
Fluorene-d10	67	43-98	05/06/03	Acceptable
Fluoranthene-d10	75	52-108	05/06/03	Acceptable
Terphenyl-d14	91	61-122	05/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/2003
Sample Matrix:	Sediment	**Date Received:**	04/22/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CH-Control-Sed	**Units:**	ug/Kg
Lab Code:	K2302965-001	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.38**	J	3.8	0.21	1	04/29/03	05/07/03	KWG0305921	
2-Methylnaphthalene	ND	U	3.8	0.21	1	04/29/03	05/07/03	KWG0305921	
Acenaphthylene	ND	U	3.8	0.16	1	04/29/03	05/07/03	KWG0305921	
Acenaphthene	ND	U	3.8	0.21	1	04/29/03	05/07/03	KWG0305921	
Dibenzofuran	ND	U	3.8	0.20	1	04/29/03	05/07/03	KWG0305921	
Fluorene	ND	U	3.8	0.17	1	04/29/03	05/07/03	KWG0305921	
Phenanthrene	**0.74**	J	3.8	0.15	1	04/29/03	05/07/03	KWG0305921	
Anthracene	**0.23**	J	3.8	0.19	1	04/29/03	05/07/03	KWG0305921	
Fluoranthene	**2.7**	J	3.8	0.17	1	04/29/03	05/07/03	KWG0305921	
Pyrene	**2.5**	J	3.8	0.11	1	04/29/03	05/07/03	KWG0305921	
Benz(a)anthracene	**1.4**	J	3.8	0.13	1	04/29/03	05/07/03	KWG0305921	
Chrysene	**2.1**	J	3.8	0.15	1	04/29/03	05/07/03	KWG0305921	
Benzo(b)fluoranthene	**2.3**	J	3.8	0.14	1	04/29/03	05/07/03	KWG0305921	
Benzo(k)fluoranthene	**1.7**	J	3.8	0.15	1	04/29/03	05/07/03	KWG0305921	
Benzo(a)pyrene	**1.8**	J	3.8	0.14	1	04/29/03	05/07/03	KWG0305921	
Indeno(1,2,3-cd)pyrene	**2.7**	J	3.8	0.15	1	04/29/03	05/07/03	KWG0305921	
Dibenz(a,h)anthracene	**0.51**	J	3.8	0.18	1	04/29/03	05/07/03	KWG0305921	
Benzo(g,h,i)perylene	**2.8**	J	3.8	0.10	1	04/29/03	05/07/03	KWG0305921	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	33	39-97	05/07/03	Outside Control Limits
Fluorene-d10	46	43-98	05/07/03	Acceptable
Fluoranthene-d10	54	52-108	05/07/03	Acceptable
Terphenyl-d14	68	61-122	05/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305921-7	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.7	0.21	1	04/29/03	05/06/03	KWG0305921	
2-Methylnaphthalene	ND	U	3.7	0.21	1	04/29/03	05/06/03	KWG0305921	
Acenaphthylene	ND	U	3.7	0.16	1	04/29/03	05/06/03	KWG0305921	
Acenaphthene	ND	U	3.7	0.21	1	04/29/03	05/06/03	KWG0305921	
Dibenzofuran	ND	U	3.7	0.20	1	04/29/03	05/06/03	KWG0305921	
Fluorene	ND	U	3.7	0.17	1	04/29/03	05/06/03	KWG0305921	
Phenanthrene	ND	U	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Anthracene	ND	U	3.7	0.19	1	04/29/03	05/06/03	KWG0305921	
Fluoranthene	ND	U	3.7	0.17	1	04/29/03	05/06/03	KWG0305921	
Pyrene	ND	U	3.7	0.11	1	04/29/03	05/06/03	KWG0305921	
Benz(a)anthracene	ND	U	3.7	0.13	1	04/29/03	05/06/03	KWG0305921	
Chrysene	ND	U	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Benzo(b)fluoranthene	ND	U	3.7	0.14	1	04/29/03	05/06/03	KWG0305921	
Benzo(k)fluoranthene	ND	U	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Benzo(a)pyrene	ND	U	3.7	0.14	1	04/29/03	05/06/03	KWG0305921	
Indeno(1,2,3-cd)pyrene	**0.50**	J	3.7	0.15	1	04/29/03	05/06/03	KWG0305921	
Dibenz(a,h)anthracene	**0.31**	J	3.7	0.18	1	04/29/03	05/06/03	KWG0305921	
Benzo(g,h,i)perylene	**0.61**	J	3.7	0.10	1	04/29/03	05/06/03	KWG0305921	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	64	39-97	05/06/03	Acceptable
Fluorene-d10	67	43-98	05/06/03	Acceptable
Fluoranthene-d10	75	52-108	05/06/03	Acceptable
Terphenyl-d14	91	61-122	05/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1		Sur2	Sur3	Sur4
CH-Control-Sed	K2302965-001	33	*	46	54	68
Method Blank	KWG0305921-7	64		67	75	91
CH-Control-SedMS	KWG0305921-3	47		65	80	82
CH-Control-SedDMS	KWG0305921-4	56		67	81	84
Lab Control Sample	KWG0305921-5	66		67	79	78
Duplicate Lab Control Sample	KWG0305921-6	68		68	79	82

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	39-97
Sur2 =	Fluorene-d10	43-98
Sur3 =	Fluoranthene-d10	52-108
Sur4 =	Terphenyl-d14	61-122

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/06/2003
Time Analyzed: 22:37

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050603\0506F024.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306468-2
Analysis Lot: KWG0306468

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	275,057	5.06	157,732	7.31	262,313	10.08
	Upper Limit ==>	550,114	5.56	315,464	7.81	524,626	10.58
	Lower Limit ==>	137,529	4.56	78,866	6.81	131,157	9.58
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305921-7	260,944	5.05	141,033	7.30	204,360	10.07
CH-Control-Sed	K2302965-001	267,374	5.06	143,108	7.30	202,350	10.07
Lab Control Sample	KWG0305921-5	284,286	5.06	159,798	7.31	246,069	10.07
Duplicate Lab Control Sample	KWG0305921-6	271,683	5.06	152,556	7.31	235,435	10.07

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/06/2003
		Time Analyzed:	22:37

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\050603\0506F024.D	**Lab Code:**	KWG0306468-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306468
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	259,419	16.07	154,728	19.63
	Upper Limit ==>	518,838	16.57	309,456	20.13
	Lower Limit ==>	129,710	15.57	77,364	19.13
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305921-7	172,773	16.07	96,880	19.63
CH-Control-Sed	K2302965-001	167,955	16.07	97,171	19.63
Lab Control Sample	KWG0305921-5	257,447	16.08	169,151	19.64
Duplicate Lab Control Sample	KWG0305921-6	233,841	16.08	143,713	19.64

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/07/2003
		Time Analyzed:	10:26

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\050703\0507F002.D	**Lab Code:**	KWG0306587-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306587
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	264,289	5.06	153,221	7.31	252,365	10.08
	Upper Limit ==>	528,578	5.56	306,442	7.81	504,730	10.58
	Lower Limit ==>	132,145	4.56	76,611	6.81	126,183	9.58
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
CH-Control-SedMS	KWG0305921-3	379,361	5.06	213,982	7.31	335,972	10.08
CH-Control-SedDMS	KWG0305921-4	347,281	5.06	196,103	7.31	304,564	10.08

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/07/2003
		Time Analyzed:	10:26

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\050703\0507F002.D	**Lab Code:**	KWG0306587-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306587
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	240,825	16.08	138,548	19.64
	Upper Limit ==>	481,650	16.58	277,096	20.14
	Lower Limit ==>	120,413	15.58	69,274	19.14
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
CH-Control-SedMS	KWG0305921-3	341,937	16.09	200,727	19.65
CH-Control-SedDMS	KWG0305921-4	310,517	16.09	162,707	19.66

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/29/2003
Sample Matrix:	Sediment	**Date Analyzed:**	05/07/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	CH-Control-Sed	**Units:**	ug/Kg
Lab Code:	K2302965-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305921

		CH-Control-SedMS KWG0305921-3 Matrix Spike			CH-Control-SedDMS KWG0305921-4 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	0.51	66.7	250	27	118	250	47	19-105	55 *	40
2-Methylnaphthalene	ND	78.5	250	31 *	130	250	52	36-95	50 *	40
Acenaphthylene	ND	90.8	250	36 *	142	250	57	40-99	44 *	40
Acenaphthene	ND	90.7	250	36	142	250	57	33-102	44 *	40
Dibenzofuran	ND	96.3	250	39	151	250	60	38-100	44 *	40
Fluorene	ND	103	250	41	159	250	64	38-103	42 *	40
Phenanthrene	1.0	103	250	41	158	250	63	33-113	42 *	40
Anthracene	0.31	110	250	44	168	250	67	40-114	42 *	40
Fluoranthene	3.6	117	250	46	180	250	71	41-117	42 *	40
Pyrene	3.4	111	250	43	173	250	68	26-139	44 *	40
Benz(a)anthracene	1.9	109	250	43	168	250	67	32-134	43 *	40
Chrysene	2.9	110	250	43	169	250	67	27-135	43 *	40
Benzo(b)fluoranthene	3.2	102	250	40	161	250	63	31-136	45 *	40
Benzo(k)fluoranthene	2.2	95.3	250	37	154	250	61	32-131	47 *	40
Benzo(a)pyrene	2.5	112	250	44	175	250	69	26-146	44 *	40
Indeno(1,2,3-cd)pyrene	3.6	114	250	44	160	250	63	33-133	34	40
Dibenz(a,h)anthracene	0.69	115	250	46	165	250	66	42-114	36	40
Benzo(g,h,i)perylene	3.8	95.8	250	37	136	250	53	31-122	35	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/29/2003
Sample Matrix:	Soil	**Date Analyzed:**	05/07/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305921

	Lab Control Sample KWG0305921-5 Lab Control Spike			Duplicate Lab Control Sample KWG0305921-6 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	162	250	65	131	250	52	33-98	21	40
2-Methylnaphthalene	173	250	69	139	250	55	36-103	22	40
Acenaphthylene	179	250	71	143	250	57	41-102	22	40
Acenaphthene	173	250	69	139	250	56	41-97	22	40
Dibenzofuran	176	250	71	142	250	57	38-102	21	40
Fluorene	186	250	75	150	250	60	43-101	22	40
Phenanthrene	183	250	73	145	250	58	45-101	24	40
Anthracene	197	250	79	154	250	62	46-109	24	40
Fluoranthene	212	250	85	165	250	66	49-112	25	40
Pyrene	197	250	79	162	250	65	50-112	19	40
Benz(a)anthracene	199	250	79	160	250	64	52-114	22	40
Chrysene	198	250	79	163	250	65	54-109	19	40
Benzo(b)fluoranthene	178	250	71	151	250	60	54-115	17	40
Benzo(k)fluoranthene	172	250	69	143	250	57	54-115	18	40
Benzo(a)pyrene	202	250	81	164	250	66	54-120	20	40
Indeno(1,2,3-cd)pyrene	226	250	90	172	250	69	49-121	27	40
Dibenz(a,h)anthracene	222	250	89	168	250	67	48-114	28	40
Benzo(g,h,i)perylene	201	250	81	156	250	62	45-113	25	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
SRM Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	4/29/2003
		Date Analyzed:	5/7/2003

Standard Reference Material
Polynuclear Aromatic Hydrocarbons

Sample Name:	Standard Reference Material	Units:	ug/Kg (ppb)
Lab Code:	KWG0305921-8	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	CAS Advisory Limits	Result Notes
Phenanthrene	EPA 3541	SIM	5270 ± 220	3900	2520-8240	
Anthracene	EPA 3541	SIM	1770 ± 330	802	720-3150	
Fluoranthene	EPA 3541	SIM	8920 ± 320	7390	4300-13900	
Pyrene	EPA 3541	SIM	9700 ± 420	7100	4640-15200	
Benz(a)anthracene	EPA 3541	SIM	4720 ± 110	3490	2310-7250	
Chrysene	EPA 3541	SIM	5900 ± 370	4420	2770-9410	
Benzo(b)fluoranthene	EPA 3541	SIM	3870 ± 420	3010	1720-6440	
Benzo(k)fluoranthene	EPA 3541	SIM	4390 ± 640	2560	1880-7550	
Benzo(a)pyrene	EPA 3541	SIM	4300 ± 130	3130	2090-6650	
Indeno(1,2,3-cd)pyrene	EPA 3541	SIM	2780 ± 100	2260	1340-4320	
Dibenz(a,h)anthracene	EPA 3541	SIM	424 ± 69	539	178-740	
Benzo(g,h,i)perylene	EPA 3541	SIM	2840 ± 100	1840	1370-4410	

Approved By: _____ Date: 5/14/03

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302965
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/29/2003
Sample Matrix:	Soil	**Date Analyzed:**	05/06/2003
		Time Analyzed:	23:49

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\050603\0506F026.D
Lab Code:	KWG0305921-7	**Instrument ID:**	MS11
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305921

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
CH-Control-Sed	K2302965-001	J:\MS11\DATA\050603\0506F031.D	05/07/03	02:48
Lab Control Sample	KWG0305921-5	J:\MS11\DATA\050603\0506F038.D	05/07/03	08:54
Duplicate Lab Control Sample	KWG0305921-6	J:\MS11\DATA\050603\0506F039.D	05/07/03	09:30
CH-Control-SedMS	KWG0305921-3	J:\MS11\DATA\050703\0507F012.D	05/07/03	17:10
CH-Control-SedDMS	KWG0305921-4	J:\MS11\DATA\050703\0507F013.D	05/07/03	17:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302965
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Soil

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0305921-5	**Lab Code:**	KWG0305921-6
File ID:	J:\MS11\DATA\050603\0506F038.D	**File ID:**	J:\MS11\DATA\050603\0506F039.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/29/2003	**Date Extracted:**	04/29/2003
Date Analyzed:	05/07/2003	**Date Analyzed:**	05/07/2003
Time Analyzed:	08:54	**Time Analyzed:**	09:30

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305921

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305921-7	J:\MS11\DATA\050603\0506F026.D	05/06/03	23:49
CH-Control-Sed	K2302965-001	J:\MS11\DATA\050603\0506F031.D	05/07/03	02:48
CH-Control-SedMS	KWG0305921-3	J:\MS11\DATA\050703\0507F012.D	05/07/03	17:10
CH-Control-SedDMS	KWG0305921-4	J:\MS11\DATA\050703\0507F013.D	05/07/03	17:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/06/2003
Time Analyzed: 22:16

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050603\0506F023.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306468

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	25.3	303488	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	29.3	350720	PASS
70	69	0	2	0.5	1770	PASS
127	198	10	80	40.1	480704	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	49.1	1198592	PASS
199	198	5	9	6.6	79688	PASS
275	198	10	60	36.3	435008	PASS
365	442	1	50	2.2	54096	PASS
441	443	0	100	76.3	359744	PASS
442	442	100	100	100.0	2440192	PASS
443	442	15	24	19.3	471296	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306468-2	J:\MS11\DATA\050603\0506F024.D	05/06/2003	22:37	
Method Blank	KWG0305921-7	J:\MS11\DATA\050603\0506F026.D	05/06/2003	23:49	
CH-Control-Sed	K2302965-001	J:\MS11\DATA\050603\0506F031.D	05/07/2003	02:48	
Lab Control Sample	KWG0305921-5	J:\MS11\DATA\050603\0506F038.D	05/07/2003	08:54	
Duplicate Lab Control Sample	KWG0305921-6	J:\MS11\DATA\050603\0506F039.D	05/07/2003	09:30	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/07/2003
Time Analyzed: 10:04

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050703\0507F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306587

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	26.7	371712	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	31.7	440640	PASS
70	69	0	2	0.5	2352	PASS
127	198	10	80	42.4	590784	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	56.1	1392128	PASS
199	198	5	9	6.8	94552	PASS
275	198	10	60	33.6	468032	PASS
365	442	1	50	2.2	54384	PASS
441	443	0	100	74.4	367104	PASS
442	442	100	100	100.0	2480640	PASS
443	442	15	24	19.9	493376	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306587-2	J:\MS11\DATA\050703\0507F002.D	05/07/2003	10:26	
CH-Control-SedMS	KWG0305921-3	J:\MS11\DATA\050703\0507F012.D	05/07/2003	17:10	
CH-Control-SedDMS	KWG0305921-4	J:\MS11\DATA\050703\0507F013.D	05/07/2003	17:46	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302965
Project: Canaveral Harbor 103 Evaluation **Calibration Date:** 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533 **Column:** MS
Instrument ID: MS11

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302965
Project: Canaveral Harbor 103 Evaluation **Calibration Date:** 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533 **Column:** MS
Instrument ID: MS11

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302965
Project: Canaveral Harbor 103 Evaluation **Calibration Date:** 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533 **Column:** MS
Instrument ID: MS11

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/06/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306468
Units: ng/ml

File ID: J:\MS11\DATA\050603\0506F024.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.672	2	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.82	5	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	1	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.55	3	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.27	4	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.17	1.07	-9	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.06	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	1900	0.01	1.20	1.17	-3	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.18	-8	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.973	-10	NA	± 20 %	AverageRF
Chrysene	2000	1800	0.01	1.10	1.02	-8	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.45	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1700	0.01	1.98	1.69	-15	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.27	-5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.908	1	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.952	0.948	0	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1800	0.01	1.15	1.06	-8	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2000	0.01	0.711	0.726	2	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.05	1.01	-4	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	1.01	0.936	-8	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.802	-12	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965
Date Analyzed: 05/07/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306587
Units: ng/ml

File ID: J:\MS11\DATA\050703\0507F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.676	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.82	5	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.54	3	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.26	3	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.17	1.07	-9	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.06	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	1900	0.01	1.20	1.16	-4	NA	± 20 %	AverageRF
Pyrene	2000	1900	0.01	1.28	1.22	-5	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.987	-8	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.48	-14	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1800	0.01	1.98	1.75	-11	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.27	-5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.902	0.857	-5	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.01	0.952	0.905	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1700	0.01	1.15	0.983	-15	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2000	0.01	0.711	0.725	2	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.05	1.00	-4	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	1.01	0.933	-8	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.824	-10	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302965

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0306468
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0506F023.D	GC/MS Tuning - Decafluorotriphenyl	KWG0306468-1	5/6/2003	22:16		5/6/2003	22:29
0506F024.D	Continuing Calibration Verification	KWG0306468-2	5/6/2003	22:37		5/6/2003	23:03
0506F025.D	Instrument Blank	KWG0306468-3	5/6/2003	23:13		5/6/2003	23:39
0506F026.D	Method Blank	KWG0305921-7	5/6/2003	23:49		5/7/2003	00:15
0506F027.D	ZZZZZZ	ZZZZZZ	5/7/2003	00:24		5/7/2003	00:50
0506F028.D	ZZZZZZ	ZZZZZZ	5/7/2003	01:00		5/7/2003	01:26
0506F029.D	ZZZZZZ	ZZZZZZ	5/7/2003	01:36		5/7/2003	02:02
0506F030.D	ZZZZZZ	ZZZZZZ	5/7/2003	02:12		5/7/2003	02:38
0506F031.D	CH-Control-Sed	K2302965-001	5/7/2003	02:48		5/7/2003	03:14
0506F032.D	ZZZZZZ	ZZZZZZ	5/7/2003	03:24		5/7/2003	03:50
0506F033.D	ZZZZZZ	ZZZZZZ	5/7/2003	04:00		5/7/2003	04:26
0506F034.D	ZZZZZZ	ZZZZZZ	5/7/2003	04:35		5/7/2003	05:01
0506F035.D	ZZZZZZ	ZZZZZZ	5/7/2003	05:11		5/7/2003	05:37
0506F036.D	ZZZZZZ	ZZZZZZ	5/7/2003	05:47		5/7/2003	06:13
0506F037.D	ZZZZZZ	ZZZZZZ	5/7/2003	06:23		5/7/2003	06:49
0506F038.D	Lab Control Sample	KWG0305921-5	5/7/2003	08:54		5/7/2003	09:20
0506F039.D	Duplicate Lab Control Sample	KWG0305921-6	5/7/2003	09:30		5/7/2003	09:56

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302965
Project: Canaveral Harbor 103 Evaluation

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0306587
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0507F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0306587-1	5/7/2003	10:04		5/7/2003	10:17
0507F002.D	Continuing Calibration Verification	KWG0306587-2	5/7/2003	10:26		5/7/2003	10:52
0507F100.D	Instrument Blank	KWG0306587-3	5/7/2003	11:40		5/7/2003	12:06
0507F004.D	ZZZZZZ	ZZZZZZ	5/7/2003	12:17		5/7/2003	12:43
0507F005.D	ZZZZZZ	ZZZZZZ	5/7/2003	12:53		5/7/2003	13:19
0507F006.D	ZZZZZZ	ZZZZZZ	5/7/2003	13:30		5/7/2003	13:56
0507F007.D	ZZZZZZ	ZZZZZZ	5/7/2003	14:07		5/7/2003	14:33
0507F008.D	ZZZZZZ	ZZZZZZ	5/7/2003	14:44		5/7/2003	15:10
0507F009.D	ZZZZZZ	ZZZZZZ	5/7/2003	15:21		5/7/2003	15:47
0507F010.D	ZZZZZZ	ZZZZZZ	5/7/2003	15:57		5/7/2003	16:23
0507F011.D	ZZZZZZ	ZZZZZZ	5/7/2003	16:34		5/7/2003	17:00
0507F012.D	CH-Control-SedMS	KWG0305921-3	5/7/2003	17:10		5/7/2003	17:36
0507F013.D	CH-Control-SedDMS	KWG0305921-4	5/7/2003	17:46		5/7/2003	18:12
0507F014.D	ZZZZZZ	ZZZZZZ	5/7/2003	18:22		5/7/2003	18:48
0507F015.D	ZZZZZZ	ZZZZZZ	5/7/2003	18:58		5/7/2003	19:24
0507F016.D	ZZZZZZ	ZZZZZZ	5/7/2003	19:33		5/7/2003	19:59
0507F017.D	ZZZZZZ	ZZZZZZ	5/7/2003	20:09		5/7/2003	20:35
0507F018.D	ZZZZZZ	ZZZZZZ	5/7/2003	20:45		5/7/2003	21:11
0507F019.D	ZZZZZZ	ZZZZZZ	5/7/2003	21:21		5/7/2003	21:47
0507F020.D	ZZZZZZ	ZZZZZZ	5/7/2003	21:57		5/7/2003	22:23

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2302965
Date Extracted: 04/29/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0305921
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
CH-Control-Sed	K2302965-001	04/17/03	04/22/03	27.00g	2ml	74.2	
Method Blank	KWG0305921-7	NA	NA	27.56g	2ml	NA	
CH-Control-SedMS	KWG0305921-3	04/17/03	04/22/03	27.00g	2ml	74.2	
CH-Control-SedDMS	KWG0305921-4	04/17/03	04/22/03	26.97g	2ml	74.2	
Lab Control Sample	KWG0305921-5	NA	NA	20.00g	2ml	NA	
Duplicate Lab Control Sample	KWG0305921-6	NA	NA	20.00g	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

[redacted]

May 21, 2003 Service Request No: K2302961

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 22, 2003. For your reference, these analyses have been assigned our service request number K2302961.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/cb

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Received:**	4/22/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One water sample was received for analysis at Columbia Analytical Services on 4/22/03. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

Several alternative procedures were used due to difficulties encountered that were primarily related to the associated elutriate samples. Arsenic was analyzed using EPA Method 7062 (Hydride/AAS). Although the Reductive Precipitation/ICP-MS procedure performs very well in typical seawater and other complex salt matrices, an interference was observed in some of the elutriate samples. Therefore, all samples were analyzed by Hydride/AAS.

Iron and Aluminum were initially planned for analysis by EPA Method 6010 (ICP-AES). To circumvent interferences, the Iron was analyzed by EPA Method 7381 (GFAAS) and Aluminum was analyzed by EPA Method 200.8 (ICP-MS after appropriate dilution of the digestate).

No other anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

Holding Time Exceptions:
Sample CH-Control-Elut. was inadvertently omitted for Oil & Grease analysis during sample login. The error was not discovered until the sample was one day past the recommended holding time. Thus, the analysis was performed one day past the recommended hold time. The data is flagged to indicate the holding time violation.

Lab Control Sample Exceptions:
The control criterion was exceeded for the following analyte in Laboratory Control Samples (LCS/DLCS) K030516-WL1 and K030516-WL2: Oil and Grease, Total (HEM). The problem indicates a potential bias for results reported from this analytical batch. Reanalysis was not performed because insufficient sample remained for additional testing. The data is flagged to indicate the problem.

No other anomalies associated with the analysis of these samples were observed.

Approved by W. Cl[illegible] **Date** 5/21/03

Organotin Compounds

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Sample Notes and Discussion:
Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of these samples were observed.

Approved by R. Clt **Date** 5/21/03

Chain of Custody Documentation

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custory

1G30 29 61

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
CH-Control-Sed	04/ 7 /03	1705	Sediment	16 oz glass jars	2	Per Contract		Sediment Received from
CH-Control-Elut.	04/ 7 /03	0955	Elutriate	various	7	Per Contract		Martin - CSE
	04/ /03					Per Contract		
	04/ /03					Per Contract		PPB performed elutriation
	04/ /03					Per Contract		
	04/ /03					Per Contract		Collection of sea water
	04/ /03					Per Contract		for elutriation (0955
	04/ /03					Per Contract		4/7/03) indicates
	04/ /03					Per Contract		start of holding time
	04/ /03					Per Contract		for elutriate sample
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
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	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		

~~Precleaned Containers~~ Relinquished by: [signature]
Date: 4/21/03 Time: 1540
Samples Relinquished by: [signature]
Date: 4/21/03 Time: 1645

Received by: [signature]
Date: 4/21/03 Time: 1540
Received by: [signature]
Date: 4/22/03 Time: 1000

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Anamar Work Order K23 02961

Cooler received on 4/22/03 and opened on 4/22/03 by [illegible]

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: (Y) N
4. COC #
   Temperature of cooler(s) upon receipt: 4.5
   Temperature Blank: 2.1
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present bmap - loose ice
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? (Y) N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies: Seds on separate SR per J.C.

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03

Carbon, Total Organic

Units : mg/L (ppm)
Basis : NA

Analysis Method 415.1
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
CH-Contol-Elut.	K2302961-001	0.5	0.2	1	04/28/03	4.8	
Method Blank	K2302961-MB	0.5	0.2	1	04/28/03	ND	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03
Date Extracted : NA
Date Analyzed : 04/28/03

Duplicate Summary
Inorganic Parameters

Sample Name : CH-Contol-Elut.
Lab Code : K2302961-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	415.1	0.5	4.8	4.8	4.8	<1	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03
Date Extracted : NA
Date Analyzed : 04/28/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : CH-Contol-Elut.
Lab Code : K2302961-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	415.1	0.5	25.0	4.8	30.2	102	85-115	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302961
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/28/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302961-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	mg/L (ppm)	415.1	27.1	26.6	98	85-115	

Approved By BL Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Collected: NA
Date Received: NA
Date Analyzed: 04/28/03

Carbon, Total Organic
EPA Method 415.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	25.0	24.9	100
CCV 2 Result	25.0	25.2	101
CCV 3 Result	25.0	24.7	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.5	ND
CCB 2 Result	0.5	ND
CCB 3 Result	0.5	ND

Approved By: _____ Date: 5/02/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03

Sulfide, Total

Units : mg/L (ppm)
Basis : NA

Analysis Method 376.2
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
CH-Contol-Elut.	K2302961-001	0.05	0.004	1	04/22/03	ND	
Method Blank	K2302961-MB	0.05	0.004	1	04/22/03	ND	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03
Date Extracted : NA
Date Analyzed : 04/22/03

Duplicate Summary
Inorganic Parameters

Sample Name : CH-Contol-Elut.
Lab Code : K2302961-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.05	ND	ND	ND	-	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03
Date Extracted : NA
Date Analyzed : 04/22/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : CH-Contol-Elut.
Lab Code : K2302961-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	376.2	0.05	0.92	ND	0.88	96	75-125	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302961
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/22/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302961-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	mg/L (ppm)	376.2	0.92	0.92	100	85-115	

Approved By [signature] Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Collected: NA
Date Received: NA
Date Analyzed: 04/22/03

Sulfide
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.92	0.92	100
CCV 2 Result	0.92	0.91	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND

Approved By: BL Date: 5/02/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03

Ammonia as Nitrogen

Units : mg/L (ppm)
Basis : NA

Analysis Method 350.1
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
CH-Contol-Elut.	K2302961-001	0.05	0.02	1	04/23/03	0.30	
Method Blank	K2302961-MB	0.05	0.02	1	04/23/03	0.03	J

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03
Date Extracted : NA
Date Analyzed : 04/23/03

Duplicate Summary
Inorganic Parameters

Sample Name : CH-Contol-Elut.
Lab Code : K2302961-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	350.1	0.05	0.30	0.30	0.30	<1	

Approved By _____ Date : 8/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03
Date Extracted : NA
Date Analyzed : 04/23/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : CH-Contol-Elut.
Lab Code : K2302961-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	350.1	0.05	2.00	0.30	2.45	108	75-125	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302961
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/23/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302961-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	2.29	2.26	99	85-115	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Collected: NA
Date Received: NA
Date Analyzed: 04/23/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 3 Result	2.00	2.01	101
CCV 4 Result	2.00	1.99	100
CCV 5 Result	2.00	1.98	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 3 Result	0.05	ND
CCB 4 Result	0.05	ND
CCB 5 Result	0.05	ND

Approved By: _____ Date: 5/02/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : 04/17/03
Date Received : 04/22/03

Cyanide, Total

Units : mg/L (ppm)
Basis : NA

Analysis Method 335.2
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
CH-Contol-Elut.	K2302961-001	0.01	0.003	1	04/24/03	ND	
Method Blank	K2302961-MB	0.01	0.003	1	04/24/03	ND	

Approved By _____ Date : 5/16/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/24/03

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K2302785-008DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	335.2	0.01	ND	ND	ND	-	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation
Project Number : NA
Sample Matrix : Water

Service Request : K2302961
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/24/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K2302785-008MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	335.2	0.01	0.10	ND	0.10	100	75-125	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302961
Project Name :	Canaveral Harbor 103 Evaluation	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/24/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302961-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	mg/L (ppm)	335.2	0.75	0.78	104	85-115	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Collected: NA
Date Received: NA
Date Analyzed: 04/24/03

Cyanide, Total
EPA Method 335.2
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	100	108	108
CCV 3 Result	100	109	109

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	10	ND
CCB 3 Result	10	ND

Approved By: _____ Date: 5/3/03

COMBOQCD/042695

Q-CCV.XLT

10/6/95

Metals

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Sample No.	Lab Sample ID.
Batch QC3D	K2302785-001D
Batch QC4S	K2302785-002S
Batch QCD	K2302808-002D
Batch QCS	K2302808-002S
Batch QC2D	K2302808-006D
Batch QC2S	K2302808-006S
CH-Contol-Elut.	K2302961-001
CH-Contol-Elut.D	K2302961-001D
CH-Contol-Elut.S	K2302961-001S
Method Blank	K2302961-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/16/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: WATER

Service Request: K2302961
Date Collected: 04/17/03
Date Received: 04/22/03
Units: µG/L
Basis: NA

Sample Name: CH-Contol-Elut.
Lab Code: K2302961-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	11.0		
Antimony	200.8	0.50	0.20	10	5/7/03	5/8/03	1.74		
Arsenic	7062	1.00	0.50	2	5/14/03	5/15/03	2.92		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.29	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.24		
Iron	7381	10.0	10.0	10	5/6/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.27		
Mercury	7470A	0.20	0.10	1	4/28/03	4/29/03	0.10	U	
Nickel	200.8	0.40	0.08	1	4/25/03	5/2/03	0.54		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.06		
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.5		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: WATER

Service Request: K2302961
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2302961-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	9.8	B	
Antimony	200.8	0.50	0.20	10	5/7/03	5/8/03	0.20	U	
Arsenic	7062	1.00	0.50	2	5/14/03	5/15/03	0.50	U	
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.25	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.02	U	
Iron	7381	10.0	10.0	10	5/6/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/28/03	4/29/03	0.10	U	
Nickel	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	U	
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.4	U	

% Solids: 0.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	200	40.0	100	25.0	25.2	101	24.8	99	200.8
Antimony	50.0	10.6	106	25.0	24.9	100	25.2	101	200.8
Arsenic	5.0	5.06	101	5.0	4.58	92	5.16	103	7062
Cadmium	25.0	24.8	99	25.0	25.1	100	25.0	100	200.8
Chromium	20.0	19.8	99	25.0	24.9	100	25.4	102	200.8
Copper	25.0	24.1	96	25.0	24.5	98	24.4	98	200.8
Iron	12.5	12.4	99	10.0	16.4	164	10.4	104	7381
Lead	50.0	47.6	95	25.0	24.9	100	24.7	99	200.8
Mercury	5.0	5.07	101	5.0	5.05	101	5.36	107	7470A
Nickel	50.0	48.2	96	25.0	24.6	98	24.3	97	200.8
Silver	25.0	24.8	99	25.0	24.8	99	24.8	99	200.8
Zinc	50.0	49.5	99	25.0	25.0	100	25.0	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				25.0	25.2	101	25.7	103	200.8
Antimony				25.0	25.0	100	25.4	102	200.8
Cadmium				25.0	24.4	98	24.8	99	200.8
Chromium				25.0	25.0	100	25.0	100	200.8
Copper				25.0	24.8	99	25.0	100	200.8
Iron				10.0	9.84	98	10.1	101	7381
Lead				25.0	24.2	97	24.9	100	200.8
Mercury				5.0	5.08	102	5.25	105	7470A
Nickel				25.0	24.9	100	24.7	99	200.8
Silver				25.0	24.5	98	24.9	100	200.8
Zinc				25.0	25.2	101	25.2	101	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cadmium				25.0	24.7	99			200.8
Chromium				25.0	24.8	99			200.8
Copper				25.0	24.9	100			200.8
Iron				10.0	10.1	100			7381
Lead				25.0	25.1	100			200.8
Mercury				5.0	5.30	106	5.23	105	7470A
Nickel				25.0	24.6	98			200.8
Silver				25.0	24.9	99			200.8
Zinc				25.0	25.0	100			200.8

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				2.0	2.01	101		
Antimony				0.05	0.068	136		
Arsenic	0.50	0.33	66					
Cadmium				0.40	0.43	108		
Chromium				2.0	2.00	100		
Copper				1.0	0.99	99		
Iron	5.0	6.780	136					
Lead				0.20	0.20	98		
Mercury	0.20	0.20	101					
Nickel				2.0	2.21	111		
Silver				0.20	0.17	86		
Zinc				5.0	4.70	94		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum	0.6	U	0.6	U	0.6	U	0.6	U					200.8
Antimony	0.035	B	0.021	B	0.02	U	0.020	U					200.8
Arsenic	0.25	U	0.25	U	0.25	U							7062
Cadmium	0.060	U	0.060	U	0.06	U	0.060	U					200.8
Chromium	0.40	U	0.40	U	0.40	U	0.40	U					200.8
Copper	0.10	U	0.10	U	0.10	U	0.10	U					200.8
Iron	1.000	U	1.000	U	1.000	U	1.000	U					7381
Lead	0.200	U	0.200	U	0.200	U	0.200	U					200.8
Mercury	0.10	U	0.10	U	0.10	U	0.10	U					7470A
Nickel	0.40	U	0.40	U	0.40	U	0.40	U					200.8
Silver	0.070	U	0.070	U	0.07	U	0.070	U					200.8
Zinc	2.0	U	2.0	U	2.0	U	2.0	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum			0.6	U									200.8
Antimony			0.020	U									200.8
Cadmium			0.060	U	0.06	U							200.8
Chromium			0.40	U	0.40	U							200.8
Copper			0.10	U	0.10	U							200.8
Iron			1.000	U	1.000	U							7381
Lead			0.200	U	0.200	U							200.8
Mercury			0.10	U	0.10	U	0.10	U					7470A
Nickel			0.40	U	0.40	U							200.8
Silver			0.070	U	0.07	U							200.8
Zinc			2.0	U	2.0	U							200.8

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302961
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: CH-Contol-Elut.S
Lab Code: K2302961-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	75 - 125	16.2		2.92		16.0	83		7062
Iron	75 - 125	1070		10.0	U	1000	107		7381
Mercury	74 - 120	0.97		0.10	U	1.00	97		7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302961
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QCS
Lab Code: K2302808-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	103		10.7	B	100	92		200.8
Antimony	70 - 130	92.1		0.395	B	100	92		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302961
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QC2S
Lab Code: K2302808-006S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	112		18.7	B	100	93		200.8
Antimony	70 - 130	89.4		0.311	B	100	89		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QC4S Lab Code: K2302785-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Cadmium	51 - 127	3.520		0.012	U	4.000	88		200.8
Chromium	48 - 136	3.74		0.08	U	4.00	94		200.8
Copper	47 - 113	3.48		0.24		4.00	81		200.8
Lead	61 - 120	3.460		0.040	U	4.000	87		200.8
Nickel	1 - 111	3.43		0.44		4.00	75		200.8
Silver	66 - 112	3.330		0.130		4.000	80		200.8
Zinc	36 - 143	4.3		1.2		4.0	78		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: CH-Contol-Elut.D Lab Code: K2302961-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic		2.92		3.62		21		7062
Iron		10.000	U	10.000	U			7381
Mercury		0.10	U	0.10	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QCD Lab Code: K2302808-002D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		10.7	B	15.0	B	33		200.8
Antimony		0.395	B	0.374	B	5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: Batch QC2D Lab Code: K2302808-006D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		18.7	B	17.3	B	8		200.8
Antimony		0.311	B	0.306	B	2		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302961
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QC3D
Lab Code: K2302785-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Cadmium		0.017	B	0.014	B	14		200.8
Chromium		0.19	B	0.19	B	2		200.8
Copper		0.74		0.69		6		200.8
Lead		0.040	U	0.040	U			200.8
Nickel		0.33	B	0.32	B	4		200.8
Silver		0.018	B	0.014	U	200.0		200.8
Zinc		1.7		1.6		5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 7 -
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits		Solid (mg/kg) %R
Aluminum	100	95.7	96						
Antimony	100	85.2	85						
Arsenic	16.0	16.1	101						
Cadmium	4.00	4.12	103						
Chromium	4.00	3.96	99						
Copper	4.00	3.96	99						
Iron	2500	2640	106						
Lead	4.00	4.02	101						
Mercury	5.00	5.03	101						
Nickel	4.00	3.98	100						
Silver	4.00	3.86	97						
Zinc	4.00	4.26	107						

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.20	0.10	7470A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Cadmium	111		0.200	0.060	200.8
Chromium	52		2.00	0.40	200.8
Copper	65		1.00	0.10	200.8
Lead	208		0.200	0.200	200.8
Nickel	60		2.00	0.40	200.8
Silver	107		0.200	0.070	200.8
Zinc	66		5.0	2.0	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	27		2.0	0.6	200.8
Antimony	123		0.050	0.020	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: Varian-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	193.60		0.50	0.25	7062

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: Varian-5 (GFAA) AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Iron	259.90	BZ	1.000	1.000	7381

Comments

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Cadmium	15.00	1000.0	200.8
Chromium	15.00	1000.0	200.8
Copper	15.00	400.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	700.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	700.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	15.00	300.0	200.8
Antimony	15.00	600.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: AA

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302961-001	5/14/03	EPA 3010A	25	25
K2302961-001D	5/14/03	EPA 3010A	25	25
K2302961-001S	5/14/03	EPA 3010A	25	25
LCSW	5/14/03	EPA 3010A	25	25
K2302961-MB	5/14/03	EPA 3010A	25	25

K2302961-001	4/28/03	METHOD	20	20
K2302961-001D	4/28/03	METHOD	20	20
K2302961-001S	4/28/03	METHOD	20	20
LCSW	4/28/03	METHOD	20	20
K2302961-MB	4/28/03	METHOD	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: F

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302961-001	5/6/03	CLAA	20	20
K2302961-001D	5/6/03	CLAA	20	20
K2302961-001S	5/6/03	CLAA	20	20
LCSW	5/6/03	CLAA	20	20
K2302961-MB	5/6/03	CLAA	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302808-006D	5/7/03	CLFAA	20	20
K2302808-006S	5/7/03	CLFAA	20	20
K2302808-002D	5/7/03	CLFAA	20	20
K2302808-002S	5/7/03	CLFAA	20	20
K2302961-001	5/7/03	CLFAA	20	20
LCSW	5/7/03	CLFAA	20	20
K2302961-MB	5/7/03	CLFAA	20	20
K2302785-001D	4/25/03	RED PPTN	500	100
K2302785-002S	4/25/03	RED PPTN	500	100
K2302961-001	4/25/03	RED PPTN	500	100
LCSW	4/25/03	RED PPTN	500	100
K2302961-MB	4/25/03	RED PPTN	500	100

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/15/03 End Date: 5/15/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	19:00				X																					
S0	1.00	19:02				X																					
S0	1.00	19:04				X																					
S0	1.00	19:06				X																					
S0	1.00	19:08				X																					
S0	1.00	19:10				X																					
ICV	1.00	19:12				X																					
ICB	1.00	19:14				X																					
CCV1	1.00	19:16				X																					
CCB1	1.00	19:18				X																					
CRI	1.00	19:20				X																					
K2302961-MB	2.00	19:22				X																					
LCSW	2.00	19:24				X																					
ZK2302961-001	2.00	19:26																									
K2302961-001D	2.00	19:28				X																					
K2302961-001S	2.00	19:30				X																					
K2302961-001	2.00	19:32				X																					
CCV2	1.00	19:34				X																					
CCB2	1.00	19:36				X																					

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-5 (GFAA) Method: F

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	10:04												X													
S5	1.00	10:08												X													
S10	1.00	10:12												X													
S15	1.00	10:16												X													
S20	1.00	10:20												X													
ICV	1.00	10:24												X													
ICB	1.00	10:28												X													
CCV1	1.00	10:32												X													
CCB1	1.00	10:36												X													
ZZZZZZ	1.00	10:40																									
ZZZZZZ	1.00	10:44																									
CCV2	1.00	10:48												X													
CCB2	1.00	10:52												X													
CRI	1.00	10:56												X													
K2302961-MB	10.00	11:00												X													
LCSW	200.00	11:04												X													
K2302961-001	10.00	11:08												X													
ZK2302961-001A	10.00	11:12	-9999																								
K2302961-001D	10.00	11:16												X													
K2302961-001S	100.00	11:20												X													
ZZZZZZ	10.00	11:24																									
CCV3	1.00	11:28												X													
CCB3	1.00	11:32												X													
ZZZZZZ	1.00	11:36																									
ZZZZZZ	1.00	11:40																									
K2302961-001A	10.00	11:44	-9999											X													
ZZZZZZ	1.00	11:48																									
ZZZZZZ	10.00	11:52																									
ZZZZZZ	200.00	11:56																									
ZZZZZZ	10.00	12:00																									

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-5 (GFAA) Method: F

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	10.00	12:04																									
ZZZZZZ	10.00	12:08																									
ZZZZZZ	10.00	12:12																									
ZZZZZZ	10.00	12:16																									
ZZZZZZ	100.00	12:20																									
CCV4	1.00	12:24												X													
CCB4	1.00	12:28												X													
ZZZZZZ	10.00	12:32																									
ZZZZZZ	10.00	12:36																									
ZZZZZZ	10.00	12:40																									
ZZZZZZ	10.00	12:44																									
ZZZZZZ	10.00	12:48																									
ZZZZZZ	100.00	12:52																									
ZZZZZZ	10.00	12:56																									
ZZZZZZ	10.00	13:00																									
ZZZZZZ	10.00	13:04																									
ZZZZZZ	10.00	13:08																									
CCV5	1.00	13:12												X													
CCB5	1.00	13:16												X													

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/29/03 End Date: 4/29/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	09:57																X									
STANDARD #1	1.00	09:58																X									
STANDARD #2	1.00	10:00																X									
STANDARD #3	1.00	10:02																X									
STANDARD #4	1.00	10:03																X									
STANDARD #5	1.00	10:05																X									
ICV	1.00	10:07																X									
ICB	1.00	10:08																X									
CCV1	1.00	10:10																X									
CCB1	1.00	10:11																X									
CRA	1.00	10:13																X									
ZZZZZZ	1.00	10:15																									
ZZZZZZ	1.00	10:16																									
ZZZZZZ	1.00	10:18																									
ZZZZZZ	1.00	10:19																									
ZZZZZZ	1.00	10:21																									
ZZZZZZ	1.00	10:23																									
ZZZZZZ	1.00	10:24																									
ZZZZZZ	1.00	10:26																									
ZZZZZZ	1.00	10:27																									
CCV2	1.00	10:29																X									
CCB2	1.00	10:31																X									
ZZZZZZ	1.00	10:32																									
ZZZZZZ	1.00	10:34																									
ZZZZZZ	1.00	10:36																									
ZZZZZZ	1.00	10:37																									
ZZZZZZ	1.00	10:39																									
ZZZZZZ	1.00	10:40																									
ZZZZZZ	1.00	10:42																									
ZZZZZZ	1.00	10:44																									

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/29/03 End Date: 4/29/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:45																									
ZZZZZZ	1.00	10:47																									
CCV3	1.00	10:48																X									
CCB3	1.00	10:50																X									
ZZZZZZ	1.00	10:52																									
ZZZZZZ	1.00	10:53																									
ZZZZZZ	1.00	10:55																									
ZZZZZZ	1.00	10:57																									
ZZZZZZ	1.00	10:58																									
ZZZZZZ	1.00	11:00																									
ZZZZZZ	1.00	11:01																									
ZZZZZZ	1.00	11:03																									
ZZZZZZ	1.00	11:05																									
K2302961-MB	1.00	11:06																X									
CCV4	1.00	11:08																X									
CCB4	1.00	11:10																X									
LCSW	1.00	11:11																X									
ZZZZZZ	1.00	11:13																									
ZZZZZZ	1.00	11:14																									
ZZZZZZ	1.00	11:16																									
ZZZZZZ	1.00	11:18																									
ZZZZZZ	1.00	11:19																									
ZZZZZZ	1.00	11:21																									
ZZZZZZ	1.00	11:23																									
ZZZZZZ	1.00	11:24																									
ZZZZZZ	1.00	11:26																									
CCV5	1.00	11:27																X									
CCB5	1.00	11:29																X									
ZZZZZZ	1.00	11:31																									
ZZZZZZ	1.00	11:32																									

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/29/03 End Date: 4/29/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	11:34																									
ZZZZZZ	1.00	11:36																									
K2302961-001	1.00	11:37																X									
K2302961-001D	1.00	11:39																X									
K2302961-001S	1.00	11:41																X									
CCV6	1.00	11:42																X									
CCB6	1.00	11:44																X									

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	10:16							X		X		X		X				X			X				X	
25 PPB STD. MS3-6-B	1.00	10:20							X		X		X		X				X			X				X	
ICV	1.00	10:23							X		X		X		X				X			X				X	
CCV1	1.00	10:26							X		X		X		X				X			X				X	
ICB1	1.00	10:31							X		X		X		X				X			X				X	
CCB1	1.00	10:34							X		X		X		X				X			X				X	
ZZZZZZ	1.00	10:36																									
ZZZZZZ	1.00	10:39																									
ZZZZZZ	1.00	10:43																									
ZZZZZZ	1.00	10:45																									
ZZZZZZ	1.00	10:48																									
ZZZZZZ	1.00	10:51																									
ZZZZZZ	1.00	10:54																									
ZZZZZZ	1.00	10:56																									
ZZZZZZ	1.00	10:59																									
ZZZZZZ	1.00	11:02																									
CCV2	1.00	11:05							X		X		X		X				X			X				X	
CCB2	1.00	11:10							X		X		X		X				X			X				X	
CCV3	1.00	11:43							X		X		X		X				X			X				X	
CCB3	1.00	11:47							X		X		X		X				X			X				X	
CRA	1.00	11:50							X		X		X		X				X			X				X	
K2302961-MB	1.00	11:55							X		X		X		X				X			X				X	
LCSW	1.00	11:58							X		X		X		X				X			X				X	
ZZZZZZ	1.00	12:03																									
K2302785-001D	1.00	12:06							X		X		X		X				X			X				X	
ZZZZZZ	1.00	12:09																									
K2302785-002S	1.00	12:16							X		X		X		X				X			X				X	
ZZZZZZ	1.00	12:20																									
ZZZZZZ	1.00	12:23																									
ZZZZZZ	1.00	12:25																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV4	1.00	12:29							X		X		X		X				X			X				X	
CCB4	1.00	12:34							X		X		X		X				X			X				X	
ZZZZZZ	1.00	12:39																									
ZZZZZZ	1.00	12:42																									
ZZZZZZ	1.00	12:45																									
ZZZZZZ	1.00	12:48																									
ZZZZZZ	1.00	12:51																									
K2302961-001	1.00	12:54							X		X		X		X				X			X				X	
CCV5	1.00	12:57							X		X		X		X				X			X				X	
CCB5	1.00	13:01							X		X		X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	11:37		X	X																						
S25	1.00	11:39		X	X																						
ICV	1.00	11:40		X	X																						
ICV	5.00	11:42		X	X																						
CCV1	1.00	11:43		X	X																						
ICB	1.00	11:47		X	X																						
CCB1	1.00	11:49		X	X																						
CRA	1.00	11:50		X	X																						
K2302961-MB	10.00	11:52			X																						
LCSW	10.00	11:53		X	X																						
ZZZZZZ	10.00	11:56																									
K2302808-002D	10.00	11:57		X	X																						
K2302808-002S	10.00	11:58		X	X																						
ZZZZZZ	10.00	12:01																									
K2302808-006D	10.00	12:02		X	X																						
K2302808-006S	10.00	12:04		X	X																						
CCV2	1.00	12:06		X	X																						
CCB2	1.00	12:11		X	X																						
ZZZZZZ	10.00	12:13																									
ZZZZZZ	10.00	12:14																									
ZZZZZZ	10.00	12:16																									
ZZZZZZ	10.00	12:17																									
ZZZZZZ	10.00	12:19																									
ZZZZZZ	10.00	12:20																									
ZZZZZZ	10.00	12:21																									
ZZZZZZ	10.00	12:23																									
ZZZZZZ	10.00	12:24																									
CCV3	1.00	12:25		X	X																						
CCB3	1.00	12:30		X	X																						
ZZZZZZ	10.00	12:32																									

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302961

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	10.00	12:33																									
ZZZZZZ	10.00	12:35																									
ZZZZZZ	10.00	12:36																									
ZZZZZZ	10.00	12:38																									
ZZZZZZ	10.00	12:39																									
ZZZZZZ	10.00	12:45																									
K2302961-001	10.00	12:46		X	X																						
CCV4	1.00	12:48		X	X																						
CCB4	1.00	12:53		X	X																						

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Oil and Grease
Method 1664

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	4/17/03
Sample Matrix:	Water	**Date Received:**	4/22/03

Oil and Grease

Sample Name:	CH-Contol-Elut.	Units:	mg/L (ppm)
Lab Code:	K2302961-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	5/16/03	5/19/03	ND	H

Approved By: M Lula Date: 5/20/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	K030516-WB	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	5/16/03	5/19/03	ND	

Approved By: M Curtis Date: 5/20/03

1S22/020597p

02961PHC.ME1 - MB 5/20/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	5/16/03
		Date Analyzed:	5/19/03

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K030516-WL1, K030516-WL2	Basis:	NA
Test Notes:			

							Percent Recovery				
Analyte	**Prep Method**	**Analysis Method**	**True Value** LCS	**True Value** DLCS	**Result** LCS	**Result** DLCS	LCS	DLCS	CAS Acceptance Limits	**Relative Percent Difference**	**Result Notes**
Oil and Grease, Total (HEM)	METHOD	1664	40	40	18	19	45	48	78-114	5	*

Approved By: M Cuter Date: 5/20/03

DLCS/072898p
02961PHC.ME1 - DLCS 5/20/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 5/19/03

Continuing Calibration Verification (CCV) Summary
EPA Methods 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	2.0	100	2.0	100

Approved By: M Curla Date: 5/20/03

CCV 1-4/102194

02961PHC.ME1 - ccv 5/20/03

Page No.:

Organotins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
CH-Contol-Elut.	K2302961-001	04/17/2003	04/22/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: 5/21/03 Title: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961
Date Collected: 04/17/2003
Date Received: 04/22/2003

Butyltins

Sample Name: CH-Contol-Elut.
Lab Code: K2302961-001

Units: ug/L
Basis: NA

Extraction Method: EPA 3520
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/24/03	05/20/03	KWG0305772	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/24/03	05/20/03	KWG0305772	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/24/03	05/20/03	KWG0305772	
n-Butyltin	ND	U	0.050	0.0065	1	04/24/03	05/20/03	KWG0305772	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	73	41-128	05/20/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305772-4	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/24/03	05/20/03	KWG0305772	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/24/03	05/20/03	KWG0305772	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/24/03	05/20/03	KWG0305772	
n-Butyltin	ND	U	0.050	0.0065	1	04/24/03	05/20/03	KWG0305772	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	70	41-128	05/20/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961

Surrogate Recovery Summary
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
CH-Contol-Elut.	K2302961-001	73
Method Blank	KWG0305772-4	70
Batch QC	K2302863-006	74
Batch QCMS	KWG0305772-1	61
Batch QCDMS	KWG0305772-2	70
Lab Control Sample	KWG0305772-3	69

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 41-128

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/24/2003
Sample Matrix:	Water	**Date Analyzed:**	05/21/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K2302863-006	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305772

Analyte Name	Sample Result	Batch QCMS KWG0305772-1 Matrix Spike			Batch QCDMS KWG0305772-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Tetra-n-butyltin	ND	0.256	1.00	26	0.308	1.00	31	10-110	19	30
Tri-n-butyltin	ND	0.573	1.00	57	0.586	1.00	59	37-138	2	30
Di-n-butyltin	ND	0.541	1.00	54	0.645	1.00	65	29-124	18	30
n-Butyltin	ND	0.790	1.00	79	0.770	1.00	77	10-139	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961
Date Extracted: 04/24/2003
Date Analyzed: 05/20/2003

Lab Control Spike Summary
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0305772

	Lab Control Sample KWG0305772-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	0.116	0.500	23	21-115
Tri-n-butyltin	0.278	0.500	56	22-157
Di-n-butyltin	0.283	0.500	57	19-149
n-Butyltin	0.293	0.500	59	23-150

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/24/2003
Sample Matrix:	Water	**Date Analyzed:**	05/20/2003
		Time Analyzed:	15:38

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\052003B\0520F003.D
Lab Code:	KWG0305772-4	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305772

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305772-3	J:\GC11\DATA\052003B\0520F004.D	05/20/03	15:56
Batch QC	K2302863-006	J:\GC11\DATA\052003B\0520F006.D	05/20/03	16:31
CH-Contol-Elut.	K2302961-001	J:\GC11\DATA\052003B\0520F011.D	05/20/03	18:00
Batch QCMS	KWG0305772-1	J:\GC11\DATA\052003B\0520F020.D	05/21/03	00:42
Batch QCDMS	KWG0305772-2	J:\GC11\DATA\052003B\0520F021.D	05/21/03	01:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/24/2003
Sample Matrix:	Water	**Date Analyzed:**	05/20/2003
		Time Analyzed:	15:56

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\052003B\0520F004.D
Lab Code:	KWG0305772-3	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305772

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305772-4	J:\GC11\DATA\052003B\0520F003.D	05/20/03	15:38
Batch QC	K2302863-006	J:\GC11\DATA\052003B\0520F006.D	05/20/03	16:31
CH-Contol-Elut.	K2302961-001	J:\GC11\DATA\052003B\0520F011.D	05/20/03	18:00
Batch QCMS	KWG0305772-1	J:\GC11\DATA\052003B\0520F020.D	05/21/03	00:42
Batch QCDMS	KWG0305772-2	J:\GC11\DATA\052003B\0520F021.D	05/21/03	01:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\052003\0520F003.D	D	J:\GC11\DATA\052003\0520F006.D
B	J:\GC11\DATA\052003\0520F004.D	E	J:\GC11\DATA\052003\0520F007.D
C	J:\GC11\DATA\052003\0520F005.D	F	J:\GC11\DATA\052003\0520F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	735	B	50	687	C	100	674	D	500	636	E	1000	641
	F	2000	623												
Tri-n-butyltin	A	10	873	B	50	816	C	100	795	D	500	756	E	1000	734
	F	2000	714												
Di-n-butyltin	A	10	942	B	50	1000	C	100	947	D	500	936	E	1000	908
	F	2000	915												
n-Butyltin	A	10	1240	B	50	1250	C	100	1250	D	500	1210	E	1000	1180
	F	2000	1210												
Tri-n-propyltin	A	11	688	B	54	675	C	110	659	D	540	640	E	1100	633
	F	2100	614												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.2		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	3.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	2.3		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 05/20/2003
Date Analyzed: 05/20/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2630
Units: ng/ml

File ID: J:\GC11\DATA\052003\0520F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	510	666	723	9	NA	± 30 %	AverageRF
Tri-n-butyltin	480	490	781	802	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	520	942	1030	9	NA	± 30 %	AverageRF
n-Butyltin	490	550	1220	1370	12	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\052003\0520F003.D\0520R003.D	D	J:\GC11\DATA\052003\0520F006.D\0520R006.D
B	J:\GC11\DATA\052003\0520F004.D\0520R004.D	E	J:\GC11\DATA\052003\0520F007.D\0520R007.D
C	J:\GC11\DATA\052003\0520F005.D\0520R005.D	F	J:\GC11\DATA\052003\0520F008.D\0520R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	439	B	50	365	C	100	367	D	500	359	E	1000	352
	F	2000	352												
Tri-n-butyltin	A	10	452	B	50	451	C	100	470	D	500	445	E	1000	433
	F	2000	413												
Di-n-butyltin	A	10	526	B	50	562	C	100	568	D	500	556	E	1000	539
	F	2000	516												
n-Butyltin	A	10	726	B	50	751	C	100	759	D	500	728	E	1000	704
	F	2000	654												
Tri-n-propyltin	A	11	376	B	54	345	C	110	350	D	540	355	E	1100	349
	F	2100	337												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 05/20/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2630
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	8.9		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	4.3		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	3.9		≤ 20
n-Butyltin	MS	AverageRF	% RSD	5.3		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	3.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 05/20/2003
Date Analyzed: 05/20/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2630
Units: ng/ml

File ID: J:\GC11\DATA\052003\0520F010.D\0520R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	480	372	379	2	NA	± 30 %	AverageRF
Tri-n-butyltin	480	490	444	456	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	500	545	571	5	NA	± 30 %	AverageRF
n-Butyltin	490	520	720	766	6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	666	651	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	781	754	-4	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	942	943	0	NA	± 25 %	AverageRF
n-Butyltin	500	500	1220	1220	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	530	651	649	0	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F002.D\0520R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	450	372	336	-10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	444	418	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	545	514	-6	NA	± 25 %	AverageRF
n-Butyltin	500	460	720	664	-8	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	352	328	-7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F018.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	510	666	681	2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	781	801	3	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	942	976	4	NA	± 25 %	AverageRF
n-Butyltin	500	510	1220	1250	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	560	651	686	5	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/20/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	05/20/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2630
		Analysis Lot:	KWG0307157
		Units:	ng/ml
File ID:	J:\GC11\DATA\052003B\0520F018.D\0520R018.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	530	372	391	5	NA	± 25 %	AverageRF
Tri-n-butyltin	500	540	444	479	8	NA	± 25 %	AverageRF
Di-n-butyltin	500	560	545	607	11	NA	± 25 %	AverageRF
n-Butyltin	500	530	720	768	7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	600	352	392	11	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/21/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F023.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	666	696	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	781	801	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	942	990	5	NA	± 25 %	AverageRF
n-Butyltin	500	530	1220	1290	5	NA	± 25 %	AverageRF
Tri-n-propyltin	540	570	651	692	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/21/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 05/20/2003
Calibration ID: CAL2630
Analysis Lot: KWG0307157
Units: ng/ml

File ID: J:\GC11\DATA\052003B\0520F023.D\0520R023.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	372	386	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	444	474	7	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	545	593	9	NA	± 25 %	AverageRF
n-Butyltin	500	530	720	767	7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	580	352	383	9	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0307157
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0520F001.D	Instrument Blank	KWG0307157-1	5/20/03	15:02		5/20/03	15:14
0520F002.D	Continuing Calibration Verification	KWG0307157-2	5/20/03	15:20		5/20/03	15:32
0520F003.D	Method Blank	KWG0305772-4	5/20/03	15:38		5/20/03	15:50
0520F004.D	Lab Control Sample	KWG0305772-3	5/20/03	15:56		5/20/03	16:08
0520F005.D	ZZZZZZ	ZZZZZZ	5/20/03	16:13		5/20/03	16:25
0520F006.D	Batch QC	K2302863-006	5/20/03	16:31		5/20/03	16:43
0520F009.D	ZZZZZZ	ZZZZZZ	5/20/03	17:24		5/20/03	17:36
0520F010.D	ZZZZZZ	ZZZZZZ	5/20/03	17:42		5/20/03	17:54
0520F011.D	CH-Contol-Elut.	K2302961-001	5/20/03	18:00		5/20/03	18:12
0520F012.D	ZZZZZZ	ZZZZZZ	5/20/03	18:18		5/20/03	18:30
0520F013.D	ZZZZZZ	ZZZZZZ	5/20/03	18:35		5/20/03	18:47
0520F014.D	ZZZZZZ	ZZZZZZ	5/20/03	18:53		5/20/03	19:05
0520F015.D	ZZZZZZ	ZZZZZZ	5/20/03	19:11		5/20/03	19:23
0520F016.D	ZZZZZZ	ZZZZZZ	5/20/03	19:29		5/20/03	19:41
0520F017.D	Instrument Blank	KWG0307157-3	5/20/03	19:46		5/20/03	19:58
0520F018.D	Continuing Calibration Verification	KWG0307157-4	5/20/03	20:04		5/20/03	20:16
0520F019.D	ZZZZZZ	ZZZZZZ	5/21/03	00:25		5/21/03	00:37
0520F020.D	Batch QCMS	KWG0305772-1	5/21/03	00:42		5/21/03	00:54
0520F021.D	Batch QCDMS	KWG0305772-2	5/21/03	01:00		5/21/03	01:12
0520F022.D	Instrument Blank	KWG0307157-5	5/21/03	01:18		5/21/03	01:30
0520F023.D	Continuing Calibration Verification	KWG0307157-6	5/21/03	01:35		5/21/03	01:47

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961
Date Extracted: 04/24/2003

Extraction Prep Log
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Extraction Lot: KWG0305772
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
CH-Contol-Elut.	K2302961-001	04/17/03	04/22/03	500ml	0.5ml	NA	
Method Blank	KWG0305772-4	NA	NA	500ml	0.5ml	NA	
Batch QC	K2302863-006	NA	NA	500ml	0.5ml	NA	
Batch QCMS	KWG0305772-1	NA	NA	250ml	0.5ml	NA	
Batch QCDMS	KWG0305772-2	NA	NA	250ml	0.5ml	NA	
Lab Control Sample	KWG0305772-3	NA	NA	500ml	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
CH-Contol-Elut.	K2302961-001	04/17/2003	04/22/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Julie Gosh

Name: Julie Gosh

Date: 5/16/03

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/2003
Sample Matrix:	Water	**Date Received:**	04/22/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CH-Contol-Elut.	**Units:**	ug/L
Lab Code:	K2302961-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.023**		0.020	0.0032	1	04/24/03	05/05/03	KWG0305744	
2-Methylnaphthalene	**0.0036**	J	0.020	0.0027	1	04/24/03	05/05/03	KWG0305744	
Acenaphthylene	ND	U	0.020	0.0018	1	04/24/03	05/05/03	KWG0305744	
Acenaphthene	**0.0030**	J	0.020	0.0020	1	04/24/03	05/05/03	KWG0305744	
Dibenzofuran	ND	U	0.020	0.0071	1	04/24/03	05/05/03	KWG0305744	
Fluorene	ND	U	0.020	0.0026	1	04/24/03	05/05/03	KWG0305744	
Phenanthrene	**0.0044**	J	0.020	0.0032	1	04/24/03	05/05/03	KWG0305744	
Anthracene	ND	U	0.020	0.0011	1	04/24/03	05/05/03	KWG0305744	
Fluoranthene	ND	U	0.020	0.0024	1	04/24/03	05/05/03	KWG0305744	
Pyrene	ND	U	0.020	0.0023	1	04/24/03	05/05/03	KWG0305744	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/24/03	05/05/03	KWG0305744	
Chrysene	**0.0026**	J	0.020	0.0013	1	04/24/03	05/05/03	KWG0305744	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/24/03	05/05/03	KWG0305744	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/24/03	05/05/03	KWG0305744	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/24/03	05/05/03	KWG0305744	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/24/03	05/05/03	KWG0305744	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/24/03	05/05/03	KWG0305744	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/24/03	05/05/03	KWG0305744	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	59	34-115	05/05/03	Acceptable
Fluorene-d10	60	43-96	05/05/03	Acceptable
Fluoranthene-d10	53	20-131	05/05/03	Acceptable
Terphenyl-d14	80	13-146	05/05/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305744-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0043**	J	0.020	0.0032	1	04/24/03	05/01/03	KWG0305744	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/24/03	05/01/03	KWG0305744	
Acenaphthylene	ND	U	0.020	0.0018	1	04/24/03	05/01/03	KWG0305744	
Acenaphthene	ND	U	0.020	0.0020	1	04/24/03	05/01/03	KWG0305744	
Dibenzofuran	ND	U	0.020	0.0071	1	04/24/03	05/01/03	KWG0305744	
Fluorene	ND	U	0.020	0.0026	1	04/24/03	05/01/03	KWG0305744	
Phenanthrene	ND	U	0.020	0.0032	1	04/24/03	05/01/03	KWG0305744	
Anthracene	ND	U	0.020	0.0011	1	04/24/03	05/01/03	KWG0305744	
Fluoranthene	ND	U	0.020	0.0024	1	04/24/03	05/01/03	KWG0305744	
Pyrene	ND	U	0.020	0.0023	1	04/24/03	05/01/03	KWG0305744	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/24/03	05/01/03	KWG0305744	
Chrysene	ND	U	0.020	0.0013	1	04/24/03	05/01/03	KWG0305744	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/24/03	05/01/03	KWG0305744	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/24/03	05/01/03	KWG0305744	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/24/03	05/01/03	KWG0305744	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/24/03	05/01/03	KWG0305744	
Dibenz(a,h)anthracene	**0.0019**	J	0.020	0.0017	1	04/24/03	05/01/03	KWG0305744	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/24/03	05/01/03	KWG0305744	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	71	34-115	05/01/03	Acceptable
Fluorene-d10	71	43-96	05/01/03	Acceptable
Fluoranthene-d10	80	20-131	05/01/03	Acceptable
Terphenyl-d14	99	13-146	05/01/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
CH-Contol-Elut.	K2302961-001	59	60	53	80
Method Blank	KWG0305744-3	71	71	80	99
Lab Control Sample	KWG0305744-1	82	80	85	91
Duplicate Lab Control Sample	KWG0305744-2	86	85	86	91

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 04/29/2003
Time Analyzed: 13:57

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042903\0429F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306099-2
Analysis Lot: KWG0306099

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	299,042	5.08	164,062	7.33	268,606	10.10
	Upper Limit ==>	598,084	5.58	328,124	7.83	537,212	10.60
	Lower Limit ==>	149,521	4.58	82,031	6.83	134,303	9.60
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Lab Control Sample	KWG0305744-1	318,752	5.08	165,792	7.33	246,437	10.10
Duplicate Lab Control Sample	KWG0305744-2	295,191	5.08	152,906	7.33	232,454	10.10

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	04/29/2003
		Time Analyzed:	13:57

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042903\0429F003.D	**Lab Code:**	KWG0306099-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306099
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	290,532	16.11	165,579	19.69
	Upper Limit ==>	581,064	16.61	331,158	20.19
	Lower Limit ==>	145,266	15.61	82,790	19.19
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Lab Control Sample	KWG0305744-1	231,278	16.11	112,425	19.68
Duplicate Lab Control Sample	KWG0305744-2	220,789	16.11	110,539	19.68

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/01/2003
Time Analyzed: 09:58

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050103\0501F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306302-2
Analysis Lot: KWG0306302

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	284,223	5.05	149,227	7.30	231,263	10.07
	Upper Limit ==>	568,446	5.55	298,454	7.80	462,526	10.57
	Lower Limit ==>	142,112	4.55	74,614	6.80	115,632	9.57
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305744-3	320,797	5.06	163,908	7.30	250,679	10.07

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/01/2003
		Time Analyzed:	09:58

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\050103\0501F002.D	**Lab Code:**	KWG0306302-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306302
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT
	Results ==>	237,891	16.07	133,759	19.61
	Upper Limit ==>	475,782	16.57	267,518	20.11
	Lower Limit ==>	118,946	15.57	66,880	19.11
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305744-3	217,639	16.07	92,533	19.62

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/05/2003
Time Analyzed: 14:48

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050503\0505F004.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306348-2
Analysis Lot: KWG0306348

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	316,994	5.05	170,682	7.30	284,270	10.07
	Upper Limit ==>	633,988	5.55	341,364	7.80	568,540	10.57
	Lower Limit ==>	158,497	4.55	85,341	6.80	142,135	9.57
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
CH-Contol-Elut.	K2302961-001	324,986	5.06	172,287	7.30	263,552	10.07

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/05/2003
		Time Analyzed:	14:48

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\050503\0505F004.D	**Lab Code:**	KWG0306348-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306348
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	292,677	16.07	170,171	19.62
	Upper Limit ==>	585,354	16.57	340,342	20.12
	Lower Limit ==>	146,339	15.57	85,086	19.12
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
CH-Contol-Elut.	K2302961-001	240,201	16.07	124,874	19.61

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961
Date Extracted: 04/24/2003
Date Analyzed: 04/29/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0305744

	Lab Control Sample KWG0305744-1 Lab Control Spike			Duplicate Lab Control Sample KWG0305744-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	3.99	5.00	80	4.31	5.00	86	37-95	8	30
2-Methylnaphthalene	4.03	5.00	81	4.35	5.00	87	26-110	8	30
Acenaphthylene	4.14	5.00	83	4.53	5.00	91	44-103	9	30
Acenaphthene	4.10	5.00	82	4.43	5.00	89	41-97	8	30
Dibenzofuran	4.18	5.00	84	4.54	5.00	91	17-130	8	30
Fluorene	4.22	5.00	84	4.57	5.00	91	46-102	8	30
Phenanthrene	4.12	5.00	82	4.32	5.00	86	47-101	5	30
Anthracene	4.06	5.00	81	4.34	5.00	87	45-104	7	30
Fluoranthene	4.37	5.00	87	4.51	5.00	90	51-112	3	30
Pyrene	4.48	5.00	90	4.57	5.00	91	45-111	2	30
Benz(a)anthracene	3.84	5.00	77	4.06	5.00	81	50-111	6	30
Chrysene	4.28	5.00	86	4.49	5.00	90	51-108	5	30
Benzo(b)fluoranthene	4.01	5.00	80	4.25	5.00	85	54-114	6	30
Benzo(k)fluoranthene	4.43	5.00	89	4.65	5.00	93	51-117	5	30
Benzo(a)pyrene	4.31	5.00	86	4.66	5.00	93	51-119	8	30
Indeno(1,2,3-cd)pyrene	3.65	5.00	73	4.12	5.00	82	43-127	12	30
Dibenz(a,h)anthracene	3.86	5.00	77	4.37	5.00	87	47-119	12	30
Benzo(g,h,i)perylene	4.34	5.00	87	4.79	5.00	96	44-115	10	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/24/2003
Sample Matrix:	Water	**Date Analyzed:**	05/01/2003
		Time Analyzed:	11:11

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\050103\0501F004.D
Lab Code:	KWG0305744-3	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305744

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305744-1	J:\MS11\DATA\042903\0429F017.D	04/29/03	22:26
Duplicate Lab Control Sample	KWG0305744-2	J:\MS11\DATA\042903\0429F018.D	04/29/03	23:02
CH-Contol-Elut.	K2302961-001	J:\MS11\DATA\050503\0505F015.D	05/05/03	21:24

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0305744-1	**Lab Code:**	KWG0305744-2
File ID:	J:\MS11\DATA\042903\0429F017.D	**File ID:**	J:\MS11\DATA\042903\0429F018.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/24/2003	**Date Extracted:**	04/24/2003
Date Analyzed:	04/29/2003	**Date Analyzed:**	04/29/2003
Time Analyzed:	22:26	**Time Analyzed:**	23:02

Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305744

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305744-3	J:\MS11\DATA\050103\0501F004.D	05/01/03	11:11
CH-Contol-Elut.	K2302961-001	J:\MS11\DATA\050503\0505F015.D	05/05/03	21:24

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 04/29/2003
Time Analyzed: 12:59

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042903\0429F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306099

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.3	389440	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.8	449088	PASS
70	69	0	2	0.5	2403	PASS
127	198	10	80	44.6	592512	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	63.1	1329152	PASS
199	198	5	9	6.8	90696	PASS
275	198	10	60	32.5	431616	PASS
365	442	1	50	2.4	51432	PASS
441	443	0	100	74.0	311808	PASS
442	442	100	100	100.0	2106368	PASS
443	442	15	24	20.0	421312	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306099-2	J:\MS11\DATA\042903\0429F003.D	04/29/2003	13:57	
Lab Control Sample	KWG0305744-1	J:\MS11\DATA\042903\0429F017.D	04/29/2003	22:26	
Duplicate Lab Control Sample	KWG0305744-2	J:\MS11\DATA\042903\0429F018.D	04/29/2003	23:02	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/01/2003
Time Analyzed: 09:36

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050103\0501F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306302

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.1	411520	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.8	478016	PASS
70	69	0	2	0.5	2586	PASS
127	198	10	80	44.9	634880	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	68.4	1414656	PASS
199	198	5	9	6.7	95208	PASS
275	198	10	60	31.7	448768	PASS
365	442	1	50	2.5	52024	PASS
441	443	0	100	73.6	311360	PASS
442	442	100	100	100.0	2068992	PASS
443	442	15	24	20.5	423296	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306302-2	J:\MS11\DATA\050103\0501F002.D	05/01/2003	09:58	
Method Blank	KWG0305744-3	J:\MS11\DATA\050103\0501F004.D	05/01/2003	11:11	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/05/2003
Time Analyzed: 14:26

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050503\0505F003.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306348

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	28.8	418368	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.7	489536	PASS
70	69	0	2	0.5	2568	PASS
127	198	10	80	44.1	641024	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	67.2	1453056	PASS
199	198	5	9	7.0	101064	PASS
275	198	10	60	31.3	454208	PASS
365	442	1	50	2.4	51304	PASS
441	443	0	100	73.3	318144	PASS
442	442	100	100	100.0	2162688	PASS
443	442	15	24	20.1	433792	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306348-2	J:\MS11\DATA\050503\0505F004.D	05/05/2003	14:48	
CH-Contol-Elut.	K2302961-001	J:\MS11\DATA\050503\0505F015.D	05/05/2003	21:24	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302961
Project: Canaveral Harbor 103 Evaluation **Calibration Date:** 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533 **Column:** MS
Instrument ID: MS11

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306099
Units: ng/ml

File ID: J:\MS11\DATA\042903\0429F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.677	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.75	1	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.57	4	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.27	4	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.02	-6	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.945	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.04	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.46	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.86	-6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.25	-7	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1800	0.01	0.902	0.820	-9	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.01	0.952	0.914	-4	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.14	-1	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.738	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.03	-1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.971	-4	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.801	-12	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/01/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306302
Units: ng/ml

File ID: J:\MS11\DATA\050103\0501F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2200	0.01	1.05	1.13	8	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.701	6	NA	± 20 %	AverageRF
Acenaphthylene	2000	2200	0.01	1.74	1.91	10	NA	± 20 %	AverageRF
Acenaphthene	2000	2200	0.01	1.09	1.22	11	NA	± 20 %	AverageRF
Dibenzofuran	2000	2300	0.01	1.50	1.72	15	NA	± 20 %	AverageRF
Fluorene	2000	2300	0.01	1.22	1.38	13	NA	± 20 %	AverageRF
Phenanthrene	2000	2200	0.01	1.17	1.27	8	NA	± 20 %	AverageRF
Anthracene	2000	2200	0.01	1.09	1.19	10	NA	± 20 %	AverageRF
Fluoranthene	2000	2300	0.01	1.20	1.37	13	NA	± 20 %	AverageRF
Pyrene	2000	2000	0.01	1.28	1.30	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	0.01	1.08	1.02	-6	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.10	1.19	7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1900	0.01	1.73	1.65	-5	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.98	2.13	8	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	0.01	1.34	1.41	5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.888	-2	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.952	0.963	1	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.15	1.28	11	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.748	5	NA	± 20 %	AverageRF
Fluorene-d10	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	2100	0.01	1.01	1.06	5	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1900	0.01	0.915	0.882	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/05/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306348
Units: ng/ml

File ID: J:\MS11\DATA\050503\0505F004.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.04	0	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.652	-1	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.78	2	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.59	6	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.27	4	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.17	1.08	-8	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.04	-4	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.18	-2	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.14	-11	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1700	0.01	1.08	0.896	-17	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1600	0.01	1.73	1.38	-20	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.83	-7	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.22	-9	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1800	0.01	0.902	0.797	-12	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1800	0.01	0.952	0.873	-8	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.13	-2	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2000	0.01	0.711	0.708	-1	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.05	1.01	-3	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	1.01	0.927	-9	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	0.915	0.767	-16	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0306099
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0429F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0306099-1	4/29/2003	12:59		4/29/2003	13:12
0429F003.D	Continuing Calibration Verification	KWG0306099-2	4/29/2003	13:57		4/29/2003	14:23
0429F005.D	Instrument Blank	KWG0306099-3	4/29/2003	15:16		4/29/2003	15:42
0429F008.D	ZZZZZZ	ZZZZZZ	4/29/2003	17:03		4/29/2003	17:29
0429F009.D	ZZZZZZ	ZZZZZZ	4/29/2003	17:39		4/29/2003	18:05
0429F010.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:15		4/29/2003	18:41
0429F011.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:51		4/29/2003	19:17
0429F012.D	ZZZZZZ	ZZZZZZ	4/29/2003	19:27		4/29/2003	19:53
0429F013.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:02		4/29/2003	20:28
0429F014.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:38		4/29/2003	21:04
0429F017.D	Lab Control Sample	KWG0305744-1	4/29/2003	22:26		4/29/2003	22:52
0429F018.D	Duplicate Lab Control Sample	KWG0305744-2	4/29/2003	23:02		4/29/2003	23:28
0429F019.D	ZZZZZZ	ZZZZZZ	4/29/2003	23:38		4/30/2003	00:04
0429F020.D	ZZZZZZ	ZZZZZZ	4/30/2003	00:13		4/30/2003	00:39
0429F021.D	ZZZZZZ	ZZZZZZ	4/30/2003	00:49		4/30/2003	01:15
0429F022.D	ZZZZZZ	ZZZZZZ	4/30/2003	01:25		4/30/2003	01:51

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0306302
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0501F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0306302-1	5/1/2003	09:36		5/1/2003	09:49
0501F002.D	Continuing Calibration Verification	KWG0306302-2	5/1/2003	09:58		5/1/2003	10:24
0501F003.D	Instrument Blank	KWG0306302-3	5/1/2003	10:35		5/1/2003	11:01
0501F004.D	Method Blank	KWG0305744-3	5/1/2003	11:11		5/1/2003	11:37
0501F005.D	ZZZZZZ	ZZZZZZ	5/1/2003	11:48		5/1/2003	12:14
0501F006.D	ZZZZZZ	ZZZZZZ	5/1/2003	12:25		5/1/2003	12:51
0501F007.D	ZZZZZZ	ZZZZZZ	5/1/2003	13:01		5/1/2003	13:27
0501F008.D	ZZZZZZ	ZZZZZZ	5/1/2003	13:37		5/1/2003	14:03
0501F009.D	ZZZZZZ	ZZZZZZ	5/1/2003	14:13		5/1/2003	14:39
0501F010.D	ZZZZZZ	ZZZZZZ	5/1/2003	14:48		5/1/2003	15:14
0501F011.D	ZZZZZZ	ZZZZZZ	5/1/2003	15:24		5/1/2003	15:50
0501F012.D	ZZZZZZ	ZZZZZZ	5/1/2003	16:00		5/1/2003	16:26
0501F013.D	ZZZZZZ	ZZZZZZ	5/1/2003	16:35		5/1/2003	17:01
0501F014.D	ZZZZZZ	ZZZZZZ	5/1/2003	17:11		5/1/2003	17:37
0501F015.D	ZZZZZZ	ZZZZZZ	5/1/2003	17:47		5/1/2003	18:13
0501F016.D	ZZZZZZ	ZZZZZZ	5/1/2003	18:23		5/1/2003	18:49
0501F017.D	ZZZZZZ	ZZZZZZ	5/1/2003	18:58		5/1/2003	19:24
0501F018.D	ZZZZZZ	ZZZZZZ	5/1/2003	19:34		5/1/2003	20:00
0501F019.D	ZZZZZZ	ZZZZZZ	5/1/2003	20:10		5/1/2003	20:36
0501F020.D	ZZZZZZ	ZZZZZZ	5/1/2003	20:45		5/1/2003	21:11
0501F021.D	ZZZZZZ	ZZZZZZ	5/1/2003	21:21		5/1/2003	21:47

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0306348
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0505F003.D	GC/MS Tuning - Decafluorotriphenyl	KWG0306348-1	5/5/2003	14:26		5/5/2003	14:39
0505F004.D	Continuing Calibration Verification	KWG0306348-2	5/5/2003	14:48		5/5/2003	15:14
0505F005.D	Instrument Blank	KWG0306348-3	5/5/2003	15:24		5/5/2003	15:50
0505F006.D	ZZZZZZ	ZZZZZZ	5/5/2003	16:00		5/5/2003	16:26
0505F007.D	ZZZZZZ	ZZZZZZ	5/5/2003	16:36		5/5/2003	17:02
0505F008.D	ZZZZZZ	ZZZZZZ	5/5/2003	17:12		5/5/2003	17:38
0505F009.D	ZZZZZZ	ZZZZZZ	5/5/2003	17:48		5/5/2003	18:14
0505F010.D	ZZZZZZ	ZZZZZZ	5/5/2003	18:24		5/5/2003	18:50
0505F011.D	ZZZZZZ	ZZZZZZ	5/5/2003	19:00		5/5/2003	19:26
0505F013.D	ZZZZZZ	ZZZZZZ	5/5/2003	20:12		5/5/2003	20:38
0505F014.D	ZZZZZZ	ZZZZZZ	5/5/2003	20:48		5/5/2003	21:14
0505F015.D	CH-Contol-Elut.	K2302961-001	5/5/2003	21:24		5/5/2003	21:50
0505F016.D	ZZZZZZ	ZZZZZZ	5/5/2003	22:00		5/5/2003	22:26
0505F017.D	ZZZZZZ	ZZZZZZ	5/5/2003	22:36		5/5/2003	23:02
0505F018.D	ZZZZZZ	ZZZZZZ	5/5/2003	23:12		5/5/2003	23:38
0505F021.D	ZZZZZZ	ZZZZZZ	5/6/2003	01:01		5/6/2003	01:27

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961
Date Extracted: 04/24/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0305744
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
CH-Contol-Elut.	K2302961-001	04/17/03	04/22/03	1040ml	1ml	NA	
Method Blank	KWG0305744-3	NA	NA	1000ml	1ml	NA	
Lab Control Sample	KWG0305744-1	NA	NA	1000ml	1ml	NA	
Duplicate Lab Control Sample	KWG0305744-2	NA	NA	1000ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

QC Reports

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
CH-Contol-Elut.	K2302961-001	59	60	53	80
Method Blank	KWG0305744-3	71	71	80	99
Lab Control Sample	KWG0305744-1	82	80	85	91
Duplicate Lab Control Sample	KWG0305744-2	86	85	86	91

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	04/29/2003
		Time Analyzed:	13:57

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042903\0429F003.D	**Lab Code:**	KWG0306099-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306099
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	299,042	5.08	164,062	7.33	268,606	10.10
	Upper Limit ==>	598,084	5.58	328,124	7.83	537,212	10.60
	Lower Limit ==>	149,521	4.58	82,031	6.83	134,303	9.60
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Lab Control Sample	KWG0305744-1	318,752	5.08	165,792	7.33	246,437	10.10
Duplicate Lab Control Sample	KWG0305744-2	295,191	5.08	152,906	7.33	232,454	10.10

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 04/29/2003
Time Analyzed: 13:57

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042903\0429F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306099-2
Analysis Lot: KWG0306099

		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT
	Results ==>	290,532	16.11	165,579	19.69
	Upper Limit ==>	581,064	16.61	331,158	20.19
	Lower Limit ==>	145,266	15.61	82,790	19.19
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Lab Control Sample	KWG0305744-1	231,278	16.11	112,425	19.68
Duplicate Lab Control Sample	KWG0305744-2	220,789	16.11	110,539	19.68

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/01/2003
Time Analyzed: 09:58

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050103\0501F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306302-2
Analysis Lot: KWG0306302

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	284,223	5.05	149,227	7.30	231,263	10.07
	Upper Limit ==>	568,446	5.55	298,454	7.80	462,526	10.57
	Lower Limit ==>	142,112	4.55	74,614	6.80	115,632	9.57
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305744-3	320,797	5.06	163,908	7.30	250,679	10.07

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/01/2003
Time Analyzed: 09:58

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050103\0501F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306302-2
Analysis Lot: KWG0306302

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	237,891	16.07	133,759	19.61
	Upper Limit ==>	475,782	16.57	267,518	20.11
	Lower Limit ==>	118,946	15.57	66,880	19.11
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305744-3	217,639	16.07	92,533	19.62

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/05/2003
Time Analyzed: 14:48

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050503\0505F004.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306348-2
Analysis Lot: KWG0306348

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	316,994	5.05	170,682	7.30	284,270	10.07
	Upper Limit ==>	633,988	5.55	341,364	7.80	568,540	10.57
	Lower Limit ==>	158,497	4.55	85,341	6.80	142,135	9.57
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
CH-Contol-Elut.	K2302961-001	324,986	5.06	172,287	7.30	263,552	10.07

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/05/2003
Time Analyzed: 14:48

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050503\0505F004.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0306348-2
Analysis Lot: KWG0306348

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	292,677	16.07	170,171	19.62
	Upper Limit ==>	585,354	16.57	340,342	20.12
	Lower Limit ==>	146,339	15.57	85,086	19.12
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
CH-Contol-Elut.	K2302961-001	240,201	16.07	124,874	19.61

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961
Date Extracted: 04/24/2003
Date Analyzed: 04/29/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0305744

	Lab Control Sample KWG0305744-1 Lab Control Spike			Duplicate Lab Control Sample KWG0305744-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	3.99	5.00	80	4.31	5.00	86	37-95	8	30
2-Methylnaphthalene	4.03	5.00	81	4.35	5.00	87	26-110	8	30
Acenaphthylene	4.14	5.00	83	4.53	5.00	91	44-103	9	30
Acenaphthene	4.10	5.00	82	4.43	5.00	89	41-97	8	30
Dibenzofuran	4.18	5.00	84	4.54	5.00	91	17-130	8	30
Fluorene	4.22	5.00	84	4.57	5.00	91	46-102	8	30
Phenanthrene	4.12	5.00	82	4.32	5.00	86	47-101	5	30
Anthracene	4.06	5.00	81	4.34	5.00	87	45-104	7	30
Fluoranthene	4.37	5.00	87	4.51	5.00	90	51-112	3	30
Pyrene	4.48	5.00	90	4.57	5.00	91	45-111	2	30
Benz(a)anthracene	3.84	5.00	77	4.06	5.00	81	50-111	6	30
Chrysene	4.28	5.00	86	4.49	5.00	90	51-108	5	30
Benzo(b)fluoranthene	4.01	5.00	80	4.25	5.00	85	54-114	6	30
Benzo(k)fluoranthene	4.43	5.00	89	4.65	5.00	93	51-117	5	30
Benzo(a)pyrene	4.31	5.00	86	4.66	5.00	93	51-119	8	30
Indeno(1,2,3-cd)pyrene	3.65	5.00	73	4.12	5.00	82	43-127	12	30
Dibenz(a,h)anthracene	3.86	5.00	77	4.37	5.00	87	47-119	12	30
Benzo(g,h,i)perylene	4.34	5.00	87	4.79	5.00	96	44-115	10	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	04/24/2003
Sample Matrix:	Water	**Date Analyzed:**	05/01/2003
		Time Analyzed:	11:11

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\050103\0501F004.D
Lab Code:	KWG0305744-3	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305744

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305744-1	J:\MS11\DATA\042903\0429F017.D	04/29/03	22:26
Duplicate Lab Control Sample	KWG0305744-2	J:\MS11\DATA\042903\0429F018.D	04/29/03	23:02
CH-Contol-Elut.	K2302961-001	J:\MS11\DATA\050503\0505F015.D	05/05/03	21:24

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2302961

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0305744-1	**Lab Code:**	KWG0305744-2
File ID:	J:\MS11\DATA\042903\0429F017.D	**File ID:**	J:\MS11\DATA\042903\0429F018.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/24/2003	**Date Extracted:**	04/24/2003
Date Analyzed:	04/29/2003	**Date Analyzed:**	04/29/2003
Time Analyzed:	22:26	**Time Analyzed:**	23:02

Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305744

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305744-3	J:\MS11\DATA\050103\0501F004.D	05/01/03	11:11
CH-Contol-Elut.	K2302961-001	J:\MS11\DATA\050503\0505F015.D	05/05/03	21:24

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Raw Data

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	04/17/2003
Sample Matrix:	Water	**Date Received:**	04/22/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CH-Contol-Elut.	**Units:**	ug/L
Lab Code:	K2302961-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.023**		0.020	0.0032	1	04/24/03	05/05/03	KWG0305744	
2-Methylnaphthalene	**0.0036**	J	0.020	0.0027	1	04/24/03	05/05/03	KWG0305744	
Acenaphthylene	ND	U	0.020	0.0018	1	04/24/03	05/05/03	KWG0305744	
Acenaphthene	**0.0030**	J	0.020	0.0020	1	04/24/03	05/05/03	KWG0305744	
Dibenzofuran	ND	U	0.020	0.0071	1	04/24/03	05/05/03	KWG0305744	
Fluorene	ND	U	0.020	0.0026	1	04/24/03	05/05/03	KWG0305744	
Phenanthrene	**0.0044**	J	0.020	0.0032	1	04/24/03	05/05/03	KWG0305744	
Anthracene	ND	U	0.020	0.0011	1	04/24/03	05/05/03	KWG0305744	
Fluoranthene	ND	U	0.020	0.0024	1	04/24/03	05/05/03	KWG0305744	
Pyrene	ND	U	0.020	0.0023	1	04/24/03	05/05/03	KWG0305744	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/24/03	05/05/03	KWG0305744	
Chrysene	**0.0026**	J	0.020	0.0013	1	04/24/03	05/05/03	KWG0305744	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/24/03	05/05/03	KWG0305744	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/24/03	05/05/03	KWG0305744	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/24/03	05/05/03	KWG0305744	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/24/03	05/05/03	KWG0305744	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/24/03	05/05/03	KWG0305744	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/24/03	05/05/03	KWG0305744	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	59	34-115	05/05/03	Acceptable
Fluorene-d10	60	43-96	05/05/03	Acceptable
Fluoranthene-d10	53	20-131	05/05/03	Acceptable
Terphenyl-d14	80	13-146	05/05/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305744-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0043**	J	0.020	0.0032	1	04/24/03	05/01/03	KWG0305744	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/24/03	05/01/03	KWG0305744	
Acenaphthylene	ND	U	0.020	0.0018	1	04/24/03	05/01/03	KWG0305744	
Acenaphthene	ND	U	0.020	0.0020	1	04/24/03	05/01/03	KWG0305744	
Dibenzofuran	ND	U	0.020	0.0071	1	04/24/03	05/01/03	KWG0305744	
Fluorene	ND	U	0.020	0.0026	1	04/24/03	05/01/03	KWG0305744	
Phenanthrene	ND	U	0.020	0.0032	1	04/24/03	05/01/03	KWG0305744	
Anthracene	ND	U	0.020	0.0011	1	04/24/03	05/01/03	KWG0305744	
Fluoranthene	ND	U	0.020	0.0024	1	04/24/03	05/01/03	KWG0305744	
Pyrene	ND	U	0.020	0.0023	1	04/24/03	05/01/03	KWG0305744	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/24/03	05/01/03	KWG0305744	
Chrysene	ND	U	0.020	0.0013	1	04/24/03	05/01/03	KWG0305744	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/24/03	05/01/03	KWG0305744	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/24/03	05/01/03	KWG0305744	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/24/03	05/01/03	KWG0305744	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/24/03	05/01/03	KWG0305744	
Dibenz(a,h)anthracene	**0.0019**	J	0.020	0.0017	1	04/24/03	05/01/03	KWG0305744	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/24/03	05/01/03	KWG0305744	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	71	34-115	05/01/03	Acceptable
Fluorene-d10	71	43-96	05/01/03	Acceptable
Fluoranthene-d10	80	20-131	05/01/03	Acceptable
Terphenyl-d14	99	13-146	05/01/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0305744-1	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**3.99**		0.020	0.0032	1	04/24/03	04/29/03	KWG0305744	
2-Methylnaphthalene	**4.03**		0.020	0.0027	1	04/24/03	04/29/03	KWG0305744	
Acenaphthylene	**4.14**		0.020	0.0018	1	04/24/03	04/29/03	KWG0305744	
Acenaphthene	**4.10**		0.020	0.0020	1	04/24/03	04/29/03	KWG0305744	
Dibenzofuran	**4.18**		0.020	0.0071	1	04/24/03	04/29/03	KWG0305744	
Fluorene	**4.22**		0.020	0.0026	1	04/24/03	04/29/03	KWG0305744	
Phenanthrene	**4.12**		0.020	0.0032	1	04/24/03	04/29/03	KWG0305744	
Anthracene	**4.06**		0.020	0.0011	1	04/24/03	04/29/03	KWG0305744	
Fluoranthene	**4.37**		0.020	0.0024	1	04/24/03	04/29/03	KWG0305744	
Pyrene	**4.48**		0.020	0.0023	1	04/24/03	04/29/03	KWG0305744	
Benz(a)anthracene	**3.84**		0.020	0.0021	1	04/24/03	04/29/03	KWG0305744	
Chrysene	**4.28**		0.020	0.0013	1	04/24/03	04/29/03	KWG0305744	
Benzo(b)fluoranthene	**4.01**		0.020	0.0020	1	04/24/03	04/29/03	KWG0305744	
Benzo(k)fluoranthene	**4.43**		0.020	0.0014	1	04/24/03	04/29/03	KWG0305744	
Benzo(a)pyrene	**4.31**		0.020	0.0016	1	04/24/03	04/29/03	KWG0305744	
Indeno(1,2,3-cd)pyrene	**3.65**		0.020	0.0021	1	04/24/03	04/29/03	KWG0305744	
Dibenz(a,h)anthracene	**3.86**		0.020	0.0017	1	04/24/03	04/29/03	KWG0305744	
Benzo(g,h,i)perylene	**4.34**		0.020	0.0037	1	04/24/03	04/29/03	KWG0305744	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	82	34-115	04/29/03	Acceptable
Fluorene-d10	80	43-96	04/29/03	Acceptable
Fluoranthene-d10	85	20-131	04/29/03	Acceptable
Terphenyl-d14	91	13-146	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302961
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Duplicate Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG0305744-2	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**4.31**		0.020	0.0032	1	04/24/03	04/29/03	KWG0305744	
2-Methylnaphthalene	**4.35**		0.020	0.0027	1	04/24/03	04/29/03	KWG0305744	
Acenaphthylene	**4.53**		0.020	0.0018	1	04/24/03	04/29/03	KWG0305744	
Acenaphthene	**4.43**		0.020	0.0020	1	04/24/03	04/29/03	KWG0305744	
Dibenzofuran	**4.54**		0.020	0.0071	1	04/24/03	04/29/03	KWG0305744	
Fluorene	**4.57**		0.020	0.0026	1	04/24/03	04/29/03	KWG0305744	
Phenanthrene	**4.32**		0.020	0.0032	1	04/24/03	04/29/03	KWG0305744	
Anthracene	**4.34**		0.020	0.0011	1	04/24/03	04/29/03	KWG0305744	
Fluoranthene	**4.51**		0.020	0.0024	1	04/24/03	04/29/03	KWG0305744	
Pyrene	**4.57**		0.020	0.0023	1	04/24/03	04/29/03	KWG0305744	
Benz(a)anthracene	**4.06**		0.020	0.0021	1	04/24/03	04/29/03	KWG0305744	
Chrysene	**4.49**		0.020	0.0013	1	04/24/03	04/29/03	KWG0305744	
Benzo(b)fluoranthene	**4.25**		0.020	0.0020	1	04/24/03	04/29/03	KWG0305744	
Benzo(k)fluoranthene	**4.65**		0.020	0.0014	1	04/24/03	04/29/03	KWG0305744	
Benzo(a)pyrene	**4.66**		0.020	0.0016	1	04/24/03	04/29/03	KWG0305744	
Indeno(1,2,3-cd)pyrene	**4.12**		0.020	0.0021	1	04/24/03	04/29/03	KWG0305744	
Dibenz(a,h)anthracene	**4.37**		0.020	0.0017	1	04/24/03	04/29/03	KWG0305744	
Benzo(g,h,i)perylene	**4.79**		0.020	0.0037	1	04/24/03	04/29/03	KWG0305744	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	86	34-115	04/29/03	Acceptable
Fluorene-d10	85	43-96	04/29/03	Acceptable
Fluoranthene-d10	86	20-131	04/29/03	Acceptable
Terphenyl-d14	91	13-146	04/29/03	Acceptable

Comments:

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 04/29/2003
Time Analyzed: 12:59

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042903\0429F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306099

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.3	389440	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.8	449088	PASS
70	69	0	2	0.5	2403	PASS
127	198	10	80	44.6	592512	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	63.1	1329152	PASS
199	198	5	9	6.8	90696	PASS
275	198	10	60	32.5	431616	PASS
365	442	1	50	2.4	51432	PASS
441	443	0	100	74.0	311808	PASS
442	442	100	100	100.0	2106368	PASS
443	442	15	24	20.0	421312	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306099-2	J:\MS11\DATA\042903\0429F003.D	04/29/2003	13:57	
Lab Control Sample	KWG0305744-1	J:\MS11\DATA\042903\0429F017.D	04/29/2003	22:26	
Duplicate Lab Control Sample	KWG0305744-2	J:\MS11\DATA\042903\0429F018.D	04/29/2003	23:02	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/01/2003
Time Analyzed: 09:36

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050103\0501F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306302

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.1	411520	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.8	478016	PASS
70	69	0	2	0.5	2586	PASS
127	198	10	80	44.9	634880	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	68.4	1414656	PASS
199	198	5	9	6.7	95208	PASS
275	198	10	60	31.7	448768	PASS
365	442	1	50	2.5	52024	PASS
441	443	0	100	73.6	311360	PASS
442	442	100	100	100.0	2068992	PASS
443	442	15	24	20.5	423296	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306302-2	J:\MS11\DATA\050103\0501F002.D	05/01/2003	09:58	
Method Blank	KWG0305744-3	J:\MS11\DATA\050103\0501F004.D	05/01/2003	11:11	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/05/2003
Time Analyzed: 14:26

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050503\0505F003.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306348

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	28.8	418368	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.7	489536	PASS
70	69	0	2	0.5	2568	PASS
127	198	10	80	44.1	641024	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	67.2	1453056	PASS
199	198	5	9	7.0	101064	PASS
275	198	10	60	31.3	454208	PASS
365	442	1	50	2.4	51304	PASS
441	443	0	100	73.3	318144	PASS
442	442	100	100	100.0	2162688	PASS
443	442	15	24	20.1	433792	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306348-2	J:\MS11\DATA\050503\0505F004.D	05/05/2003	14:48	
CH-Contol-Elut.	K2302961-001	J:\MS11\DATA\050503\0505F015.D	05/05/2003	21:24	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306099
Units: ng/ml

File ID: J:\MS11\DATA\042903\0429F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.677	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.75	1	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.57	4	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.27	4	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.02	-6	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.945	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.04	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.46	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.86	-6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.25	-7	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1800	0.01	0.902	0.820	-9	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.01	0.952	0.914	-4	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.14	-1	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.738	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.03	-1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.971	-4	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.801	-12	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/01/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306302
Units: ng/ml

File ID: J:\MS11\DATA\050103\0501F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2200	0.01	1.05	1.13	8	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.701	6	NA	± 20 %	AverageRF
Acenaphthylene	2000	2200	0.01	1.74	1.91	10	NA	± 20 %	AverageRF
Acenaphthene	2000	2200	0.01	1.09	1.22	11	NA	± 20 %	AverageRF
Dibenzofuran	2000	2300	0.01	1.50	1.72	15	NA	± 20 %	AverageRF
Fluorene	2000	2300	0.01	1.22	1.38	13	NA	± 20 %	AverageRF
Phenanthrene	2000	2200	0.01	1.17	1.27	8	NA	± 20 %	AverageRF
Anthracene	2000	2200	0.01	1.09	1.19	10	NA	± 20 %	AverageRF
Fluoranthene	2000	2300	0.01	1.20	1.37	13	NA	± 20 %	AverageRF
Pyrene	2000	2000	0.01	1.28	1.30	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	0.01	1.08	1.02	-6	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.10	1.19	7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1900	0.01	1.73	1.65	-5	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.98	2.13	8	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	0.01	1.34	1.41	5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.888	-2	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.952	0.963	1	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.15	1.28	11	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.748	5	NA	± 20 %	AverageRF
Fluorene-d10	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	2100	0.01	1.01	1.06	5	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1900	0.01	0.915	0.882	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2302961
Date Analyzed: 05/05/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306348
Units: ng/ml

File ID: J:\MS11\DATA\050503\0505F004.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.04	0	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.652	-1	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.78	2	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.59	6	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.27	4	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.17	1.08	-8	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.04	-4	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.18	-2	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.14	-11	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1700	0.01	1.08	0.896	-17	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1600	0.01	1.73	1.38	-20	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.83	-7	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.22	-9	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1800	0.01	0.902	0.797	-12	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1800	0.01	0.952	0.873	-8	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.13	-2	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2000	0.01	0.711	0.708	-1	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.05	1.01	-3	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	1.01	0.927	-9	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	0.915	0.767	-16	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Validation Package

Sample Prep and Screen Data

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 16, 2003 Service Request No: K2302691

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/CPA

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302691.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/dj

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Received:**	4/10-15/03
Sample Matrix:	Sediment		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nine sediment samples were received for analysis at Columbia Analytical Services from 4/10/03 to 4/15/03. The samples were batched into a single Sample Delivery Group (SDG). The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

The control criteria for matrix spike recoveries of Aluminum and Iron for sample B8-CPA are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The matrix spike recovery of Antimony for sample B8-CPA was below the CAS control criterion. Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analyses. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. Since low recoveries result from a method defect and can be magnified by certain matrix components, no corrective action is appropriate other than using alternative procedures, which specifically target Antimony. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicate the analysis was in control.

No other anomalies associated with the analysis of these samples were observed.

Organotin Compounds

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Surrogate Exceptions:
The control criteria were exceeded for the surrogates in CT6-7. Since the problem may indicate a potential bias in the analytical batch, the sample was re-extracted past the recommended hold time and reanalyzed. The surrogates met control criteria for the reanalysis. Note the results for the field samples were comparable for both determinations, which indicates the problem with the initial analysis was restricted to the surrogate recovery. Therefore, the results from the original analysis are reported. The data is flagged to indicate the problem.

Approved by A-Cl **Date** 5/16/03

The control criteria were exceeded for the following surrogate in B9-CPA, CC03-4, and CC05-6: Biphenyl-d10. The surrogate in question was just outside the lower control criterion for these samples. Three other surrogates were evaluated with this analysis and all were within control criteria. No further action was appropriate.

Sample Notes and Discussion

The advisory criterion was exceeded for the following analyte in Standard Reference Material (SRM) KWG0305145-6: Phenanthrene. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, these compounds are not included in the subset of analytes used to control the analysis. The recovery information reported for these analytes is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

No other anomalies associated with the analysis of these samples were observed.

Approved by W. Clt **Date** 5/16/03

Chain of Custody Documentation

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
Canaveral Port Authority (CPA) Samples

PPB: Please homogenize and elutriate samples

K2302691

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
B1 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		All containers = 16 oz wide mouth clear glass jars.
B2 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		
B3 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		
B4 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		
B5 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		Note: Please add Total sulfides to the analysis requested in the contract.
B6 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		
✓ B7 - CPA	04/2 /03	1259	Sediment	16 oz ~~4 foot cores~~ Jars	~~2~~	Per Contract		
✓ B8 - CPA	04/3 /03	1110	Sediment	16 oz ~~4 foot cores~~ Jars	2	Per Contract		
✓ B9 - CPA	04/3 /03	1323	Sediment	16 oz ~~4 foot cores~~ Jars	~~2~~	Per Contract		
✓ B10 - CPA	04/3 /03	1630	Sediment	16 oz ~~4 foot cores~~ Jars	2	Per Contract		samples B-7 & B-9 not included @ 4/9/03
B11 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		
B12 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		
B13 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		
B14 - CPA	04/ /03		Sediment	1 Gallon Clear Glass		Per Contract		→ Total Sulfide
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		

Note: Preclean containers shipped by UPS from Columbia Analytical - Received 3/21/03 @ 1132 by Jeff

~~Proclean~~ Containers Relinquished by: P.J.C. Received by: Brian A Wade 1200
Date: 4/9/03 Time: 1200 Date: 4/9/03 Time: 1200
Samples Relinquished by: Connie Steen Received by: Fran Allen
Date: 4/9/03 Time: 1500 Date: 4/10/03 Time: 1030

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

K2302691

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody

CPA Samples

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
3 B7-CPA	04/2/03	1259	Sed	16 oz jars	2	Per Contract		All containers = 16 oz
4 B9-CPA	04/3/03	1323	Sed	16 oz jars	2	Per Contract		wide mouth clear glass
	04/ /03					Per Contract		jars.
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		
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	04/ /03					Per Contract		
	04/ /03					Per Contract		
	04/ /03					Per Contract		

Precleaned Containers Relinquished by: [illegible]
Date: 4/10/03 Time: 1600
Samples Relinquished by: Connie Steen
Date: 4/10/03 Time: 1620

Received by: Connie Steen
Date: 4/10/03 Time: 1609
Received by: [illegible]
Date: 4/11/03 Time: 1030

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6821 SW Archer Rd.
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K2302691.

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
Canaveral Port Authority (CPA) Samples

	Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
5	CCO1-2	04/ 7 /03	1335	Sed. / Elut.	Various	7+2	Per Contract		
6	CCO3-4	04/ 8 /03	0900	Sed. / Elut.	Various	7+2+6	Per Contract		QC
7	CCO5-6	04/ 8 /03	1345	Sed. / Elut.	Various	7+2	Per Contract		
	B7	04/ 2 /03	1259	Sed. / Elut.	Various	7	Per Contract		
	B8	04/ 3 /03	1110	Sed. / Elut.	Various	7	Per Contract		
	B9	04/ 3 /03	1323	Sed. / Elut.	Various	7+4	Per Contract		QC
	B10	04/ 3 /03	1630	Sed. / Elut.	Various	7	Per Contract		
8	CT6-7	04/ 9 /03	0830	Sed. / Elut.	Various	7+2	Per Contract		
9	CT8-9	04/ 9 /03	1300	Sed. / Elut.	Various	7+2	Per Contract		

Samples Relinquished by: [signature] - PPB
Date: 4/14/03 Time: 1700
Samples Relinquished by: [signature]
Date: 4/14/03 Time: 1800 → FedEx

Received by: [signature]
Date: 4/14/03 Time: 1700
Received by: [signature] 4/15/03 1000
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

Port-CPA

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

Cape Canaveral Samples							
SEDIMENTS/SOILS	Port/CPA	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ALUMINUM	9	11	9	29	0.5 mg/kg	Columbia	
ANTIMONY	9	11	9	29	0.3 mg/kg	Columbia	
ARSENIC	9	11	9	29	0.5 mg/kg	Columbia	
CADMIUM	9	11	9	29	0.1 mg/kg	Columbia	
CHROMIUM	9	11	9	29	0.2 mg/kg	Columbia	
COPPER	9	11	9	29	0.1 mg/kg	Columbia	
IRON	9	11	9	29	1.5 mg/kg	Columbia	
MERCURY	9	11	9	29	0.05 mg/kg	Columbia	
NICKEL	9	11	9	29	0.1 mg/kg	Columbia	
SILVER	9	11	9	29	0.1 mg/kg	Columbia	
ZINC	9	11	9	29	0.2 mg/kg	Columbia	
CYANIDE	0	11	9	20	1.0mg/kg	Columbia	
TOTAL AMMONIA	0	11	9	20	0.1 mg/kg	Columbia	
[redacted]	9	11	9	29	0.10%	Columbia	
OIL AND GREASE	0	11	9	20	1.0 ppm	Columbia	
[redacted]	9	11	9	29	0.02 mg/kg	Columbia	
ORGANOTIN	9	11	9	29	0.01 mg/kg	Columbia	
%SOLIDS	8	9	8	25	n/a	LAW	
GRAIN SIZE DIST.	8	9	8	25	n/a	LAW	
SPECIFIC GRAVITY	8	9	8	25	n/a	LAW	
ATTERBURG LIMITS	8	9	8	25	n/a	LAW	
SETTLING RATES	8	9	8	25	n/a	LAW	
10 DAY SEDIMENT BIOASSAY	8	2	9	19	n/a	ESE	
28 DAY SED. BIOACCUMULATION	8	2	9	19	n/a	ESE	
WATER/ELUTRIATE	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ANTIMONY	9	12	9	30	3.5 ug/l	Columbia	
ALUMINUM	9	2	0	11	0.5 ug/l	Columbia	Reference Station and Control Sediment Elutriates need aluminum and iron
ARSENIC	9	12	9	30	1.0 ug/l	Columbia	
CADMIUM	9	12	9	30	0.5 ug/l	Columbia	
CHROMIUM	9	12	9	30	0.5 ug/l	Columbia	

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Port CPA

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

COPPER	9	12	9	30	2.5 ug/l	Columbia	
LEAD	9	12	9	30	2.5 ug/l	Columbia	
IRON	9	0	0	9	0.5 ug/l	Columbia	
MERCURY	9	12	9	30	0.2 ug/l	Columbia	
NICKEL	9	12	9	30	0.2 ug/l	Columbia	
SILVER	9	12	9	30	1.0 ug/l	Columbia	
ZINC	9	12	9	30	1.5 ug/l	Columbia	
CYANIDE	0	12	9	21	1.0 ppm	Columbia	
TOTAL AMMONIA	0	12	9	21	0.10 ppm	Columbia	
TOC	9	12	9	30	0.10%	Columbia	
OIL AND GREASE	0	12	9	21	1.0 ppm	Columbia	
PAH's	9	12	9	30	0.02 ppm	Columbia	
ORGANOTIN	9	12	9	30	0.1 ppm	Columbia	
96-HR ELUTRIATE ACUTE BIOASSAY	9	2	9	20	n/a	ESE	

Sediments:
COE Samples: 8 sites, 1 dupe, 1 reference, 1 control sediment (Chem and Phys). (No Phys on control or duplicate sediment) = 11
NAVY Samples: 8 sites, 1 dupe (Chem, Phys, and Tox) Include Ref and Control on Tox) = 9 or (11 for Tox)
Port Authority:
4 Vibracore Samples (Chem, Phys, and Tox) = 4
6 Upland samples and one dupe to be combined into 4 samples (Chem, Phys, and Tox) = 4
2 Upland samples to be combined into 1 samples (Chem and Phys) = 1

Elutriates:
Same as above except for the COE Samples:
COE: 8 sites, 1 dupe, 1 reference, 1 control sediment elutriate, 1 site water = 12

12

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client ANAMAR Work Order K23 02691

Cooler received on 4/10/03 and opened on 4/10/03 by AP

1. Were custody seals on outside of cooler? – Y (N)
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? ~~Y N~~
3. Is the shipper's airbill available and filed? If no, record airbill number: 1Z 36 45 48 01 40 61 38 53 Y N
4. COC # _____ _____ _____ _____
   Temperature of cooler(s) upon receipt: 0.6 0.7 _____ _____
   Temperature Blank: N/P 0.2 _____ _____
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present Bubble
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies: _____

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client AMMAR Work Order K23

Cooler received on 4/11/03 and opened on 4/11/03 by AP

UPS

1. Were custody seals on outside of cooler? — Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? ~~Y N~~
3. Is the shipper's airbill available and filed? If no, record airbill number: 1Z364548014047026 7 Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.1
   Temperature Blank: N/P
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Bubble, STYRO
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Pg 1 of 3

Project/Client Water + Air Research (Anamax) Work Order K23 02691

Cooler received on 4-15-03 and opened on 4-15-03. by DM

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex. / Attached (Y) N
4. COC #
   Temperature of cooler(s) upon receipt: 2.0 / -1.4 / -1.5 / 1.0 / 0.9 / -1.0
   Temperature Blank: 3.5 / – / 1.0 / 2.2 / 0.7 / 1.0
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present ice, ice packs, bubbles.
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? missing dates + times. (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? Y (N)
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y (N)
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? Y N

Explain any discrepancies: Rec'd Oil + Grease in 1 L Clear Glass.

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
CCO5-6	NaOH	2 mL	EM4103010	1L Other	–	
CT6-7	NaOH	2 mL	EM4103010	1L Other	–	
CCO3-4	NaOH	2 mL	EM4103010	1L Other	–	
ECH3-9	HNO3	2 mL	X40023	1L Plastic	–	
CH3-13	H2SO4	½ mL	EMK291165	113 250 ml Teflon	–	

CRFREV.DOC3/5/2003

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Pg. 2 of 3

Project/Client Water & Air Research. Work Order K23 _____

Cooler received on 4-15-03 and opened on 4-15-03 by TM

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex. Attached. (Y) N
4. COC #
   Temperature of cooler(s) upon receipt: -1.2 -1.3 0.3 1.2 1.1 1.7
   Temperature Blank: 1.0 0.5 1.4 0.0 0.2 1.3
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present 1 lg ice packs, bubbles.
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies: See page 1

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

page 3 of 3

Project/Client Water & Air Research Work Order K23 _____

Cooler received on 4-15-03 and opened on 4-15-03 by Kin

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex / Attached N
4. COC #
   Temperature of cooler(s) upon receipt: 2.5 3.6
   Temperature Blank: 0.0 2.1
5. Were custody papers properly filled out (ink, signed, etc.)? Y (N)
6. Type of packing material present ice, ice packs, bubble
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies: _____

See page

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103
Sample Matrix: Sediment

Service Request: K2302691

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
B8-CPA	K2302691-001	04/03/2003	04/10/2003	04/11/2003	68.6	
B10-CPA	K2302691-002	04/03/2003	04/10/2003	04/11/2003	56.9	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103
Sample Matrix: Sediment

Service Request: K2302691

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
B7-CPA	K2302691-003	04/02/2003	04/11/2003	04/28/2003	72.2	
B9-CPA	K2302691-004	04/03/2003	04/11/2003	04/28/2003	58.0	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103
Sample Matrix: Sediment

Service Request: K2302691

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
CC01-2	K2302691-005	04/07/2003	04/15/2003	04/16/2003	76.0	
CC03-4	K2302691-006	04/08/2003	04/15/2003	04/16/2003	80.2	
CC05-6	K2302691-007	04/08/2003	04/15/2003	04/16/2003	73.5	
CT6-7	K2302691-008	04/09/2003	04/15/2003	04/16/2003	78.5	
CT8-9	K2302691-009	04/09/2003	04/15/2003	04/16/2003	80.4	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Analyzed:	04/11/2003

Duplicate Sample Summary

Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	WET
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
B8-CPA	K2302691-001	68.6	71.4	70.0	4	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003
		Date Analyzed:	04/28/2003

Duplicate Sample Summary
Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	WET
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
B7-CPA	K2302691-003	72.2	72.1	72.2	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103	**Date Collected:**	04/07/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003
		Date Analyzed:	04/16/2003

Duplicate Sample Summary

Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	WET
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
CC01-2	K2302691-005	76.0	77.5	76.8	2	

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302691
Date Collected : 04/02-09/03
Date Received : 04/10-15/03

Sulfide, Total

Units : mg/Kg (ppm)
Basis : Dry

Analysis Method : 9030M
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
B8-CPA	K2302691-001	6.2	3.8	1	04/15/03	6.9	
B10-CPA	K2302691-002	6.2	3.8	1	04/15/03	9.9	
B7-CPA	K2302691-003	6.2	3.8	1	04/16/03	ND	
B9-CPA	K2302691-004	6.2	3.8	1	04/15/03	8.2	
CC01-2	K2302691-005	6.2	3.8	1	04/16/03	ND	
CC03-4	K2302691-006	6.2	3.8	1	04/16/03	4.9	J
CC05-6	K2302691-007	6.2	3.8	1	04/16/03	6.9	
CT6-7	K2302691-008	6.2	3.8	1	04/16/03	ND	
CT8-9	K2302691-009	6.2	3.8	1	04/16/03	ND	
Method Blank	K2302691-MB	6.2	3.8	1	04/15/03	ND	
Method Blank	K2302691-MB	6.2	3.8	1	04/16/03	ND	

Approved By R Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691
Date Collected: 4/2-9/03
Date Received: 4/10-15/03

Sulfide, Total

Prep Method: NONE
Analysis Method: 9030M
Test Notes:

Units: mg/Kg (ppm)
Basis: WET

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
B8-CPA	K2302691-001	3.6	2.2	1	NA	04/15/03	4.7	
B10-CPA	K2302691-002	3.6	2.2	1	NA	04/15/03	5.6	
B7-CPA	K2302691-003	3.6	2.2	1	NA	04/16/03	ND	
B9-CPA	K2302691-004	3.6	2.2	1	NA	04/15/03	4.8	
CC01-2	K2302691-005	3.6	2.2	1	NA	04/16/03	ND	
CC03-4	K2302691-006	3.6	2.2	1	NA	04/16/03	3.9	
CC05-6	K2302691-007	3.6	2.2	1	NA	04/16/03	5.1	
CT6-7	K2302691-008	3.6	2.2	1	NA	04/16/03	ND	
CT8-9	K2302691-009	3.6	2.2	1	NA	04/16/03	ND	
Method Blank	K2302691-MB	3.6	2.2	1	NA	04/15/03	ND	
Method Blank	K2302691-MB	3.6	2.2	1	NA	04/16/03	ND	

M Modified for analysis of soil.

Approved By: _____ Date: 6/11/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302691
Date Collected : 04/08/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Duplicate Summary
Inorganic Parameters

Sample Name : CC03-4
Lab Code : K2302691-006DUP
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	9030M	6.2	4.9	5.2	5.1	6	J

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302691
Date Collected : 04/08/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : CC03-4
Lab Code : K2302691-006MS
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	9030M	500	1440	4.9	1480	102	60-130	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302691
Project Name :	Canaveral Harbor 103 Evaluation/CPA	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/15,16/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302691-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	mg/L (ppm)	9030M	0.96	1.18	123	60-130	
Sulfide, Total	mg/L (ppm)	9030M	0.96	0.87	91	60-130	

Approved By _____ Date : 5/5/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Collected: NA
Date Received: NA
Date Analyzed: 4/15, 16/03

Sulfide, Total
EPA Method 9030M
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.96	0.96	100
CCV 2 Result	0.96	0.96	100
CCV 3 Result	0.96	0.96	100
CCV 4 Result	0.96	0.96	100
CCV 1 Result	0.96	0.95	99
CCV 2 Result	0.96	0.95	99
CCV 3 Result	0.96	0.95	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND
CCB 4 Result	0.05	ND
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND

Approved By: _____ Date: 5/02/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302691
Date Collected : 04/02-09/03
Date Received : 04/10-15/03

Carbon, Total Organic

Analysis Method : ASTM D4129-82M
Test Notes :

Units : Percent
Basis : Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
B8-CPA	K2302691-001	0.05	0.04	1	04/26/03	0.56	
B10-CPA	K2302691-002	0.05	0.04	1	04/26/03	0.71	
B7-CPA	K2302691-003	0.05	0.04	1	04/26/03	0.81	
B9-CPA	K2302691-004	0.05	0.04	1	04/26/03	0.85	
CC01-2	K2302691-005	0.05	0.04	1	04/26/03	0.23	
CC03-4	K2302691-006	0.05	0.04	1	04/26/03	0.15	
CC05-6	K2302691-007	0.05	0.04	1	04/26/03	0.43	
CT6-7	K2302691-008	0.05	0.04	1	04/26/03	0.20	
CT8-9	K2302691-009	0.05	0.04	1	04/26/03	0.27	
Method Blank	K2302691-MB	0.05	0.04	1	04/26/03	ND	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/02-09/03
Sample Matrix:	Sediment	**Date Received:**	4/10-15/03

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
B8-CPA	K2302691-001	0.05	0.02	1	NA	04/26/03	0.39	
B10-CPA	K2302691-002	0.05	0.02	1	NA	04/26/03	0.40	
B7-CPA	K2302691-003	0.05	0.02	1	NA	04/26/03	0.59	
B9-CPA	K2302691-004	0.05	0.02	1	NA	04/26/03	0.49	
CC01-2	K2302691-005	0.05	0.02	1	NA	04/26/03	0.17	
CC03-4	K2302691-006	0.05	0.02	1	NA	04/26/03	0.12	
CC05-6	K2302691-007	0.05	0.02	1	NA	04/26/03	0.31	
CT6-7	K2302691-008	0.05	0.02	1	NA	04/26/03	0.16	
CT8-9	K2302691-009	0.05	0.02	1	NA	04/26/03	0.22	
Method Blank	K2302691-MB	0.05	0.02	1	NA	04/26/03	ND	

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302691
Date Collected : 04/03/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/26/03

Duplicate Summary
Inorganic Parameters

Sample Name : B8-CPA
Lab Code : K2302691-001DUP
Test Notes :

Units : Percent
Basis : Dry

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	ASTM D4129-82M	0.05	0.56	0.51	0.54	9	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Water

Service Request : K2302691
Date Collected : 04/03/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/26/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : B8-CPA
Lab Code : K2302691-001MS
Test Notes :

Units : Percent
Basis : Dry

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	ASTM D4129-82M	0.05	8.45	0.56	8.41	93	75-125	

Approved By _____ Date : 5/5/03

Report By: JCaulfie

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302691
Project Name :	Canaveral Harbor 103 Evaluation/CPA	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Sediment	**Date Extracted :**	NA
		Date Analyzed :	04/26/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302691-LCS
Test Notes :

Basis : Dry

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	Percent	ASTM D4129-82M	0.57	0.60	105	85-115	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/26/03

Carbon, Total Organic
Method: ASTM D4129-82M
Units: PERCENT

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	20.0	19.7	99
CCV 2 Result	20.0	19.8	99
CCV 3 Result	20.0	20.4	102

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND

Approved By: _____ Date: 5/02/03

COMBOQCD/042695

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/CPA

Sample No.	Lab Sample ID.
B8-CPA	K2302691-001
B8-CPAD	K2302691-001D
B8-CPAS	K2302691-001S
B10-CPA	K2302691-002
B7-CPA	K2302691-003
B9-CPA	K2302691-004
CC01-2	K2302691-005
CC01-2D	K2302691-005D
CC01-2S	K2302691-005S
CC03-4	K2302691-006
CC05-6	K2302691-007
CT6-7	K2302691-008
CT8-9	K2302691-009
Method Blank	K2302691-MB
Method Blank 2	K2302691-MB2

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/8/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: B8-CPA
Lab Code: K2302691-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.4	7.3	2	4/29/03	5/6/03	5700		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	2.8		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.09		
Chromium	200.8	0.21	0.01	5	4/29/03	5/1/03	15.1		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	1.82		
Iron	6010B	0.0	0.4	2	4/29/03	5/6/03	7000		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.01	B	
Nickel	200.8	0.21	0.07	5	4/29/03	5/1/03	4.40		
Silver	200.8	0.021	0.002	5	4/29/03	5/5/03	0.015	B	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	9.2		

% Solids: 68.6

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: B10-CPA
Lab Code: K2302691-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	9.8	6.8	2	4/29/03	5/6/03	11300		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.03	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	5.0		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.09		
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	25.3		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	2.69		
Iron	6010B	0.0	0.4	2	4/29/03	5/6/03	14500		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.01	B	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	5.53		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.030		
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	19.4		

% Solids: 56.9

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/02/03
Date Received: 04/11/03
Units: MG/KG
Basis: Dry

Sample Name: B7-CPA
Lab Code: K2302691-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	11.5	8.1	2	4/29/03	5/6/03	5070		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.08		N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	4.9		
Cadmium	200.8	0.06	0.03	5	4/29/03	5/1/03	0.06		
Chromium	200.8	0.23	0.01	5	4/29/03	5/1/03	13.7		
Copper	200.8	0.12	0.09	5	4/29/03	5/1/03	1.76		
Iron	6010B	0.0	0.5	2	4/29/03	5/6/03	10200		
Mercury	7471A	0.01	0.01	1	4/22/03	4/23/03	0.01	B	
Nickel	200.8	0.23	0.08	5	4/29/03	5/1/03	4.53		
Silver	200.8	0.023	0.002	5	4/29/03	5/5/03	0.015	B	
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	7.8		

% Solids: 72.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected: 04/03/03
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received: 04/11/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: B9-CPA
Lab Code: K2302691-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	9.6	6.7	2	4/29/03	5/6/03	9710		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.03	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	4.4		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.11		
Chromium	200.8	0.19	0.01	5	4/29/03	5/1/03	19.8		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	2.03		
Iron	6010B	0.0	0.4	2	4/29/03	5/6/03	12400		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.01	B	
Nickel	200.8	0.19	0.07	5	4/29/03	5/1/03	4.62		
Silver	200.8	0.019	0.002	5	4/29/03	5/5/03	0.024		
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	14.8		

% Solids: 58.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/07/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CC01-2
Lab Code: K2302691-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	11.0	7.7	2	4/29/03	5/6/03	1950		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	3.3		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.05	B	
Chromium	200.8	0.22	0.01	5	4/29/03	5/1/03	10.3		
Copper	200.8	0.11	0.09	5	4/29/03	5/1/03	0.73		
Iron	6010B	4.4	0.4	2	4/29/03	5/6/03	2940		
Mercury	7471A	0.02	0.01	1	4/28/03	4/29/03	0.01	B	
Nickel	200.8	0.22	0.08	5	4/29/03	5/1/03	2.02		
Silver	200.8	0.022	0.002	5	4/29/03	5/5/03	0.008	B	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	3.9		

% Solids: 76.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/08/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CC03-4
Lab Code: K2302691-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	12.5	8.7	2	4/29/03	5/6/03	2250		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.04	B	N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	1.2		
Cadmium	200.8	0.06	0.04	5	4/29/03	5/1/03	0.05	B	
Chromium	200.8	0.25	0.01	5	4/29/03	5/1/03	5.17		
Copper	200.8	0.13	0.10	5	4/29/03	5/1/03	0.71		
Iron	6010B	5.0	0.5	2	4/29/03	5/6/03	3450		
Mercury	7471A	0.02	0.01	1	4/28/03	4/29/03	0.01	U	
Nickel	200.8	0.25	0.09	5	4/29/03	5/1/03	2.72		
Silver	200.8	0.025	0.002	5	4/29/03	5/5/03	0.007	B	
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	3.3		

% Solids: 80.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected: 04/08/03
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received: 04/15/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: CC05-6
Lab Code: K2302691-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	11.3	7.9	2	4/29/03	5/6/03	6860		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.04	B	N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	2.1		
Cadmium	200.8	0.06	0.03	5	4/29/03	5/1/03	0.06		
Chromium	200.8	0.23	0.01	5	4/29/03	5/1/03	13.3		
Copper	200.8	0.11	0.09	5	4/29/03	5/1/03	1.21		
Iron	6010B	0.0	0.5	2	4/29/03	5/6/03	6250		
Mercury	7471A	0.02	0.01	1	4/28/03	4/29/03	0.01	U	
Nickel	200.8	0.23	0.08	5	4/29/03	5/1/03	3.45		
Silver	200.8	0.023	0.002	5	4/29/03	5/5/03	0.012	B	
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	9.0		

% Solids: 73.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/09/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CT6-7
Lab Code: K2302691-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.6	7.4	2	4/29/03	5/6/03	2880		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	2.8		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.06		
Chromium	200.8	0.21	0.01	5	4/29/03	5/1/03	11.3		
Copper	200.8	0.11	0.08	5	4/29/03	5/1/03	0.79		
Iron	6010B	4.3	0.4	2	4/29/03	5/6/03	3200		
Mercury	7471A	0.02	0.01	1	4/28/03	4/29/03	0.01	U	
Nickel	200.8	0.21	0.07	5	4/29/03	5/1/03	2.37		
Silver	200.8	0.021	0.002	5	4/29/03	5/5/03	0.007	B	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	3.9		

% Solids: 78.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/09/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CT8-9
Lab Code: K2302691-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	12.4	8.7	2	4/29/03	5/6/03	4230		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	2.0		
Cadmium	200.8	0.06	0.04	5	4/29/03	5/1/03	0.04	B	
Chromium	200.8	0.25	0.01	5	4/29/03	5/1/03	14.5		
Copper	200.8	0.12	0.10	5	4/29/03	5/1/03	0.89		
Iron	6010B	5.0	0.5	2	4/29/03	5/6/03	2140		
Mercury	7471A	0.02	0.01	1	4/28/03	4/29/03	0.02		
Nickel	200.8	0.25	0.09	5	4/29/03	5/1/03	3.90		
Silver	200.8	0.025	0.002	5	4/29/03	5/5/03	0.011	B	
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	2.9		

% Solids: 80.4

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: Method Blank
Lab Code: K2302691-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	7.0	U	
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.01	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	0.1	U	
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.03	U	
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	0.09	B	
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.08	U	
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	0.4	U	
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.01	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	0.07	U	
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.002	U	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	0.3	B	

% Solids: 100.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: B8-CPA
Lab Code: K2302691-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	7.1	5.0	2	4/29/03	5/6/03	3910		
Antimony	200.8	0.036	0.004	5	4/29/03	5/5/03	0.034	B	N
Arsenic	200.8	0.36	0.07	5	4/29/03	5/1/03	1.89		
Cadmium	200.8	0.04	0.02	5	4/29/03	5/1/03	0.06		
Chromium	200.8	0.143	0.005	5	4/29/03	5/1/03	10.4		
Copper	200.8	0.07	0.06	5	4/29/03	5/1/03	1.25		
Iron	6010B	0.0	0.3	2	4/29/03	5/6/03	4800		
Mercury	7471A	0.012	0.006	1	4/22/03	4/23/03	0.010	B	
Nickel	200.8	0.14	0.05	5	4/29/03	5/1/03	3.02		
Silver	200.8	0.014	0.001	5	4/29/03	5/5/03	0.011	B	
Zinc	200.8	0.4	0.1	5	4/29/03	5/1/03	6.3		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected: 04/03/03
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: B10-CPA
Lab Code: K2302691-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.6	3.9	2	4/29/03	5/6/03	6440		
Antimony	200.8	0.028	0.003	5	4/29/03	5/5/03	0.019	B	N
Arsenic	200.8	0.28	0.06	5	4/29/03	5/1/03	2.86		
Cadmium	200.8	0.03	0.02	5	4/29/03	5/1/03	0.05		
Chromium	200.8	0.111	0.004	5	4/29/03	5/1/03	14.4		
Copper	200.8	0.06	0.04	5	4/29/03	5/1/03	1.53		
Iron	6010B	0.0	0.2	2	4/29/03	5/6/03	8250		
Mercury	7471A	0.009	0.005	1	4/22/03	4/23/03	0.006	B	
Nickel	200.8	0.11	0.04	5	4/29/03	5/1/03	3.14		
Silver	200.8	0.011	0.001	5	4/29/03	5/5/03	0.017		
Zinc	200.8	0.3	0.1	5	4/29/03	5/1/03	11.1		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/02/03
Date Received: 04/11/03
Units: MG/KG
Basis: Wet

Sample Name: B7-CPA
Lab Code: K2302691-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	8.3	5.8	2	4/29/03	5/6/03	3660		
Antimony	200.8	0.042	0.005	5	4/29/03	5/5/03	0.055		N
Arsenic	200.8	0.42	0.08	5	4/29/03	5/1/03	3.55		
Cadmium	200.8	0.04	0.03	5	4/29/03	5/1/03	0.05		
Chromium	200.8	0.167	0.006	5	4/29/03	5/1/03	9.920		
Copper	200.8	0.08	0.07	5	4/29/03	5/1/03	1.27		
Iron	6010B	0.0	0.3	2	4/29/03	5/6/03	7400		
Mercury	7471A	0.008	0.004	1	4/22/03	4/23/03	0.004	B	
Nickel	200.8	0.17	0.06	5	4/29/03	5/1/03	3.27		
Silver	200.8	0.017	0.002	5	4/29/03	5/5/03	0.011	B	
Zinc	200.8	0.4	0.2	5	4/29/03	5/1/03	5.6		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected: 04/03/03
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received: 04/11/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: B9-CPA
Lab Code: K2302691-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.6	3.9	2	4/29/03	5/6/03	5630		
Antimony	200.8	0.028	0.003	5	4/29/03	5/5/03	0.019	B	N
Arsenic	200.8	0.28	0.06	5	4/29/03	5/1/03	2.52		
Cadmium	200.8	0.03	0.02	5	4/29/03	5/1/03	0.06		
Chromium	200.8	0.111	0.004	5	4/29/03	5/1/03	11.5		
Copper	200.8	0.06	0.04	5	4/29/03	5/1/03	1.18		
Iron	6010B	0.0	0.2	2	4/29/03	5/6/03	7170		
Mercury	7471A	0.010	0.005	1	4/22/03	4/23/03	0.007	B	
Nickel	200.8	0.11	0.04	5	4/29/03	5/1/03	2.68		
Silver	200.8	0.011	0.001	5	4/29/03	5/5/03	0.014		
Zinc	200.8	0.3	0.1	5	4/29/03	5/1/03	8.6		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/07/03
Date Received: 04/15/03
Units: MG/KG
Basis: Wet

Sample Name: CC01-2
Lab Code: K2302691-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	8.3	5.8	2	4/29/03	5/6/03	1480		
Antimony	200.8	0.042	0.005	5	4/29/03	5/5/03	0.040	B	N
Arsenic	200.8	0.42	0.08	5	4/29/03	5/1/03	2.53		
Cadmium	200.8	0.04	0.03	5	4/29/03	5/1/03	0.04	B	
Chromium	200.8	0.167	0.006	5	4/29/03	5/1/03	7.840		
Copper	200.8	0.08	0.07	5	4/29/03	5/1/03	0.55		
Iron	6010B	3.3	0.3	2	4/29/03	5/6/03	2230		
Mercury	7471A	0.014	0.007	1	4/28/03	4/29/03	0.009	B	
Nickel	200.8	0.17	0.06	5	4/29/03	5/1/03	1.54		
Silver	200.8	0.017	0.002	5	4/29/03	5/5/03	0.006	B	
Zinc	200.8	0.4	0.2	5	4/29/03	5/1/03	3.0		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected: 04/08/03
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received: 04/15/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: CC03-4
Lab Code: K2302691-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	1800		
Antimony	200.8	0.050	0.006	5	4/29/03	5/5/03	0.034	B	N
Arsenic	200.8	0.50	0.10	5	4/29/03	5/1/03	0.93		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.04	B	
Chromium	200.8	0.200	0.007	5	4/29/03	5/1/03	4.150		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.57		
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	2770		
Mercury	7471A	0.015	0.008	1	4/28/03	4/29/03	0.008	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	2.18		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.005	B	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	2.6		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/08/03
Date Received: 04/15/03
Units: MG/KG
Basis: Wet

Sample Name: CC05-6
Lab Code: K2302691-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	8.3	5.8	2	4/29/03	5/6/03	5040		
Antimony	200.8	0.042	0.005	5	4/29/03	5/5/03	0.027	B	N
Arsenic	200.8	0.42	0.08	5	4/29/03	5/1/03	1.54		
Cadmium	200.8	0.04	0.03	5	4/29/03	5/1/03	0.05		
Chromium	200.8	0.167	0.006	5	4/29/03	5/1/03	9.750		
Copper	200.8	0.08	0.07	5	4/29/03	5/1/03	0.89		
Iron	6010B	0.0	0.3	2	4/29/03	5/6/03	4600		
Mercury	7471A	0.012	0.006	1	4/28/03	4/29/03	0.006	U	
Nickel	200.8	0.17	0.06	5	4/29/03	5/1/03	2.53		
Silver	200.8	0.017	0.002	5	4/29/03	5/5/03	0.009	B	
Zinc	200.8	0.4	0.2	5	4/29/03	5/1/03	6.6		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected: 04/09/03
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received: 04/15/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: CT6-7
Lab Code: K2302691-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	8.3	5.8	2	4/29/03	5/6/03	2260		
Antimony	200.8	0.042	0.005	5	4/29/03	5/5/03	0.038	B	N
Arsenic	200.8	0.42	0.08	5	4/29/03	5/1/03	2.18		
Cadmium	200.8	0.04	0.03	5	4/29/03	5/1/03	0.04		
Chromium	200.8	0.167	0.006	5	4/29/03	5/1/03	8.840		
Copper	200.8	0.08	0.07	5	4/29/03	5/1/03	0.62		
Iron	6010B	3.3	0.3	2	4/29/03	5/6/03	2510		
Mercury	7471A	0.013	0.007	1	4/28/03	4/29/03	0.007	U	
Nickel	200.8	0.17	0.06	5	4/29/03	5/1/03	1.86		
Silver	200.8	0.017	0.002	5	4/29/03	5/5/03	0.006	B	
Zinc	200.8	0.4	0.2	5	4/29/03	5/1/03	3.0		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/09/03
Date Received: 04/15/03
Units: MG/KG
Basis: Wet

Sample Name: CT8-9
Lab Code: K2302691-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	3400		
Antimony	200.8	0.050	0.006	5	4/29/03	5/5/03	0.044	B	N
Arsenic	200.8	0.50	0.10	5	4/29/03	5/1/03	1.58		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.03	B	
Chromium	200.8	0.200	0.007	5	4/29/03	5/1/03	11.7		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.71		
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	1720		
Mercury	7471A	0.015	0.007	1	4/28/03	4/29/03	0.020		
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	3.13		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.009	B	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	2.4		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2302691-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	7.0	U	
Antimony	200.8	0.050	0.006	5	4/29/03	5/5/03	0.009	B	N
Arsenic	200.8	0.50	0.10	5	4/29/03	5/1/03	0.10	U	
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.03	U	
Chromium	200.8	0.200	0.007	5	4/29/03	5/1/03	0.091	B	
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.08	U	
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	0.4	U	
Mercury	7471A	0.020	0.010	1	4/22/03	4/23/03	0.010	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	0.07	U	
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.002	U	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	0.3	B	

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank 2
Lab Code: K2302691-MB2

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Mercury	7471A	0.020	0.010	1	4/28/03	4/29/03	0.010	U	

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: Method Blank 2
Lab Code: K2302691-MB2

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Mercury	7471A	0.02	0.01	1	4/28/03	4/29/03	0.01	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4900	98	5000	5090	102	5030	101	6010B
Antimony	25.0	23.6	94	25.0	24.9	100	25.0	100	200.8
Arsenic	50.0	48.6	97	25.0	25.2	101	25.5	102	200.8
Cadmium	25.0	24.5	98	25.0	25.7	103	25.5	102	200.8
Chromium	20.0	19.9	100	25.0	24.1	96	25.6	102	200.8
Copper	25.0	25.0	100	25.0	25.6	102	25.3	101	200.8
Iron	2500	2460	98	500	505	101	515	103	6010B
Iron	25000	25300	101	25000	25600	102	25000	100	6010B
Mercury	5.0	4.69	94	5.0	5.03	101	5.31	106	7471A
Nickel	50.0	49.8	100	25.0	24.9	100	24.7	99	200.8
Silver	12.5	12.0	96	25.0	24.9	100	24.6	98	200.8
Zinc	50.0	49.6	99	25.0	24.9	100	25.0	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4960	99	4900	98	6010B
Antimony				25.0	24.8	99	25.0	100	200.8
Arsenic				25.0	25.8	103	25.5	102	200.8
Cadmium				25.0	25.7	103	25.1	100	200.8
Chromium				25.0	26.4	106	25.0	100	200.8
Copper				25.0	25.7	103	24.3	97	200.8
Iron				500	512	102	511	102	6010B
Iron				25000	24800	99	24300	97	6010B
Mercury				5.0	5.39	108	5.38	108	7471A
Nickel				25.0	25.0	100	24.4	98	200.8
Silver				25.0	24.4	98	24.3	97	200.8
Zinc				25.0	25.2	101	23.8	95	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4880	98	4910	98	6010B
Antimony				25.0	24.3	97	24.1	97	200.8
Arsenic				25.0	26.5	106	25.8	103	200.8
Cadmium				25.0	25.2	101	24.8	99	200.8
Chromium				25.0	25.7	103	25.3	101	200.8
Copper				25.0	24.9	100	24.7	99	200.8
Iron				500	508	102	500	100	6010B
Iron				25000	24200	97	24000	96	6010B
Mercury				5.0	5.06	101			7471A
Nickel				25.0	24.8	99	24.5	98	200.8
Silver				25.0	23.6	94	24.0	96	200.8
Zinc				25.0	25.1	100	24.2	97	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	24.6	98	24.1	96	200.8
Silver				25.0	24.2	97	23.9	96	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony	25.0	23.9	96	25.0	24.8	99	24.9	100	200.8
Silver	12.5	12.1	97	25.0	24.5	98	24.8	99	200.8

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	43.9	88		
Antimony				0.10	0.10	103		
Arsenic				1.0	0.99	99		
Cadmium				0.10	0.10	99		
Chromium				0.40	0.45	112		
Copper				0.20	0.19	95		
Iron				20	21.5	108		
Mercury	0.20	0.13	65					
Nickel				0.40	0.42	104		
Silver				0.04	0.044	110		
Zinc				1.0	1.03	103		

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Antimony				0.10	0.11	106		
Silver				0.04	0.045	113		

METALS
-3-
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum	35.0	U	35.0	U	35.0	U	35.0	U						6010B
Antimony	0.01	U	0.01	U	0.01	U	0.01	U						200.8
Arsenic	0.2	U	0.2	U	0.2	U	0.2	U						200.8
Cadmium	0.06	U	0.06	U	0.06	U	0.06	U						200.8
Chromium	0.01	U	0.01	U	0.01	U	0.01	U						200.8
Copper	0.16	U	0.16	U	0.16	U	0.16	U						200.8
Iron	2.0	U	2.0	U	2.0	U	2.0	U						6010B
Mercury	0.10	U	0.10	U	0.10	U	0.10	U						7471A
Nickel	0.14	U	0.14	U	0.14	U	0.14	U						200.8
Silver	0.009	B	0.006	B	0.01	B	0.007	B						200.8
Zinc	0.4	U	0.4	U	0.4	U	0.4	U						200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum			35.0	U	35.0	U	35.0	U					6010B
Antimony			0.02	B	0.02	B	0.01	B					200.8
Arsenic			0.2	U	0.2	U	0.2	U					200.8
Cadmium			0.06	U	0.06	U	0.06	U					200.8
Chromium			0.01	U	0.01	U	0.02	B					200.8
Copper			0.16	U	0.16	U	0.16	U					200.8
Iron			2.0	U	2.0	U	2.0	U					6010B
Mercury			0.10	U	0.10	U							7471A
Nickel			0.14	U	0.14	U	0.14	U					200.8
Silver			0.009	B	0.01	B	0.006	B					200.8
Zinc			0.4	U	0.4	U	0.4	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Antimony			0.01	U	0.01	U								200.8
Silver			0.004	B	0.01	B								200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Antimony	0.06	U	0.06	U	0.06	U								200.8
Silver	0.040	U	0.040	U	0.04	U								200.8

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	481000	489000	98	474000	483000	97
Iron	200000	200000	183000	187000	94	177000	179000	89

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation/CPA Basis: Dry

Matrix: SEDIMENT % Solids: 68.6

Sample Name: B8-CPAS Lab Code: K2302691-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		4140		5700		416	-375		6010B
Antimony	70 - 130	23.4		0.05	B	104	22	N	200.8
Arsenic	70 - 130	200		2.8		208	95		200.8
Cadmium	70 - 130	9.31		0.09		10.4	89		200.8
Chromium	70 - 130	50.8		15.1		41.6	86		200.8
Copper	70 - 130	48.5		1.82		52.1	90		200.8
Iron		6360		7000		208	-308		6010B
Mercury	60 - 130	0.45		0.01	B	0.46	95		7471A
Nickel	70 - 130	97.0		4.40		104	89		200.8
Silver	70 - 130	7.340		0.021	U	10.4	71		200.8
Zinc	70 - 130	101		9.2		104	88		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/CPA
Basis: Dry
Matrix: SEDIMENT
% Solids: 76.0

Sample Name: CC01-2S
Lab Code: K2302691-005S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	60 - 130	0.51		0.01	B	0.48	103		7471A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/CPA
Basis: Dry
Matrix: SEDIMENT
% Solids: 68.6

Sample Name: B8-CPAD
Lab Code: K2302691-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	5700		4860		16		6010B
Antimony		0.05	B	0.05		9		200.8
Arsenic	30	2.8		3.0		9		200.8
Cadmium		0.09		0.09		0		200.8
Chromium	30	15.1		16.7		10		200.8
Copper	30	1.82		2.00		9		200.8
Iron	30	7000		6110		14		6010B
Mercury		0.01	B	0.01	B	10		7471A
Nickel	30	4.40		4.16		6		200.8
Silver		0.015	B	0.014	B	8		200.8
Zinc	30	9.2		10.6		14		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation/CPA Basis: Dry

Matrix: SEDIMENT % Solids: 76.0

Sample Name: CC01-2D Lab Code: K2302691-005D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.01	B	0.01	B	33		7471A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 7 -
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/CPA

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				8270	8070	4200	12300	98
Antimony				32.6	17.1	0.0500	68.1	52
Arsenic				187	187	139	235	100
Cadmium				67.9	65.1	52.0	83.6	96
Chromium				144	140	115	173	97
Copper				91.3	84.4	74.8	108	92
Iron				12700	12400	7470	17900	98
Mercury				1.49	1.39	0.662	2.02	93
Nickel				78.0	69.8	61.1	94.9	89
Silver				90.0	88.4	67.0	113	98
Zinc				283	263	219	347	93

METALS

-7-

LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/CPA

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L True	Aqueous mg/L Found	Aqueous mg/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits		Solid (mg/kg) %R
Mercury				1.49	1.44		0.662	2.02	97

METALS
-9-
ICP SERIAL DILUTIONS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.: Units: ug/L

Project Name: Canaveral Harbor 103 Evaluat:

Sample Name: B8-CPAL Lab Code: K2302691-001L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-	Q	Method
Aluminum	27400		27000		1		6010B
Iron	33600		35800		7		6010B

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.20	0.10	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.10	0.01	200.8
Silver	107		0.040	0.004	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	75		1.0	0.2	200.8
Cadmium	111		0.10	0.06	200.8
Chromium	52		0.40	0.01	200.8
Copper	65		0.20	0.16	200.8
Nickel	60		0.40	0.14	200.8
Zinc	66		1.0	0.4	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	237.30		50.0	35.0	6010B
Iron	259.90		20.0	2.0	6010B

Comments

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0009000	0.0000000	-0.0035000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0125000
Arsenic	189.0	0.0000000	0.0000000	-0.0001400	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000900	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000230	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003000	0.0000000	0.0000000	0.0000000	-0.0003600
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009500	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000780	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0005000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0001000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	-0.0012000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mo	Ni	Interelement Correction Factors for: Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019000
Antimony	206.8	-0.0280000	0.0000000	0.0002400	0.0000000	0.0004000
Arsenic	189.0	0.0010000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	-0.0004700	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000250	-0.0000120	0.0000600	0.0000000	-0.0000560
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001700	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015000	0.0000000	0.0000000
Copper	324.7	0.0003400	0.0000000	-0.0000070	-0.0017000	0.0000000
Iron	259.9	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.0740000	0.0700000
Lead	220.3	-0.0016000	0.0004600	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0001200
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0006800	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0003000	0.0000000	0.0000000	-0.0001700	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0005500	-0.0060000	-0.0002500	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0016000	0.0017000	0.0037000
Tin	189.9	0.0000000	0.0000000	-0.0019000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002500	0.0000000	-0.0006400	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	-0.0000600	0.0000000	0.0000000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003100	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0004000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0005900	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	200.0	200.8
Silver	15.00	100.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic	15.00	1000.0	200.8
Cadmium	15.00	700.0	200.8
Chromium	15.00	500.0	200.8
Copper	15.00	800.0	200.8
Nickel	15.00	800.0	200.8
Zinc	15.00	900.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Iron	5.00	20000.0	6010B
Iron	5.00	1000000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302691-002	4/29/03	EPA 3050B	1.80	100
K2302691-003	4/29/03	EPA 3050B	1.20	100
K2302691-001	4/29/03	EPA 3050B	1.40	100
K2302691-001D	4/29/03	EPA 3050B	1.40	100
K2302691-001S	4/29/03	EPA 3050B	1.40	100
K2302691-004	4/29/03	EPA 3050B	1.80	100
K2302691-005	4/29/03	EPA 3050B	1.20	100
K2302691-006	4/29/03	EPA 3050B	1.00	100
K2302691-007	4/29/03	EPA 3050B	1.20	100
K2302691-008	4/29/03	EPA 3050B	1.20	100
K2302691-009	4/29/03	EPA 3050B	1.00	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302691-MB	4/29/03	EPA 3050B	1.00	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302691-002	4/22/03	METHOD	2.14	100
K2302691-003	4/22/03	METHOD	2.46	100
K2302691-001	4/22/03	METHOD	1.61	100
K2302691-001D	4/22/03	METHOD	1.60	100
K2302691-001S	4/22/03	METHOD	1.60	100
K2302691-004	4/22/03	METHOD	2.07	100
CALIBRATION ZER	4/22/03	METHOD	100	100
ICV	4/22/03	METHOD	100	100
LCSS	4/22/03	METHOD	0.508	100
K2302691-MB	4/22/03	METHOD	1.00	100
STANDARD #1	4/22/03	METHOD	100	100
STANDARD #2	4/22/03	METHOD	100	100
STANDARD #3	4/22/03	METHOD	100	100
STANDARD #4	4/22/03	METHOD	100	100
STANDARD #5	4/22/03	METHOD	100	100
CALIBRATION ZER	4/28/03	METHOD	100	100
K2302691-005	4/28/03	METHOD	1.40	100
K2302691-005D	4/28/03	METHOD	1.88	100
K2302691-005S	4/28/03	METHOD	1.37	100
K2302691-006	4/28/03	METHOD	1.33	100
K2302691-007	4/28/03	METHOD	1.71	100
K2302691-008	4/28/03	METHOD	1.51	100
K2302691-009	4/28/03	METHOD	1.36	100
ICV	4/28/03	METHOD	100	100
LCSS2	4/28/03	METHOD	0.507	100
K2302691-MB2	4/28/03	METHOD	1.00	100
STANDARD #1	4/28/03	METHOD	100	100
STANDARD #2	4/28/03	METHOD	100	100
STANDARD #3	4/28/03	METHOD	100	100
STANDARD #4	4/28/03	METHOD	100	100
STANDARD #5	4/28/03	METHOD	100	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302691-002	4/29/03	EPA 3050B	1.80	100
K2302691-003	4/29/03	EPA 3050B	1.20	100
K2302691-001	4/29/03	EPA 3050B	1.40	100
K2302691-001D	4/29/03	EPA 3050B	1.40	100
K2302691-001S	4/29/03	EPA 3050B	1.40	100
K2302691-004	4/29/03	EPA 3050B	1.80	100
K2302691-005	4/29/03	EPA 3050B	1.20	100
K2302691-006	4/29/03	EPA 3050B	1.00	100
K2302691-007	4/29/03	EPA 3050B	1.20	100
K2302691-008	4/29/03	EPA 3050B	1.20	100
K2302691-009	4/29/03	EPA 3050B	1.00	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302691-MB	4/29/03	EPA 3050B	1.00	100

K2302691-002	4/29/03	EPA 3050B	1.80	100
K2302691-003	4/29/03	EPA 3050B	1.20	100
K2302691-001	4/29/03	EPA 3050B	1.40	100
K2302691-001D	4/29/03	EPA 3050B	1.40	100
K2302691-001S	4/29/03	EPA 3050B	1.40	100
K2302691-004	4/29/03	EPA 3050B	1.80	100
K2302691-005	4/29/03	EPA 3050B	1.20	100
K2302691-006	4/29/03	EPA 3050B	1.00	100
K2302691-007	4/29/03	EPA 3050B	1.20	100
K2302691-008	4/29/03	EPA 3050B	1.20	100
K2302691-009	4/29/03	EPA 3050B	1.00	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302691-MB	4/29/03	EPA 3050B	1.00	100

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/23/03 End Date: 4/23/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	11:20																X									
STANDARD #1	1.00	11:22																X									
STANDARD #2	1.00	11:23																X									
STANDARD #3	1.00	11:25																X									
STANDARD #4	1.00	11:27																X									
STANDARD #5	1.00	11:28																X									
ICV	1.00	11:30																X									
ICB	1.00	11:32																X									
CCV1	1.00	11:33																X									
CCB1	1.00	11:35																X									
CRA	1.00	11:36																X									
K2302691-MB	1.00	11:38																X									
LCSS	1.00	11:39																X									
K2302691-001	1.00	11:42																X									
K2302691-001D	1.00	11:43																X									
K2302691-001S	1.00	11:45																X									
K2302691-002	1.00	11:47																X									
K2302691-003	1.00	11:48																X									
K2302691-004	1.00	11:50																X									
ZZZZZZ	1.00	11:52																									
CCV2	1.00	11:53																X									
CCB2	1.00	11:55																X									
ZZZZZZ	1.00	11:56																									
ZZZZZZ	1.00	11:58																									
ZZZZZZ	1.00	12:00																									
ZZZZZZ	1.00	12:01																									
ZZZZZZ	1.00	12:03																									
ZZZZZZ	1.00	12:04																									
ZZZZZZ	1.00	12:06																									
ZZZZZZ	1.00	12:08																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/23/03 End Date: 4/23/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	12:09																									
ZZZZZZ	1.00	12:11																									
CCV3	1.00	12:12																X									
CCB3	1.00	12:14																X									
ZZZZZZ	1.00	12:16																									
ZZZZZZ	1.00	12:17																									
ZZZZZZ	1.00	12:19																									
CCV4	1.00	12:21																X									
CCB4	1.00	12:22																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/29/03 End Date: 4/29/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	15:14																X									
STANDARD #1	1.00	15:16																X									
STANDARD #2	1.00	15:17																X									
STANDARD #3	1.00	15:19																X									
STANDARD #4	1.00	15:20																X									
STANDARD #5	1.00	15:22																X									
ICV	1.00	15:24																X									
ICB	1.00	15:25																X									
CCV1	1.00	15:27																X									
CCB1	1.00	15:28																X									
CRA	1.00	15:30																X									
K2302691-MB2	1.00	15:32																X									
LCSS2	1.00	15:33																X									
ZZZZZZ	1.00	15:35																									
ZZZZZZ	1.00	15:37																									
ZZZZZZ	1.00	15:38																									
ZZZZZZ	1.00	15:40																									
ZZZZZZ	1.00	15:41																									
ZZZZZZ	1.00	15:43																									
ZZZZZZ	1.00	15:45																									
CCV2	1.00	15:47																X									
CCB2	1.00	15:48																X									
ZZZZZZ	1.00	15:50																									
ZZZZZZ	1.00	15:52																									
K2302691-005	1.00	15:53																X									
K2302691-005D	1.00	15:55																X									
K2302691-005S	1.00	15:56																X									
K2302691-006	1.00	15:58																X									
K2302691-007	1.00	16:00																X									
K2302691-008	1.00	16:01																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/29/03 End Date: 4/29/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302691-009	1.00	16:03																X									
ZZZZZZ	1.00	16:05																									
CCV3	1.00	16:06																X									
CCB3	1.00	16:08																X									
ZZZZZZ	1.00	16:09																									
ZZZZZZ	1.00	16:12																									
ZZZZZZ	1.00	16:15																									
ZZZZZZ	1.00	16:19																									
ZZZZZZ	1.00	16:22																									
ZZZZZZ	1.00	16:24																									
ZZZZZZ	1.00	16:26																									
CCV4	1.00	16:28																X									
CCB4	1.00	16:29																X									
ZZZZZZ	1.00	16:37																									
ZZZZZZ	1.00	16:39																									
ZZZZZZ	1.00	16:40																									
ZZZZZZ	1.00	16:42																									
CCV5	1.00	16:43																X									
CCB5	1.00	16:45																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	09:20		X										X													
CAL-STDA	1.00	09:22												X													
CAL-STDB	1.00	09:26		X										X													
ICV	1.00	09:31		X										X													
ICV	1.00	09:35												X													
ZZZZZZ	1.00	09:38																									
ICB	1.00	09:41		X										X													
CCV1	1.00	10:21												X													
CCV1	1.00	10:26		X										X													
CCB1	1.00	10:30		X										X													
CRI	1.00	10:41		X										X													
ICSA	1.00	10:45		X										X													
ICSAB	1.00	10:48		X										X													
ZZZZZZ	2.00	10:52																									
ZZZZZZ	2.00	10:55																									
ZZZZZZ	2.00	10:58																									
ZZZZZZ	2.00	11:00																									
ZZZZZZ	2.00	11:03																									
ZZZZZZ	10.00	11:06																									
ZZZZZZ	2.00	11:09																									
CCV2	1.00	11:13												X													
CCV2	1.00	11:15		X										X													
CCB2	1.00	11:18		X										X													
ZZZZZZ	2.00	11:20																									
ZZZZZZ	2.00	11:23																									
ZZZZZZ	2.00	11:25																									
ZZZZZZ	2.00	11:28																									
ZZZZZZ	2.00	11:30																									
ZZZZZZ	2.00	11:33																									
ZZZZZZ	2.00	11:35																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	2.00	11:37																									
ZZZZZZ	2.00	11:52																									
ZZZZZZ	2.00	11:54																									
CCV3	1.00	11:56												X													
CCV3	1.00	11:59		X										X													
CCB3	1.00	12:02		X										X													
ZZZZZZ	2.00	12:05																									
ZZZZZZ	2.00	12:07																									
ZZZZZZ	2.00	12:09																									
ZZZZZZ	2.00	12:12																									
ZZZZZZ	2.00	12:14																									
ZZZZZZ	2.00	12:16																									
ZZZZZZ	2.00	12:18																									
K2302691-MB	2.00	12:21		X										X													
LCSS	2.00	12:24		X										X													
K2302691-001	2.00	12:26		X										X													
CCV4	1.00	12:29												X													
CCV4	1.00	12:32		X										X													
CCB4	1.00	12:34		X										X													
K2302691-001D	2.00	12:37		X										X													
K2302691-001S	2.00	12:39		X										X													
K2302691-001L	10.00	12:41		X										X													
K2302691-002	2.00	12:44		X										X													
K2302691-003	2.00	12:46		X										X													
K2302691-004	2.00	12:49		X										X													
K2302691-005	2.00	12:51		X										X													
K2302691-006	2.00	12:53		X										X													
K2302691-007	2.00	12:55		X										X													
K2302691-008	2.00	12:58		X										X													
CCV5	1.00	13:00												X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV5	1.00	13:03		X										X													
CCB5	1.00	13:06		X										X													
K2302691-009	2.00	13:09		X										X													
ICSA	1.00	13:13		X										X													
ICSAB	1.00	13:15		X										X													
CCV6	1.00	13:21												X													
CCV6	1.00	13:23		X										X													
CCB6	1.00	13:25		X										X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:18			X																	X					
25 PPB STD.	1.00	08:19			X																	X					
ICV2	1.00	08:21			X																	X					
CCV1	1.00	08:22			X																	X					
ICB2	1.00	08:25			X																	X					
CCB1	1.00	08:26			X																	X					
CRA2	1.00	08:28			X																	X					
K2302691-001S	5.00	08:29			X																	X					
CCV2	1.00	08:33			X																	X					
CCB2	1.00	08:35			X																	X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:08			X																	X					
25 PPB STD.	1.00	08:12			X																	X					
ICV	1.00	08:13			X																	X					
CCV1	1.00	08:15			X																	X					
ICB	1.00	08:18			X																	X					
CCB1	1.00	08:19			X																	X					
CRA	1.00	08:21			X																	X					
ZZZZZZ	5.00	08:23																									
ZZZZZZ	5.00	08:24																									
ZZZZZZ	5.00	08:25																									
ZZZZZZ	5.00	08:26																									
ZZZZZZ	20.00	08:27																									
ZZZZZZ	5.00	08:29																									
ZZZZZZ	5.00	08:30																									
ZZZZZZ	5.00	08:31																									
ZZZZZZ	5.00	08:33																									
CCV2	1.00	08:34			X																	X					
CCB2	1.00	08:37			X																	X					
ZZZZZZ	5.00	08:38																									
ZZZZZZ	5.00	08:39																									
ZZZZZZ	5.00	08:41																									
ZZZZZZ	5.00	08:42																									
ZZZZZZ	5.00	08:43																									
ZZZZZZ	5.00	08:44																									
ZZZZZZ	5.00	08:45																									
ZZZZZZ	5.00	08:46																									
ZZZZZZ	5.00	08:47																									
ZZZZZZ	5.00	08:48																									
CCV3	1.00	08:50			X																	X					
CCB3	1.00	08:53			X																	X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	08:55																									
ZZZZZZ	5.00	08:56																									
ZZZZZZ	5.00	08:57																									
ZZZZZZ	5.00	08:59																									
K2302691-MB	5.00	09:02			X																	X					
K2302691-001	5.00	09:03			X																	X					
K2302691-001D	5.00	09:05			X																	X					
ZK2302691-001S	5.00	09:07																									
LCSS	20.00	09:11			X																	X					
CCV4	1.00	09:13			X																	X					
CCB4	1.00	09:16			X																	X					
K2302691-002	5.00	09:19			X																	X					
K2302691-003	5.00	09:20			X																	X					
K2302691-004	5.00	09:22			X																	X					
K2302691-005	5.00	09:23			X																	X					
K2302691-006	5.00	09:24			X																	X					
K2302691-007	5.00	09:25			X																	X					
K2302691-008	5.00	09:27			X																	X					
K2302691-009	5.00	09:28			X																	X					
ZZZZZZ	5.00	09:30																									
ZZZZZZ	20.00	09:32																									
CCV5	1.00	09:33			X																	X					
CCB5	1.00	09:36			X																	X					
ZZZZZZ	5.00	09:38																									
ZZZZZZ	5.00	09:39																									
ZZZZZZ	5.00	09:40																									
ZZZZZZ	5.00	09:43																									
ZZZZZZ	5.00	09:44																									
ZZZZZZ	5.00	09:45																									
ZZZZZZ	5.00	09:46																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	09:47																									
ZZZZZZ	5.00	09:49																									
ZZZZZZ	5.00	09:50																									
CCV6	1.00	09:52			X																	X					
CCB6	1.00	09:55			X																	X					
ZZZZZZ	5.00	10:21																									
ZZZZZZ	5.00	10:22																									
ZZZZZZ	5.00	10:23																									
ZZZZZZ	5.00	10:24																									
ZZZZZZ	5.00	10:25																									
ZZZZZZ	5.00	10:30																									
ZZZZZZ	5.00	10:31																									
CCV7	1.00	10:33			X																	X					
CCB7	1.00	10:36			X																	X					
ZZZZZZ	5.00	10:42																									
ZZZZZZ	5.00	10:43																									
ZZZZZZ	5.00	10:45																									
ZZZZZZ	5.00	10:46																									
ZZZZZZ	5.00	10:47																									
ZZZZZZ	20.00	10:48																									
CCV8	1.00	10:51			X																	X					
CCB8	1.00	10:55			X																	X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/1/03 End Date: 5/1/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:25				X			X		X		X						X							X	
CALIBRATION STANDARD	1.00	11:27				X			X		X		X						X							X	
ICV	1.00	11:30				X			X		X		X						X							X	
CCV1	1.00	11:32				X			X		X		X						X							X	
ICB	1.00	11:34				X			X		X		X						X							X	
CCB1	1.00	11:35				X			X		X		X						X							X	
ZZZZZZ	1.00	11:38																									
CRA SOIL	1.00	11:40				X			X		X		X						X							X	
ZZZZZZ	5.00	11:42																									
ZZZZZZ	20.00	11:44																									
ZZZZZZ	5.00	11:47																									
ZZZZZZ	5.00	11:49																									
ZZZZZZ	5.00	11:51																									
ZZZZZZ	25.00	11:53																									
ZZZZZZ	5.00	11:54																									
ZZZZZZ	5.00	11:57																									
CCV2	1.00	11:59				X			X		X		X						X							X	
CCB2	1.00	12:01				X			X		X		X						X							X	
ZZZZZZ	5.00	12:04																									
ZZZZZZ	5.00	12:06																									
ZZZZZZ	5.00	12:09																									
ZZZZZZ	5.00	12:10																									
ZZZZZZ	5.00	12:13																									
ZZZZZZ	5.00	12:15																									
ZZZZZZ	25.00	12:17																									
ZZZZZZ	5.00	12:19																									
ZZZZZZ	5.00	12:20																									
ZZZZZZ	5.00	12:23																									
CCV3	1.00	12:25				X			X		X		X						X							X	
CCB3	1.00	12:28				X			X		X		X						X							X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/1/03 End Date: 5/1/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	12:30																									
ZZZZZZ	5.00	12:32																									
ZZZZZZ	5.00	12:34																									
ZZZZZZ	5.00	12:36																									
ZZZZZZ	5.00	12:38																									
ZZZZZZ	5.00	12:43																									
ZZZZZZ	5.00	12:45																									
K2302691-MB	5.00	12:47				X			X		X		X						X							X	
LCSS	20.00	12:49				X			X		X		X						X							X	
K2302691-001	5.00	12:52				X			X		X		X						X							X	
CCV4	1.00	12:54				X			X		X		X						X							X	
CCB4	1.00	12:57				X			X		X		X						X							X	
K2302691-001D	5.00	13:02				X			X		X		X						X							X	
K2302691-001S	5.00	13:04							X																		
K2302691-001S	25.00	13:07				X					X		X						X							X	
K2302691-002	5.00	13:09				X			X		X		X						X							X	
K2302691-003	5.00	13:11				X			X		X		X						X							X	
K2302691-004	5.00	13:13				X			X		X		X						X							X	
K2302691-005	5.00	13:15				X			X		X		X						X							X	
K2302691-006	5.00	13:17				X			X		X		X						X							X	
K2302691-007	5.00	13:18				X			X		X		X						X							X	
K2302691-008	5.00	13:20				X			X		X		X						X							X	
CCV5	1.00	13:22				X			X		X		X						X							X	
CCB5	1.00	13:24				X			X		X		X						X							X	
K2302691-009	5.00	13:26				X			X		X		X						X							X	
CCV6	1.00	13:28				X			X		X		X						X							X	
CCB6	1.00	13:30				X			X		X		X						X							X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 19, 2003 Service Request No: K2302691

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/CPA

Dear Nadia:

Enclosed are the additional pages for the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302691.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/CPA

Sample No.	Lab Sample ID.
B8-CPA	K2302691-001
B8-CPAD	K2302691-001D
B8-CPAS	K2302691-001S
B10-CPA	K2302691-002
B7-CPA	K2302691-003
B9-CPA	K2302691-004
CC01-2	K2302691-005
CC03-4	K2302691-006
CC05-6	K2302691-007
CT6-7	K2302691-008
CT8-9	K2302691-009
Method Blank	K2302691-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 6/13/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: B8-CPA
Lab Code: K2302691-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	4.91		

% Solids: 68.6

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: B10-CPA
Lab Code: K2302691-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	10.6		

% Solids: 56.9

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/02/03
Date Received: 04/11/03
Units: MG/KG
Basis: Dry

Sample Name: B7-CPA
Lab Code: K2302691-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	3.78		

% Solids: 72.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/11/03
Units: MG/KG
Basis: Dry

Sample Name: B9-CPA
Lab Code: K2302691-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	7.45		

% Solids: 58.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/07/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CC01-2
Lab Code: K2302691-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	2.14		

% Solids: 76.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/08/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CC03-4
Lab Code: K2302691-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	1.20		

% Solids: 80.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/08/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CC05-6
Lab Code: K2302691-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	3.57		

% Solids: 73.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/09/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CT6-7
Lab Code: K2302691-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	2.17		

% Solids: 78.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/09/03
Date Received: 04/15/03
Units: MG/KG
Basis: Dry

Sample Name: CT8-9
Lab Code: K2302691-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	4.15		

% Solids: 80.4

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected:
Date Received:
Units: MG/KG
Basis: Dry

Sample Name: Method Blank
Lab Code: K2302691-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	0.02	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	50.0	49.6	99	25.0	25.6	102	24.8	99	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				25.0	25.7	103	25.3	101	200.8

00016

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				25.0	25.7	103			200.8

00017

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Lead				0.04	0.04	88		

00018

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Lead	0.04	U	0.04	U	0.04	U	0.04	U					200.8

00019

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Lead			0.04	U	0.04	U								200.8

00020

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/CPA
Basis: Dry
Matrix: SEDIMENT
% Solids: 68.6

Sample Name: B8-CPAS
Lab Code: K2302691-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	70 - 130	107		4.91		104	98		200.8

00021

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation/CPA Basis: Dry

Matrix: SEDIMENT % Solids: 68.6

Sample Name:B8-CPAD Lab Code: K2302691-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead	30	4.91		5.44		10		200.8

00022

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-7-
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/CPA

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L True	Aqueous mg/L Found	Aqueous mg/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	C	Limits		%R
Lead				125	124		95.2	155	99

00023

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Lead	208		0.10	0.04	200.8

Comments

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302691-002	4/29/03	EPA 3050B	1.80	100
K2302691-003	4/29/03	EPA 3050B	1.20	100
K2302691-001	4/29/03	EPA 3050B	1.40	100
K2302691-001D	4/29/03	EPA 3050B	1.40	100
K2302691-001S	4/29/03	EPA 3050B	1.40	100
K2302691-004	4/29/03	EPA 3050B	1.80	100
K2302691-005	4/29/03	EPA 3050B	1.20	100
K2302691-006	4/29/03	EPA 3050B	1.00	100
K2302691-007	4/29/03	EPA 3050B	1.20	100
K2302691-008	4/29/03	EPA 3050B	1.20	100
K2302691-009	4/29/03	EPA 3050B	1.00	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302691-MB	4/29/03	EPA 3050B	1.00	100

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	08:22													X												
S25	1.00	08:23													X												
ICV	1.00	08:24													X												
CCV1	1.00	08:26													X												
ZZZZZZ	1.00	08:28																									
ZZZZZZ	1.00	08:29																									
ICB	1.00	08:33													X												
CCB1	1.00	08:34													X												
CRA	1.00	08:36													X												
K2302691-MB	5.00	08:38													X												
LCSS	20.00	08:39													X												
K2302691-001	5.00	08:41													X												
K2302691-001D	5.00	08:42													X												
K2302691-001S	5.00	08:43													X												
K2302691-002	5.00	08:44													X												
K2302691-003	5.00	08:45													X												
K2302691-004	5.00	08:47													X												
K2302691-005	5.00	08:49													X												
CCV2	1.00	08:51													X												
CCB2	1.00	08:59													X												
K2302691-006	5.00	09:00													X												
K2302691-007	5.00	09:01													X												
K2302691-008	5.00	09:03													X												
K2302691-009	5.00	09:05													X												
ZZZZZZ	5.00	09:07																									
ZZZZZZ	20.00	09:08																									
ZZZZZZ	5.00	09:12																									
ZZZZZZ	5.00	09:14																									
ZZZZZZ	5.00	09:15																									
ZZZZZZ	5.00	09:16																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	09:17													X												
CCB3	1.00	10:25													X												
ZZZZZZ	5.00	10:26																									
ZZZZZZ	5.00	10:32																									
ZZZZZZ	5.00	10:35																									
ZZZZZZ	5.00	10:37																									
ZZZZZZ	5.00	10:39																									
ZZZZZZ	5.00	10:41																									
ZZZZZZ	5.00	10:43																									
ZZZZZZ	5.00	10:45																									
ZZZZZZ	5.00	10:49																									
ZZZZZZ	5.00	10:51																									
CCV4	1.00	10:52													X												
CCB4	1.00	10:59													X												
ZZZZZZ	5.00	11:00																									
ZZZZZZ	5.00	11:01																									
ZZZZZZ	5.00	11:02																									
ZZZZZZ	5.00	11:04																									
ZZZZZZ	5.00	11:04																									
ZZZZZZ	5.00	11:05																									
ZZZZZZ	5.00	11:06																									
ZZZZZZ	5.00	11:08																									
CCV5	1.00	11:09													X												
CCB5	1.00	11:14													X												

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 19, 2003 Service Request No: K2302688

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/COE Samples

Dear Nadia:

Enclosed are additional pages for the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302688.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/COE Sample

Sample No.	Lab Sample ID.
Batch QCD	K2302672-001D
Batch QCS	K2302672-001S
E-CH3-1 COE	K2302688-001
E-CH3-2 COE	K2302688-002
E-CH3-3 COE	K2302688-003
E-CH3-4 COE	K2302688-004
E-CH3-5 COE	K2302688-005
E-CH3-6 COE	K2302688-006
E-CH3-7 COE	K2302688-007
E-CH3-8 COE	K2302688-008
E-CH3-18 COE	K2302688-009
RS-CH03	K2302688-010
Method Blank	K2302688-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 6/18/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-1 COE
Lab Code: K2302688-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	14.8		

% Solids: 36.3

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-2 COE
Lab Code: K2302688-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	12.5		

% Solids: 39.4

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-3 COE
Lab Code: K2302688-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	17.2		

% Solids: 30.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-4 COE Lab Code: K2302688-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	18.5		

% Solids: 30.2

Comments:

00008

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-5 COE
Lab Code: K2302688-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	15.9		

% Solids: 37.2

Comments:

00009

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-6 COE Lab Code: K2302688-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	7.75		

% Solids: 55.4

Comments:

00010

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-7 COE
Lab Code: K2302688-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	19.1		

% Solids: 30.0

Comments:

00011

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-8 COE Lab Code: K2302688-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	5.13		

% Solids: 55.7

Comments:

00012

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-18 COE
Lab Code: K2302688-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	15.6		

% Solids: 36.3

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/03/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: RS-CH03 Lab Code: K2302688-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.06	0.02	5	4/29/03	6/18/03	6.30		

% Solids: 63.2

Comments:

00014

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: Method Blank
Lab Code: K2302688-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	0.02	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	50.0	49.6	99	25.0	25.6	102	24.8	99	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				25.0	25.7	103	25.3	101	200.8

00017

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead				25.0	25.7	103			200.8

00018

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Lead				0.04	0.04	88		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Lead	0.04	U	0.04	U	0.04	U	0.04	U					200.8

00020

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Lead			0.04	U	0.04	U							200.8

00021

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/COE Samp
Basis: Dry
Matrix: SEDIMENT
% Solids: 37.4

Sample Name: Batch QCS
Lab Code: K2302672-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	70 - 130	109		11.6		99.0	98		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation/COE Sampl Basis: Dry

Matrix: SEDIMENT % Solids: 37.4

Sample Name:Batch QCD Lab Code: K2302672-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead	30	11.6		11.2		4		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-7-
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/COE Sample

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L True	Aqueous mg/L Found	Aqueous mg/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Lead				125	132	95.2	155	106

00024

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Lead	208		0.10	0.04	200.8

Comments

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
K2302688-001	4/29/03	EPA 3050B	2.70	100
K2302688-009	4/29/03	EPA 3050B	2.70	100
K2302688-002	4/29/03	EPA 3050B	2.70	100
K2302688-003	4/29/03	EPA 3050B	2.70	100
K2302688-004	4/29/03	EPA 3050B	2.70	100
K2302688-005	4/29/03	EPA 3050B	2.70	100
K2302688-006	4/29/03	EPA 3050B	1.80	100
K2302688-007	4/29/03	EPA 3050B	2.70	100
K2302688-008	4/29/03	EPA 3050B	1.80	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302688-MB	4/29/03	EPA 3050B	1.00	100
K2302688-010	4/29/03	EPA 3050B	1.40	100

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	08:22													X												
S25	1.00	08:23													X												
ICV	1.00	08:24													X												
CCV1	1.00	08:26													X												
ZZZZZZ	1.00	08:28																									
ZZZZZZ	1.00	08:29																									
ICB	1.00	08:33													X												
CCB1	1.00	08:34													X												
CRA	1.00	08:36													X												
ZZZZZZ	5.00	08:38																									
ZZZZZZ	20.00	08:39																									
ZZZZZZ	5.00	08:41																									
ZZZZZZ	5.00	08:42																									
ZZZZZZ	5.00	08:43																									
ZZZZZZ	5.00	08:44																									
ZZZZZZ	5.00	08:45																									
ZZZZZZ	5.00	08:47																									
ZZZZZZ	5.00	08:49																									
CCV2	1.00	08:51													X												
CCB2	1.00	08:59													X												
ZZZZZZ	5.00	09:00																									
ZZZZZZ	5.00	09:01																									
ZZZZZZ	5.00	09:03																									
ZZZZZZ	5.00	09:05																									
K2302688-MB	5.00	09:07													X												
LCSS	20.00	09:08													X												
ZZZZZZ	5.00	09:12																									
K2302672-001D	5.00	09:14													X												
K2302672-001S	5.00	09:15													X												
ZZZZZZ	5.00	09:16																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	09:17													X												
CCB3	1.00	10:25													X												
ZZZZZZ	5.00	10:26																									
ZZZZZZ	5.00	10:32																									
ZZZZZZ	5.00	10:35																									
ZZZZZZ	5.00	10:37																									
ZZZZZZ	5.00	10:39																									
ZZZZZZ	5.00	10:41																									
ZZZZZZ	5.00	10:43																									
ZZZZZZ	5.00	10:45																									
K2302688-001	5.00	10:49													X												
K2302688-002	5.00	10:51													X												
CCV4	1.00	10:52													X												
CCB4	1.00	10:59													X												
K2302688-003	5.00	11:00													X												
K2302688-004	5.00	11:01													X												
K2302688-005	5.00	11:02													X												
K2302688-006	5.00	11:04													X												
K2302688-007	5.00	11:04													X												
K2302688-008	5.00	11:05													X												
K2302688-009	5.00	11:06													X												
K2302688-010	5.00	11:08													X												
CCV5	1.00	11:09													X												
CCB5	1.00	11:14													X												

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 30, 2003 Service Request No: K2302691

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/CPA

Dear Nadia:

Enclosed is the additional report for the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302691.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302691

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/CPA

Sample No.	Lab Sample ID.
B8-CPA	K2302691-001
B8-CPAD	K2302691-001D
B8-CPAS	K2302691-001S
B10-CPA	K2302691-002
B7-CPA	K2302691-003
B9-CPA	K2302691-004
CC01-2	K2302691-005
CC03-4	K2302691-006
CC05-6	K2302691-007
CT6-7	K2302691-008
CT8-9	K2302691-009
Method Blank	K2302691-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 7/30/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: B8-CPA
Lab Code: K2302691-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.04	0.01	5	4/29/03	6/18/03	3.37		

% Solids: NA

Comments:

00005

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: B10-CPA
Lab Code: K2302691-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.03	0.01	5	4/29/03	6/18/03	6.04		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/02/03
Date Received: 04/11/03
Units: MG/KG
Basis: Wet

Sample Name: B7-CPA
Lab Code: K2302691-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.04	0.02	5	4/29/03	6/18/03	2.73		

% Solids: NA

Comments:

00007

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302691
Project No.:	NA	Date Collected:	04/03/03
Project Name:	Canaveral Harbor 103 Evaluation/CPA	Date Received:	04/11/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: B9-CPA Lab Code: K2302691-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.03	0.01	5	4/29/03	6/18/03	4.32		

% Solids: NA

Comments:

00008

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302691
Project No.:	NA	Date Collected:	04/07/03
Project Name:	Canaveral Harbor 103 Evaluation/CPA	Date Received:	04/15/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: CC01-2 Lab Code: K2302691-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.04	0.02	5	4/29/03	6/18/03	1.63		

% Solids: NA

Comments:

00009

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302691
Project No.:	NA	Date Collected:	04/08/03
Project Name:	Canaveral Harbor 103 Evaluation/CPA	Date Received:	04/15/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: CC03-4 Lab Code: K2302691-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	0.96		

% Solids: NA

Comments:

00010

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/08/03
Date Received: 04/15/03
Units: MG/KG
Basis: Wet

Sample Name: CC05-6
Lab Code: K2302691-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.04	0.02	5	4/29/03	6/18/03	2.62		

% Solids: NA

Comments:

00011

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/09/03
Date Received: 04/15/03
Units: MG/KG
Basis: Wet

Sample Name: CT6-7
Lab Code: K2302691-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.04	0.02	5	4/29/03	6/18/03	1.71		

% Solids: NA

Comments:

00012

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/CPA
Matrix: SEDIMENT

Service Request: K2302691
Date Collected: 04/09/03
Date Received: 04/15/03
Units: MG/KG
Basis: Wet

Sample Name: CT8-9
Lab Code: K2302691-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	3.34		

% Solids: NA

Comments:

00013

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302691
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/CPA
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2302691-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	0.02	U	

% Solids: NA

Comments:

Butyltins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
B8-CPA	K2302691-001	04/03/2003	04/10/2003
B10-CPA	K2302691-002	04/03/2003	04/10/2003
B7-CPA	K2302691-003	04/02/2003	04/11/2003
B9-CPA	K2302691-004	04/03/2003	04/11/2003
CC01-2	K2302691-005	04/07/2003	04/15/2003
CC03-4	K2302691-006	04/08/2003	04/15/2003
CC05-6	K2302691-007	04/08/2003	04/15/2003
CT6-7	K2302691-008	04/09/2003	04/15/2003
CT8-9	K2302691-009	04/09/2003	04/15/2003
B8-CPAMS	KWG0305219-1	04/03/2003	04/10/2003
B8-CPADMS	KWG0305219-2	04/03/2003	04/10/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Daryl Coulombe

Name: 20050203 ~~Scientist~~ Daryl Coulombe

Date: 02 May 2003

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	B8-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.5	1.2	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.5	0.53	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.5	1.1	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.5	0.69	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	B10-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-002	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.8	1.5	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.8	0.64	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.8	1.3	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.8	0.83	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	58	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Butyltins

Sample Name:	B7-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-003	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.4	1.2	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.4	0.50	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.4	1.1	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.4	0.66	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	57	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Butyltins

Sample Name:	B9-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-004	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.7	1.4	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.7	0.63	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.7	1.3	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.7	0.82	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/07/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC01-2	**Units:**	ug/Kg
Lab Code:	K2302691-005	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.4	1.1	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.4	0.48	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.4	0.97	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.4	0.62	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	76	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC03-4	**Units:**	ug/Kg
Lab Code:	K2302691-006	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.3	1.1	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.3	0.45	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.3	0.92	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.3	0.59	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC05-6	**Units:**	ug/Kg
Lab Code:	K2302691-007	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.4	1.2	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.4	0.49	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.4	1.0	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.4	0.64	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	64	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CT6-7	**Units:**	ug/Kg
Lab Code:	K2302691-008	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.3	1.1	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.3	0.46	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.3	0.93	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.3	0.60	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	75	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CT8-9	**Units:**	ug/Kg
Lab Code:	K2302691-009	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.3	1.1	1	04/16/03	04/25/03	KWG0305219	
Tri-n-butyltin	ND	U	1.3	0.45	1	04/16/03	04/25/03	KWG0305219	
Di-n-butyltin	ND	U	1.3	0.91	1	04/16/03	04/25/03	KWG0305219	
n-Butyltin	ND	U	1.3	0.59	1	04/16/03	04/25/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	70	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305219-4	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.0	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.0	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	B8-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-001	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.0	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.0	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	B10-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-002	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.0	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.0	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	58	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Butyltins

Sample Name:	B7-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-003	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	0.98	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	0.98	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	0.98	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	57	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Butyltins

Sample Name:	B9-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-004	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	0.98	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	0.98	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	0.98	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/07/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC01-2	**Units:**	ug/Kg
Lab Code:	K2302691-005	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.0	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.0	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	76	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC03-4	**Units:**	ug/Kg
Lab Code:	K2302691-006	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	0.99	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	0.99	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	0.99	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC05-6	**Units:**	ug/Kg
Lab Code:	K2302691-007	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.0	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.0	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	64	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CT6-7	**Units:**	ug/Kg
Lab Code:	K2302691-008	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	0.99	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	0.99	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	0.99	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	75	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CT8-9	**Units:**	ug/Kg
Lab Code:	K2302691-009	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.81	1	04/16/03	04/25/03	KWG0305219	
Tri-n-butyltin	ND	U	0.99	0.36	1	04/16/03	04/25/03	KWG0305219	
Di-n-butyltin	ND	U	0.99	0.73	1	04/16/03	04/25/03	KWG0305219	
n-Butyltin	ND	U	0.99	0.47	1	04/16/03	04/25/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	70	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305219-4	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/16/03	04/24/03	KWG0305219	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/16/03	04/24/03	KWG0305219	
Di-n-butyltin	ND	U	1.0	0.73	1	04/16/03	04/24/03	KWG0305219	
n-Butyltin	ND	U	1.0	0.47	1	04/16/03	04/24/03	KWG0305219	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	22-113	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
B8-CPA	K2302691-001	69
B10-CPA	K2302691-002	58
B7-CPA	K2302691-003	57
B9-CPA	K2302691-004	55
CC01-2	K2302691-005	76
CC03-4	K2302691-006	69
CC05-6	K2302691-007	64
CT6-7	K2302691-008	75
CT8-9	K2302691-009	70
Method Blank	KWG0305219-4	55
B8-CPAMS	KWG0305219-1	68
B8-CPADMS	KWG0305219-2	71
Lab Control Sample	KWG0305219-3	45

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 22-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/24/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	B8-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305219

Analyte Name	Sample Result	B8-CPAMS KWG0305219-1 Matrix Spike			B8-CPADMS KWG0305219-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Tetra-n-butyltin	ND	38.2	72.6	53	34.0	72.7	47	25-125	11	50
Tri-n-butyltin	ND	41.4	72.6	57	36.5	72.7	50	12-138	13	50
Di-n-butyltin	ND	39.2	72.6	54	34.7	72.7	48	10-155	12	50
n-Butyltin	ND	11.3	72.6	16	13.5	72.7	19	10-99	18	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/24/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/Kg
Analysis Method:	Krone	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305219

	Lab Control Sample KWG0305219-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	18.0	50.0	36	10-126
Tri-n-butyltin	23.8	50.0	48	30-131
Di-n-butyltin	24.5	50.0	49	23-141
n-Butyltin	15.4	50.0	31	10-127

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/24/2003
		Time Analyzed:	18:24

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\042403A\0424F003.D
Lab Code:	KWG0305219-4	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305219

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305219-3	J:\GC11\DATA\042403A\0424F004.D	04/24/03	18:42
B8-CPA	K2302691-001	J:\GC11\DATA\042403A\0424F005.D	04/24/03	19:00
B8-CPAMS	KWG0305219-1	J:\GC11\DATA\042403A\0424F006.D	04/24/03	19:18
B8-CPADMS	KWG0305219-2	J:\GC11\DATA\042403A\0424F007.D	04/24/03	19:35
B10-CPA	K2302691-002	J:\GC11\DATA\042403A\0424F008.D	04/24/03	19:53
B7-CPA	K2302691-003	J:\GC11\DATA\042403A\0424F009.D	04/24/03	20:11
B9-CPA	K2302691-004	J:\GC11\DATA\042403A\0424F010.D	04/24/03	20:28
CC01-2	K2302691-005	J:\GC11\DATA\042403A\0424F011.D	04/24/03	20:46
CC03-4	K2302691-006	J:\GC11\DATA\042403A\0424F012.D	04/24/03	21:04
CC05-6	K2302691-007	J:\GC11\DATA\042403A\0424F013.D	04/24/03	21:22
CT6-7	K2302691-008	J:\GC11\DATA\042403A\0424F014.D	04/24/03	21:39
CT8-9	K2302691-009	J:\GC11\DATA\042503\0425F003.D	04/25/03	20:28

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/24/2003
		Time Analyzed:	18:42

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\042403A\0424F004.D
Lab Code:	KWG0305219-3	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305219

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305219-4	J:\GC11\DATA\042403A\0424F003.D	04/24/03	18:24
B8-CPA	K2302691-001	J:\GC11\DATA\042403A\0424F005.D	04/24/03	19:00
B8-CPAMS	KWG0305219-1	J:\GC11\DATA\042403A\0424F006.D	04/24/03	19:18
B8-CPADMS	KWG0305219-2	J:\GC11\DATA\042403A\0424F007.D	04/24/03	19:35
B10-CPA	K2302691-002	J:\GC11\DATA\042403A\0424F008.D	04/24/03	19:53
B7-CPA	K2302691-003	J:\GC11\DATA\042403A\0424F009.D	04/24/03	20:11
B9-CPA	K2302691-004	J:\GC11\DATA\042403A\0424F010.D	04/24/03	20:28
CC01-2	K2302691-005	J:\GC11\DATA\042403A\0424F011.D	04/24/03	20:46
CC03-4	K2302691-006	J:\GC11\DATA\042403A\0424F012.D	04/24/03	21:04
CC05-6	K2302691-007	J:\GC11\DATA\042403A\0424F013.D	04/24/03	21:22
CT6-7	K2302691-008	J:\GC11\DATA\042403A\0424F014.D	04/24/03	21:39
CT8-9	K2302691-009	J:\GC11\DATA\042503\0425F003.D	04/25/03	20:28

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/24/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2576
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042403\0424F003.D	D	J:\GC11\DATA\042403\0424F006.D
B	J:\GC11\DATA\042403\0424F004.D	E	J:\GC11\DATA\042403\0424F007.D
C	J:\GC11\DATA\042403\0424F005.D	F	J:\GC11\DATA\042403\0424F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	583	B	50	562	C	100	583	D	500	545	E	1000	578
	F	2000	572												
Tri-n-butyltin	A	10	635	B	50	727	C	100	709	D	500	686	E	1000	720
	F	2000	698												
Di-n-butyltin	A	10	864	B	50	863	C	100	874	D	500	855	E	1000	914
	F	2000	887												
n-Butyltin	A	10	1140	B	50	1170	C	100	1180	D	500	1140	E	1000	1210
	F	2000	1190												
Tri-n-propyltin	A	11	467	B	54	502	C	110	516	D	540	487	E	1100	529
	F	2100	514												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/24/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2576
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	2.6		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	2.5		≤ 20
n-Butyltin	MS	AverageRF	% RSD	2.3		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.4		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/24/2003
Date Analyzed: 04/24/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2576
Units: ng/ml

File ID: J:\GC11\DATA\042403\0424F009.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	510	570	619	8	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	696	701	1	NA	± 30 %	AverageRF
Di-n-butyltin	480	490	876	908	4	NA	± 30 %	AverageRF
n-Butyltin	490	520	1170	1230	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/24/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2576
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042403\0424F003.D\0424R003.D	D	J:\GC11\DATA\042403\0424F006.D\0424R006.D
B	J:\GC11\DATA\042403\0424F004.D\0424R004.D	E	J:\GC11\DATA\042403\0424F007.D\0424R007.D
C	J:\GC11\DATA\042403\0424F005.D\0424R005.D	F	J:\GC11\DATA\042403\0424F008.D\0424R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	247	B	50	215	C	100	229	D	500	217	E	1000	233
	F	2000	235												
Tri-n-butyltin	A	10	273	B	50	283	C	100	281	D	500	276	E	1000	294
	F	2000	296												
Di-n-butyltin	A	10	370	B	50	343	C	100	345	D	500	350	E	1000	366
	F	2000	370												
n-Butyltin	A	10	431	B	50	459	C	100	445	D	500	446	E	1000	471
	F	2000	488												
Tri-n-propyltin	A	11	205	B	54	198	C	110	202	D	540	191	E	1100	206
	F	2100	208												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/24/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2576
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	5.2		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.3		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
n-Butyltin	MS	AverageRF	% RSD	4.5		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	3.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/24/2003
Date Analyzed: 04/24/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2576
Units: ng/ml

File ID: J:\GC11\DATA\042403\0424F009.D\0424R009.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	510	229	247	8	NA	± 30 %	AverageRF
Tri-n-butyltin	480	490	284	286	1	NA	± 30 %	AverageRF
Di-n-butyltin	480	490	357	364	2	NA	± 30 %	AverageRF
n-Butyltin	490	510	456	472	3	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D	D	J:\GC11\DATA\042503\0425F105.D
B	J:\GC11\DATA\042503\0425F103.D	E	J:\GC11\DATA\042503\0425F106.D
C	J:\GC11\DATA\042503\0425F104.D	F	J:\GC11\DATA\042503\0425F107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	669	B	50	620	C	100	626	D	500	576	E	1000	588
	F	2000	576												
Tri-n-butyltin	A	10	835	B	50	789	C	100	794	D	500	708	E	1000	729
	F	2000	704												
Di-n-butyltin	A	10	1090	B	50	1050	C	100	975	D	500	895	E	1000	923
	F	2000	895												
n-Butyltin	A	10	1580	B	50	1310	C	100	1350	D	500	1200	E	1000	1250
	F	2000	1210												
Tri-n-propyltin	A	11	562	B	54	569	C	110	595	D	540	539	E	1100	546
	F	2100	532												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.0		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	10.8		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	490	609	634	4	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	760	752	-1	NA	± 30 %	AverageRF
Di-n-butyltin	480	460	970	934	-4	NA	± 30 %	AverageRF
n-Butyltin	490	470	1320	1260	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D\0425R102.D	D	J:\GC11\DATA\042503\0425F105.D\0425R105.D
B	J:\GC11\DATA\042503\0425F103.D\0425R103.D	E	J:\GC11\DATA\042503\0425F106.D\0425R106.D
C	J:\GC11\DATA\042503\0425F104.D\0425R104.D	F	J:\GC11\DATA\042503\0425F107.D\0425R107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	352	B	50	317	C	100	328	D	500	311	E	1000	324
	F	2000	319												
Tri-n-butyltin	A	10	425	B	50	400	C	100	419	D	500	393	E	1000	406
	F	2000	389												
Di-n-butyltin	A	10	553	B	50	500	C	100	520	D	500	490	E	1000	510
	F	2000	485												
n-Butyltin	A	10	631	B	50	613	C	100	674	D	500	623	E	1000	648
	F	2000	615												
Tri-n-propyltin	A	11	296	B	54	289	C	110	290	D	540	280	E	1100	291
	F	2100	286												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.4		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.7		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	1.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D\0425R108.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	325	326	0	NA	± 30 %	AverageRF
Tri-n-butyltin	480	450	405	378	-7	NA	± 30 %	AverageRF
Di-n-butyltin	480	450	510	479	-6	NA	± 30 %	AverageRF
n-Butyltin	490	490	634	634	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/24/2003
Calibration ID: CAL2576
Analysis Lot: KWG0305795
Units: ng/ml

File ID: J:\GC11\DATA\042403A\0424F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	500	570	572	0	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	696	708	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	876	893	2	NA	± 25 %	AverageRF
n-Butyltin	500	500	1170	1170	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	503	516	3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/24/2003
Calibration ID: CAL2576
Analysis Lot: KWG0305795
Units: ng/ml

File ID: J:\GC11\DATA\042403A\0424F002.D\0424R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	229	217	-5	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	284	279	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	480	357	346	-3	NA	± 25 %	AverageRF
n-Butyltin	500	490	456	449	-2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	202	194	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/24/2003
Calibration ID: CAL2576
Analysis Lot: KWG0305795
Units: ng/ml

File ID: J:\GC11\DATA\042403A\0424F016.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	570	528	-8	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	696	655	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	876	788	-10	NA	± 25 %	AverageRF
n-Butyltin	500	460	1170	1070	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	530	503	493	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/24/2003
Calibration ID: CAL2576
Analysis Lot: KWG0305795
Units: ng/ml

File ID: J:\GC11\DATA\042403A\0424F016.D\0424R016.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	229	240	5	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	284	303	7	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	357	379	6	NA	± 25 %	AverageRF
n-Butyltin	500	530	456	487	7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	202	208	3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/25/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	609	574	-6	NA	± 25 %	AverageRF
Tri-n-butyltin	500	460	760	702	-8	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	876	-10	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1160	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	538	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/25/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F002.D\0425R002.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	325	287	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	405	367	-10	NA	± 25 %	AverageRF
Di-n-butyltin	500	440	510	452	-11	NA	± 25 %	AverageRF
n-Butyltin	500	460	634	584	-8	NA	± 25 %	AverageRF
Tri-n-propyltin	540	470	289	253	-12	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F017.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	566	-7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	713	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	970	920	-5	NA	± 25 %	AverageRF
n-Butyltin	500	450	1320	1200	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	546	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F017.D\0425R017.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	316	-3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	397	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	504	-1	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	649	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	289	282	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305795
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0424F001.D	Instrument Blank	KWG0305795-1	4/24/2003	17:49		4/24/2003	18:01
0424F002.D	Continuing Calibration Verification	KWG0305795-2	4/24/2003	18:07		4/24/2003	18:19
0424F003.D	Method Blank	KWG0305219-4	4/24/2003	18:24		4/24/2003	18:36
0424F004.D	Lab Control Sample	KWG0305219-3	4/24/2003	18:42		4/24/2003	18:54
0424F005.D	B8-CPA	K2302691-001	4/24/2003	19:00		4/24/2003	19:12
0424F006.D	B8-CPAMS	KWG0305219-1	4/24/2003	19:18		4/24/2003	19:30
0424F007.D	B8-CPADMS	KWG0305219-2	4/24/2003	19:35		4/24/2003	19:47
0424F008.D	B10-CPA	K2302691-002	4/24/2003	19:53		4/24/2003	20:05
0424F009.D	B7-CPA	K2302691-003	4/24/2003	20:11		4/24/2003	20:23
0424F010.D	B9-CPA	K2302691-004	4/24/2003	20:28		4/24/2003	20:40
0424F011.D	CC01-2	K2302691-005	4/24/2003	20:46		4/24/2003	20:58
0424F012.D	CC03-4	K2302691-006	4/24/2003	21:04		4/24/2003	21:16
0424F013.D	CC05-6	K2302691-007	4/24/2003	21:22		4/24/2003	21:34
0424F014.D	CT6-7	K2302691-008	4/24/2003	21:39		4/24/2003	21:51
0424F015.D	Instrument Blank	KWG0305795-3	4/24/2003	21:57		4/24/2003	22:09
0424F016.D	Continuing Calibration Verification	KWG0305795-4	4/24/2003	22:15		4/24/2003	22:27

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	Instrument Blank	KWG0305835-1	4/25/2003	19:53		4/25/2003	20:05
0425F002.D	Continuing Calibration Verification	KWG0305835-20	4/25/2003	20:10		4/25/2003	20:22
0425F003.D	CT8-9	K2302691-009	4/25/2003	20:28		4/25/2003	20:40
0425F004.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:46		4/25/2003	20:58
0425F005.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:04		4/25/2003	21:16
0425F006.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:22		4/25/2003	21:34
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:40		4/25/2003	21:52
0425F008.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:57		4/25/2003	22:09
0425F009.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:15		4/25/2003	22:27
0425F010.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:33		4/25/2003	22:45
0425F011.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:51		4/25/2003	23:03
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:09		4/25/2003	23:21
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:27		4/25/2003	23:39
0425F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:02		4/26/2003	00:14
0425F016.D	Instrument Blank	KWG0305835-3	4/26/2003	00:20		4/26/2003	00:32
0425F017.D	Continuing Calibration Verification	KWG0305835-4	4/26/2003	00:38		4/26/2003	00:50
0425F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:55		4/26/2003	01:07
0425F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:13		4/26/2003	01:25
0425F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:31		4/26/2003	01:43
0425F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:49		4/26/2003	02:01
0425F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:07		4/26/2003	02:19
0425F023.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:24		4/26/2003	02:36
0425F024.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:42		4/26/2003	02:54
0425F025.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:00		4/26/2003	03:12
0425F026.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:18		4/26/2003	03:30
0425F027.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:36		4/26/2003	03:48
0425F028.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:54		4/26/2003	04:06
0425F029.D	ZZZZZZ	ZZZZZZ	4/26/2003	04:12		4/26/2003	04:24
0425F030.D	Instrument Blank	KWG0305835-5	4/26/2003	04:30		4/26/2003	04:42
0425F031.D	Continuing Calibration Verification	KWG0305835-6	4/26/2003	04:48		4/26/2003	05:00
0425F032.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:06		4/26/2003	05:18
0425F034.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:42		4/26/2003	05:54
0425F040.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:29		4/26/2003	07:41
0425F041.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:47		4/26/2003	07:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F042.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:05		4/26/2003	08:17
0425F043.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:24		4/26/2003	08:36
0425F044.D	Instrument Blank	KWG0305835-7	4/26/2003	08:41		4/26/2003	08:53
0425F045.D	Continuing Calibration Verification	KWG0305835-8	4/26/2003	09:00		4/26/2003	09:12
0425F046.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:18		4/26/2003	09:30
0425F047.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:36		4/26/2003	09:48
0425F048.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:54		4/26/2003	10:06
0425F049.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:12		4/26/2003	10:24
0425F050.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:30		4/26/2003	10:42
0425F051.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:48		4/26/2003	11:00
0425F052.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:06		4/26/2003	11:18
0425F053.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:24		4/26/2003	11:36
0425F054.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:42		4/26/2003	11:54
0425F055.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:00		4/26/2003	12:12
0425F056.D	Instrument Blank	KWG0305835-9	4/26/2003	12:18		4/26/2003	12:30
0425F057.D	Continuing Calibration Verification	KWG0305835-10	4/26/2003	12:36		4/26/2003	12:48
0425F058.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:54		4/26/2003	13:06
0425F059.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:12		4/26/2003	13:24
0425F060.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:30		4/26/2003	13:42
0425F061.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:47		4/26/2003	13:59
0425F062.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:05		4/26/2003	14:17
0425F063.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:23		4/26/2003	14:35
0425F064.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:41		4/26/2003	14:53
0425F065.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:59		4/26/2003	15:11
0425F066.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:17		4/26/2003	15:29
0425F072.D	Instrument Blank	KWG0305835-11	4/26/2003	17:05		4/26/2003	17:17
0425F073.D	Continuing Calibration Verification	KWG0305835-12	4/26/2003	17:23		4/26/2003	17:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691
Date Extracted: 04/16/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0305219
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
B8-CPA	K2302691-001	04/03/03	04/10/03	20.08g	1ml	68.6	
B10-CPA	K2302691-002	04/03/03	04/10/03	20.14g	1ml	56.9	
B7-CPA	K2302691-003	04/02/03	04/11/03	20.51g	1ml	72.2	
B9-CPA	K2302691-004	04/03/03	04/11/03	20.56g	1ml	58.0	
CC01-2	K2302691-005	04/07/03	04/15/03	20.06g	1ml	76.0	
CC03-4	K2302691-006	04/08/03	04/15/03	20.37g	1ml	80.2	
CC05-6	K2302691-007	04/08/03	04/15/03	20.17g	1ml	73.5	
CT6-7	K2302691-008	04/09/03	04/15/03	20.31g	1ml	78.5	
CT8-9	K2302691-009	04/09/03	04/15/03	20.37g	1ml	80.4	
Method Blank	KWG0305219-4	NA	NA	20.00g	1ml	NA	
B8-CPAMS	KWG0305219-1	04/03/03	04/10/03	20.07g	1ml	68.6	
B8-CPADMS	KWG0305219-2	04/03/03	04/10/03	20.06g	1ml	68.6	
Lab Control Sample	KWG0305219-3	NA	NA	20.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
B8-CPA	K2302691-001	04/03/2003	04/10/2003
B10-CPA	K2302691-002	04/03/2003	04/10/2003
B7-CPA	K2302691-003	04/02/2003	04/11/2003
B9-CPA	K2302691-004	04/03/2003	04/11/2003
CC01-2	K2302691-005	04/07/2003	04/15/2003
CC03-4	K2302691-006	04/08/2003	04/15/2003
CC05-6	K2302691-007	04/08/2003	04/15/2003
CT6-7	K2302691-008	04/09/2003	04/15/2003
CT8-9	K2302691-009	04/09/2003	04/15/2003
B8-CPADMS	KWG0305145-2	04/03/2003	04/10/2003
B8-CPAMS	KWG0305145-7	04/03/2003	04/10/2003
CT8-9MS	KWG0305413-1	04/09/2003	04/15/2003
CT8-9DMS	KWG0305413-2	04/09/2003	04/15/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 5/15/03

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B8-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	7.3	0.31	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	7.3	0.31	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	7.3	0.24	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	7.3	0.31	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	7.3	0.30	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	7.3	0.25	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.40**	J	7.3	0.22	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	7.3	0.28	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	**1.0**	J	7.3	0.25	1	04/15/03	04/24/03	KWG0305145	
Pyrene	**0.88**	J	7.3	0.17	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	**0.39**	J	7.3	0.19	1	04/15/03	04/24/03	KWG0305145	
Chrysene	**0.47**	J	7.3	0.22	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	**0.49**	J	7.3	0.21	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	**0.79**	J	7.3	0.22	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	**0.36**	J	7.3	0.21	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	**0.35**	J	7.3	0.22	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	7.3	0.27	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.62**	J	7.3	0.15	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	44	39-97	04/24/03	Acceptable
Fluorene-d10	61	43-98	04/24/03	Acceptable
Fluoranthene-d10	75	52-108	04/24/03	Acceptable
Terphenyl-d14	88	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B10-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-002	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.38**	J	8.8	0.37	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	8.8	0.37	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	8.8	0.29	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	8.8	0.37	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	8.8	0.36	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	8.8	0.30	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.27**	J	8.8	0.27	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	8.8	0.34	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	**0.43**	J	8.8	0.30	1	04/15/03	04/24/03	KWG0305145	
Pyrene	**0.34**	J	8.8	0.20	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	ND	U	8.8	0.23	1	04/15/03	04/24/03	KWG0305145	
Chrysene	**0.28**	J	8.8	0.27	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	8.8	0.25	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	8.8	0.27	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	ND	U	8.8	0.25	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	ND	U	8.8	0.27	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	8.8	0.32	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.50**	J	8.8	0.18	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	50	39-97	04/24/03	Acceptable
Fluorene-d10	63	43-98	04/24/03	Acceptable
Fluoranthene-d10	71	52-108	04/24/03	Acceptable
Terphenyl-d14	90	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B7-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.32**	J	7.0	0.30	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	7.0	0.30	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	7.0	0.23	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	7.0	0.30	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	7.0	0.28	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	7.0	0.24	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.24**	J	7.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	7.0	0.27	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	ND	U	7.0	0.24	1	04/15/03	04/24/03	KWG0305145	
Pyrene	ND	U	7.0	0.16	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	ND	U	7.0	0.19	1	04/15/03	04/24/03	KWG0305145	
Chrysene	ND	U	7.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	7.0	0.20	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	7.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	ND	U	7.0	0.20	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	ND	U	7.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	7.0	0.25	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.31**	J	7.0	0.14	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	41	39-97	04/24/03	Acceptable
Fluorene-d10	61	43-98	04/24/03	Acceptable
Fluoranthene-d10	82	52-108	04/24/03	Acceptable
Terphenyl-d14	91	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B9-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-004	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	8.7	0.37	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	8.7	0.37	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	8.7	0.28	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	8.7	0.37	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	8.7	0.35	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	8.7	0.30	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.26**	J	8.7	0.26	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	8.7	0.33	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	**0.32**	J	8.7	0.30	1	04/15/03	04/24/03	KWG0305145	
Pyrene	ND	U	8.7	0.19	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	ND	U	8.7	0.23	1	04/15/03	04/24/03	KWG0305145	
Chrysene	ND	U	8.7	0.26	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	8.7	0.25	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	8.7	0.26	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	ND	U	8.7	0.25	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	**0.27**	J	8.7	0.26	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	8.7	0.32	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.48**	J	8.7	0.18	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	36	39-97	04/24/03	Outside Control Limits
Fluorene-d10	54	43-98	04/24/03	Acceptable
Fluoranthene-d10	70	52-108	04/24/03	Acceptable
Terphenyl-d14	80	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/07/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC01-2	**Units:**	ug/Kg
Lab Code:	K2302691-005	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.28	1	04/19/03	04/26/03	KWG0305413	
2-Methylnaphthalene	ND	U	5.0	0.28	1	04/19/03	04/26/03	KWG0305413	
Acenaphthylene	ND	U	5.0	0.22	1	04/19/03	04/26/03	KWG0305413	
Acenaphthene	ND	U	5.0	0.28	1	04/19/03	04/26/03	KWG0305413	
Dibenzofuran	ND	U	5.0	0.27	1	04/19/03	04/26/03	KWG0305413	
Fluorene	ND	U	5.0	0.23	1	04/19/03	04/26/03	KWG0305413	
Phenanthrene	ND	U	5.0	0.20	1	04/19/03	04/26/03	KWG0305413	
Anthracene	ND	U	5.0	0.25	1	04/19/03	04/26/03	KWG0305413	
Fluoranthene	ND	U	5.0	0.23	1	04/19/03	04/26/03	KWG0305413	
Pyrene	ND	U	5.0	0.15	1	04/19/03	04/26/03	KWG0305413	
Benz(a)anthracene	ND	U	5.0	0.18	1	04/19/03	04/26/03	KWG0305413	
Chrysene	ND	U	5.0	0.20	1	04/19/03	04/26/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	5.0	0.19	1	04/19/03	04/26/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	5.0	0.20	1	04/19/03	04/26/03	KWG0305413	
Benzo(a)pyrene	ND	U	5.0	0.19	1	04/19/03	04/26/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.20	1	04/19/03	04/26/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	5.0	0.24	1	04/19/03	04/26/03	KWG0305413	
Benzo(g,h,i)perylene	**0.17**	J	5.0	0.14	1	04/19/03	04/26/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	56	39-97	04/26/03	Acceptable
Fluorene-d10	64	43-98	04/26/03	Acceptable
Fluoranthene-d10	70	52-108	04/26/03	Acceptable
Terphenyl-d14	85	61-122	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC03-4	**Units:**	ug/Kg
Lab Code:	K2302691-006	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.6	0.27	1	04/19/03	04/25/03	KWG0305413	
2-Methylnaphthalene	ND	U	3.6	0.27	1	04/19/03	04/25/03	KWG0305413	
Acenaphthylene	ND	U	3.6	0.20	1	04/19/03	04/25/03	KWG0305413	
Acenaphthene	ND	U	3.6	0.27	1	04/19/03	04/25/03	KWG0305413	
Dibenzofuran	ND	U	3.6	0.25	1	04/19/03	04/25/03	KWG0305413	
Fluorene	ND	U	3.6	0.22	1	04/19/03	04/25/03	KWG0305413	
Phenanthrene	ND	U	3.6	0.19	1	04/19/03	04/25/03	KWG0305413	
Anthracene	ND	U	3.6	0.24	1	04/19/03	04/25/03	KWG0305413	
Fluoranthene	ND	U	3.6	0.22	1	04/19/03	04/25/03	KWG0305413	
Pyrene	ND	U	3.6	0.14	1	04/19/03	04/25/03	KWG0305413	
Benz(a)anthracene	ND	U	3.6	0.17	1	04/19/03	04/25/03	KWG0305413	
Chrysene	ND	U	3.6	0.19	1	04/19/03	04/25/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	3.6	0.18	1	04/19/03	04/25/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	3.6	0.19	1	04/19/03	04/25/03	KWG0305413	
Benzo(a)pyrene	ND	U	3.6	0.18	1	04/19/03	04/25/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	3.6	0.19	1	04/19/03	04/25/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	3.6	0.23	1	04/19/03	04/25/03	KWG0305413	
Benzo(g,h,i)perylene	ND	U	3.6	0.13	1	04/19/03	04/25/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	37	39-97	04/25/03	Outside Control Limits
Fluorene-d10	55	43-98	04/25/03	Acceptable
Fluoranthene-d10	68	52-108	04/25/03	Acceptable
Terphenyl-d14	86	61-122	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC05-6	**Units:**	ug/Kg
Lab Code:	K2302691-007	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.29	1	04/19/03	04/26/03	KWG0305413	
2-Methylnaphthalene	ND	U	5.0	0.29	1	04/19/03	04/26/03	KWG0305413	
Acenaphthylene	ND	U	5.0	0.22	1	04/19/03	04/26/03	KWG0305413	
Acenaphthene	ND	U	5.0	0.29	1	04/19/03	04/26/03	KWG0305413	
Dibenzofuran	ND	U	5.0	0.28	1	04/19/03	04/26/03	KWG0305413	
Fluorene	ND	U	5.0	0.24	1	04/19/03	04/26/03	KWG0305413	
Phenanthrene	ND	U	5.0	0.21	1	04/19/03	04/26/03	KWG0305413	
Anthracene	ND	U	5.0	0.26	1	04/19/03	04/26/03	KWG0305413	
Fluoranthene	ND	U	5.0	0.24	1	04/19/03	04/26/03	KWG0305413	
Pyrene	ND	U	5.0	0.15	1	04/19/03	04/26/03	KWG0305413	
Benz(a)anthracene	ND	U	5.0	0.18	1	04/19/03	04/26/03	KWG0305413	
Chrysene	ND	U	5.0	0.21	1	04/19/03	04/26/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	5.0	0.20	1	04/19/03	04/26/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	5.0	0.21	1	04/19/03	04/26/03	KWG0305413	
Benzo(a)pyrene	ND	U	5.0	0.20	1	04/19/03	04/26/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.21	1	04/19/03	04/26/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	5.0	0.25	1	04/19/03	04/26/03	KWG0305413	
Benzo(g,h,i)perylene	ND	U	5.0	0.14	1	04/19/03	04/26/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	30	39-97	04/26/03	Outside Control Limits
Fluorene-d10	49	43-98	04/26/03	Acceptable
Fluoranthene-d10	59	52-108	04/26/03	Acceptable
Terphenyl-d14	69	61-122	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CT6-7	**Units:**	ug/Kg
Lab Code:	K2302691-008	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.27	1	04/19/03	04/24/03	KWG0305413	
2-Methylnaphthalene	ND	U	5.0	0.27	1	04/19/03	04/24/03	KWG0305413	
Acenaphthylene	ND	U	5.0	0.21	1	04/19/03	04/24/03	KWG0305413	
Acenaphthene	ND	U	5.0	0.27	1	04/19/03	04/24/03	KWG0305413	
Dibenzofuran	ND	U	5.0	0.26	1	04/19/03	04/24/03	KWG0305413	
Fluorene	ND	U	5.0	0.22	1	04/19/03	04/24/03	KWG0305413	
Phenanthrene	ND	U	5.0	0.20	1	04/19/03	04/24/03	KWG0305413	
Anthracene	ND	U	5.0	0.25	1	04/19/03	04/24/03	KWG0305413	
Fluoranthene	ND	U	5.0	0.22	1	04/19/03	04/24/03	KWG0305413	
Pyrene	ND	U	5.0	0.15	1	04/19/03	04/24/03	KWG0305413	
Benz(a)anthracene	ND	U	5.0	0.17	1	04/19/03	04/24/03	KWG0305413	
Chrysene	ND	U	5.0	0.20	1	04/19/03	04/24/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	5.0	0.18	1	04/19/03	04/24/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	5.0	0.20	1	04/19/03	04/24/03	KWG0305413	
Benzo(a)pyrene	ND	U	5.0	0.18	1	04/19/03	04/24/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.20	1	04/19/03	04/24/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	5.0	0.23	1	04/19/03	04/24/03	KWG0305413	
Benzo(g,h,i)perylene	ND	U	5.0	0.13	1	04/19/03	04/24/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	21	39-97	04/24/03	Outside Control Limits
Fluorene-d10	32	43-98	04/24/03	Outside Control Limits
Fluoranthene-d10	40	52-108	04/24/03	Outside Control Limits
Terphenyl-d14	46	61-122	04/24/03	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CT8-9	**Units:**	ug/Kg
Lab Code:	K2302691-009	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.27	1	04/19/03	04/24/03	KWG0305413	
2-Methylnaphthalene	ND	U	5.0	0.27	1	04/19/03	04/24/03	KWG0305413	
Acenaphthylene	ND	U	5.0	0.20	1	04/19/03	04/24/03	KWG0305413	
Acenaphthene	ND	U	5.0	0.27	1	04/19/03	04/24/03	KWG0305413	
Dibenzofuran	ND	U	5.0	0.25	1	04/19/03	04/24/03	KWG0305413	
Fluorene	ND	U	5.0	0.22	1	04/19/03	04/24/03	KWG0305413	
Phenanthrene	**0.21**	J	5.0	0.19	1	04/19/03	04/24/03	KWG0305413	
Anthracene	ND	U	5.0	0.24	1	04/19/03	04/24/03	KWG0305413	
Fluoranthene	**0.26**	J	5.0	0.22	1	04/19/03	04/24/03	KWG0305413	
Pyrene	**0.21**	J	5.0	0.14	1	04/19/03	04/24/03	KWG0305413	
Benz(a)anthracene	ND	U	5.0	0.17	1	04/19/03	04/24/03	KWG0305413	
Chrysene	**0.19**	J	5.0	0.19	1	04/19/03	04/24/03	KWG0305413	
Benzo(b)fluoranthene	**0.20**	J	5.0	0.18	1	04/19/03	04/24/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	5.0	0.19	1	04/19/03	04/24/03	KWG0305413	
Benzo(a)pyrene	**0.24**	J	5.0	0.18	1	04/19/03	04/24/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	**0.67**	J	5.0	0.19	1	04/19/03	04/24/03	KWG0305413	
Dibenz(a,h)anthracene	**0.63**	J	5.0	0.23	1	04/19/03	04/24/03	KWG0305413	
Benzo(g,h,i)perylene	**0.93**	J	5.0	0.13	1	04/19/03	04/24/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	41	39-97	04/24/03	Acceptable
Fluorene-d10	65	43-98	04/24/03	Acceptable
Fluoranthene-d10	81	52-108	04/24/03	Acceptable
Terphenyl-d14	94	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305145-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.8	0.21	1	04/15/03	04/23/03	KWG0305145	
2-Methylnaphthalene	ND	U	3.8	0.21	1	04/15/03	04/23/03	KWG0305145	
Acenaphthylene	ND	U	3.8	0.16	1	04/15/03	04/23/03	KWG0305145	
Acenaphthene	ND	U	3.8	0.21	1	04/15/03	04/23/03	KWG0305145	
Dibenzofuran	ND	U	3.8	0.20	1	04/15/03	04/23/03	KWG0305145	
Fluorene	ND	U	3.8	0.17	1	04/15/03	04/23/03	KWG0305145	
Phenanthrene	ND	U	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Anthracene	ND	U	3.8	0.19	1	04/15/03	04/23/03	KWG0305145	
Fluoranthene	ND	U	3.8	0.17	1	04/15/03	04/23/03	KWG0305145	
Pyrene	**0.12**	J	3.8	0.11	1	04/15/03	04/23/03	KWG0305145	
Benz(a)anthracene	ND	U	3.8	0.13	1	04/15/03	04/23/03	KWG0305145	
Chrysene	ND	U	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	3.8	0.14	1	04/15/03	04/23/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Benzo(a)pyrene	ND	U	3.8	0.14	1	04/15/03	04/23/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	**0.26**	J	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Dibenz(a,h)anthracene	**0.22**	J	3.8	0.18	1	04/15/03	04/23/03	KWG0305145	
Benzo(g,h,i)perylene	**0.50**	J	3.8	0.10	1	04/15/03	04/23/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	43	39-97	04/23/03	Acceptable
Fluorene-d10	63	43-98	04/23/03	Acceptable
Fluoranthene-d10	77	52-108	04/23/03	Acceptable
Terphenyl-d14	94	61-122	04/23/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305413-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/19/03	04/25/03	KWG0305413	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/19/03	04/25/03	KWG0305413	
Acenaphthylene	ND	U	5.0	0.16	1	04/19/03	04/25/03	KWG0305413	
Acenaphthene	ND	U	5.0	0.21	1	04/19/03	04/25/03	KWG0305413	
Dibenzofuran	ND	U	5.0	0.20	1	04/19/03	04/25/03	KWG0305413	
Fluorene	ND	U	5.0	0.17	1	04/19/03	04/25/03	KWG0305413	
Phenanthrene	**0.19**	J	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Anthracene	ND	U	5.0	0.19	1	04/19/03	04/25/03	KWG0305413	
Fluoranthene	ND	U	5.0	0.17	1	04/19/03	04/25/03	KWG0305413	
Pyrene	**0.15**	J	5.0	0.11	1	04/19/03	04/25/03	KWG0305413	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/19/03	04/25/03	KWG0305413	
Chrysene	ND	U	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/19/03	04/25/03	KWG0305413	
Benzo(k)fluoranthene	**0.30**	J	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Benzo(a)pyrene	**0.15**	J	5.0	0.14	1	04/19/03	04/25/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	**0.27**	J	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Dibenz(a,h)anthracene	**0.27**	J	5.0	0.18	1	04/19/03	04/25/03	KWG0305413	
Benzo(g,h,i)perylene	**0.39**	J	5.0	0.10	1	04/19/03	04/25/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	70	39-97	04/25/03	Acceptable
Fluorene-d10	68	43-98	04/25/03	Acceptable
Fluoranthene-d10	75	52-108	04/25/03	Acceptable
Terphenyl-d14	92	61-122	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B8-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-001	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	5.0	0.16	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	5.0	0.20	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.27**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	5.0	0.19	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	**0.69**	J	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Pyrene	**0.60**	J	5.0	0.11	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	**0.27**	J	5.0	0.13	1	04/15/03	04/24/03	KWG0305145	
Chrysene	**0.33**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	**0.34**	J	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	**0.54**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	**0.25**	J	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	**0.24**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.42**	J	5.0	0.10	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	44	39-97	04/24/03	Acceptable
Fluorene-d10	61	43-98	04/24/03	Acceptable
Fluoranthene-d10	75	52-108	04/24/03	Acceptable
Terphenyl-d14	88	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B10-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-002	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.22**	J	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	5.0	0.16	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	5.0	0.20	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.16**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	5.0	0.19	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	**0.25**	J	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Pyrene	**0.19**	J	5.0	0.11	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/15/03	04/24/03	KWG0305145	
Chrysene	**0.16**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	ND	U	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.29**	J	5.0	0.10	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	50	39-97	04/24/03	Acceptable
Fluorene-d10	63	43-98	04/24/03	Acceptable
Fluoranthene-d10	71	52-108	04/24/03	Acceptable
Terphenyl-d14	90	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B7-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-003	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.23**	J	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	5.0	0.16	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	5.0	0.20	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.17**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	5.0	0.19	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	ND	U	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Pyrene	**0.11**	J	5.0	0.11	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/15/03	04/24/03	KWG0305145	
Chrysene	ND	U	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	ND	U	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.22**	J	5.0	0.10	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	41	39-97	04/24/03	Acceptable
Fluorene-d10	61	43-98	04/24/03	Acceptable
Fluoranthene-d10	82	52-108	04/24/03	Acceptable
Terphenyl-d14	91	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/11/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B9-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-004	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Acenaphthylene	ND	U	5.0	0.16	1	04/15/03	04/24/03	KWG0305145	
Acenaphthene	ND	U	5.0	0.21	1	04/15/03	04/24/03	KWG0305145	
Dibenzofuran	ND	U	5.0	0.20	1	04/15/03	04/24/03	KWG0305145	
Fluorene	ND	U	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Phenanthrene	**0.15**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Anthracene	ND	U	5.0	0.19	1	04/15/03	04/24/03	KWG0305145	
Fluoranthene	**0.18**	J	5.0	0.17	1	04/15/03	04/24/03	KWG0305145	
Pyrene	ND	U	5.0	0.11	1	04/15/03	04/24/03	KWG0305145	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/15/03	04/24/03	KWG0305145	
Chrysene	ND	U	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Benzo(a)pyrene	ND	U	5.0	0.14	1	04/15/03	04/24/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	**0.16**	J	5.0	0.15	1	04/15/03	04/24/03	KWG0305145	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/15/03	04/24/03	KWG0305145	
Benzo(g,h,i)perylene	**0.28**	J	5.0	0.10	1	04/15/03	04/24/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	36	39-97	04/24/03	Outside Control Limits
Fluorene-d10	54	43-98	04/24/03	Acceptable
Fluoranthene-d10	70	52-108	04/24/03	Acceptable
Terphenyl-d14	80	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/07/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC01-2	**Units:**	ug/Kg
Lab Code:	K2302691-005	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.8	0.21	1	04/19/03	04/26/03	KWG0305413	
2-Methylnaphthalene	ND	U	3.8	0.21	1	04/19/03	04/26/03	KWG0305413	
Acenaphthylene	ND	U	3.8	0.16	1	04/19/03	04/26/03	KWG0305413	
Acenaphthene	ND	U	3.8	0.21	1	04/19/03	04/26/03	KWG0305413	
Dibenzofuran	ND	U	3.8	0.20	1	04/19/03	04/26/03	KWG0305413	
Fluorene	ND	U	3.8	0.17	1	04/19/03	04/26/03	KWG0305413	
Phenanthrene	ND	U	3.8	0.15	1	04/19/03	04/26/03	KWG0305413	
Anthracene	ND	U	3.8	0.19	1	04/19/03	04/26/03	KWG0305413	
Fluoranthene	ND	U	3.8	0.17	1	04/19/03	04/26/03	KWG0305413	
Pyrene	ND	U	3.8	0.11	1	04/19/03	04/26/03	KWG0305413	
Benz(a)anthracene	ND	U	3.8	0.13	1	04/19/03	04/26/03	KWG0305413	
Chrysene	ND	U	3.8	0.15	1	04/19/03	04/26/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	3.8	0.14	1	04/19/03	04/26/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	3.8	0.15	1	04/19/03	04/26/03	KWG0305413	
Benzo(a)pyrene	ND	U	3.8	0.14	1	04/19/03	04/26/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	3.8	0.15	1	04/19/03	04/26/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	3.8	0.18	1	04/19/03	04/26/03	KWG0305413	
Benzo(g,h,i)perylene	**0.13**	J	3.8	0.10	1	04/19/03	04/26/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	56	39-97	04/26/03	Acceptable
Fluorene-d10	64	43-98	04/26/03	Acceptable
Fluoranthene-d10	70	52-108	04/26/03	Acceptable
Terphenyl-d14	85	61-122	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC03-4	**Units:**	ug/Kg
Lab Code:	K2302691-006	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	2.9	0.21	1	04/19/03	04/25/03	KWG0305413	
2-Methylnaphthalene	ND	U	2.9	0.21	1	04/19/03	04/25/03	KWG0305413	
Acenaphthylene	ND	U	2.9	0.16	1	04/19/03	04/25/03	KWG0305413	
Acenaphthene	ND	U	2.9	0.21	1	04/19/03	04/25/03	KWG0305413	
Dibenzofuran	ND	U	2.9	0.20	1	04/19/03	04/25/03	KWG0305413	
Fluorene	ND	U	2.9	0.17	1	04/19/03	04/25/03	KWG0305413	
Phenanthrene	ND	U	2.9	0.15	1	04/19/03	04/25/03	KWG0305413	
Anthracene	ND	U	2.9	0.19	1	04/19/03	04/25/03	KWG0305413	
Fluoranthene	ND	U	2.9	0.17	1	04/19/03	04/25/03	KWG0305413	
Pyrene	ND	U	2.9	0.11	1	04/19/03	04/25/03	KWG0305413	
Benz(a)anthracene	ND	U	2.9	0.13	1	04/19/03	04/25/03	KWG0305413	
Chrysene	ND	U	2.9	0.15	1	04/19/03	04/25/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	2.9	0.14	1	04/19/03	04/25/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	2.9	0.15	1	04/19/03	04/25/03	KWG0305413	
Benzo(a)pyrene	ND	U	2.9	0.14	1	04/19/03	04/25/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	2.9	0.15	1	04/19/03	04/25/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	2.9	0.18	1	04/19/03	04/25/03	KWG0305413	
Benzo(g,h,i)perylene	ND	U	2.9	0.10	1	04/19/03	04/25/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	37	39-97	04/25/03	Outside Control Limits
Fluorene-d10	55	43-98	04/25/03	Acceptable
Fluoranthene-d10	68	52-108	04/25/03	Acceptable
Terphenyl-d14	86	61-122	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/08/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC05-6	**Units:**	ug/Kg
Lab Code:	K2302691-007	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.7	0.21	1	04/19/03	04/26/03	KWG0305413	
2-Methylnaphthalene	ND	U	3.7	0.21	1	04/19/03	04/26/03	KWG0305413	
Acenaphthylene	ND	U	3.7	0.16	1	04/19/03	04/26/03	KWG0305413	
Acenaphthene	ND	U	3.7	0.21	1	04/19/03	04/26/03	KWG0305413	
Dibenzofuran	ND	U	3.7	0.20	1	04/19/03	04/26/03	KWG0305413	
Fluorene	ND	U	3.7	0.17	1	04/19/03	04/26/03	KWG0305413	
Phenanthrene	ND	U	3.7	0.15	1	04/19/03	04/26/03	KWG0305413	
Anthracene	ND	U	3.7	0.19	1	04/19/03	04/26/03	KWG0305413	
Fluoranthene	ND	U	3.7	0.17	1	04/19/03	04/26/03	KWG0305413	
Pyrene	ND	U	3.7	0.11	1	04/19/03	04/26/03	KWG0305413	
Benz(a)anthracene	ND	U	3.7	0.13	1	04/19/03	04/26/03	KWG0305413	
Chrysene	ND	U	3.7	0.15	1	04/19/03	04/26/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	3.7	0.14	1	04/19/03	04/26/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	3.7	0.15	1	04/19/03	04/26/03	KWG0305413	
Benzo(a)pyrene	ND	U	3.7	0.14	1	04/19/03	04/26/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	3.7	0.15	1	04/19/03	04/26/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	3.7	0.18	1	04/19/03	04/26/03	KWG0305413	
Benzo(g,h,i)perylene	ND	U	3.7	0.10	1	04/19/03	04/26/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	30	39-97	04/26/03	Outside Control Limits
Fluorene-d10	49	43-98	04/26/03	Acceptable
Fluoranthene-d10	59	52-108	04/26/03	Acceptable
Terphenyl-d14	69	61-122	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CT6-7	**Units:**	ug/Kg
Lab Code:	K2302691-008	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.0	0.21	1	04/19/03	04/24/03	KWG0305413	
2-Methylnaphthalene	ND	U	4.0	0.21	1	04/19/03	04/24/03	KWG0305413	
Acenaphthylene	ND	U	4.0	0.16	1	04/19/03	04/24/03	KWG0305413	
Acenaphthene	ND	U	4.0	0.21	1	04/19/03	04/24/03	KWG0305413	
Dibenzofuran	ND	U	4.0	0.20	1	04/19/03	04/24/03	KWG0305413	
Fluorene	ND	U	4.0	0.17	1	04/19/03	04/24/03	KWG0305413	
Phenanthrene	ND	U	4.0	0.15	1	04/19/03	04/24/03	KWG0305413	
Anthracene	ND	U	4.0	0.19	1	04/19/03	04/24/03	KWG0305413	
Fluoranthene	ND	U	4.0	0.17	1	04/19/03	04/24/03	KWG0305413	
Pyrene	**0.11**	J	4.0	0.11	1	04/19/03	04/24/03	KWG0305413	
Benz(a)anthracene	ND	U	4.0	0.13	1	04/19/03	04/24/03	KWG0305413	
Chrysene	ND	U	4.0	0.15	1	04/19/03	04/24/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	4.0	0.14	1	04/19/03	04/24/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	4.0	0.15	1	04/19/03	04/24/03	KWG0305413	
Benzo(a)pyrene	ND	U	4.0	0.14	1	04/19/03	04/24/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	ND	U	4.0	0.15	1	04/19/03	04/24/03	KWG0305413	
Dibenz(a,h)anthracene	ND	U	4.0	0.18	1	04/19/03	04/24/03	KWG0305413	
Benzo(g,h,i)perylene	**0.10**	J	4.0	0.10	1	04/19/03	04/24/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	21	39-97	04/24/03	Outside Control Limits
Fluorene-d10	32	43-98	04/24/03	Outside Control Limits
Fluoranthene-d10	40	52-108	04/24/03	Outside Control Limits
Terphenyl-d14	46	61-122	04/24/03	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/09/2003
Sample Matrix:	Sediment	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CT8-9	**Units:**	ug/Kg
Lab Code:	K2302691-009	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.1	0.21	1	04/19/03	04/24/03	KWG0305413	
2-Methylnaphthalene	ND	U	4.1	0.21	1	04/19/03	04/24/03	KWG0305413	
Acenaphthylene	ND	U	4.1	0.16	1	04/19/03	04/24/03	KWG0305413	
Acenaphthene	ND	U	4.1	0.21	1	04/19/03	04/24/03	KWG0305413	
Dibenzofuran	ND	U	4.1	0.20	1	04/19/03	04/24/03	KWG0305413	
Fluorene	ND	U	4.1	0.17	1	04/19/03	04/24/03	KWG0305413	
Phenanthrene	**0.17**	J	4.1	0.15	1	04/19/03	04/24/03	KWG0305413	
Anthracene	ND	U	4.1	0.19	1	04/19/03	04/24/03	KWG0305413	
Fluoranthene	**0.21**	J	4.1	0.17	1	04/19/03	04/24/03	KWG0305413	
Pyrene	**0.17**	J	4.1	0.11	1	04/19/03	04/24/03	KWG0305413	
Benz(a)anthracene	ND	U	4.1	0.13	1	04/19/03	04/24/03	KWG0305413	
Chrysene	**0.15**	J	4.1	0.15	1	04/19/03	04/24/03	KWG0305413	
Benzo(b)fluoranthene	**0.16**	J	4.1	0.14	1	04/19/03	04/24/03	KWG0305413	
Benzo(k)fluoranthene	ND	U	4.1	0.15	1	04/19/03	04/24/03	KWG0305413	
Benzo(a)pyrene	**0.20**	J	4.1	0.14	1	04/19/03	04/24/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	**0.54**	J	4.1	0.15	1	04/19/03	04/24/03	KWG0305413	
Dibenz(a,h)anthracene	**0.51**	J	4.1	0.18	1	04/19/03	04/24/03	KWG0305413	
Benzo(g,h,i)perylene	**0.75**	J	4.1	0.10	1	04/19/03	04/24/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	41	39-97	04/24/03	Acceptable
Fluorene-d10	65	43-98	04/24/03	Acceptable
Fluoranthene-d10	81	52-108	04/24/03	Acceptable
Terphenyl-d14	94	61-122	04/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305145-5	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	3.8	0.21	1	04/15/03	04/23/03	KWG0305145	
2-Methylnaphthalene	ND	U	3.8	0.21	1	04/15/03	04/23/03	KWG0305145	
Acenaphthylene	ND	U	3.8	0.16	1	04/15/03	04/23/03	KWG0305145	
Acenaphthene	ND	U	3.8	0.21	1	04/15/03	04/23/03	KWG0305145	
Dibenzofuran	ND	U	3.8	0.20	1	04/15/03	04/23/03	KWG0305145	
Fluorene	ND	U	3.8	0.17	1	04/15/03	04/23/03	KWG0305145	
Phenanthrene	ND	U	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Anthracene	ND	U	3.8	0.19	1	04/15/03	04/23/03	KWG0305145	
Fluoranthene	ND	U	3.8	0.17	1	04/15/03	04/23/03	KWG0305145	
Pyrene	**0.12**	J	3.8	0.11	1	04/15/03	04/23/03	KWG0305145	
Benz(a)anthracene	ND	U	3.8	0.13	1	04/15/03	04/23/03	KWG0305145	
Chrysene	ND	U	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Benzo(b)fluoranthene	ND	U	3.8	0.14	1	04/15/03	04/23/03	KWG0305145	
Benzo(k)fluoranthene	ND	U	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Benzo(a)pyrene	ND	U	3.8	0.14	1	04/15/03	04/23/03	KWG0305145	
Indeno(1,2,3-cd)pyrene	**0.26**	J	3.8	0.15	1	04/15/03	04/23/03	KWG0305145	
Dibenz(a,h)anthracene	**0.22**	J	3.8	0.18	1	04/15/03	04/23/03	KWG0305145	
Benzo(g,h,i)perylene	**0.50**	J	3.8	0.10	1	04/15/03	04/23/03	KWG0305145	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	43	39-97	04/23/03	Acceptable
Fluorene-d10	63	43-98	04/23/03	Acceptable
Fluoranthene-d10	77	52-108	04/23/03	Acceptable
Terphenyl-d14	94	61-122	04/23/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305413-5	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/19/03	04/25/03	KWG0305413	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/19/03	04/25/03	KWG0305413	
Acenaphthylene	ND	U	5.0	0.16	1	04/19/03	04/25/03	KWG0305413	
Acenaphthene	ND	U	5.0	0.21	1	04/19/03	04/25/03	KWG0305413	
Dibenzofuran	ND	U	5.0	0.20	1	04/19/03	04/25/03	KWG0305413	
Fluorene	ND	U	5.0	0.17	1	04/19/03	04/25/03	KWG0305413	
Phenanthrene	**0.19**	J	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Anthracene	ND	U	5.0	0.19	1	04/19/03	04/25/03	KWG0305413	
Fluoranthene	ND	U	5.0	0.17	1	04/19/03	04/25/03	KWG0305413	
Pyrene	**0.15**	J	5.0	0.11	1	04/19/03	04/25/03	KWG0305413	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/19/03	04/25/03	KWG0305413	
Chrysene	ND	U	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/19/03	04/25/03	KWG0305413	
Benzo(k)fluoranthene	**0.30**	J	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Benzo(a)pyrene	**0.15**	J	5.0	0.14	1	04/19/03	04/25/03	KWG0305413	
Indeno(1,2,3-cd)pyrene	**0.27**	J	5.0	0.15	1	04/19/03	04/25/03	KWG0305413	
Dibenz(a,h)anthracene	**0.27**	J	5.0	0.18	1	04/19/03	04/25/03	KWG0305413	
Benzo(g,h,i)perylene	**0.39**	J	5.0	0.10	1	04/19/03	04/25/03	KWG0305413	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	70	39-97	04/25/03	Acceptable
Fluorene-d10	68	43-98	04/25/03	Acceptable
Fluoranthene-d10	75	52-108	04/25/03	Acceptable
Terphenyl-d14	92	61-122	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
B8-CPA	K2302691-001	44	61	75	88
B10-CPA	K2302691-002	50	63	71	90
B7-CPA	K2302691-003	41	61	82	91
B9-CPA	K2302691-004	36 *	54	70	80
CC01-2	K2302691-005	56	64	70	85
CC03-4	K2302691-006	37 *	55	68	86
CC05-6	K2302691-007	30 *	49	59	69
CT6-7	K2302691-008	21 *	32 *	40 *	46 *
CT8-9	K2302691-009	41	65	81	94
Method Blank	KWG0305145-5	43	63	77	94
Method Blank	KWG0305413-5	70	68	75	92
B8-CPADMS	KWG0305145-2	66	74	84	84
B8-CPAMS	KWG0305145-7	59	67	75	81
CT8-9MS	KWG0305413-1	60	71	80	76
CT8-9DMS	KWG0305413-2	73	76	80	79
Lab Control Sample	KWG0305145-3	74	74	81	90
Duplicate Lab Control Sample	KWG0305145-4	76	77	88	87
Lab Control Sample	KWG0305413-3	79	79	82	80
Duplicate Lab Control Sample	KWG0305413-4	76	76	81	78

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	39-97
Sur2 =	Fluorene-d10	43-98
Sur3 =	Fluoranthene-d10	52-108
Sur4 =	Terphenyl-d14	61-122

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/23/2003
Time Analyzed: 15:27

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042303\0423F011.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305737-2
Analysis Lot: KWG0305737

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	299,207	5.16	166,563	7.46	277,461	10.25
	Upper Limit ==>	598,414	5.66	333,126	7.96	554,922	10.75
	Lower Limit ==>	149,604	4.66	83,282	6.96	138,731	9.75
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305145-5	313,331	5.15	162,624	7.45	241,506	10.25
Duplicate Lab Control Sample	KWG0305145-4	301,189	5.15	160,048	7.45	238,622	10.25
B8-CPAMS	KWG0305145-7	294,774	5.15	154,731	7.45	224,208	10.25
Lab Control Sample	KWG0305145-3	300,289	5.15	153,136	7.45	219,072	10.25
B8-CPADMS	KWG0305145-2	286,608	5.15	150,103	7.45	224,649	10.25
B8-CPA	K2302691-001	332,168	5.15	170,669	7.45	259,055	10.25
B10-CPA	K2302691-002	297,956	5.15	148,491	7.45	212,264	10.25
B7-CPA	K2302691-003	299,398	5.15	154,671	7.45	224,835	10.25

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/23/2003
Time Analyzed: 15:27

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042303\0423F011.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305737-2
Analysis Lot: KWG0305737

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	290,519	16.27	179,322	19.95
	Upper Limit ==>	581,038	16.77	358,644	20.45
	Lower Limit ==>	145,260	15.77	89,661	19.45
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305145-5	220,538	16.27	120,710	19.95
Duplicate Lab Control Sample	KWG0305145-4	265,775	16.27	167,901	19.94
B8-CPAMS	KWG0305145-7	220,028	16.27	131,298	19.94
Lab Control Sample	KWG0305145-3	209,538	16.27	119,431	19.94
B8-CPADMS	KWG0305145-2	238,435	16.27	140,661	19.94
B8-CPA	K2302691-001	263,841	16.27	160,921	19.94
B10-CPA	K2302691-002	193,291	16.27	95,502	19.94
B7-CPA	K2302691-003	233,388	16.27	139,015	19.94

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003
Time Analyzed: 10:54

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042403\0424F005.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305843-2
Analysis Lot: KWG0305843

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	313,512	5.16	175,776	7.45	298,264	10.25
	Upper Limit ==>	627,024	5.66	351,552	7.95	596,528	10.75
	Lower Limit ==>	156,756	4.66	87,888	6.95	149,132	9.75
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
B9-CPA	K2302691-004	331,207	5.15	170,888	7.45	258,534	10.25
Lab Control Sample	KWG0305413-3	295,795	5.15	157,273	7.45	235,900	10.25
Duplicate Lab Control Sample	KWG0305413-4	282,654	5.15	149,909	7.46	226,402	10.25
CT8-9MS	KWG0305413-1	295,764	5.15	161,065	7.45	242,984	10.25
CT8-9DMS	KWG0305413-2	294,199	5.15	155,746	7.45	237,606	10.25
CT8-9	K2302691-009	292,168	5.15	146,371	7.45	213,158	10.25
CT6-7	K2302691-008	514,110	5.15	259,627	7.45	373,150	10.25

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003
Time Analyzed: 10:54

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042403\0424F005.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305843-2
Analysis Lot: KWG0305843

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	326,718	16.27	202,359	19.94
	Upper Limit ==>	653,436	16.77	404,718	20.44
	Lower Limit ==>	163,359	15.77	101,180	19.44
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
B9-CPA	K2302691-004	254,117	16.27	135,811	19.94
Lab Control Sample	KWG0305413-3	261,645	16.27	152,151	19.94
Duplicate Lab Control Sample	KWG0305413-4	249,732	16.27	137,478	19.94
CT8-9MS	KWG0305413-1	266,239	16.27	164,265	19.94
CT8-9DMS	KWG0305413-2	253,736	16.27	146,460	19.94
CT8-9	K2302691-009	201,249	16.27	102,695	19.94
CT6-7	K2302691-008	349,028	16.27	173,991	19.94

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/25/2003
Time Analyzed: 11:00

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042503\0425F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305844-2
Analysis Lot: KWG0305844

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	314,412	5.16	173,855	7.45	295,386	10.25
	Upper Limit ==>	628,824	5.66	347,710	7.95	590,772	10.75
	Lower Limit ==>	157,206	4.66	86,928	6.95	147,693	9.75
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305413-5	347,164	5.15	179,259	7.45	269,848	10.25
CC03-4	K2302691-006	339,537	5.15	168,911	7.45	246,476	10.25

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/25/2003
Time Analyzed: 11:00

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042503\0425F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305844-2
Analysis Lot: KWG0305844

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	309,497	16.27	169,264	19.94
	Upper Limit ==>	618,994	16.77	338,528	20.44
	Lower Limit ==>	154,749	15.77	84,632	19.44
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305413-5	246,219	16.27	111,008	19.94
CC03-4	K2302691-006	209,231	16.27	95,379	19.94

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/26/2003
Time Analyzed: 10:14

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042603\0426F005.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305889-2
Analysis Lot: KWG0305889

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	344,329	5.11	184,026	7.39	299,232	10.17
	Upper Limit ==>	688,658	5.61	368,052	7.89	598,464	10.67
	Lower Limit ==>	172,165	4.61	92,013	6.89	149,616	9.67
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
CC01-2	K2302691-005	382,981	5.11	197,285	7.39	294,269	10.17
CC05-6	K2302691-007	380,488	5.11	191,892	7.38	269,135	10.17

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003
		Time Analyzed:	10:14

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042603\0426F005.D	**Lab Code:**	KWG0305889-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305889
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	297,807	16.18	167,782	19.80
	Upper Limit ==>	595,614	16.68	335,564	20.30
	Lower Limit ==>	148,904	15.68	83,891	19.30
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
CC01-2	K2302691-005	248,555	16.18	123,519	19.80
CC05-6	K2302691-007	242,285	16.18	128,212	19.79

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/15/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/23/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	B8-CPA	**Units:**	ug/Kg
Lab Code:	K2302691-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305145

		B8-CPAMS KWG0305145-7 Matrix Spike			B8-CPADMS KWG0305145-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	ND	177	364	49	230	364	63	19-105	26	40
2-Methylnaphthalene	ND	183	364	50	241	364	66	36-95	27	40
Acenaphthylene	ND	193	364	53	255	364	70	40-99	28	40
Acenaphthene	ND	197	364	54	261	364	72	33-102	28	40
Dibenzofuran	ND	200	364	55	274	364	75	38-100	31	40
Fluorene	ND	208	364	57	284	364	78	38-103	31	40
Phenanthrene	0.40	214	364	59	285	364	78	33-113	29	40
Anthracene	ND	219	364	60	294	364	81	40-114	29	40
Fluoranthene	1.0	229	364	63	317	364	87	41-117	32	40
Pyrene	0.88	226	364	62	288	364	79	26-139	24	40
Benz(a)anthracene	0.39	214	364	59	279	364	77	32-134	26	40
Chrysene	0.47	228	364	63	304	364	83	27-135	28	40
Benzo(b)fluoranthene	0.49	207	364	57	272	364	75	31-136	27	40
Benzo(k)fluoranthene	0.79	206	364	56	286	364	78	32-131	32	40
Benzo(a)pyrene	0.36	224	364	62	305	364	84	26-146	31	40
Indeno(1,2,3-cd)pyrene	0.35	231	364	63	316	364	87	33-133	31	40
Dibenz(a,h)anthracene	ND	229	364	63	310	364	85	42-114	30	40
Benzo(g,h,i)perylene	0.62	254	364	70	348	364	95	31-122	31	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/19/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/24/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	CT8-9	**Units:**	ug/Kg
Lab Code:	K2302691-009	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305413

		CT8-9MS KWG0305413-1 Matrix Spike			CT8-9DMS KWG0305413-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	ND	154	249	62	169	250	68	19-105	9	40
2-Methylnaphthalene	ND	172	249	69	183	250	73	36-95	6	40
Acenaphthylene	ND	190	249	76	197	250	79	40-99	4	40
Acenaphthene	ND	190	249	76	200	250	80	33-102	5	40
Dibenzofuran	ND	199	249	80	209	250	84	38-100	5	40
Fluorene	ND	208	249	83	215	250	86	38-103	4	40
Phenanthrene	0.21	206	249	82	211	250	85	33-113	2	40
Anthracene	ND	214	249	86	220	250	88	40-114	3	40
Fluoranthene	0.26	223	249	89	228	250	91	41-117	2	40
Pyrene	0.21	199	249	80	207	250	83	26-139	4	40
Benz(a)anthracene	ND	195	249	78	197	250	79	32-134	1	40
Chrysene	0.19	213	249	85	220	250	88	27-135	3	40
Benzo(b)fluoranthene	0.20	186	249	74	197	250	79	31-136	6	40
Benzo(k)fluoranthene	ND	197	249	79	207	250	83	32-131	5	40
Benzo(a)pyrene	0.24	213	249	85	218	250	87	26-146	2	40
Indeno(1,2,3-cd)pyrene	0.67	219	249	88	202	250	81	33-133	8	40
Dibenz(a,h)anthracene	0.63	222	249	89	208	250	83	42-114	7	40
Benzo(g,h,i)perylene	0.93	240	249	96	229	250	91	31-122	5	40

Results flagged with an asterisk (*) indicate values outside control criteria.

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Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/15/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/23/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305145

	Lab Control Sample KWG0305145-3 Lab Control Spike			Duplicate Lab Control Sample KWG0305145-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	155	250	62	180	250	72	33-98	15	40
2-Methylnaphthalene	156	250	63	186	250	75	36-103	18	40
Acenaphthylene	163	250	65	194	250	77	41-102	17	40
Acenaphthene	164	250	65	191	250	77	41-97	16	40
Dibenzofuran	167	250	67	195	250	78	38-102	16	40
Fluorene	170	250	68	202	250	81	43-101	18	40
Phenanthrene	173	250	69	201	250	80	45-101	15	40
Anthracene	176	250	71	212	250	85	46-109	18	40
Fluoranthene	184	250	74	228	250	91	49-112	21	40
Pyrene	186	250	74	198	250	79	50-112	6	40
Benz(a)anthracene	172	250	69	208	250	83	52-114	19	40
Chrysene	188	250	75	215	250	86	54-109	14	40
Benzo(b)fluoranthene	173	250	69	199	250	80	54-115	14	40
Benzo(k)fluoranthene	178	250	71	193	250	77	54-115	8	40
Benzo(a)pyrene	187	250	75	218	250	87	54-120	15	40
Indeno(1,2,3-cd)pyrene	182	250	73	232	250	93	49-121	24	40
Dibenz(a,h)anthracene	175	250	70	223	250	89	48-114	24	40
Benzo(g,h,i)perylene	202	250	81	239	250	96	45-113	17	40

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/19/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/24/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305413

	Lab Control Sample KWG0305413-3 Lab Control Spike			Duplicate Lab Control Sample KWG0305413-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	198	249	80	191	249	77	33-98	4	40
2-Methylnaphthalene	203	249	82	196	249	79	36-103	4	40
Acenaphthylene	202	249	81	192	249	77	41-102	5	40
Acenaphthene	210	249	84	202	249	81	41-97	4	40
Dibenzofuran	215	249	86	212	249	85	38-102	1	40
Fluorene	220	249	88	216	249	87	43-101	2	40
Phenanthrene	216	249	87	216	249	87	45-101	0	40
Anthracene	218	249	87	216	249	87	46-109	1	40
Fluoranthene	235	249	95	236	249	95	49-112	0	40
Pyrene	206	249	83	206	249	83	50-112	0	40
Benz(a)anthracene	197	249	79	191	249	77	52-114	3	40
Chrysene	227	249	91	222	249	89	54-109	2	40
Benzo(b)fluoranthene	201	249	81	199	249	80	54-115	1	40
Benzo(k)fluoranthene	217	249	87	218	249	88	54-115	1	40
Benzo(a)pyrene	226	249	91	218	249	88	54-120	4	40
Indeno(1,2,3-cd)pyrene	220	249	88	200	249	80	49-121	10	40
Dibenz(a,h)anthracene	231	249	93	212	249	85	48-114	8	40
Benzo(g,h,i)perylene	256	249	103	239	249	96	45-113	7	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
SRM Matrix: Sediment

Service Request: K2302691
Date Collected: NA
Date Received: NA
Date Extracted: 4/15/2003
Date Analyzed: 4/23/2003

Standard Reference Material
Polynuclear Aromatic Hydrocarbons

Sample Name: Standard Reference Material
Lab Code: KWG0305145-6
Test Notes:

Units: ug/Kg (ppb)
Basis: Dry

Analyte	Prep Method	Analysis Method	True Value	Result	CAS Advisory Limits	Result Notes
Phenanthrene	EPA 3541	SIM	5270 ± 220	3500	2520-8240	
Anthracene	EPA 3541	SIM	1770 ± 330	674	720-3150	*
Fluoranthene	EPA 3541	SIM	8920 ± 320	6410	4300-13900	
Pyrene	EPA 3541	SIM	9700 ± 420	6270	4640-15200	
Benz(a)anthracene	EPA 3541	SIM	4720 ± 110	2840	2310-7250	
Chrysene	EPA 3541	SIM	5900 ± 370	4000	2770-9410	
Benzo(b)fluoranthene	EPA 3541	SIM	3870 ± 420	2180	1720-6440	
Benzo(k)fluoranthene	EPA 3541	SIM	4390 ± 640	2540	1880-7550	
Benzo(a)pyrene	EPA 3541	SIM	4300 ± 130	2340	2090-6650	
Indeno(1,2,3-cd)pyrene	EPA 3541	SIM	2780 ± 100	1780	1340-4320	
Dibenz(a,h)anthracene	EPA 3541	SIM	424 ± 69	351	178-740	
Benzo(g,h,i)perylene	EPA 3541	SIM	2840 ± 100	1920	1370-4410	

Approved By: _____ Date: 5/15/03

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
SRM Matrix: Sediment

Service Request: K2302691
Date Collected: NA
Date Received: NA
Date Extracted: 4/19/2003
Date Analyzed: 4/24/2003

Standard Reference Material
Polynuclear Aromatic Hydrocarbons

Sample Name: Standard Reference Material
Lab Code: KWG0305413-6
Test Notes:

Units: ug/Kg (ppb)
Basis: Dry

Analyte	Prep Method	Analysis Method	True Value	Result	CAS Advisory Limits	Result Notes
Phenanthrene	EPA 3541	SIM	5270 ± 220	4380	2520-8240	
Anthracene	EPA 3541	SIM	1770 ± 330	874	720-3150	
Fluoranthene	EPA 3541	SIM	8920 ± 320	8070	4300-13900	
Pyrene	EPA 3541	SIM	9700 ± 420	7280	4640-15200	
Benz(a)anthracene	EPA 3541	SIM	4720 ± 110	3680	2310-7250	
Chrysene	EPA 3541	SIM	5900 ± 370	4760	2770-9410	
Benzo(b)fluoranthene	EPA 3541	SIM	3870 ± 420	2790	1720-6440	
Benzo(k)fluoranthene	EPA 3541	SIM	4390 ± 640	2810	1880-7550	
Benzo(a)pyrene	EPA 3541	SIM	4300 ± 130	3100	2090-6650	
Indeno(1,2,3-cd)pyrene	EPA 3541	SIM	2780 ± 100	2520	1340-4320	
Dibenz(a,h)anthracene	EPA 3541	SIM	424 ± 69	490	178-740	
Benzo(g,h,i)perylene	EPA 3541	SIM	2840 ± 100	2520	1370-4410	

Approved By: _____ Date: 5/15/03

LCS (44)/091898p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/15/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/23/2003
		Time Analyzed:	16:41

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\042303\0423F013.D
Lab Code:	KWG0305145-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305145

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Duplicate Lab Control Sample	KWG0305145-4	J:\MS11\DATA\042303\0423F016.D	04/23/03	18:29
B8-CPAMS	KWG0305145-7	J:\MS11\DATA\042303\0423F017.D	04/23/03	19:05
Lab Control Sample	KWG0305145-3	J:\MS11\DATA\042303\0423F018.D	04/23/03	19:42
B8-CPADMS	KWG0305145-2	J:\MS11\DATA\042303\0423F019.D	04/23/03	20:18
B8-CPA	K2302691-001	J:\MS11\DATA\042303\0423F027.D	04/24/03	01:06
B10-CPA	K2302691-002	J:\MS11\DATA\042303\0423F028.D	04/24/03	01:42
B7-CPA	K2302691-003	J:\MS11\DATA\042303\0423F029.D	04/24/03	02:18
B9-CPA	K2302691-004	J:\MS11\DATA\042403\0424F008.D	04/24/03	12:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302691
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/19/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003
		Time Analyzed:	12:13

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\042503\0425F004.D
Lab Code:	KWG0305413-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305413

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305413-3	J:\MS11\DATA\042403\0424F009.D	04/24/03	13:23
Duplicate Lab Control Sample	KWG0305413-4	J:\MS11\DATA\042403\0424F010.D	04/24/03	14:00
CT8-9MS	KWG0305413-1	J:\MS11\DATA\042403\0424F012.D	04/24/03	15:13
CT8-9DMS	KWG0305413-2	J:\MS11\DATA\042403\0424F013.D	04/24/03	15:50
CT8-9	K2302691-009	J:\MS11\DATA\042403\0424F014.D	04/24/03	16:26
CT6-7	K2302691-008	J:\MS11\DATA\042403\0424F018.D	04/24/03	18:50
CC03-4	K2302691-006	J:\MS11\DATA\042503\0425F007.D	04/25/03	14:02
CC01-2	K2302691-005	J:\MS11\DATA\042603\0426F008.D	04/26/03	12:02
CC05-6	K2302691-007	J:\MS11\DATA\042603\0426F022.D	04/26/03	20:21

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0305145-3	**Lab Code:**	KWG0305145-4
File ID:	J:\MS11\DATA\042303\0423F018.D	**File ID:**	J:\MS11\DATA\042303\0423F016.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/15/2003	**Date Extracted:**	04/15/2003
Date Analyzed:	04/23/2003	**Date Analyzed:**	04/23/2003
Time Analyzed:	19:42	**Time Analyzed:**	18:29

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305145

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305145-5	J:\MS11\DATA\042303\0423F013.D	04/23/03	16:41
B8-CPAMS	KWG0305145-7	J:\MS11\DATA\042303\0423F017.D	04/23/03	19:05
B8-CPADMS	KWG0305145-2	J:\MS11\DATA\042303\0423F019.D	04/23/03	20:18
B8-CPA	K2302691-001	J:\MS11\DATA\042303\0423F027.D	04/24/03	01:06
B10-CPA	K2302691-002	J:\MS11\DATA\042303\0423F028.D	04/24/03	01:42
B7-CPA	K2302691-003	J:\MS11\DATA\042303\0423F029.D	04/24/03	02:18
B9-CPA	K2302691-004	J:\MS11\DATA\042403\0424F008.D	04/24/03	12:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0305413-3	**Lab Code:**	KWG0305413-4
File ID:	J:\MS11\DATA\042403\0424F009.D	**File ID:**	J:\MS11\DATA\042403\0424F010.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/19/2003	**Date Extracted:**	04/19/2003
Date Analyzed:	04/24/2003	**Date Analyzed:**	04/24/2003
Time Analyzed:	13:23	**Time Analyzed:**	14:00

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305413

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
CT8-9MS	KWG0305413-1	J:\MS11\DATA\042403\0424F012.D	04/24/03	15:13
CT8-9DMS	KWG0305413-2	J:\MS11\DATA\042403\0424F013.D	04/24/03	15:50
CT8-9	K2302691-009	J:\MS11\DATA\042403\0424F014.D	04/24/03	16:26
CT6-7	K2302691-008	J:\MS11\DATA\042403\0424F018.D	04/24/03	18:50
Method Blank	KWG0305413-5	J:\MS11\DATA\042503\0425F004.D	04/25/03	12:13
CC03-4	K2302691-006	J:\MS11\DATA\042503\0425F007.D	04/25/03	14:02
CC01-2	K2302691-005	J:\MS11\DATA\042603\0426F008.D	04/26/03	12:02
CC05-6	K2302691-007	J:\MS11\DATA\042603\0426F022.D	04/26/03	20:21

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/23/2003
Time Analyzed: 15:04

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042303\0423F010.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305737

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.4	420864	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.9	484160	PASS
70	69	0	2	0.5	2290	PASS
127	198	10	80	44.2	632128	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	62.8	1429504	PASS
199	198	5	9	6.9	99320	PASS
275	198	10	60	31.2	445888	PASS
365	442	1	50	2.3	52096	PASS
441	443	0	100	73.5	337088	PASS
442	442	100	100	100.0	2277376	PASS
443	442	15	24	20.1	458368	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305737-2	J:\MS11\DATA\042303\0423F011.D	04/23/2003	15:27	
Method Blank	KWG0305145-5	J:\MS11\DATA\042303\0423F013.D	04/23/2003	16:41	
Duplicate Lab Control Sample	KWG0305145-4	J:\MS11\DATA\042303\0423F016.D	04/23/2003	18:29	
B8-CPAMS	KWG0305145-7	J:\MS11\DATA\042303\0423F017.D	04/23/2003	19:05	
Lab Control Sample	KWG0305145-3	J:\MS11\DATA\042303\0423F018.D	04/23/2003	19:42	
B8-CPADMS	KWG0305145-2	J:\MS11\DATA\042303\0423F019.D	04/23/2003	20:18	
B8-CPA	K2302691-001	J:\MS11\DATA\042303\0423F027.D	04/24/2003	01:06	
B10-CPA	K2302691-002	J:\MS11\DATA\042303\0423F028.D	04/24/2003	01:42	
B7-CPA	K2302691-003	J:\MS11\DATA\042303\0423F029.D	04/24/2003	02:18	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003
Time Analyzed: 10:31

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042403\0424F004.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305843

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.4	429312	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.4	487808	PASS
70	69	0	2	0.5	2593	PASS
127	198	10	80	44.5	650688	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	64.8	1460736	PASS
199	198	5	9	6.8	99936	PASS
275	198	10	60	31.7	463296	PASS
365	442	1	50	2.3	52696	PASS
441	443	0	100	72.6	331904	PASS
442	442	100	100	100.0	2255360	PASS
443	442	15	24	20.3	457216	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305843-2	J:\MS11\DATA\042403\0424F005.D	04/24/2003	10:54	
B9-CPA	K2302691-004	J:\MS11\DATA\042403\0424F008.D	04/24/2003	12:46	
Lab Control Sample	KWG0305413-3	J:\MS11\DATA\042403\0424F009.D	04/24/2003	13:23	
Duplicate Lab Control Sample	KWG0305413-4	J:\MS11\DATA\042403\0424F010.D	04/24/2003	14:00	
CT8-9MS	KWG0305413-1	J:\MS11\DATA\042403\0424F012.D	04/24/2003	15:13	
CT8-9DMS	KWG0305413-2	J:\MS11\DATA\042403\0424F013.D	04/24/2003	15:50	
CT8-9	K2302691-009	J:\MS11\DATA\042403\0424F014.D	04/24/2003	16:26	
CT6-7	K2302691-008	J:\MS11\DATA\042403\0424F018.D	04/24/2003	18:50	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/25/2003
Time Analyzed: 10:38

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042503\0425F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305844

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	26.5	397824	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	31.2	467200	PASS
70	69	0	2	0.5	2334	PASS
127	198	10	80	42.0	630016	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	56.8	1498624	PASS
199	198	5	9	6.7	100888	PASS
275	198	10	60	33.7	505728	PASS
365	442	1	50	2.3	61808	PASS
441	443	0	100	74.8	393664	PASS
442	442	100	100	100.0	2640384	PASS
443	442	15	24	19.9	526208	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305844-2	J:\MS11\DATA\042503\0425F002.D	04/25/2003	11:00	
Method Blank	KWG0305413-5	J:\MS11\DATA\042503\0425F004.D	04/25/2003	12:13	
CC03-4	K2302691-006	J:\MS11\DATA\042503\0425F007.D	04/25/2003	14:02	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/26/2003
Time Analyzed: 09:53

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042603\0426F004.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305889

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.5	417600	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	34.2	483520	PASS
70	69	0	2	0.5	2547	PASS
127	198	10	80	43.8	619648	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	63.7	1414144	PASS
199	198	5	9	6.7	95416	PASS
275	198	10	60	32.2	455936	PASS
365	442	1	50	2.3	51776	PASS
441	443	0	100	74.7	331392	PASS
442	442	100	100	100.0	2219008	PASS
443	442	15	24	20.0	443520	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305889-2	J:\MS11\DATA\042603\0426F005.D	04/26/2003	10:14	
CC01-2	K2302691-005	J:\MS11\DATA\042603\0426F008.D	04/26/2003	12:02	
CC05-6	K2302691-007	J:\MS11\DATA\042603\0426F022.D	04/26/2003	20:21	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/23/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305737
Units: ng/ml

File ID: J:\MS11\DATA\042303\0423F011.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.08	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.677	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.13	3	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.58	5	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.29	6	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.17	1.09	-8	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	1.09	1.06	-2	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.19	-1	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.13	-12	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.993	-8	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.50	-13	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1700	0.01	1.98	1.72	-13	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.27	-5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.889	-1	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.952	0.931	-2	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	0.01	1.15	1.12	-3	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.745	5	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.05	0	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.975	-4	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.809	-12	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/24/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305843
Units: ng/ml

File ID: J:\MS11\DATA\042403\0424F005.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.683	4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.80	3	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.61	7	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.30	6	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-6	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	1.09	1.06	-2	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.966	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.45	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1800	0.01	1.98	1.75	-12	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.26	-6	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.897	-1	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.01	0.952	0.976	3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.18	2	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.758	7	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.981	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	0.915	0.798	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/25/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305844
Units: ng/ml

File ID: J:\MS11\DATA\042503\0425F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.678	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.61	7	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.30	7	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.22	1	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.15	-10	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.964	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.46	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.85	-7	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.23	-8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.723	-20	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1600	0.01	0.952	0.784	-18	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1800	0.01	1.15	1.01	-12	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.751	6	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.985	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.831	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305889
Units: ng/ml

File ID: J:\MS11\DATA\042603\0426F005.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.08	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.670	2	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.60	6	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.28	5	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.09	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.18	-2	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.18	-8	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.967	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.50	-13	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.86	-6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.25	-7	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.737	-18	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1600	0.01	0.952	0.780	-18	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1700	0.01	1.15	0.991	-14	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.735	3	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.04	-1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.953	-6	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.837	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305737
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0423F010.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305737-1	4/23/2003	15:04		4/23/2003	15:17
0423F011.D	Continuing Calibration Verification	KWG0305737-2	4/23/2003	15:27		4/23/2003	15:53
0423F012.D	Instrument Blank	KWG0305737-3	4/23/2003	16:04		4/23/2003	16:30
0423F013.D	Method Blank	KWG0305145-5	4/23/2003	16:41		4/23/2003	17:07
0423F014.D	ZZZZZZ	ZZZZZZ	4/23/2003	17:17		4/23/2003	17:43
0423F015.D	ZZZZZZ	ZZZZZZ	4/23/2003	17:53		4/23/2003	18:19
0423F016.D	Duplicate Lab Control Sample	KWG0305145-4	4/23/2003	18:29		4/23/2003	18:55
0423F017.D	B8-CPAMS	KWG0305145-7	4/23/2003	19:05		4/23/2003	19:31
0423F018.D	Lab Control Sample	KWG0305145-3	4/23/2003	19:42		4/23/2003	20:08
0423F019.D	B8-CPADMS	KWG0305145-2	4/23/2003	20:18		4/23/2003	20:44
0423F020.D	ZZZZZZ	ZZZZZZ	4/23/2003	20:54		4/23/2003	21:20
0423F021.D	ZZZZZZ	ZZZZZZ	4/23/2003	21:30		4/23/2003	21:56
0423F022.D	ZZZZZZ	ZZZZZZ	4/23/2003	22:06		4/23/2003	22:32
0423F023.D	ZZZZZZ	ZZZZZZ	4/23/2003	22:41		4/23/2003	23:07
0423F024.D	ZZZZZZ	ZZZZZZ	4/23/2003	23:18		4/23/2003	23:44
0423F025.D	ZZZZZZ	ZZZZZZ	4/23/2003	23:54		4/24/2003	00:20
0423F026.D	ZZZZZZ	ZZZZZZ	4/24/2003	00:30		4/24/2003	00:56
0423F027.D	B8-CPA	K2302691-001	4/24/2003	01:06		4/24/2003	01:32
0423F028.D	B10-CPA	K2302691-002	4/24/2003	01:42		4/24/2003	02:08
0423F029.D	B7-CPA	K2302691-003	4/24/2003	02:18		4/24/2003	02:44
0423F030.D	ZZZZZZ	ZZZZZZ	4/24/2003	02:54		4/24/2003	03:20

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305843
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0424F004.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305843-1	4/24/2003	10:31		4/24/2003	10:44
0424F005.D	Continuing Calibration Verification	KWG0305843-2	4/24/2003	10:54		4/24/2003	11:20
0424F008.D	B9-CPA	K2302691-004	4/24/2003	12:46		4/24/2003	13:12
0424F009.D	Lab Control Sample	KWG0305413-3	4/24/2003	13:23		4/24/2003	13:49
0424F010.D	Duplicate Lab Control Sample	KWG0305413-4	4/24/2003	14:00		4/24/2003	14:26
0424F011.D	ZZZZZZ	ZZZZZZ	4/24/2003	14:37		4/24/2003	15:03
0424F012.D	CT8-9MS	KWG0305413-1	4/24/2003	15:13		4/24/2003	15:39
0424F013.D	CT8-9DMS	KWG0305413-2	4/24/2003	15:50		4/24/2003	16:16
0424F014.D	CT8-9	K2302691-009	4/24/2003	16:26		4/24/2003	16:52
0424F015.D	ZZZZZZ	ZZZZZZ	4/24/2003	17:02		4/24/2003	17:28
0424F016.D	ZZZZZZ	ZZZZZZ	4/24/2003	17:38		4/24/2003	18:04
0424F017.D	ZZZZZZ	ZZZZZZ	4/24/2003	18:14		4/24/2003	18:40
0424F018.D	CT6-7	K2302691-008	4/24/2003	18:50		4/24/2003	19:16
0424F020.D	ZZZZZZ	ZZZZZZ	4/24/2003	20:02		4/24/2003	20:28
0424F021.D	ZZZZZZ	ZZZZZZ	4/24/2003	20:38		4/24/2003	21:04
0424F022.D	ZZZZZZ	ZZZZZZ	4/24/2003	21:14		4/24/2003	21:40
0424F023.D	ZZZZZZ	ZZZZZZ	4/24/2003	21:50		4/24/2003	22:16
0424F024.D	ZZZZZZ	ZZZZZZ	4/24/2003	22:26		4/24/2003	22:52

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305844
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305844-1	4/25/2003	10:38		4/25/2003	10:51
0425F002.D	Continuing Calibration Verification	KWG0305844-2	4/25/2003	11:00		4/25/2003	11:26
0425F004.D	Method Blank	KWG0305413-5	4/25/2003	12:13		4/25/2003	12:39
0425F005.D	ZZZZZZ	ZZZZZZ	4/25/2003	12:49		4/25/2003	13:15
0425F007.D	CC03-4	K2302691-006	4/25/2003	14:02		4/25/2003	14:28
0425F009.D	ZZZZZZ	ZZZZZZ	4/25/2003	15:15		4/25/2003	15:41
0425F010.D	ZZZZZZ	ZZZZZZ	4/25/2003	15:51		4/25/2003	16:17
0425F011.D	ZZZZZZ	ZZZZZZ	4/25/2003	16:27		4/25/2003	16:53
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	17:03		4/25/2003	17:29
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	17:39		4/25/2003	18:05
0425F014.D	ZZZZZZ	ZZZZZZ	4/25/2003	18:14		4/25/2003	18:40
0425F015.D	ZZZZZZ	ZZZZZZ	4/25/2003	18:50		4/25/2003	19:16
0425F016.D	ZZZZZZ	ZZZZZZ	4/25/2003	19:26		4/25/2003	19:52
0425F017.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:02		4/25/2003	20:28
0425F018.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:38		4/25/2003	21:04
0425F019.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:13		4/25/2003	21:39
0425F021.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:25		4/25/2003	22:51

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302691

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305889
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0426F004.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305889-1	4/26/2003	09:53		4/26/2003	10:06
0426F005.D	Continuing Calibration Verification	KWG0305889-2	4/26/2003	10:14		4/26/2003	10:40
0426F007.D	Instrument Blank	KWG0305889-3	4/26/2003	11:26		4/26/2003	11:52
0426F008.D	CC01-2	K2302691-005	4/26/2003	12:02		4/26/2003	12:28
0426F010.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:13		4/26/2003	13:39
0426F011.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:49		4/26/2003	14:15
0426F012.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:25		4/26/2003	14:51
0426F013.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:00		4/26/2003	15:26
0426F014.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:36		4/26/2003	16:02
0426F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	16:11		4/26/2003	16:37
0426F016.D	ZZZZZZ	ZZZZZZ	4/26/2003	16:47		4/26/2003	17:13
0426F017.D	ZZZZZZ	ZZZZZZ	4/26/2003	17:23		4/26/2003	17:49
0426F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	17:58		4/26/2003	18:24
0426F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	18:34		4/26/2003	19:00
0426F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	19:10		4/26/2003	19:36
0426F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	19:46		4/26/2003	20:12
0426F022.D	CC05-6	K2302691-007	4/26/2003	20:21		4/26/2003	20:47

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691
Date Extracted: 04/15/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0305145
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
B8-CPA	K2302691-001	04/03/03	04/10/03	20.04g	2ml	68.6	
B10-CPA	K2302691-002	04/03/03	04/10/03	20.06g	2ml	56.9	
B7-CPA	K2302691-003	04/02/03	04/11/03	20.02g	2ml	72.2	
B9-CPA	K2302691-004	04/03/03	04/11/03	20.01g	2ml	58.0	
Method Blank	KWG0305145-5	NA	NA	26.60g	2ml	NA	
B8-CPADMS	KWG0305145-2	04/03/03	04/10/03	20.00g	2ml	68.6	
B8-CPAMS	KWG0305145-7	04/03/03	04/10/03	20.03g	2ml	68.6	
Lab Control Sample	KWG0305145-3	NA	NA	20.00g	2ml	NA	
Duplicate Lab Control Sample	KWG0305145-4	NA	NA	20.00g	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Sediment

Service Request: K2302691
Date Extracted: 04/19/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0305413
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
CC01-2	K2302691-005	04/07/03	04/15/03	26.35g	2ml	76.0	
CC03-4	K2302691-006	04/08/03	04/15/03	34.96g	2ml	80.2	
CC05-6	K2302691-007	04/08/03	04/15/03	27.24g	2ml	73.5	
CT6-7	K2302691-008	04/09/03	04/15/03	25.53g	2ml	78.5	
CT8-9	K2302691-009	04/09/03	04/15/03	24.90g	2ml	80.4	
Method Blank	KWG0305413-5	NA	NA	20.11g	2ml	NA	
CT8-9MS	KWG0305413-1	04/09/03	04/15/03	24.93g	2ml	80.4	
CT8-9DMS	KWG0305413-2	04/09/03	04/15/03	24.92g	2ml	80.4	
Lab Control Sample	KWG0305413-3	NA	NA	20.09g	2ml	NA	
Duplicate Lab Control Sample	KWG0305413-4	NA	NA	20.10g	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 425-9096 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 16, 2003 Service Request No: K2302808

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/CPA

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 15, 2003. For your reference, these analyses have been assigned our service request number K2302808.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The reported value is estimated because of the presence of matrix interference.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Received:**	4/15/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nine water samples were received for analysis at Columbia Analytical Services on 4/15/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

The samples were not initially logged into the laboratory for Total Sulfide due to confusion associated with the chain of custody. However, verbal instructions were received from ANAMAR Environmental Chemistry, Inc. to add Total Sulfide to all samples regardless of the information on the COC. The error was by CAS/Kelso. As a result, the samples were analyzed past the recommended hold time.

No other anomalies associated with the analysis of these samples were observed.

Total Metals

Several alternative procedures were used due to difficulties encountered that were primarily related to the associated elutriate samples. Arsenic was analyzed using EPA Method 7062 (Hydride/AAS). Although the Reductive Precipitation/ICP-MS procedure performs very well in typical seawater and other complex salt matrices, an interference was observed in some of the elutriate samples. Therefore, all samples were analyzed by Hydride/AAS.

Iron and Aluminum were initially planned for analysis by EPA Method 6010 (ICP-AES). To circumvent interferences, the Iron was analyzed by EPA Method 7381 (GFAAS) and Aluminum was analyzed by EPA Method 200.8 (ICP-MS after appropriate dilution of the digestate).

No other anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of these samples were observed.

Organotin Compounds

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Internal Standard Exceptions /Elevated Method Reporting Limits:

Approved by J. Cl **Date** 5/15/03

The internal standard recovery of Perylene-d12 in sample B7 was outside control criteria because of suspected matrix interference. Reanalysis of the extract confirmed that the internal standard recovery was low, so the sample was reanalyzed at a dilution. The internal standard in question was within control criteria for the analysis of the diluted sample. The results for the analytes quantitated using the internal standard in question are reported from the analysis of the diluted sample. The MRL has been elevated accordingly for Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, and Benzo(g,h,i)perylene.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 5/15/03

Chain of Custody Documentation

ANAMAR Environmental Chemistry, Inc.

K2302808

00008

Canaveral Harbor 103 Evaluation Chain-of-Custody
Canaveral Port Authority (CPA) Samples

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
CCO1-2	04/ 7 /03	1335	Sed. / Elut.	Various	7+2	Per Contract		
CCO3-4	04/ 8 /03	0900	Sed. / Elut.	Various	7+2+6	Per Contract		QC
CCO5-6	04/ 8 /03	1345	Sed. / Elut.	Various	7+2	Per Contract		
B7	04/ 2 /03	1259	Sed. / Elut.	Various	7	Per Contract		
B8	04/ 3 /03	1110	Sed. / Elut.	Various	7	Per Contract		
B9	04/ 3 /03	1323	Sed. / Elut.	Various	7+4	Per Contract		QC
B10	04/ 3 /03	1630	Sed. / Elut.	Various	7	Per Contract		
CT6-7	04/ 9 /03	0830	Sed. / Elut.	Various	7+2	Per Contract		
CT8-9	04/ 9 /03	1300	Sed. / Elut.	Various	7+2	Per Contract		

Samples Relinquished by: [signature] - PRB
Date: 4/14/03 Time: 1700
Samples Relinquished by: [signature]
Date: 4/14/03 Time: 1800 → FedEx

Received by: [signature]
Date: 4/14/03 Time: 1700
Received by: [signature] CAS
Date: 4/21/03 Time: 0930

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
Canaveral Port Authority (CPA) Samples

K2302808

00009

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
CCO1-2	04/7/03	1335	Sed. / Elut.	Various	7+2	Per Contract		
CCO3-4	04/8/03	0900	Sed. / Elut.	Various	7+2+6	Per Contract		QC
CCO5-6	04/8/03	1345	Sed. / Elut.	Various	7+2	Per Contract		
B7	04/2/03	1259	Sed. / Elut.	Various	7	Per Contract		
B8	04/3/03	1110	Sed. / Elut.	Various	7	Per Contract		
B9	04/3/03	1323	Sed. / Elut.	Various	7+4	Per Contract		QC
B10	04/3/03	1630	Sed. / Elut.	Various	7	Per Contract		
CT6-7	04/9/03	0830	Sed. / Elut.	Various	7+2	Per Contract		
CT8-9	04/9/03	1300	Sed. / Elut.	Various	7+2	Per Contract		

Added 52-576-2 As per Client Instruction

Samples Relinquished by: [signature] - PPB
Date: 4/14/03 Time: 1700
Samples Relinquished by: [signature]
Date: 4/14/03 Time: 1800 → FedEx

Received by: [signature]
Date: 4/14/03 Time: 1700
Received by: [signature] 4/15/03 1000
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

Port-CPA

00010

Cape Canaveral Samples							
[redacted]	[redacted]	COE	NAVY	Total	Detection Limit	Laboratory	Comments
[redacted]	9	11	9	29	0.5 mg/kg	Columbia	
[redacted]	9	11	9	29	0.3 mg/kg	Columbia	
[redacted]	9	11	9	29	0.5 mg/kg	Columbia	
[redacted]	9	11	9	29	0.1 mg/kg	Columbia	
[redacted]	9	11	9	29	0.2 mg/kg	Columbia	
[redacted]	9	11	9	29	0.1 mg/kg	Columbia	
[redacted]	9	11	9	29	1.5 mg/kg	Columbia	
[redacted]	9	11	9	29	0.05 mg/kg	Columbia	
[redacted]	9	11	9	29	0.1 mg/kg	Columbia	
[redacted]	9	11	9	29	0.1 mg/kg	Columbia	
[redacted]	9	11	9	29	0.2 mg/kg	Columbia	
CYANIDE	0	11	9	20	1.0mg/kg	Columbia	
TOTAL AMMONIA	0	11	9	20	0.1 mg/kg	Columbia	
[redacted] (TOC)	9	11	9	29	0.10%	Columbia	
OIL AND GREASE	0	11	9	20	1.0 ppm	Columbia	
[redacted]	9	11	9	29	0.02 mg/kg	Columbia	
[redacted]	9	11	9	29	0.01 mg/kg	Columbia	
%SOLIDS	8	9	8	25	n/a	LAW	
GRAIN SIZE DIST.	8	9	8	25	n/a	LAW	
SPECIFIC GRAVITY	8	9	8	25	n/a	LAW	
ATTERBURG LIMITS	8	9	8	25	n/a	LAW	
SETTLING RATES	8	9	8	25	n/a	LAW	
10 DAY SEDIMENT BIOASSAY	8	2	9	19	n/a	ESE	
28 DAY SED. BIOACCUMULATION	8	2	9	19	n/a	ESE	
[redacted]	[redacted]	COE	NAVY	Total	Detection Limit	Laboratory	Comments
[redacted]	9	12	9	30	3.5 ug/l	Columbia	
[redacted]	9	2	0	11	0.5 ug/l	Columbia	Reference Station and Control Sediment Elutriates need aluminum and iron
[redacted]	9	12	9	30	1.0 ug/l	Columbia	
[redacted]	9	12	9	30	0.5 ug/l	Columbia	
[redacted]	9	12	9	30	0.5 ug/l	Columbia	

Port CPA

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

[redacted]	9	12	9	30	2.5 ug/l	[redacted]	
[redacted]	9	12	9	30	2.5 ug/l	[redacted]	
[redacted]	9	0	0	9	0.5 ug/l	[redacted]	
[redacted]	9	12	9	30	0.2 ug/l	[redacted]	
[redacted]	9	12	9	30	0.2 ug/l	[redacted]	
[redacted]	9	12	9	30	1.0 ug/l	[redacted]	
[redacted]	9	12	9	30	1.5 ug/l	[redacted]	
CYANIDE	0	12	9	21	1.0 ppm	Columbia	
TOTAL AMMONIA	0	12	9	21	0.10 ppm	Columbia	
[redacted]	9	12	9	30	0.10%	[redacted]	
OIL AND GREASE	0	12	9	21	1.0 ppm	Columbia	
[redacted]	9	12	9	30	0.02 ppm	[redacted]	
[redacted]	9	12	9	30	0.1 ppm	[redacted]	
96-HR ELUTRIATE ACUTE BIOASSAY	9	2	9	20	n/a	ESE	

Sediments:
COE Samples: 8 sites, 1 dupe, 1 reference, 1 control sediment (Chem and Phys). (No Phys on control or duplicate sediment) = 11
NAVY Samples: 8 sites, 1 dupe (Chem, Phys, and Tox) Include Ref and Control on Tox) = 9 or (11 for Tox)
Port Authority:
4 Vibracore Samples (Chem, Phys, and Tox) = 4
6 Upland samples and one dupe to be combined into 4 samples (Chem, Phys, and Tox) = 4
2 Upland samples to be combined into 1 samples (Chem and Phys) = 1

Elutriates:
Same as above except for the COE Samples:
COE: 8 sites, 1 dupe, 1 reference, 1 control sediment elutriate, 1 site water = 12

00011

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Pg 1 of 3

Project/Client Anamar Water + Air Research Work Order K23 02808

Cooler received on 4-15-03 and opened on 4-15-03. by TM.

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex / Attached (Y) N
4. COC #

Temperature of cooler(s) upon receipt:	2.0	-1.4	-1.5	1.0	0.9	-1.6
Temperature Blank:	3.5	–	1.0	2.2	0.7	1.0

5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present ice, ice packs, bubbles.
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? missing dates + times. (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? Y (N)
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y (N)
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies: Rec'd Oil & Grease in 1 L Clear Glass.

RESOLUTION:

Samples that required preservation or received out of temperature:

	Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
3	CCO5-6	NaOH	2 mil.	EM41030109	1L Other	–	[illegible]
8	CT6-7	NaOH	2 mil	EM41030109	1L Other	–	[illegible]
2	CCO3-4	NaOH	2 mil	EM41030109	1L Other	–	[illegible]
	ECH3-9	HNO3	2 mil.	X40023	1L Plastic	–	[illegible]
	CH3-13	H2SO4	½ mL.	EMK2911650	113 250 yellow	–	[illegible]

00012

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

pg. 2 of 3

Project/Client Water & Air Research Work Order K23

Cooler received on 4-15-03 and opened on 4-15-03 by [illegible]

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex. / Attached Y N
4. COC #
   Temperature of cooler(s) upon receipt: -1.2 -1.3 0.3 1.2 1.1 1.7
   Temperature Blank: 1.0 0.5 1.4 0.0 0.2 1.3
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present 1 cl, ice packs, bubbles.
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies: See page 1

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

00013

CRFREV.DOC3/5/2003

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

page 3 of 3

Project/Client Water & Air Research Work Order K23 _____

Cooler received on 4-15-03 and opened on 4-15-03 by Kn

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex / Attached N
4. COC #
   Temperature of cooler(s) upon receipt: 2.5 3.6 ____ ____
   Temperature Blank: 0.0 2.1 ____ ____
5. Were custody papers properly filled out (ink, signed, etc.)? Y (N)
6. Type of packing material present ice, ice packs, bubbles
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies: _____

See Page

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

00014

CRFREV.DOC3/5/2003

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Water

Service Request : K2302808
Date Collected : 04/10/03
Date Received : 04/15/03

Sulfide, Total

Units : mg/L (ppm)
Basis : NA

Analysis Method : 376.2
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
CC01-2	K2302808-001	0.05	0.004	1	04/28/03	ND	X
CC03-4	K2302808-002	0.05	0.004	1	04/28/03	ND	X
CC05-6	K2302808-003	0.05	0.004	1	04/28/03	ND	X
B7	K2302808-004	0.05	0.004	1	04/28/03	ND	X
B8	K2302808-005	0.05	0.004	1	04/28/03	ND	X
B9	K2302808-006	0.05	0.004	1	04/28/03	ND	X
B10	K2302808-007	0.05	0.004	1	04/28/03	ND	X
CT6-7	K2302808-008	0.05	0.004	1	04/28/03	ND	X
CT8-9	K2302808-009	0.05	0.004	1	04/28/03	ND	X
Method Blank	K2302808-MB	0.05	0.004	1	04/28/03	ND	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Water

Service Request : K2302808
Date Collected : 04/10/03
Date Received : 04/15/03

Carbon, Total Organic

Units : mg/L (ppm)
Basis : NA

Analysis Method : 415.1
Test Notes :

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
CC01-2	K2302808-001	0.5	0.2	1	04/28/03	3.7	
CC03-4	K2302808-002	0.5	0.2	1	04/28/03	3.2	
CC05-6	K2302808-003	0.5	0.2	1	04/28/03	4.6	
B7	K2302808-004	0.5	0.2	1	04/28/03	3.5	
B8	K2302808-005	0.5	0.2	1	04/28/03	4.3	
B9	K2302808-006	0.5	0.2	1	04/28/03	4.8	
B10	K2302808-007	0.5	0.2	1	04/28/03	4.6	
CT6-7	K2302808-008	0.5	0.2	1	04/28/03	2.9	
CT8-9	K2302808-009	0.5	0.2	1	04/28/03	2.4	
Method Blank	K2302808-MB	0.5	0.2	1	04/28/03	ND	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Water

Service Request : K2302808
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Duplicate Summary
Inorganic Parameters

Sample Name : CC03-4
Lab Code : K2302808-002DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	415.1	0.5	3.2	3.2	3.2	<1	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Water

Service Request : K2302808
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : CC03-4
Lab Code : K2302808-002MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	415.1	0.5	25.0	3.2	26.0	91	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302808
Project Name :	Canaveral Harbor 103 Evaluation/CPA	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/28/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302808-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	mg/L (ppm)	415.1	27.1	26.6	98	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/28/03

Carbon, Total Organic
EPA Method 415.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	25.0	25.2	101
CCV 3 Result	25.0	24.7	99
CCV 4 Result	25.0	24.8	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	0.5	ND
CCB 3 Result	0.5	ND
CCB 4 Result	0.5	ND

Approved By: MJ Stt Date: 5/2/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Water

Service Request : K2302808
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Duplicate Summary
Inorganic Parameters

Sample Name : CC03-4
Lab Code : K2302808-002DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.05	ND	ND	ND	-	X

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/CPA
Project Number : NA
Sample Matrix : Water

Service Request : K2302808
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : CC03-4
Lab Code : K2302808-002MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	376.2	0.05	0.92	ND	0.78	85	75-125	X

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302808
Project Name :	Canaveral Harbor 103 Evaluation/CPA	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/28/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302808-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	mg/L (ppm)	376.2	0.92	0.97	105	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Collected: NA
Date Received: NA
Date Analyzed: 04/28/03

Total Sulfide
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.92	0.91	99
CCV 2 Result	0.92	0.91	99
CCV 3 Result	0.92	0.91	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND

Approved By: _____ Date: 5/2/03

COMBOQCD/042695

00025

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY

Sample No.	Lab Sample ID.
CC01-2	K2302808-001
CC01-2D	K2302808-001D
CC03-4	K2302808-002
CC03-4D	K2302808-002D
CC03-4S	K2302808-002S
CC05-6	K2302808-003
B7	K2302808-004
B7S	K2302808-004S
B8	K2302808-005
B9	K2302808-006
B9D	K2302808-006D
B9S	K2302808-006S
B10	K2302808-007
CT6-7	K2302808-008
CT8-9	K2302808-009
Method Blank	K2302808-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/15/03

00027

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302808
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: CC01-2
Lab Code: K2302808-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	11.6		
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.32	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	4.3		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.09	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.20	B	
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.22		
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.37		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	0.55	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302808
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: CC03-4
Lab Code: K2302808-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	10.7		
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.40	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	3.1		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.38	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.43		
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.09		
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.39		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.04		
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	0.81	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.: NA
Date Collected: 04/10/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Date Received: 04/15/03
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: CC05-6
Lab Code: K2302808-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	7.1	B	
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.32	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	8.0		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.42		
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	1.14		
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.10		
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.31		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	1.36		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302808
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: B7
Lab Code: K2302808-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	15.4		
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.78	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	12.9		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.53		
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	1.79		
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	38.4		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.06		
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.76		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	2.41		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.: NA
Date Collected: 04/10/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Date Received: 04/15/03
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: B8
Lab Code: K2302808-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	30.7		
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.70	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	8.5		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.28	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.29		
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	49.5		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.24		
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.38		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	1.93		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302808
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: B9
Lab Code: K2302808-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	18.7		
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.31	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	6.7		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.25	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.24		
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.05		
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.10	B	
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.04		
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	0.52	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.: NA
Date Collected: 04/10/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Date Received: 04/15/03
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: B10
Lab Code: K2302808-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	18.3		
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.59	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	5.8		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	U	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.19	B	
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.12	B	
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	0.49	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.: NA
Date Collected: 04/10/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Date Received: 04/15/03
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: CT6-7
Lab Code: K2302808-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	9.5	B	
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.83	B	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	8.0		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.38	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	1.92		
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.11		
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.60		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.03	B	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	3.18		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302808
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: CT8-9
Lab Code: K2302808-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	10.9		
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	1.06		
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	3.9		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.31	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.81		
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.06		
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.52		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.03	B	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	2.14		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Date Received:
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2302808-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	10.0	6.0	10	5/7/03	5/8/03	9.8	B	
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.20	U	
Arsenic	7062	1.0	0.5	2	5/12/03	5/14/03	0.5	U	
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.34	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.02	U	
Iron	7381	10.0	10.0	10	5/7/03	5/14/03	10.0	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.08	U	
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.00	0.40	1	4/25/03	5/2/03	0.40	U	

% Solids: 0.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	200	40.0	100	25.0	25.2	101	24.8	99	200.8
Antimony	50.0	10.6	106	25.0	24.9	100	25.2	101	200.8
Arsenic	5.0	4.87	97	5.0	5.18	104	5.44	109	7062
Cadmium	25.0	24.9	100	25.0	25.1	100	25.7	103	200.8
Chromium	20.0	19.7	99	25.0	25.0	100	24.8	99	200.8
Copper	25.0	24.2	97	25.0	24.5	98	24.6	98	200.8
Iron	12.5	12.4	99	15.0	16.4	109	10.4	104	7381
Lead	50.0	48.2	96	25.0	25.1	100	26.1	104	200.8
Mercury	5.0	5.40	108	5.0	5.20	104	5.20	104	7470A
Nickel	50.0	48.4	97	25.0	24.6	98	24.4	98	200.8
Silver	25.0	24.8	99	25.0	25.1	100	25.4	102	200.8
Zinc	50.0	49.0	98	25.0	24.8	99	24.8	99	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	Method
Aluminum				25.0	25.2	101	25.7	103	200.8
Antimony				25.0	25.0	100	25.4	102	200.8
Arsenic				5.0	5.22	104	5.12	102	7062
Cadmium				25.0	24.8	99	25.5	102	200.8
Chromium				25.0	23.9	96	25.1	100	200.8
Copper				25.0	23.9	96	24.5	98	200.8
Iron				10.0	9.84	98	10.1	101	7381
Lead				25.0	25.2	101	26.3	105	200.8
Mercury				5.0	5.44	109			7470A
Nickel				25.0	23.8	95	24.2	97	200.8
Silver				25.0	24.7	99	25.3	101	200.8
Zinc				25.0	23.9	96	24.4	98	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				5.0	4.95	99	5.00	100	7062
Iron				10.0	10.1	100			7381

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	Method
Arsenic				5.0	4.97	99			7062

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				2.0	2.01	101		
Antimony				0.05	0.07	136		
Arsenic	0.50	0.4	78					
Cadmium				0.50	0.46	92		
Chromium				2.0	2.03	102		
Copper				1.0	1.05	105		
Iron	5.0	6.8	136					
Lead				0.20	0.22	108		
Mercury	0.20	0.17	83					
Nickel				2.0	2.21	111		
Silver				0.20	0.18	92		
Zinc				5.0	4.66	93		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	0.6	U	0.6	U	0.6	U	0.6	U					200.8
Antimony	0.03	B	0.02	B	0.02	U	0.02	U					200.8
Arsenic	0.3	U	0.3	U	0.4	B	0.3	B					7062
Cadmium	0.06	U	0.06	U	0.06	U	0.06	U					200.8
Chromium	0.40	U	0.40	U	0.40	U	0.40	U					200.8
Copper	0.10	U	0.10	U	0.10	U	0.10	U					200.8
Iron	1.0	U	1.0	U	1.0	U	1.0	U					7381
Lead	0.20	U	0.20	U	0.20	U	0.20	U					200.8
Mercury	0.10	U	0.10	U	0.10	U	0.10	U					7470A
Nickel	0.40	U	0.40	U	0.40	U	0.40	U					200.8
Silver	0.07	U	0.07	U	0.07	U	0.07	U					200.8
Zinc	2.00	U	2.00	U	2.00	U	2.00	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum			0.6	U									200.8
Antimony			0.02	U									200.8
Arsenic			0.3	U	0.3	U	0.3	U					7062
Cadmium			0.06	U									200.8
Chromium			0.40	U									200.8
Copper			0.10	U									200.8
Iron			1.0	U	1.0	U							7381
Lead			0.20	U									200.8
Nickel			0.40	U									200.8
Silver			0.07	U									200.8
Zinc			2.00	U									200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Arsenic			0.3	U									7062

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: CC03-4S
Lab Code: K2302808-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	103		10.7		100	92		200.8
Antimony	70 - 130	92.1		0.40	B	100	92		200.8
Arsenic	75 - 125	15.4		3.1		16.0	77		7062
Iron	75 - 125	1050		10.0	U	1000	105		7381
Mercury	74 - 120	0.90		0.10	U	1.00	90		7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: B7S
Lab Code: K2302808-004S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Cadmium	51 - 127	3.68		0.01	B	4.00	92		200.8
Chromium	48 - 136	4.66		0.53		4.00	103		200.8
Copper	47 - 113	5.05		1.79		4.00	82		200.8
Lead	61 - 120	3.81		0.06		4.00	94		200.8
Nickel	1 - 111	4.08		0.76		4.00	83		200.8
Silver	66 - 112	3.55		0.01	U	4.00	89		200.8
Zinc	36 - 143	5.49		2.41		4.00	77		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: B9S
Lab Code: K2302808-006S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	112		18.7		100	93		200.8
Antimony	70 - 130	89.4		0.31	B	100	89		200.8
Arsenic	75 - 125	20.0		6.7		16.0	83		7062
Iron	75 - 125	1060		10.0	U	1000	106		7381
Mercury	74 - 120	0.91		0.10	U	1.00	91		7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: CC01-2D
Lab Code: K2302808-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Cadmium		0.01	U	0.01	U			200.8
Chromium		0.09	B	0.09	B	1		200.8
Copper		0.20	B	0.22		9		200.8
Lead		0.04	U	0.04	U			200.8
Nickel		0.37		0.33		12		200.8
Silver		0.01	U	0.01	U			200.8
Zinc		0.55	B	0.54	B	0		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302808
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: CC03-4D
Lab Code: K2302808-002D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		10.7		15.0		33		200.8
Antimony		0.40	B	0.37	B	5		200.8
Arsenic		3.1		3.5		12		7062
Iron		10.0	U	10.0	U			7381
Mercury		0.10	U	0.10	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation/NAVY Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name: B9D Lab Code: K2302808-006D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		18.7		17.3		8		200.8
Antimony		0.31	B	0.31	B	2		200.8
Arsenic	20	6.7		7.7		14		7062
Iron		10.0	U	10.3		200.0		7381
Mercury		0.10	U	0.10	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 7 -
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits		Solid (mg/kg) %R
Aluminum	100	95.7	96						
Antimony	100	85.2	85						
Arsenic	16.0	14.2	89						
Cadmium	4.00	4.14	104						
Chromium	4.00	4.24	106						
Copper	4.00	3.86	96						
Iron	2500	2600	104						
Lead	4.00	4.02	101						
Mercury	5.00	4.95	99						
Nickel	4.00	3.86	97						
Silver	4.00	3.90	97						
Zinc	4.00	4.12	103						

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.20	0.10	7470A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Cadmium	111		0.20	0.06	200.8
Chromium	52		2.00	0.40	200.8
Copper	65		1.00	0.10	200.8
Lead	208		0.20	0.20	200.8
Nickel	60		1.00	0.40	200.8
Silver	107		0.20	0.07	200.8
Zinc	66		5.00	2.00	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	27		1.0	0.6	200.8
Antimony	123		0.10	0.02	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: Varian-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	193.60		0.5	0.3	7062

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: Varian-5 (GFAA) AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Iron	259.90	BZ	1.0	1.0	7381

Comments

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Cadmium	15.00	1000.0	200.8
Chromium	15.00	1000.0	200.8
Copper	15.00	400.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	700.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	700.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	15.00	300.0	200.8
Antimony	15.00	600.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: AA

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302808-007	5/12/03	EPA 3010A	50	50
K2302808-004	5/12/03	EPA 3010A	50	50
K2302808-005	5/12/03	EPA 3010A	50	50
K2302808-006	5/12/03	EPA 3010A	50	50
K2302808-006D	5/12/03	EPA 3010A	50	50
K2302808-006S	5/12/03	EPA 3010A	50	50
K2302808-001	5/12/03	EPA 3010A	50	50
K2302808-002	5/12/03	EPA 3010A	50	50
K2302808-002D	5/12/03	EPA 3010A	50	50
K2302808-002S	5/12/03	EPA 3010A	50	50
K2302808-003	5/12/03	EPA 3010A	50	50
K2302808-008	5/12/03	EPA 3010A	50	50
K2302808-009	5/12/03	EPA 3010A	50	50
LCSW	5/12/03	EPA 3010A	50	50
K2302808-MB	5/12/03	EPA 3010A	50	50
K2302808-007	4/24/03	METHOD	20	20
K2302808-004	4/24/03	METHOD	20	20
K2302808-005	4/24/03	METHOD	20	20
K2302808-006	4/24/03	METHOD	20	20
K2302808-006D	4/24/03	METHOD	20	20
K2302808-006S	4/24/03	METHOD	20	20
K2302808-001	4/24/03	METHOD	20	20
K2302808-002	4/24/03	METHOD	20	20
K2302808-002D	4/24/03	METHOD	20	20
K2302808-002S	4/24/03	METHOD	20	20
K2302808-003	4/24/03	METHOD	20	20
K2302808-008	4/24/03	METHOD	20	20
K2302808-009	4/24/03	METHOD	20	20
LCSW	4/24/03	METHOD	20	20
K2302808-MB	4/24/03	METHOD	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: F

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302808-007	5/7/03	CLAA	50	50
K2302808-004	5/7/03	CLAA	50	50
K2302808-005	5/7/03	CLAA	50	50
K2302808-006	5/7/03	CLAA	50	50
K2302808-006D	5/7/03	CLAA	50	50
K2302808-006S	5/7/03	CLAA	50	50
K2302808-001	5/7/03	CLAA	50	50
K2302808-002	5/7/03	CLAA	50	50
K2302808-002D	5/7/03	CLAA	50	50
K2302808-002S	5/7/03	CLAA	50	50
K2302808-003	5/7/03	CLAA	50	50
K2302808-008	5/7/03	CLAA	50	50
K2302808-009	5/7/03	CLAA	50	50
LCSW	5/7/03	CLAA	50	50
K2302808-MB	5/7/03	CLAA	50	50

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302808-007	5/7/03	CLFAA	20	20
K2302808-004	5/7/03	CLFAA	20	20
K2302808-005	5/7/03	CLFAA	20	20
K2302808-006	5/7/03	CLFAA	20	20
K2302808-006D	5/7/03	CLFAA	20	20
K2302808-006S	5/7/03	CLFAA	20	20
K2302808-001	5/7/03	CLFAA	20	20
K2302808-002	5/7/03	CLFAA	20	20
K2302808-002D	5/7/03	CLFAA	20	20
K2302808-002S	5/7/03	CLFAA	20	20
K2302808-003	5/7/03	CLFAA	20	20
K2302808-008	5/7/03	CLFAA	20	20
K2302808-009	5/7/03	CLFAA	20	20
LCSW	5/7/03	CLFAA	20	20
K2302808-MB	5/7/03	CLFAA	20	20
K2302808-007	4/25/03	RED PPTN	500	100
K2302808-004	4/25/03	RED PPTN	500	100
K2302808-004S	4/25/03	RED PPTN	500	100
K2302808-005	4/25/03	RED PPTN	500	100
K2302808-006	4/25/03	RED PPTN	500	100
K2302808-001	4/25/03	RED PPTN	500	100
K2302808-001D	4/25/03	RED PPTN	500	100
K2302808-002	4/25/03	RED PPTN	500	100
K2302808-003	4/25/03	RED PPTN	500	100
K2302808-008	4/25/03	RED PPTN	500	100
K2302808-009	4/25/03	RED PPTN	500	100
LCSW	4/25/03	RED PPTN	500	100
K2302808-MB	4/25/03	RED PPTN	500	100

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	14:04																									
S0.5	1.00	14:08																									
S1	1.00	14:12																									
S5	1.00	14:16																									
S7.5	1.00	14:20				X																					
S10	1.00	14:24																									
ICV	1.00	14:28				X																					
ICB	1.00	14:32				X																					
CCV1	1.00	14:36				X																					
CCB1	1.00	14:40				X																					
CRI	1.00	14:44				X																					
ZZZZZZ	2.00	14:48																									
ZZZZZZ	2.00	14:52																									
ZZZZZZ	10.00	14:56																									
ZZZZZZ	10.00	15:00																									
ZZZZZZ	10.00	15:04																									
ZZZZZZ	10.00	15:08																									
ZZZZZZ	10.00	15:12																									
ZZZZZZ	10.00	15:16																									
CCV2	1.00	15:20				X																					
CCB2	1.00	15:24				X																					
ZZZZZZ	1.00	15:28																									
ZZZZZZ	2.00	15:32																									
ZZZZZZ	10.00	15:36																									
ZZZZZZ	20.00	15:40																									
ZZZZZZ	2.00	15:44																									
ZZZZZZ	10.00	15:48																									
ZZZZZZ	10.00	15:52																									
ZZZZZZ	2.00	15:56																									
K2302808-MB	2.00	16:00				X																					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
LCSW	2.00	16:04				X																					
ZZZZZZ	10.00	16:08																									
CCV3	1.00	16:12				X																					
CCB3	1.00	16:16				X																					
ZZZZZZ	10.00	16:20																									
ZZZZZZ	10.00	16:24																									
ZZZZZZ	2.00	16:28																									
ZZZZZZ	2.00	16:32																									
ZZZZZZ	2.00	16:36																									
ZZZZZZ	2.00	16:40																									
ZZZZZZ	10.00	16:44																									
ZZZZZZ	2.00	16:48																									
ZZZZZZ	2.00	16:52																									
ZZZZZZ	2.00	16:56																									
CCV4	1.00	17:00				X																					
CCB4	1.00	17:04				X																					
ZZZZZZ	1.00	17:08																									
ZZZZZZ	1.00	17:12																									
CCV5	1.00	17:16				X																					
CCB5	1.00	17:20				X																					
K2302808-001	2.00	17:24				X																					
K2302808-002	2.00	17:28				X																					
K2302808-002D	2.00	17:32				X																					
K2302808-002S	2.00	17:36				X																					
K2302808-003	2.00	17:40				X																					
K2302808-004	2.00	17:44				X																					
K2302808-005	2.00	17:48				X																					
K2302808-006	2.00	17:52				X																					
K2302808-006D	2.00	17:56				X																					
K2302808-006S	4.00	18:00				X																					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV6	1.00	18:04				X																					
CCB6	1.00	18:08				X																					
K2302808-007	2.00	18:12				X																					
K2302808-008	2.00	18:16				X																					
K2302808-009	2.00	18:20				X																					
CCV7	1.00	18:24				X																					
CCB7	1.00	18:28				X																					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-5 (GFAA) Method: F

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	10:04												X													
S5	1.00	10:08												X													
S10	1.00	10:12												X													
S15	1.00	10:16												X													
S20	1.00	10:20												X													
ICV	1.00	10:24												X													
ICB	1.00	10:28												X													
CCV1	1.00	10:32												X													
CCB1	1.00	10:36												X													
ZZZZZZ	1.00	10:40																									
ZZZZZZ	1.00	10:44																									
CCV2	1.00	10:48												X													
CCB2	1.00	10:52												X													
CRI	1.00	10:56												X													
ZZZZZZ	10.00	11:00																									
ZZZZZZ	200.00	11:04																									
ZZZZZZ	10.00	11:08																									
ZZZZZZ	10.00	11:12																									
ZZZZZZ	10.00	11:16																									
ZZZZZZ	100.00	11:20																									
ZZZZZZ	10.00	11:24																									
CCV3	1.00	11:28												X													
CCB3	1.00	11:32												X													
ZZZZZZ	1.00	11:36																									
ZZZZZZ	1.00	11:40																									
ZZZZZZ	10.00	11:44																									
ZZZZZZ	1.00	11:48																									
K2302808-MB	10.00	11:52												X													
LCSW	200.00	11:56												X													
K2302808-001	10.00	12:00												X													

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Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-5 (GFAA) Method: F

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302808-001A	10.00	12:04	-9999											X													
K2302808-002	10.00	12:08												X													
K2302808-002D	10.00	12:12												X													
ZK2302808-002S	10.00	12:16																									
K2302808-002S	100.00	12:20												X													
CCV4	1.00	12:24												X													
CCB4	1.00	12:28												X													
ZK2302808-003	10.00	12:32																									
K2302808-004	10.00	12:36												X													
K2302808-005	10.00	12:40												X													
K2302808-006	10.00	12:44												X													
K2302808-006D	10.00	12:48												X													
K2302808-006S	100.00	12:52												X													
K2302808-007	10.00	12:56												X													
K2302808-008	10.00	13:00												X													
K2302808-009	10.00	13:04												X													
K2302808-003	10.00	13:08												X													
CCV5	1.00	13:12												X													
CCB5	1.00	13:16												X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	11:49																X									
STANDARD #1	1.00	11:51																X									
STANDARD #2	1.00	11:53																X									
STANDARD #3	1.00	11:54																X									
STANDARD #4	1.00	11:56																X									
STANDARD #5	1.00	11:57																X									
ICV	1.00	11:59																X									
ICB	1.00	12:01																X									
CCV1	1.00	12:02																X									
CCB1	1.00	12:04																X									
CRA	1.00	12:05																X									
K2302808-MB	1.00	12:07																X									
LCSW	1.00	12:09																X									
K2302808-001	1.00	12:10																X									
K2302808-002	1.00	12:12																X									
K2302808-002D	1.00	12:13																X									
K2302808-002S	1.00	12:15																X									
K2302808-003	1.00	12:17																X									
K2302808-004	1.00	12:18																X									
K2302808-005	1.00	12:20																X									
CCV2	1.00	12:22																X									
CCB2	1.00	12:23																X									
K2302808-006	1.00	12:25																X									
K2302808-006D	1.00	12:26																X									
K2302808-006S	1.00	12:28																X									
K2302808-007	1.00	12:30																X									
K2302808-008	1.00	12:31																X									
K2302808-009	1.00	12:33																X									
ZZZZZZ	1.00	12:34																									
ZZZZZZ	1.00	12:36																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	12:38																									
ZZZZZZ	1.00	12:39																									
CCV3	1.00	12:41																X									
CCB3	1.00	12:43																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	13:14							X		X		X		X				X			X				X	
25 PPB STD. MS3-6-B	1.00	13:18							X		X		X		X				X			X				X	
ICV	1.00	13:23							X		X		X		X				X			X				X	
CCV1	1.00	13:27							X		X		X		X				X			X				X	
ICB1	1.00	13:32							X		X		X		X				X			X				X	
CCB1	1.00	13:35							X		X		X		X				X			X				X	
CRA	1.00	13:38							X		X		X		X				X			X				X	
K2302808-MB	1.00	13:43							X		X		X		X				X			X				X	
LCSW	1.00	13:47							X		X		X		X				X			X				X	
K2302808-001	1.00	13:51							X		X		X		X				X			X				X	
K2302808-001D	1.00	13:53							X		X		X		X				X			X				X	
K2302808-002	1.00	13:56							X		X		X		X				X			X				X	
K2302808-003	1.00	13:59							X		X		X		X				X			X				X	
K2302808-004	1.00	14:02							X		X		X		X				X			X				X	
K2302808-004S	1.00	14:04							X		X		X		X				X			X				X	
K2302808-005	1.00	14:08							X		X		X		X				X			X				X	
CCV2	1.00	14:11							X		X		X		X				X			X				X	
CCB2	1.00	14:16							X		X		X		X				X			X				X	
K2302808-006	1.00	14:19							X		X		X		X				X			X				X	
K2302808-007	1.00	14:24							X		X		X		X				X			X				X	
K2302808-008	1.00	14:27							X		X		X		X				X			X				X	
K2302808-009	1.00	14:29							X		X		X		X				X			X				X	
ZZZZZZ	1.00	14:33																									
ZZZZZZ	1.00	14:36																									
ZZZZZZ	1.00	14:39																									
ZZZZZZ	1.00	14:42																									
ZZZZZZ	1.00	14:45																									
ZZZZZZ	1.00	14:47																									
CCV3	1.00	14:51							X		X		X		X				X			X				X	
CCB3	1.00	14:59							X		X		X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	15:02																									
ZZZZZZ	1.00	15:05																									
ZZZZZZ	1.00	15:08																									
ZZZZZZ	1.00	15:11																									
ZZZZZZ	1.00	15:13																									
ZZZZZZ	1.00	15:16																									
CCV4	1.00	15:19							X		X		X		X				X			X				X	
CCB4	1.00	15:25							X		X		X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	11:37		X	X																						
S25	1.00	11:39		X	X																						
ICV	1.00	11:40		X	X																						
ICV	5.00	11:42		X	X																						
CCV1	1.00	11:43		X	X																						
ICB	1.00	11:47		X	X																						
CCB1	1.00	11:49		X	X																						
CRA	1.00	11:50		X	X																						
K2302808-MB	10.00	11:52		X	X																						
LCSW	10.00	11:53		X	X																						
K2302808-002	10.00	11:56		X	X																						
K2302808-002D	10.00	11:57		X	X																						
K2302808-002S	10.00	11:58		X	X																						
K2302808-006	10.00	12:01		X	X																						
K2302808-006D	10.00	12:02		X	X																						
K2302808-006S	10.00	12:04		X	X																						
CCV2	1.00	12:06		X	X																						
CCB2	1.00	12:11		X	X																						
K2302808-001	10.00	12:13		X	X																						
K2302808-003	10.00	12:14		X	X																						
K2302808-004	10.00	12:16		X	X																						
K2302808-005	10.00	12:17		X	X																						
K2302808-007	10.00	12:19		X	X																						
K2302808-008	10.00	12:20		X	X																						
K2302808-009	10.00	12:21		X	X																						
ZZZZZZ	10.00	12:23																									
ZZZZZZ	10.00	12:24																									
CCV3	1.00	12:25		X	X																						
CCB3	1.00	12:30		X	X																						
ZZZZZZ	10.00	12:32																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302808

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	10.00	12:33																									
ZZZZZZ	10.00	12:35																									
ZZZZZZ	10.00	12:36																									
ZZZZZZ	10.00	12:38																									
ZZZZZZ	10.00	12:39																									
ZZZZZZ	10.00	12:45																									
ZZZZZZ	10.00	12:46																									
CCV4	1.00	12:48		X	X																						
CCB4	1.00	12:53		X	X																						

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Form XIV - IN

Organotins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
CC01-2	K2302808-001	04/10/2003	04/15/2003
CC03-4	K2302808-002	04/10/2003	04/15/2003
CC05-6	K2302808-003	04/10/2003	04/15/2003
B7	K2302808-004	04/10/2003	04/15/2003
B8	K2302808-005	04/10/2003	04/15/2003
B9	K2302808-006	04/10/2003	04/15/2003
B10	K2302808-007	04/10/2003	04/15/2003
CT6-7	K2302808-008	04/10/2003	04/15/2003
CT8-9	K2302808-009	04/10/2003	04/15/2003
CC03-4MS	KWG0305222-1	04/10/2003	04/15/2003
CC03-4DMS	KWG0305222-2	04/10/2003	04/15/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Darryl Coulombe

Name: Darryl Coulombe

Date: 02 May 2003

Title: Scientist

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC01-2	**Units:**	ug/L
Lab Code:	K2302808-001	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	73	41-128	04/26/03	Acceptable

Comments:

00077

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC03-4	**Units:**	ug/L
Lab Code:	K2302808-002	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	113	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CC05-6	**Units:**	ug/L
Lab Code:	K2302808-003	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	B7	**Units:**	ug/L
Lab Code:	K2302808-004	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	B8	**Units:**	ug/L
Lab Code:	K2302808-005	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	41-128	04/26/03	Acceptable

Comments:

00081

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	B9	**Units:**	ug/L
Lab Code:	K2302808-006	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	100	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	B10	**Units:**	ug/L
Lab Code:	K2302808-007	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	41-128	04/26/03	Acceptable

Comments:

00083

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CT6-7	**Units:**	ug/L
Lab Code:	K2302808-008	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	86	41-128	04/26/03	Acceptable

Comments:

00084

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	CT8-9	**Units:**	ug/L
Lab Code:	K2302808-009	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	41-128	04/26/03	Acceptable

Comments:

00085

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305222-4	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	97	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Water

Service Request: K2302808

Surrogate Recovery Summary
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
CC01-2	K2302808-001	73
CC03-4	K2302808-002	113
CC05-6	K2302808-003	94
B7	K2302808-004	69
B8	K2302808-005	102
B9	K2302808-006	100
B10	K2302808-007	94
CT6-7	K2302808-008	86
CT8-9	K2302808-009	94
Method Blank	KWG0305222-4	97
CC03-4MS	KWG0305222-1	107
CC03-4DMS	KWG0305222-2	99
Lab Control Sample	KWG0305222-3	91

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 41-128

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	CC03-4	**Units:**	ug/L
Lab Code:	K2302808-002	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305222

		CC03-4MS KWG0305222-1 Matrix Spike			CC03-4DMS KWG0305222-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	0.480	1.00	48	0.429	1.00	43	10-110	11	30
Tri-n-butyltin	ND	0.693	1.00	69	0.650	1.00	65	37-138	6	30
Di-n-butyltin	ND	0.523	1.00	52	0.490	1.00	49	29-124	6	30
n-Butyltin	ND	0.821	1.00	82	0.803	1.00	80	10-139	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00088

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	EPA 3520	**Units:**	ug/L
Analysis Method:	Krone	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0305222

	Lab Control Sample KWG0305222-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	0.236	0.500	47	21-115
Tri-n-butyltin	0.311	0.500	62	22-157
Di-n-butyltin	0.217	0.500	43	19-149
n-Butyltin	0.404	0.500	81	23-150

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00089

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003
		Time Analyzed:	07:29

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\042503\0425F040.D
Lab Code:	KWG0305222-4	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305222

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305222-3	J:\GC11\DATA\042503\0425F041.D	04/26/03	07:47
CC01-2	K2302808-001	J:\GC11\DATA\042503\0425F054.D	04/26/03	11:42
CC03-4	K2302808-002	J:\GC11\DATA\042503\0425F055.D	04/26/03	12:00
CC03-4MS	KWG0305222-1	J:\GC11\DATA\042503\0425F058.D	04/26/03	12:54
CC03-4DMS	KWG0305222-2	J:\GC11\DATA\042503\0425F059.D	04/26/03	13:12
CC05-6	K2302808-003	J:\GC11\DATA\042503\0425F060.D	04/26/03	13:30
B7	K2302808-004	J:\GC11\DATA\042503\0425F061.D	04/26/03	13:47
B8	K2302808-005	J:\GC11\DATA\042503\0425F062.D	04/26/03	14:05
B9	K2302808-006	J:\GC11\DATA\042503\0425F063.D	04/26/03	14:23
B10	K2302808-007	J:\GC11\DATA\042503\0425F064.D	04/26/03	14:41
CT6-7	K2302808-008	J:\GC11\DATA\042503\0425F065.D	04/26/03	14:59
CT8-9	K2302808-009	J:\GC11\DATA\042503\0425F066.D	04/26/03	15:17

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003
		Time Analyzed:	07:47

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\042503\0425F041.D
Lab Code:	KWG0305222-3	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305222

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305222-4	J:\GC11\DATA\042503\0425F040.D	04/26/03	07:29
CC01-2	K2302808-001	J:\GC11\DATA\042503\0425F054.D	04/26/03	11:42
CC03-4	K2302808-002	J:\GC11\DATA\042503\0425F055.D	04/26/03	12:00
CC03-4MS	KWG0305222-1	J:\GC11\DATA\042503\0425F058.D	04/26/03	12:54
CC03-4DMS	KWG0305222-2	J:\GC11\DATA\042503\0425F059.D	04/26/03	13:12
CC05-6	K2302808-003	J:\GC11\DATA\042503\0425F060.D	04/26/03	13:30
B7	K2302808-004	J:\GC11\DATA\042503\0425F061.D	04/26/03	13:47
B8	K2302808-005	J:\GC11\DATA\042503\0425F062.D	04/26/03	14:05
B9	K2302808-006	J:\GC11\DATA\042503\0425F063.D	04/26/03	14:23
B10	K2302808-007	J:\GC11\DATA\042503\0425F064.D	04/26/03	14:41
CT6-7	K2302808-008	J:\GC11\DATA\042503\0425F065.D	04/26/03	14:59
CT8-9	K2302808-009	J:\GC11\DATA\042503\0425F066.D	04/26/03	15:17

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D	D	J:\GC11\DATA\042503\0425F105.D
B	J:\GC11\DATA\042503\0425F103.D	E	J:\GC11\DATA\042503\0425F106.D
C	J:\GC11\DATA\042503\0425F104.D	F	J:\GC11\DATA\042503\0425F107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	669	B	50	620	C	100	626	D	500	576	E	1000	588
	F	2000	576												
Tri-n-butyltin	A	10	835	B	50	789	C	100	794	D	500	708	E	1000	729
	F	2000	704												
Di-n-butyltin	A	10	1090	B	50	1050	C	100	975	D	500	895	E	1000	923
	F	2000	895												
n-Butyltin	A	10	1580	B	50	1310	C	100	1350	D	500	1200	E	1000	1250
	F	2000	1210												
Tri-n-propyltin	A	11	562	B	54	569	C	110	595	D	540	539	E	1100	546
	F	2100	532												

Results flagged with an asterisk (*) indicate values outside control criteria.

00092

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.0		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	10.8		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

00093

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Calibration Date:**	04/25/2003
		Date Analyzed:	04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type:	External Standard	**Calibration ID:**	CAL2579
Analysis Method:	Krone	**Units:**	ng/ml
File ID:	J:\GC11\DATA\042503\0425F108.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	490	609	634	4	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	760	752	-1	NA	± 30 %	AverageRF
Di-n-butyltin	480	460	970	934	-4	NA	± 30 %	AverageRF
n-Butyltin	490	470	1320	1260	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00094

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D\0425R102.D	D	J:\GC11\DATA\042503\0425F105.D\0425R105.D
B	J:\GC11\DATA\042503\0425F103.D\0425R103.D	E	J:\GC11\DATA\042503\0425F106.D\0425R106.D
C	J:\GC11\DATA\042503\0425F104.D\0425R104.D	F	J:\GC11\DATA\042503\0425F107.D\0425R107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	352	B	50	317	C	100	328	D	500	311	E	1000	324
	F	2000	319												
Tri-n-butyltin	A	10	425	B	50	400	C	100	419	D	500	393	E	1000	406
	F	2000	389												
Di-n-butyltin	A	10	553	B	50	500	C	100	520	D	500	490	E	1000	510
	F	2000	485												
n-Butyltin	A	10	631	B	50	613	C	100	674	D	500	623	E	1000	648
	F	2000	615												
Tri-n-propyltin	A	11	296	B	54	289	C	110	290	D	540	280	E	1100	291
	F	2100	286												

Results flagged with an asterisk (*) indicate values outside control criteria.

00095

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.4		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.7		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	1.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

00096

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D\0425R108.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	325	326	0	NA	± 30 %	AverageRF
Tri-n-butyltin	480	450	405	378	-7	NA	± 30 %	AverageRF
Di-n-butyltin	480	450	510	479	-6	NA	± 30 %	AverageRF
n-Butyltin	490	490	634	634	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00097

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F031.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	609	588	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	717	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	874	-10	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1160	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	510	557	534	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00098

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F031.D\0425R031.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	325	337	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	405	426	5	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	510	536	5	NA	± 25 %	AverageRF
n-Butyltin	500	540	634	688	9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	560	289	305	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00099

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F045.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	609	536	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	760	679	-11	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	866	-11	NA	± 25 %	AverageRF
n-Butyltin	500	430	1320	1130	-14	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	557	497	-11	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00100

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F045.D\0425R045.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	325	339	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	405	430	6	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	510	545	7	NA	± 25 %	AverageRF
n-Butyltin	500	550	634	696	10	NA	± 25 %	AverageRF
Tri-n-propyltin	540	570	289	306	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00101

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F057.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	555	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	714	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	460	970	890	-8	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1170	-11	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	537	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00102

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F057.D\0425R057.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	550	325	356	10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	550	405	447	10	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	510	550	8	NA	± 25 %	AverageRF
n-Butyltin	500	550	634	698	10	NA	± 25 %	AverageRF
Tri-n-propyltin	540	580	289	316	9	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00103

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
		Analysis Lot:	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F073.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	565	-7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	707	-7	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	970	906	-7	NA	± 25 %	AverageRF
n-Butyltin	500	460	1320	1200	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	557	524	-6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00104

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
		Analysis Lot:	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F073.D\0425R073.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	550	325	356	9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	560	405	452	11	NA	± 25 %	AverageRF
Di-n-butyltin	500	550	510	559	10	NA	± 25 %	AverageRF
n-Butyltin	500	570	634	720	14	NA	± 25 %	AverageRF
Tri-n-propyltin	540	600	289	324	12	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00105

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	Instrument Blank	KWG0305835-1	4/25/2003	19:53		4/25/2003	20:05
0425F002.D	Continuing Calibration Verification	KWG0305835-20	4/25/2003	20:10		4/25/2003	20:22
0425F003.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:28		4/25/2003	20:40
0425F004.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:46		4/25/2003	20:58
0425F005.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:04		4/25/2003	21:16
0425F006.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:22		4/25/2003	21:34
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:40		4/25/2003	21:52
0425F008.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:57		4/25/2003	22:09
0425F009.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:15		4/25/2003	22:27
0425F010.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:33		4/25/2003	22:45
0425F011.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:51		4/25/2003	23:03
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:09		4/25/2003	23:21
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:27		4/25/2003	23:39
0425F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:02		4/26/2003	00:14
0425F016.D	Instrument Blank	KWG0305835-3	4/26/2003	00:20		4/26/2003	00:32
0425F017.D	Continuing Calibration Verification	KWG0305835-4	4/26/2003	00:38		4/26/2003	00:50
0425F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:55		4/26/2003	01:07
0425F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:13		4/26/2003	01:25
0425F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:31		4/26/2003	01:43
0425F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:49		4/26/2003	02:01
0425F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:07		4/26/2003	02:19
0425F023.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:24		4/26/2003	02:36
0425F024.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:42		4/26/2003	02:54
0425F025.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:00		4/26/2003	03:12
0425F026.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:18		4/26/2003	03:30
0425F027.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:36		4/26/2003	03:48
0425F028.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:54		4/26/2003	04:06
0425F029.D	ZZZZZZ	ZZZZZZ	4/26/2003	04:12		4/26/2003	04:24
0425F030.D	Instrument Blank	KWG0305835-5	4/26/2003	04:30		4/26/2003	04:42
0425F031.D	Continuing Calibration Verification	KWG0305835-6	4/26/2003	04:48		4/26/2003	05:00
0425F032.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:06		4/26/2003	05:18
0425F034.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:42		4/26/2003	05:54
0425F040.D	Method Blank	KWG0305222-4	4/26/2003	07:29		4/26/2003	07:41
0425F041.D	Lab Control Sample	KWG0305222-3	4/26/2003	07:47		4/26/2003	07:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00106

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F042.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:05		4/26/2003	08:17
0425F043.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:24		4/26/2003	08:36
0425F044.D	Instrument Blank	KWG0305835-7	4/26/2003	08:41		4/26/2003	08:53
0425F045.D	Continuing Calibration Verification	KWG0305835-8	4/26/2003	09:00		4/26/2003	09:12
0425F046.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:18		4/26/2003	09:30
0425F047.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:36		4/26/2003	09:48
0425F048.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:54		4/26/2003	10:06
0425F049.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:12		4/26/2003	10:24
0425F050.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:30		4/26/2003	10:42
0425F051.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:48		4/26/2003	11:00
0425F052.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:06		4/26/2003	11:18
0425F053.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:24		4/26/2003	11:36
0425F054.D	CC01-2	K2302808-001	4/26/2003	11:42		4/26/2003	11:54
0425F055.D	CC03-4	K2302808-002	4/26/2003	12:00		4/26/2003	12:12
0425F056.D	Instrument Blank	KWG0305835-9	4/26/2003	12:18		4/26/2003	12:30
0425F057.D	Continuing Calibration Verification	KWG0305835-10	4/26/2003	12:36		4/26/2003	12:48
0425F058.D	CC03-4MS	KWG0305222-1	4/26/2003	12:54		4/26/2003	13:06
0425F059.D	CC03-4DMS	KWG0305222-2	4/26/2003	13:12		4/26/2003	13:24
0425F060.D	CC05-6	K2302808-003	4/26/2003	13:30		4/26/2003	13:42
0425F061.D	B7	K2302808-004	4/26/2003	13:47		4/26/2003	13:59
0425F062.D	B8	K2302808-005	4/26/2003	14:05		4/26/2003	14:17
0425F063.D	B9	K2302808-006	4/26/2003	14:23		4/26/2003	14:35
0425F064.D	B10	K2302808-007	4/26/2003	14:41		4/26/2003	14:53
0425F065.D	CT6-7	K2302808-008	4/26/2003	14:59		4/26/2003	15:11
0425F066.D	CT8-9	K2302808-009	4/26/2003	15:17		4/26/2003	15:29
0425F072.D	Instrument Blank	KWG0305835-11	4/26/2003	17:05		4/26/2003	17:17
0425F073.D	Continuing Calibration Verification	KWG0305835-12	4/26/2003	17:23		4/26/2003	17:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00107

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Water

Service Request: K2302808
Date Extracted: 04/16/2003

Extraction Prep Log
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Extraction Lot: KWG0305222
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
CC01-2	K2302808-001	04/10/03	04/15/03	500ml	0.5ml	NA	
CC03-4	K2302808-002	04/10/03	04/15/03	500ml	0.5ml	NA	
CC05-6	K2302808-003	04/10/03	04/15/03	500ml	0.5ml	NA	
B7	K2302808-004	04/10/03	04/15/03	500ml	0.5ml	NA	
B8	K2302808-005	04/10/03	04/15/03	500ml	0.5ml	NA	
B9	K2302808-006	04/10/03	04/15/03	500ml	0.5ml	NA	
B10	K2302808-007	04/10/03	04/15/03	500ml	0.5ml	NA	
CT6-7	K2302808-008	04/10/03	04/15/03	500ml	0.5ml	NA	
CT8-9	K2302808-009	04/10/03	04/15/03	500ml	0.5ml	NA	
Method Blank	KWG0305222-4	NA	NA	500ml	0.5ml	NA	
CC03-4MS	KWG0305222-1	04/10/03	04/15/03	250ml	0.5ml	NA	
CC03-4DMS	KWG0305222-2	04/10/03	04/15/03	250ml	0.5ml	NA	
Lab Control Sample	KWG0305222-3	NA	NA	500ml	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00108

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
CC01-2	K2302808-001	04/10/2003	04/15/2003
CC03-4	K2302808-002	04/10/2003	04/15/2003
CC05-6	K2302808-003	04/10/2003	04/15/2003
B7	K2302808-004	04/10/2003	04/15/2003
B8	K2302808-005	04/10/2003	04/15/2003
B9	K2302808-006	04/10/2003	04/15/2003
B10	K2302808-007	04/10/2003	04/15/2003
CT6-7	K2302808-008	04/10/2003	04/15/2003
CT8-9	K2302808-009	04/10/2003	04/15/2003
B9MS	KWG0305247-1	04/10/2003	04/15/2003
B9DMS	KWG0305247-2	04/10/2003	04/15/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 5/8/03

Title: SVM Supervisor

00111

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC01-2	**Units:**	ug/L
Lab Code:	K2302808-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.018**	J	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0040**	J	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	56	34-115	04/26/03	Acceptable
Fluorene-d10	67	43-96	04/26/03	Acceptable
Fluoranthene-d10	80	20-131	04/26/03	Acceptable
Terphenyl-d14	77	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC03-4	**Units:**	ug/L
Lab Code:	K2302808-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.016**	J	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0043**	J	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	**0.0029**	J	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	81	34-115	04/26/03	Acceptable
Fluorene-d10	83	43-96	04/26/03	Acceptable
Fluoranthene-d10	89	20-131	04/26/03	Acceptable
Terphenyl-d14	92	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CC05-6	**Units:**	ug/L
Lab Code:	K2302808-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.022**		0.022	0.0035	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0068**	J	0.022	0.0030	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.022	0.0020	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	**0.0037**	J	0.022	0.0022	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.022	0.0078	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.022	0.0029	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	**0.0060**	J	0.022	0.0036	1	04/17/03	04/26/03	KWG0305247	
Anthracene	**0.0016**	J	0.022	0.0012	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	**0.0039**	J	0.022	0.0027	1	04/17/03	04/26/03	KWG0305247	
Pyrene	**0.0028**	J	0.022	0.0025	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.022	0.0024	1	04/17/03	04/26/03	KWG0305247	
Chrysene	**0.0021**	J	0.022	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.022	0.0022	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	**0.0026**	J	0.022	0.0015	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.022	0.0018	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.022	0.0023	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.022	0.0018	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.022	0.0041	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	65	34-115	04/26/03	Acceptable
Fluorene-d10	68	43-96	04/26/03	Acceptable
Fluoranthene-d10	59	20-131	04/26/03	Acceptable
Terphenyl-d14	70	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B7	**Units:**	ug/L
Lab Code:	K2302808-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.013**	J	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	**0.0030**	J	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	**0.0019**	J	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	**0.022**	JD	0.097	0.0097	5	04/17/03	05/06/03	KWG0305247	
Benzo(k)fluoranthene	**0.016**	JD	0.097	0.0067	5	04/17/03	05/06/03	KWG0305247	
Benzo(a)pyrene	**0.017**	JD	0.097	0.0079	5	04/17/03	05/06/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	**0.029**	JD	0.097	0.011	5	04/17/03	05/06/03	KWG0305247	
Dibenz(a,h)anthracene	**0.024**	JD	0.097	0.0081	5	04/17/03	05/06/03	KWG0305247	
Benzo(g,h,i)perylene	**0.033**	JD	0.097	0.019	5	04/17/03	05/06/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	65	34-115	04/26/03	Acceptable
Fluorene-d10	74	43-96	04/26/03	Acceptable
Fluoranthene-d10	82	20-131	04/26/03	Acceptable
Terphenyl-d14	86	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B8	**Units:**	ug/L
Lab Code:	K2302808-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.024**		0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0048**	J	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	**0.0022**	J	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	62	34-115	04/26/03	Acceptable
Fluorene-d10	75	43-96	04/26/03	Acceptable
Fluoranthene-d10	84	20-131	04/26/03	Acceptable
Terphenyl-d14	98	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B9	**Units:**	ug/L
Lab Code:	K2302808-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.019**	J	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0033**	J	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	**0.0020**	J	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	75	34-115	04/26/03	Acceptable
Fluorene-d10	76	43-96	04/26/03	Acceptable
Fluoranthene-d10	81	20-131	04/26/03	Acceptable
Terphenyl-d14	90	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	B10	**Units:**	ug/L
Lab Code:	K2302808-007	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.018**	J	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	**0.0034**	J	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	**0.0025**	J	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	**0.0020**	J	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	**0.0023**	J	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	**0.0021**	J	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	**0.011**	J	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	**0.013**	J	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	**0.015**	J	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	76	34-115	04/25/03	Acceptable
Fluorene-d10	78	43-96	04/25/03	Acceptable
Fluoranthene-d10	90	20-131	04/25/03	Acceptable
Terphenyl-d14	105	13-146	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CT6-7	**Units:**	ug/L
Lab Code:	K2302808-008	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.019**	J	0.022	0.0035	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0064**	J	0.022	0.0030	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.022	0.0020	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	**0.0035**	J	0.022	0.0022	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.022	0.0078	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.022	0.0029	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	**0.0049**	J	0.022	0.0036	1	04/17/03	04/26/03	KWG0305247	
Anthracene	**0.0014**	J	0.022	0.0012	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	**0.0031**	J	0.022	0.0027	1	04/17/03	04/26/03	KWG0305247	
Pyrene	**0.0029**	J	0.022	0.0025	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.022	0.0024	1	04/17/03	04/26/03	KWG0305247	
Chrysene	**0.0025**	J	0.022	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.022	0.0022	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	**0.0038**	J	0.022	0.0015	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.022	0.0018	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.022	0.0023	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.022	0.0018	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.022	0.0041	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	40	34-115	04/26/03	Acceptable
Fluorene-d10	48	43-96	04/26/03	Acceptable
Fluoranthene-d10	42	20-131	04/26/03	Acceptable
Terphenyl-d14	47	13-146	04/26/03	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	CT8-9	**Units:**	ug/L
Lab Code:	K2302808-009	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.019**	J	0.021	0.0033	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0046**	J	0.021	0.0028	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	**0.0026**	J	0.021	0.0019	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	ND	U	0.021	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.021	0.0072	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.021	0.0027	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.021	0.0033	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.021	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.021	0.0025	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.021	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.021	0.0022	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.021	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.021	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.021	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.021	0.0017	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.021	0.0022	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.021	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.021	0.0038	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	67	34-115	04/26/03	Acceptable
Fluorene-d10	68	43-96	04/26/03	Acceptable
Fluoranthene-d10	42	20-131	04/26/03	Acceptable
Terphenyl-d14	62	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Water

Service Request: K2302808
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
Lab Code: KWG0305247-5

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	72	34-115	04/25/03	Acceptable
Fluorene-d10	73	43-96	04/25/03	Acceptable
Fluoranthene-d10	82	20-131	04/25/03	Acceptable
Terphenyl-d14	103	13-146	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Water

Service Request: K2302808

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
CC01-2	K2302808-001	56	67	80	77
CC03-4	K2302808-002	81	83	89	92
CC05-6	K2302808-003	65	68	59	70
B7	K2302808-004	65	74	82	86
B8	K2302808-005	62	75	84	98
B9	K2302808-006	75	76	81	90
B10	K2302808-007	76	78	90	105
CT6-7	K2302808-008	40	48	42	47
CT8-9	K2302808-009	67	68	42	62
Method Blank	KWG0305247-5	72	73	82	103
B9MS	KWG0305247-1	77	78	90	85
B9DMS	KWG0305247-2	81	81	91	88
Lab Control Sample	KWG0305247-3	71	72	85	81

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/24/2003
		Time Analyzed:	10:54

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042403\0424F005.D	**Lab Code:**	KWG0305843-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305843
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	313,512	5.16	175,776	7.45	298,264	10.25
	Upper Limit ==>	627,024	5.66	351,552	7.95	596,528	10.75
	Lower Limit ==>	156,756	4.66	87,888	6.95	149,132	9.75
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Lab Control Sample	KWG0305247-3	303,015	5.16	163,116	7.45	253,947	10.25

Results flagged with an asterisk (*) indicate values outside control criteria.

00123

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/24/2003
		Time Analyzed:	10:54

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042403\0424F005.D	**Lab Code:**	KWG0305843-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305843
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	326,718	16.27	202,359	19.94
	Upper Limit ==>	653,436	16.77	404,718	20.44
	Lower Limit ==>	163,359	15.77	101,180	19.44
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Lab Control Sample	KWG0305247-3	283,753	16.27	156,587	19.94

Results flagged with an asterisk (*) indicate values outside control criteria.

00124

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/25/2003
		Time Analyzed:	11:00

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042503\0425F002.D	**Lab Code:**	KWG0305844-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305844
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	314,412	5.16	173,855	7.45	295,386	10.25
	Upper Limit ==>	628,824	5.66	347,710	7.95	590,772	10.75
	Lower Limit ==>	157,206	4.66	86,928	6.95	147,693	9.75
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305247-5	385,674	5.15	198,262	7.45	295,805	10.25
B9MS	KWG0305247-1	279,142	5.15	149,631	7.45	230,121	10.25
B9DMS	KWG0305247-2	284,008	5.16	150,531	7.45	224,187	10.25
B10	K2302808-007	272,567	5.16	141,951	7.45	207,886	10.24

Results flagged with an asterisk (*) indicate values outside control criteria.

00125

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/25/2003
		Time Analyzed:	11:00

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042503\0425F002.D	**Lab Code:**	KWG0305844-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305844
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	309,497	16.27	169,264	19.94
	Upper Limit ==>	618,994	16.77	338,528	20.44
	Lower Limit ==>	154,749	15.77	84,632	19.44
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305247-5	259,445	16.27	107,602	19.94
B9MS	KWG0305247-1	243,494	16.27	127,865	19.93
B9DMS	KWG0305247-2	232,965	16.27	119,663	19.93
B10	K2302808-007	190,867	16.27	90,564	19.93

Results flagged with an asterisk (*) indicate values outside control criteria.

00126

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003
		Time Analyzed:	10:14

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042603\0426F005.D	**Lab Code:**	KWG0305889-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305889
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	344,329	5.11	184,026	7.39	299,232	10.17
	Upper Limit ==>	688,658	5.61	368,052	7.89	598,464	10.67
	Lower Limit ==>	172,165	4.61	92,013	6.89	149,616	9.67
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
B9	K2302808-006	355,944	5.12	179,576	7.39	270,505	10.17
CT6-7	K2302808-008	324,331	5.11	170,006	7.39	259,730	10.17
CT8-9	K2302808-009	369,318	5.11	196,699	7.38	302,512	10.17
CC01-2	K2302808-001	326,508	5.11	167,861	7.39	254,583	10.17
CC03-4	K2302808-002	309,118	5.12	159,591	7.39	236,708	10.17
CC05-6	K2302808-003	297,998	5.11	152,740	7.38	232,084	10.17
B7	K2302808-004	316,465	5.12	153,948	7.39	234,204	10.17
B8	K2302808-005	359,489	5.11	181,973	7.39	278,849	10.17

Results flagged with an asterisk (*) indicate values outside control criteria.

00127

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	04/26/2003
		Time Analyzed:	10:14

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042603\0426F005.D	**Lab Code:**	KWG0305889-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305889
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	297,807	16.18	167,782	19.80
	Upper Limit ==>	595,614	16.68	335,564	20.30
	Lower Limit ==>	148,904	15.68	83,891	19.30
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
B9	K2302808-006	264,696	16.18	146,307	19.79
CT6-7	K2302808-008	264,557	16.17	160,349	19.79
CT8-9	K2302808-009	329,001	16.18	204,977	19.79
CC01-2	K2302808-001	246,517	16.18	140,980	19.79
CC03-4	K2302808-002	233,816	16.18	131,947	19.79
CC05-6	K2302808-003	237,324	16.18	137,610	19.79
B7	K2302808-004	220,716	16.18	29,859*	19.79
B8	K2302808-005	262,127	16.18	126,150	19.79

Results flagged with an asterisk (*) indicate values outside control criteria.

00128

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	05/06/2003
		Time Analyzed:	09:36

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\050603\0506F002.D	**Lab Code:**	KWG0306379-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306379
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	266,162	5.06	142,385	7.30	218,973	10.07
	Upper Limit ==>	532,324	5.56	284,770	7.80	437,946	10.57
	Lower Limit ==>	133,081	4.56	71,193	6.80	109,487	9.57
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
B7DL	K2302808-004	281,376	5.06	143,531	7.30	214,868	10.08

Results flagged with an asterisk (*) indicate values outside control criteria.

00129

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Analyzed:**	05/06/2003
		Time Analyzed:	09:36

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\050603\0506F002.D	**Lab Code:**	KWG0306379-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0306379
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	228,263	16.07	128,703	19.62
	Upper Limit ==>	456,526	16.57	257,406	20.12
	Lower Limit ==>	114,132	15.57	64,352	19.12
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
B7DL	K2302808-004	189,753	16.07	70,592	19.62

Results flagged with an asterisk (*) indicate values outside control criteria.

00130

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/25/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	B9	**Units:**	ug/L
Lab Code:	K2302808-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305247

		B9MS KWG0305247-1 Matrix Spike			B9DMS KWG0305247-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	0.019	7.82	10.0	78	8.42	10.0	84	30-97	7	30
2-Methylnaphthalene	0.0033	7.95	10.0	80	8.55	10.0	85	33-96	7	30
Acenaphthylene	ND	7.93	10.0	79	8.61	10.0	86	39-104	8	30
Acenaphthene	0.0020	8.07	10.0	81	8.71	10.0	87	34-99	8	30
Dibenzofuran	ND	8.25	10.0	83	8.79	10.0	88	16-110	6	30
Fluorene	ND	8.50	10.0	85	9.05	10.0	91	36-105	6	30
Phenanthrene	ND	8.47	10.0	85	8.88	10.0	89	31-106	5	30
Anthracene	ND	7.91	10.0	79	8.11	10.0	81	24-111	3	30
Fluoranthene	ND	9.39	10.0	94	9.63	10.0	96	16-121	3	30
Pyrene	ND	8.64	10.0	86	9.02	10.0	90	11-125	4	30
Benz(a)anthracene	ND	6.46	10.0	65	7.36	10.0	74	14-125	13	30
Chrysene	ND	7.48	10.0	75	8.44	10.0	84	16-117	12	30
Benzo(b)fluoranthene	ND	5.23	10.0	52	6.38	10.0	64	16-124	20	30
Benzo(k)fluoranthene	ND	6.56	10.0	66	7.67	10.0	77	14-127	16	30
Benzo(a)pyrene	ND	5.80	10.0	58	6.83	10.0	68	19-126	16	30
Indeno(1,2,3-cd)pyrene	ND	5.30	10.0	53	5.98	10.0	60	10-137	12	30
Dibenz(a,h)anthracene	ND	5.96	10.0	60	6.40	10.0	64	16-124	7	30
Benzo(g,h,i)perylene	ND	6.53	10.0	65	7.26	10.0	73	15-119	11	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/24/2003

Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3520C	**Units:**	ug/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0305247

	Lab Control Sample KWG0305247-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	3.70	5.00	74	37-95
2-Methylnaphthalene	3.64	5.00	73	26-110
Acenaphthylene	3.89	5.00	78	44-103
Acenaphthene	3.84	5.00	77	41-97
Dibenzofuran	4.02	5.00	80	17-130
Fluorene	4.23	5.00	85	46-102
Phenanthrene	4.27	5.00	85	47-101
Anthracene	3.95	5.00	79	45-104
Fluoranthene	4.83	5.00	97	51-112
Pyrene	4.20	5.00	84	45-111
Benz(a)anthracene	4.06	5.00	81	50-111
Chrysene	4.52	5.00	90	51-108
Benzo(b)fluoranthene	4.23	5.00	85	54-114
Benzo(k)fluoranthene	4.51	5.00	90	51-117
Benzo(a)pyrene	4.54	5.00	91	51-119
Indeno(1,2,3-cd)pyrene	4.40	5.00	88	43-127
Dibenz(a,h)anthracene	4.63	5.00	93	47-119
Benzo(g,h,i)perylene	4.86	5.00	97	44-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00132

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/25/2003
		Time Analyzed:	12:49

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\042503\0425F005.D
Lab Code:	KWG0305247-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305247

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305247-3	J:\MS11\DATA\042403\0424F020.D	04/24/03	20:02
B9MS	KWG0305247-1	J:\MS11\DATA\042503\0425F018.D	04/25/03	20:38
B9DMS	KWG0305247-2	J:\MS11\DATA\042503\0425F019.D	04/25/03	21:13
B10	K2302808-007	J:\MS11\DATA\042503\0425F021.D	04/25/03	22:25
B9	K2302808-006	J:\MS11\DATA\042603\0426F014.D	04/26/03	15:36
CT6-7	K2302808-008	J:\MS11\DATA\042603\0426F015.D	04/26/03	16:11
CT8-9	K2302808-009	J:\MS11\DATA\042603\0426F016.D	04/26/03	16:47
CC01-2	K2302808-001	J:\MS11\DATA\042603\0426F017.D	04/26/03	17:23
CC03-4	K2302808-002	J:\MS11\DATA\042603\0426F018.D	04/26/03	17:58
CC05-6	K2302808-003	J:\MS11\DATA\042603\0426F019.D	04/26/03	18:34
B7	K2302808-004	J:\MS11\DATA\042603\0426F020.D	04/26/03	19:10
B8	K2302808-005	J:\MS11\DATA\042603\0426F021.D	04/26/03	19:46
B7	K2302808-004	J:\MS11\DATA\050603\0506F004.D	05/06/03	10:51

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302808
Project:	Canaveral Harbor 103 Evaluation/CPA	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/24/2003
		Time Analyzed:	20:02

Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**File ID:**	J:\MS11\DATA\042403\0424F020.D
Lab Code:	KWG0305247-3	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305247

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305247-5	J:\MS11\DATA\042503\0425F005.D	04/25/03	12:49
B9MS	KWG0305247-1	J:\MS11\DATA\042503\0425F018.D	04/25/03	20:38
B9DMS	KWG0305247-2	J:\MS11\DATA\042503\0425F019.D	04/25/03	21:13
B10	K2302808-007	J:\MS11\DATA\042503\0425F021.D	04/25/03	22:25
B9	K2302808-006	J:\MS11\DATA\042603\0426F014.D	04/26/03	15:36
CT6-7	K2302808-008	J:\MS11\DATA\042603\0426F015.D	04/26/03	16:11
CT8-9	K2302808-009	J:\MS11\DATA\042603\0426F016.D	04/26/03	16:47
CC01-2	K2302808-001	J:\MS11\DATA\042603\0426F017.D	04/26/03	17:23
CC03-4	K2302808-002	J:\MS11\DATA\042603\0426F018.D	04/26/03	17:58
CC05-6	K2302808-003	J:\MS11\DATA\042603\0426F019.D	04/26/03	18:34
B7	K2302808-004	J:\MS11\DATA\042603\0426F020.D	04/26/03	19:10
B8	K2302808-005	J:\MS11\DATA\042603\0426F021.D	04/26/03	19:46
B7	K2302808-004	J:\MS11\DATA\050603\0506F004.D	05/06/03	10:51

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 04/24/2003
Time Analyzed: 10:31

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042403\0424F004.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305843

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.4	429312	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.4	487808	PASS
70	69	0	2	0.5	2593	PASS
127	198	10	80	44.5	650688	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	64.8	1460736	PASS
199	198	5	9	6.8	99936	PASS
275	198	10	60	31.7	463296	PASS
365	442	1	50	2.3	52696	PASS
441	443	0	100	72.6	331904	PASS
442	442	100	100	100.0	2255360	PASS
443	442	15	24	20.3	457216	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305843-2	J:\MS11\DATA\042403\0424F005.D	04/24/2003	10:54	
Lab Control Sample	KWG0305247-3	J:\MS11\DATA\042403\0424F020.D	04/24/2003	20:02	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 04/25/2003
Time Analyzed: 10:38

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042503\0425F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305844

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	26.5	397824	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	31.2	467200	PASS
70	69	0	2	0.5	2334	PASS
127	198	10	80	42.0	630016	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	56.8	1498624	PASS
199	198	5	9	6.7	100888	PASS
275	198	10	60	33.7	505728	PASS
365	442	1	50	2.3	61808	PASS
441	443	0	100	74.8	393664	PASS
442	442	100	100	100.0	2640384	PASS
443	442	15	24	19.9	526208	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305844-2	J:\MS11\DATA\042503\0425F002.D	04/25/2003	11:00	
Method Blank	KWG0305247-5	J:\MS11\DATA\042503\0425F005.D	04/25/2003	12:49	
B9MS	KWG0305247-1	J:\MS11\DATA\042503\0425F018.D	04/25/2003	20:38	
B9DMS	KWG0305247-2	J:\MS11\DATA\042503\0425F019.D	04/25/2003	21:13	
B10	K2302808-007	J:\MS11\DATA\042503\0425F021.D	04/25/2003	22:25	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 04/26/2003
Time Analyzed: 09:53

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042603\0426F004.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305889

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.5	417600	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	34.2	483520	PASS
70	69	0	2	0.5	2547	PASS
127	198	10	80	43.8	619648	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	63.7	1414144	PASS
199	198	5	9	6.7	95416	PASS
275	198	10	60	32.2	455936	PASS
365	442	1	50	2.3	51776	PASS
441	443	0	100	74.7	331392	PASS
442	442	100	100	100.0	2219008	PASS
443	442	15	24	20.0	443520	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305889-2	J:\MS11\DATA\042603\0426F005.D	04/26/2003	10:14	
B9	K2302808-006	J:\MS11\DATA\042603\0426F014.D	04/26/2003	15:36	
CT6-7	K2302808-008	J:\MS11\DATA\042603\0426F015.D	04/26/2003	16:11	
CT8-9	K2302808-009	J:\MS11\DATA\042603\0426F016.D	04/26/2003	16:47	
CC01-2	K2302808-001	J:\MS11\DATA\042603\0426F017.D	04/26/2003	17:23	
CC03-4	K2302808-002	J:\MS11\DATA\042603\0426F018.D	04/26/2003	17:58	
CC05-6	K2302808-003	J:\MS11\DATA\042603\0426F019.D	04/26/2003	18:34	
B7	K2302808-004	J:\MS11\DATA\042603\0426F020.D	04/26/2003	19:10	
B8	K2302808-005	J:\MS11\DATA\042603\0426F021.D	04/26/2003	19:46	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 05/06/2003
Time Analyzed: 09:12

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\050603\0506F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0306379

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	27.4	385216	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	32.1	451904	PASS
70	69	0	2	0.5	2264	PASS
127	198	10	80	42.8	601792	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	64.7	1406464	PASS
199	198	5	9	6.9	97088	PASS
275	198	10	60	31.9	448320	PASS
365	442	1	50	2.4	52176	PASS
441	443	0	100	73.0	318720	PASS
442	442	100	100	100.0	2172928	PASS
443	442	15	24	20.1	436480	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0306379-2	J:\MS11\DATA\050603\0506F002.D	05/06/2003	09:36	
B7	K2302808-004	J:\MS11\DATA\050603\0506F004.D	05/06/2003	10:51	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

00138

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00140

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00141

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302808
Project: Canaveral Harbor 103 Evaluation/CPA **Calibration Date:** 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533 **Column:** MS
Instrument ID: MS11

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00142

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 04/24/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305843
Units: ng/ml

File ID: J:\MS11\DATA\042403\0424F005.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.683	4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.80	3	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.61	7	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.30	6	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-6	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	1.09	1.06	-2	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.966	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.45	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1800	0.01	1.98	1.75	-12	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.26	-6	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.897	-1	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.01	0.952	0.976	3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.18	2	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.758	7	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.981	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	0.915	0.798	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 04/25/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305844
Units: ng/ml

File ID: J:\MS11\DATA\042503\0425F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.678	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.61	7	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.30	7	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.22	1	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.15	-10	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.964	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.46	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.85	-7	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.23	-8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.723	-20	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1600	0.01	0.952	0.784	-18	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1800	0.01	1.15	1.01	-12	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.751	6	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.985	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.831	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305889
Units: ng/ml

File ID: J:\MS11\DATA\042603\0426F005.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.08	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.670	2	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.60	6	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.28	5	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.09	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.18	-2	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.18	-8	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.967	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.50	-13	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.86	-6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.25	-7	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.737	-18	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1600	0.01	0.952	0.780	-18	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1700	0.01	1.15	0.991	-14	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.735	3	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.04	-1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.953	-6	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.837	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808
Date Analyzed: 05/06/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0306379
Units: ng/ml

File ID: J:\MS11\DATA\050603\0506F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2200	0.01	1.05	1.14	9	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2200	0.01	0.658	0.709	8	NA	± 20 %	AverageRF
Acenaphthylene	2000	2200	0.01	1.74	1.94	11	NA	± 20 %	AverageRF
Acenaphthene	2000	2200	0.01	1.09	1.23	12	NA	± 20 %	AverageRF
Dibenzofuran	2000	2300	0.01	1.50	1.72	15	NA	± 20 %	AverageRF
Fluorene	2000	2300	0.01	1.22	1.39	14	NA	± 20 %	AverageRF
Phenanthrene	2000	2200	0.01	1.17	1.27	8	NA	± 20 %	AverageRF
Anthracene	2000	2200	0.01	1.09	1.22	12	NA	± 20 %	AverageRF
Fluoranthene	2000	2300	0.01	1.20	1.39	15	NA	± 20 %	AverageRF
Pyrene	2000	2100	0.01	1.28	1.31	3	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	0.01	1.08	1.02	-5	NA	± 20 %	AverageRF
Chrysene	2000	2200	0.01	1.10	1.19	8	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1900	0.01	1.73	1.62	-6	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.98	2.17	10	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	0.01	1.34	1.42	6	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.902	0.872	-3	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.01	0.952	0.925	-3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.15	1.27	10	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.762	7	NA	± 20 %	AverageRF
Fluorene-d10	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	2100	0.01	1.01	1.07	6	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1900	0.01	0.915	0.876	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302808
Project: Canaveral Harbor 103 Evaluation/CPA

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0305843
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0424F004.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305843-1	4/24/2003	10:31		4/24/2003	10:44
0424F005.D	Continuing Calibration Verification	KWG0305843-2	4/24/2003	10:54		4/24/2003	11:20
0424F007.D	ZZZZZZ	ZZZZZZ	4/24/2003	12:09		4/24/2003	12:35
0424F008.D	ZZZZZZ	ZZZZZZ	4/24/2003	12:46		4/24/2003	13:12
0424F009.D	ZZZZZZ	ZZZZZZ	4/24/2003	13:23		4/24/2003	13:49
0424F010.D	ZZZZZZ	ZZZZZZ	4/24/2003	14:00		4/24/2003	14:26
0424F011.D	ZZZZZZ	ZZZZZZ	4/24/2003	14:37		4/24/2003	15:03
0424F012.D	ZZZZZZ	ZZZZZZ	4/24/2003	15:13		4/24/2003	15:39
0424F013.D	ZZZZZZ	ZZZZZZ	4/24/2003	15:50		4/24/2003	16:16
0424F014.D	ZZZZZZ	ZZZZZZ	4/24/2003	16:26		4/24/2003	16:52
0424F015.D	ZZZZZZ	ZZZZZZ	4/24/2003	17:02		4/24/2003	17:28
0424F016.D	ZZZZZZ	ZZZZZZ	4/24/2003	17:38		4/24/2003	18:04
0424F017.D	ZZZZZZ	ZZZZZZ	4/24/2003	18:14		4/24/2003	18:40
0424F018.D	ZZZZZZ	ZZZZZZ	4/24/2003	18:50		4/24/2003	19:16
0424F020.D	Lab Control Sample	KWG0305247-3	4/24/2003	20:02		4/24/2003	20:28
0424F021.D	ZZZZZZ	ZZZZZZ	4/24/2003	20:38		4/24/2003	21:04
0424F022.D	ZZZZZZ	ZZZZZZ	4/24/2003	21:14		4/24/2003	21:40
0424F023.D	ZZZZZZ	ZZZZZZ	4/24/2003	21:50		4/24/2003	22:16
0424F024.D	ZZZZZZ	ZZZZZZ	4/24/2003	22:26		4/24/2003	22:52

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302808
Project: Canaveral Harbor 103 Evaluation/CPA

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0305844
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F018.D	B9MS	KWG0305247-1	4/25/2003	20:38		4/25/2003	21:04
0425F019.D	B9DMS	KWG0305247-2	4/25/2003	21:13		4/25/2003	21:39
0425F021.D	B10	K2302808-007	4/25/2003	22:25		4/25/2003	22:51
0425F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305844-1	4/25/2003	10:38		4/25/2003	10:51
0425F002.D	Continuing Calibration Verification	KWG0305844-2	4/25/2003	11:00		4/25/2003	11:26
0425F004.D	ZZZZZZ	ZZZZZZ	4/25/2003	12:13		4/25/2003	12:39
0425F005.D	Method Blank	KWG0305247-5	4/25/2003	12:49		4/25/2003	13:15
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	14:02		4/25/2003	14:28
0425F009.D	ZZZZZZ	ZZZZZZ	4/25/2003	15:15		4/25/2003	15:41
0425F010.D	ZZZZZZ	ZZZZZZ	4/25/2003	15:51		4/25/2003	16:17
0425F011.D	ZZZZZZ	ZZZZZZ	4/25/2003	16:27		4/25/2003	16:53
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	17:03		4/25/2003	17:29
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	17:39		4/25/2003	18:05
0425F014.D	ZZZZZZ	ZZZZZZ	4/25/2003	18:14		4/25/2003	18:40
0425F015.D	ZZZZZZ	ZZZZZZ	4/25/2003	18:50		4/25/2003	19:16
0425F016.D	ZZZZZZ	ZZZZZZ	4/25/2003	19:26		4/25/2003	19:52
0425F017.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:02		4/25/2003	20:28

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA

Service Request: K2302808

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305889
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0426F004.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305889-1	4/26/2003	09:53		4/26/2003	10:06
0426F005.D	Continuing Calibration Verification	KWG0305889-2	4/26/2003	10:14		4/26/2003	10:40
0426F007.D	Instrument Blank	KWG0305889-3	4/26/2003	11:26		4/26/2003	11:52
0426F008.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:02		4/26/2003	12:28
0426F010.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:13		4/26/2003	13:39
0426F011.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:49		4/26/2003	14:15
0426F012.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:25		4/26/2003	14:51
0426F013.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:00		4/26/2003	15:26
0426F014.D	B9	K2302808-006	4/26/2003	15:36		4/26/2003	16:02
0426F015.D	CT6-7	K2302808-008	4/26/2003	16:11		4/26/2003	16:37
0426F016.D	CT8-9	K2302808-009	4/26/2003	16:47		4/26/2003	17:13
0426F017.D	CC01-2	K2302808-001	4/26/2003	17:23		4/26/2003	17:49
0426F018.D	CC03-4	K2302808-002	4/26/2003	17:58		4/26/2003	18:24
0426F019.D	CC05-6	K2302808-003	4/26/2003	18:34		4/26/2003	19:00
0426F020.D	B7	K2302808-004	4/26/2003	19:10		4/26/2003	19:36
0426F021.D	B8	K2302808-005	4/26/2003	19:46		4/26/2003	20:12
0426F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	20:21		4/26/2003	20:47

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302808
Project: Canaveral Harbor 103 Evaluation/CPA

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0306379
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0506F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0306379-1	5/6/2003	09:12		5/6/2003	09:25
0506F002.D	Continuing Calibration Verification	KWG0306379-2	5/6/2003	09:36		5/6/2003	10:02
0506F003.D	Instrument Blank	KWG0306379-3	5/6/2003	10:14		5/6/2003	10:40
0506F004.D	B7	K2302808-004	5/6/2003	10:51		5/6/2003	11:17
0506F005.D	ZZZZZZ	ZZZZZZ	5/6/2003	11:28		5/6/2003	11:54
0506F006.D	ZZZZZZ	ZZZZZZ	5/6/2003	12:04		5/6/2003	12:30
0506F007.D	ZZZZZZ	ZZZZZZ	5/6/2003	12:41		5/6/2003	13:07
0506F008.D	ZZZZZZ	ZZZZZZ	5/6/2003	13:18		5/6/2003	13:44
0506F009.D	ZZZZZZ	ZZZZZZ	5/6/2003	13:54		5/6/2003	14:20
0506F010.D	ZZZZZZ	ZZZZZZ	5/6/2003	14:30		5/6/2003	14:56
0506F011.D	ZZZZZZ	ZZZZZZ	5/6/2003	15:07		5/6/2003	15:33
0506F012.D	ZZZZZZ	ZZZZZZ	5/6/2003	15:43		5/6/2003	16:09
0506F013.D	ZZZZZZ	ZZZZZZ	5/6/2003	16:20		5/6/2003	16:46
0506F014.D	ZZZZZZ	ZZZZZZ	5/6/2003	16:56		5/6/2003	17:22
0506F015.D	ZZZZZZ	ZZZZZZ	5/6/2003	17:33		5/6/2003	17:59
0506F016.D	ZZZZZZ	ZZZZZZ	5/6/2003	18:09		5/6/2003	18:35
0506F017.D	ZZZZZZ	ZZZZZZ	5/6/2003	18:44		5/6/2003	19:10
0506F018.D	ZZZZZZ	ZZZZZZ	5/6/2003	19:20		5/6/2003	19:46
0506F019.D	ZZZZZZ	ZZZZZZ	5/6/2003	19:56		5/6/2003	20:22
0506F020.D	ZZZZZZ	ZZZZZZ	5/6/2003	20:31		5/6/2003	20:57
0506F021.D	ZZZZZZ	ZZZZZZ	5/6/2003	21:07		5/6/2003	21:33

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/CPA
Sample Matrix: Water

Service Request: K2302808
Date Extracted: 04/17/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0305247
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
CC01-2	K2302808-001	04/10/03	04/15/03	1050ml	1ml	NA	
CC03-4	K2302808-002	04/10/03	04/15/03	1040ml	1ml	NA	
CC05-6	K2302808-003	04/10/03	04/15/03	910ml	1ml	NA	
B7DL	K2302808-004	04/10/03	04/15/03	1040ml	1ml	NA	
B7	K2302808-004	04/10/03	04/15/03	1040ml	1ml	NA	
B8	K2302808-005	04/10/03	04/15/03	1050ml	1ml	NA	
B9	K2302808-006	04/10/03	04/15/03	1010ml	1ml	NA	
B10	K2302808-007	04/10/03	04/15/03	1040ml	1ml	NA	
CT6-7	K2302808-008	04/10/03	04/15/03	910ml	1ml	NA	
CT8-9	K2302808-009	04/10/03	04/15/03	980ml	1ml	NA	
Method Blank	KWG0305247-5	NA	NA	1000ml	1ml	NA	
B9MS	KWG0305247-1	04/10/03	04/15/03	500ml	1ml	NA	
B9DMS	KWG0305247-2	04/10/03	04/15/03	500ml	1ml	NA	
Lab Control Sample	KWG0305247-3	NA	NA	1000ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00152

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 19, 2003 Service Request No: K2302688

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/COE Samples

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302688.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/dj

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Received:**	4/10/03
Sample Matrix:	Sediment		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Ten sediment samples were received for analysis at Columbia Analytical Services on 4/10/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Total Cyanide by EPA Method 9010:
The reporting limit is elevated for Total Cyanide in samples E-CH3-1 COE because the sample required dilution. The distillates contained a significant amount of carbonate from distillation of carbon dioxide from the bulk sediment sample. The carbonate prevented analysis of the distillate without dilution.

The Matrix Spike (MS) recovery of Total Cyanide for sample E-CH3-2 COE was outside control criteria because of matrix interference. The samples contained high levels of sulfide. Lead acetate scrubbers were used in the distillation, but did not provide adequate removal of the sulfide. As a result of the interference, the results for this analyte might contain a low bias. A Matrix Spike Duplicate (MSD) was also analyzed with the batch, but yielded similar results. No further corrective action was taken.

No other anomalies associated with the analysis of these samples were observed.

Total Metals

The control criteria for matrix spike recoveries of Aluminum and Iron for sample Batch QC (related ANAMAR sample) are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The matrix spike recovery of Antimony for sample Batch QC (related ANAMAR sample) was below the CAS control criterion. Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analyses. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. Since low recoveries result from a method defect and can be magnified by certain matrix components, no corrective action is appropriate other than using alternative procedures, which specifically target Antimony. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicate the analysis was in control.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 5/19/03

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of this sample were observed.

Organotin Compounds

Surrogate Exceptions:
The lower control criterion was exceeded for the following surrogate in Method Blank KWG0305086-4: Tri-n-propyltin. Since the problem indicates a potential low bias in the Method Blank, sample E-CH3-8-COE for Tri-n-butyltin was re-extracted and reanalyzed to confirm the detections of Butyltin. The Method Blank met control criteria for the reanalysis. Note the results for the field samples were comparable for both determinations, which indicates the problem with the initial analysis was restricted to the Method Blank. Therefore, the results from the original analysis are reported. The data is flagged to indicate the problem.

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) for the following analytes in the replicate matrix spike analyses of E-CH3-8COE was outside control criteria: n-Butyltin. In general, the RPD was relatively high for all spiked compounds, which indicates a low bias in the Matrix Spike (MS). All spike recoveries in the MS, Matrix Spike Duplicate (MSD), and associated Laboratory Control Sample (LCS) were within acceptance limits, indicating the analytical batch was in control. No further corrective action was appropriate.

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Surrogate Exceptions:
The CAS/Kelso control criterion was exceeded for the following surrogate in sample E-CH3-6 COE due to matrix interferences: Biphenyl-d10 (37% recovery versus a control limit of 39%). A re-extraction was performed past the recommended hold time and produced similar results, which confirmed the interference. Three other surrogates were evaluated with this analysis and all were within control criteria. The results of the original analysis are reported. No further corrective action was required.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 5/19/03

Chain of Custody Documentation

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
COE Samples

PPB: Please homogenize and elutriate samples

K2302688

	Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
1	✓E-CH3-1 COE	04/2/03	1112	Sediment	2 ~~1 Gallon~~ 16 oz Clear Glass	2	Per Contract		All containers = 16 oz wide mouth clear glass jars.
2	✓E-CH3-2 COE	04/2/03	1155	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
3	✓E-CH3-3 COE	04/2/03	1220	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
4	✓E-CH3-4 COE	04/2/03	1243	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
5	✓E-CH3-5 COE	04/2/03	1307	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		Note: Please add Total sulfides to the analysis requested in the contract.
6	✓E-CH3-6 COE	04/2/03	1336	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
7	✓E-CH3-7 COE	04/2/03	1401	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
8	✓E-CH3-8 COE	04/1/03	1250	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
9	E-CH3-18 COE	04/2/03	1220	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
10	RS-CH03-~~A~~ 1	04/3/03	1004	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		RS samples composited @ 4/9/03
	✓ RS-CH03-~~B~~ 4-p-03	04/3/03	1158	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
	~~Offshore Water~~	04/ /03		~~Water~~	1/2 Gallon Plastic		Per Contract		
	~~Basin Water~~	04/ /03		Water	1 Gallon Amber Glass		Per Contract		
		04/ /03					Per Contract		→ Total Sulfide (9030M)
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		

Note: Precleaned containers shipped by UPS from Columbia Analytical - Received 5/21/03 @ 1132 by Jeff

~~Precleaned~~ Containers Relinquished by: AC
Date: 4/9/03 Time: 1200

Received by: Brian A Wade
Date: 4/9/03 Time: 1200

Samples Relinquished by: Connie Steen
Date: 4/9/03 Time: 1500

Received by: Fran Adam
Date: 4/10/03 Time: 1030

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

COE

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

Cape Canaveral Samples							
SEDIMENTS/SOILS	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ALUMINUM - ICP - 6010	9	11	9	**29**	0.5 mg/kg	Columbia	
ANTIMONY - ICP/MS - 6020	9	11	9	**29**	0.3 mg/kg	Columbia	
ARSENIC	9	11	9	**29**	0.5 mg/kg	Columbia	
CADMIUM	9	11	9	**29**	0.1 mg/kg	Columbia	
CHROMIUM	9	11	9	**29**	0.2 mg/kg	Columbia	
COPPER	9	11	9	**29**	0.1 mg/kg	Columbia	
IRON - ICP - 6010	9	11	9	**29**	1.5 mg/kg	Columbia	
MERCURY - CVAAS	9	11	9	**29**	0.05 mg/kg	Columbia	
NICKEL ICP-MS - 6020	9	11	9	**29**	0.1 mg/kg	Columbia	
SILVER	9	11	9	**29**	0.1 mg/kg	Columbia	
ZINC	9	11	9	**29**	0.2 mg/kg	Columbia	
CYANIDE	0	11	9	**20**	1.0mg/kg	Columbia	
TOTAL AMMONIA	0	11	9	**20**	0.1 mg/kg	Columbia	
TOC	9	11	9	**29**	0.10%	Columbia	
OIL AND GREASE	0	11	9	**20**	1.0 ppm	Columbia	
PAH'S	9	11	9	**29**	0.02 mg/kg	Columbia	
ORGANOTIN	9	11	9	**29**	0.01 mg/kg	Columbia	
%SOLIDS	8	9	8	**25**	n/a	LAW	
GRAIN SIZE DIST.	8	9	8	**25**	n/a	LAW	
SPECIFIC GRAVITY	8	9	8	**25**	n/a	LAW	
ATTERBURG LIMITS	8	9	8	**25**	n/a	LAW	
SETTLING RATES	8	9	8	**25**	n/a	LAW	
10 DAY SEDIMENT BIOASSAY	8	2	9	**19**	n/a	ESE	
28 DAY SED. BIOACCUMULATION	8	2	9	**19**	n/a	ESE	
WATER/ELUTRIATE	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ANTIMONY	9	12	9	**30**	3.5 ug/l	Columbia	
ALUMINUM	9	2	0	**11**	0.5 ug/l	Columbia	Reference Station and control sediment elutriate need aluminum and iron
ARSENIC	9	12	9	**30**	1.0 ug/l	Columbia	
CADMIUM	9	12	9	**30**	0.5 ug/l	Columbia	
CHROMIUM	9	12	9	**30**	0.5 ug/l	Columbia	

6

COPPER	9	12	9	**30**	2.5 ug/l	Columbia	
LEAD	9	12	9	**30**	2.5 ug/l	Columbia	
IRON	9	0	0	**9**	0.5 ug/l	Columbia	
MERCURY	9	12	9	**30**	0.2 ug/l	Columbia	
NICKEL	9	12	9	**30**	0.2 ug/l	Columbia	
SILVER	9	12	9	**30**	1.0 ug/l	Columbia	
ZINC	9	12	9	**30**	1.5 ug/l	Columbia	
CYANIDE	0	12	9	**21**	1.0 ppm	Columbia	
TOTAL AMMONIA	0	12	9	**21**	0.10 ppm	Columbia	
TOC	9	12	9	**30**	0.10%	Columbia	
OIL AND GREASE	0	12	9	**21**	1.0 ppm	Columbia	
PAH's	9	12	9	**30**	0.02 ppm	Columbia	
ORGANOTIN	9	12	9	**30**	0.1 ppm	Columbia	
96-HR ELUTRIATE ACUTE BIOASSAY	9	2	9	**20**	n/a	ESE	

Sediments:
COE Samples: 8 sites, 1 dupe, 1 reference, 1 control sediment (Chem and Phys). (No Phys on control or duplicate sediment) = 11
NAVY Samples: 8 sites, 1 dupe (Chem, Phys, and Tox) Include Ref and Control on Tox) = 9 or (11 for Tox)
Port Authority:
4 Vibracore Samples (Chem, Phys, and Tox) = 4
6 Upland samples and one dupe to be combined into 4 samples (Chem, Phys, and Tox) = 4
2 Upland samples to be combined into 1 samples (Chem and Phys) = 1

Elutriates:
Same as above except for the COE Samples:
COE: 8 sites, 1 dupe, 1 reference, 1 control sediment elutriate, 1 site water = 12

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client ANAMAR Work Order K23 02688

Cooler received on 4/10/03 and opened on 4/10/03 by AP

1. Were custody seals on outside of cooler? — Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? ~~Y N~~
3. Is the shipper's airbill available and filed? If no, record airbill number: 1Z 36454801406138 53 Y N
4. COC #

Temperature of cooler(s) upon receipt:	0.6	0.7		
Temperature Blank:	N/P	0.2		

5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present Burlap
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103
Sample Matrix: Sediment

Service Request: K2302688

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	04/02/2003	04/10/2003	04/11/2003	36.3	
E-CH3-2 COE	K2302688-002	04/02/2003	04/10/2003	04/11/2003	39.4	
E-CH3-3 COE	K2302688-003	04/02/2003	04/10/2003	04/11/2003	30.8	
E-CH3-4 COE	K2302688-004	04/02/2003	04/10/2003	04/11/2003	30.2	
E-CH3-5 COE	K2302688-005	04/02/2003	04/10/2003	04/11/2003	37.2	
E-CH3-6 COE	K2302688-006	04/02/2003	04/10/2003	04/11/2003	55.4	
E-CH3-7 COE	K2302688-007	04/02/2003	04/10/2003	04/11/2003	30.0	
E-CH3-8 COE	K2302688-008	04/01/2003	04/10/2003	04/11/2003	55.7	
E-CH3-18 COE	K2302688-009	04/02/2003	04/10/2003	04/11/2003	36.3	
RS-CH03	K2302688-010	04/03/2003	04/10/2003	04/11/2003	63.2	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Analyzed:	04/11/2003

Duplicate Sample Summary

Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	WET
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
E-CH3-1 COE	K2302688-001	36.3	36.5	36.4	<1	

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1-3/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	0.05	0.02	1	NA	04/19/03	1.93	
E-CH3-2 COE	K2302688-002	0.05	0.02	1	NA	04/19/03	1.74	
E-CH3-3 COE	K2302688-003	0.05	0.02	1	NA	04/19/03	2.30	
E-CH3-4 COE	K2302688-004	0.05	0.02	1	NA	04/19/03	3.36	
E-CH3-5 COE	K2302688-005	0.05	0.02	1	NA	04/19/03	1.73	
E-CH3-6 COE	K2302688-006	0.05	0.02	1	NA	04/19/03	0.93	
E-CH3-7 COE	K2302688-007	0.05	0.02	1	NA	04/19/03	2.84	
E-CH3-8 COE	K2302688-008	0.05	0.02	1	NA	04/19/03	0.74	
E-CH3-18 COE	K2302688-009	0.05	0.02	1	NA	04/19/03	1.94	
RS-CH03	K2302688-010	0.05	0.02	1	NA	04/19/03	0.81	
Method Blank	K2302688-MB	0.05	0.02	1	NA	04/19/03	ND	

Approved By: _____ Date: 5/1/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1-3/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	0.05	0.02	1	NA	04/19/03	0.70	
E-CH3-2 COE	K2302688-002	0.05	0.02	1	NA	04/19/03	0.68	
E-CH3-3 COE	K2302688-003	0.05	0.02	1	NA	04/19/03	0.71	
E-CH3-4 COE	K2302688-004	0.05	0.02	1	NA	04/19/03	1.02	
E-CH3-5 COE	K2302688-005	0.05	0.02	1	NA	04/19/03	0.65	
E-CH3-6 COE	K2302688-006	0.05	0.02	1	NA	04/19/03	0.52	
E-CH3-7 COE	K2302688-007	0.05	0.02	1	NA	04/19/03	0.85	
E-CH3-8 COE	K2302688-008	0.05	0.02	1	NA	04/19/03	0.41	
E-CH3-18 COE	K2302688-009	0.05	0.02	1	NA	04/19/03	0.70	
RS-CH03	K2302688-010	0.05	0.02	1	NA	04/19/03	0.51	
Method Blank	K2302688-MB	0.05	0.02	1	NA	04/19/03	ND	

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/19/03

Duplicate Summary
Inorganic Parameters

Sample Name:	E-CH3-1 COE	Units:	PERCENT
Lab Code:	K2302688-001DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.05	1.93	1.84	1.89	5	

Approved By: MM Fitt Date: 5/1/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/19/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH3-1 COE	Units:	PERCENT
Lab Code:	K2302688-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.05	9.43	1.93	11.0	96	75-125	

Approved By: _____ Date: 5/1/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	04/19/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	PERCENT
Lab Code:	K2302688-LCS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.57	0.59	104	85-115	

Approved By: _____ Date: 5/1/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/19/03

Carbon, Total Organic
ASTM Method D4129-82M
Units: PERCENT

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	20.0	18.6	93
CCV 2 Result	20.0	19.5	98
CCV 3 Result	20.0	20.0	100

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND

Approved By: _____ Date: 5/15/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03

Ammonia as Nitrogen

Prep Method: NONE
Analysis Method: 350.1M
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	9	4	10	NA	04/15/03	142	
E-CH3-2 COE	K2302688-002	5	2	5	NA	04/15/03	103	
E-CH3-3 COE	K2302688-003	5	2	5	NA	04/15/03	116	
E-CH3-4 COE	K2302688-004	9	4	10	NA	04/15/03	226	
E-CH3-5 COE	K2302688-005	0.9	0.4	1	NA	04/15/03	15.7	
E-CH3-6 COE	K2302688-006	5	2	5	NA	04/15/03	45	
E-CH3-7 COE	K2302688-007	9	4	10	NA	04/15/03	241	
E-CH3-8 COE	K2302688-008	0.9	0.4	1	NA	04/15/03	15.7	
E-CH3-18 COE	K2302688-009	9	4	10	NA	04/15/03	150	
RS-CH03	K2302688-010	0.9	0.4	1	NA	04/15/03	7.8	
Method Blank	K2302688-MB	0.9	0.4	1	NA	04/15/03	ND	

M Modified for analysis of soil.
* Analysis was performed on a 2M KCl extract.

Approved By: _____ Date: 5/1/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1-3/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03

Ammonia as Nitrogen

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	350.1M	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	3	1	10	NA	04/15/03	51	
E-CH3-2 COE	K2302688-002	2	0.5	5	NA	04/15/03	41	
E-CH3-3 COE	K2302688-003	2	0.5	5	NA	04/15/03	36	
E-CH3-4 COE	K2302688-004	3	1	10	NA	04/15/03	68	
E-CH3-5 COE	K2302688-005	0.3	0.1	1	NA	04/15/03	5.8	
E-CH3-6 COE	K2302688-006	2	0.5	5	NA	04/15/03	25	
E-CH3-7 COE	K2302688-007	3	1	10	NA	04/15/03	72	
E-CH3-8 COE	K2302688-008	0.3	0.1	1	NA	04/15/03	8.7	
E-CH3-18 COE	K2302688-009	3	1	10	NA	04/15/03	54	
RS-CH03	K2302688-010	0.3	0.1	1	NA	04/15/03	4.9	
Method Blank	K2302688-MB	0.3	0.1	1	NA	04/15/03	ND	

M Modified for analysis of soil.
* Analysis was performed on a 2M KCl extract.

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/15/03

Duplicate Summary
Inorganic Parameters

Sample Name:	E-CH3-1 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-001DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	NONE	350.1M	9	142	142	142	< 1	

Approved By: _____ Date: 5/1/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/15/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH3-1 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1M	45	1350	142	1460	98	75-125	

Approved By: MJ Fitt Date: 5/1/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	04/15/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2302688-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1M	2.29	2.30	100	85-115	

Approved By: _____ Date: 5/1/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/15/03

Ammonia as Nitrogen
EPA Method 350.1M
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	2.00	2.00	100
CCV 3 Result	2.00	2.00	100
CCV 4 Result	2.00	1.98	99
CCV 5 Result	2.00	1.99	100

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND
CCB 4 Result	0.05	ND
CCB 5 Result	0.05	ND

Approved By: _____ Date: 5/1/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1-3/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03

Sulfide

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9030M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	320	200	20	NA	04/13/03	1050	
E-CH3-2 COE	K2302688-002	320	200	20	NA	04/13/03	1350	
E-CH3-3 COE	K2302688-003	320	200	20	NA	04/13/03	1470	
E-CH3-4 COE	K2302688-004	320	200	20	NA	04/13/03	1410	
E-CH3-5 COE	K2302688-005	32	20	2	NA	04/13/03	209	
E-CH3-6 COE	K2302688-006	320	200	20	NA	04/13/03	687	
E-CH3-7 COE	K2302688-007	80	50	5	NA	04/15/03	570	
E-CH3-8 COE	K2302688-008	80	50	5	NA	04/15/03	226	
E-CH3-18 COE	K2302688-009	160	100	10	NA	04/15/03	1060	
RS-CH03	K2302688-010	64	40	4	NA	04/15/03	106	
Method Blank	K2302688-MB	16	10	1	NA	04/13/03	ND	
Method Blank	K2302688-MB	16	10	1	NA	04/15/03	ND	

M Modified for analysis of soil.

Approved By: _____ Date: 5/1/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1-3/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03

Sulfide

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9030M	Basis:	WET
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	100	60	20	NA	04/13/03	383	
E-CH3-2 COE	K2302688-002	100	60	20	NA	04/13/03	533	
E-CH3-3 COE	K2302688-003	100	60	20	NA	04/13/03	452	
E-CH3-4 COE	K2302688-004	100	60	20	NA	04/13/03	427	
E-CH3-5 COE	K2302688-005	10	6	2	NA	04/13/03	78	
E-CH3-6 COE	K2302688-006	100	60	20	NA	04/13/03	381	
E-CH3-7 COE	K2302688-007	25	15	5	NA	04/15/03	171	
E-CH3-8 COE	K2302688-008	25	15	5	NA	04/15/03	126	
E-CH3-18 COE	K2302688-009	50	30	10	NA	04/15/03	384	
RS-CH03	K2302688-010	20	12	4	NA	04/15/03	67	
Method Blank	K2302688-MB	5	3	1	NA	04/13/03	ND	
Method Blank	K2302688-MB	5	3	1	NA	04/15/03	ND	

M Modified for analysis of soil.

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/03/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/13/03

Duplicate Summary
Inorganic Parameters

Sample Name:	RS-CH03	Units:	mg/Kg (ppm)
Lab Code:	K2302688-010DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide	NONE	9030M	32	106	122	114	14	

Approved By: _____ Date: 5/1/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/03/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/13/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	RS-CH03	Units:	mg/Kg (ppm)
Lab Code:	K2302688-010MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide	NONE	9030M	1280	3090	106	3940	124	60-130	

Approved By: _____ Date: 5/1/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	4/13.15/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2302688-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide	NONE	9030M	0.95	0.89	94	60-130	
Sulfide	NONE	9030M	0.96	1.18	123	60-130	

Approved By: _____ Date: 5/1/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	4/13,15/03

Sulfide
EPA Method 9030M
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	0.95	0.96	101
CCV 3 Result	0.95	0.96	101
CCV 1 Result	0.96	0.96	100
CCV 2 Result	0.96	0.96	100

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	0.1	ND
CCB 3 Result	0.1	ND
CCB 1 Result	0.1	ND
CCB 2 Result	0.1	ND

Approved By: MJ Fitt Date: 5/1/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 4/1-3/03
Date Received: 04/10/03

Cyanide, Total

Prep Method: NONE
Analysis Method: 9010B
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	1	0.6	2	NA	04/14/03	ND	i
E-CH3-2 COE	K2302688-002	0.5	0.3	1	NA	04/15/03	ND	
E-CH3-3 COE	K2302688-003	0.5	0.3	1	NA	04/15/03	ND	
E-CH3-4 COE	K2302688-004	0.5	0.3	1	NA	04/15/03	ND	
E-CH3-5 COE	K2302688-005	0.5	0.3	1	NA	04/15/03	ND	
E-CH3-6 COE	K2302688-006	0.5	0.3	1	NA	04/15/03	ND	
E-CH3-7 COE	K2302688-007	0.5	0.3	1	NA	04/15/03	ND	
E-CH3-8 COE	K2302688-008	0.5	0.3	1	NA	04/15/03	ND	
E-CH3-18 COE	K2302688-009	0.5	0.3	1	NA	04/15/03	ND	
RS-CH03	K2302688-010	0.5	0.3	1	NA	04/15/03	ND	
Method Blank	K2302688-MB	0.5	0.3	1	NA	04/14/03	ND	
Method Blank	K2302688-MB	0.5	0.3	1	NA	04/15/03	ND	

Approved By: MA Fitt Date: 5/1/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1-3/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03

Cyanide, Total

Prep Method: NONE
Analysis Method: 9010B
Test Notes:

Units: mg/Kg (ppm)
Basis: WET

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-1 COE	K2302688-001	0.4	0.08	2	NA	04/14/03	ND	i
E-CH3-2 COE	K2302688-002	0.2	0.04	1	NA	04/15/03	ND	
E-CH3-3 COE	K2302688-003	0.2	0.04	1	NA	04/15/03	ND	
E-CH3-4 COE	K2302688-004	0.2	0.04	1	NA	04/15/03	ND	
E-CH3-5 COE	K2302688-005	0.2	0.04	1	NA	04/15/03	ND	
E-CH3-6 COE	K2302688-006	0.2	0.04	1	NA	04/15/03	ND	
E-CH3-7 COE	K2302688-007	0.2	0.04	1	NA	04/15/03	ND	
E-CH3-8 COE	K2302688-008	0.2	0.04	1	NA	04/15/03	ND	
E-CH3-18 COE	K2302688-009	0.2	0.04	1	NA	04/15/03	ND	
RS-CH03	K2302688-010	0.2	0.04	1	NA	04/15/03	ND	
Method Blank	K2302688-MB	0.2	0.04	1	NA	04/14/03	ND	
Method Blank	K2302688-MB	0.2	0.04	1	NA	04/15/03	ND	

Approved By: MA Fitt Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/14/03

Duplicate Summary
Inorganic Parameters

Sample Name:	E-CH3-2 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-002DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	NONE	9010B	0.5	ND	ND	ND	-	

Approved By: _____ Date: 5/1/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/03
Sample Matrix:	Sediment	**Date Received:**	04/10/03
		Date Extracted:	NA
		Date Analyzed:	04/14/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH3-2 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-002MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	9010B	0.5	5.7	ND	1.4	25	75-125	*

Approved By: _____ Date: 5/1/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	4/14,15/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2302688-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	9010B	26.6	24.5	92	85-115	
Cyanide, Total	NONE	9010B	26.6	29.9	112	85-115	

Approved By: _____ Date: 5/1/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	4/14,15/03

Cyanide, Total
EPA Method 9010B
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 5 Result	100	98.1	98
CCV 6 Result	100	97.1	97
CCV 1 Result	100	102	102
CCV 2 Result	100	104	104
CCV 3 Result	100	103	103

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 5 Result	10	ND
CCB 6 Result	10	ND
CCB 1 Result	10	ND
CCB 2 Result	10	ND
CCB 3 Result	10	ND

Approved By: _____ Date: 5/2/03

COMBOQCD/042695

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/COE Sample

Sample No.	Lab Sample ID.
Batch QC	K2302672-001D
Batch QC	K2302672-001S
E-CH3-1 COE	K2302688-001
E-CH3-2 COE	K2302688-002
E-CH3-3 COE	K2302688-003
E-CH3-4 COE	K2302688-004
E-CH3-5 COE	K2302688-005
E-CH3-6 COE	K2302688-006
E-CH3-7 COE	K2302688-007
E-CH3-8 COE	K2302688-008
E-CH3-18 COE	K2302688-009
RS-CH03	K2302688-010
Method Blank	K2302688-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/7/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-1 COE
Lab Code: K2302688-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.2	7.1	2	4/29/03	5/6/03	14800		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	8.2		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.07		
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	29.2		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	4.87		
Iron	6010B	4.1	0.4	2	4/29/03	5/6/03	17200		
Mercury	7471A	0.017	0.008	1	4/22/03	4/23/03	0.027		
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	8.17		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.032		
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	28.1		

% Solids: 36.3

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-2 COE
Lab Code: K2302688-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	9.4	6.6	2	4/29/03	5/6/03	12500		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.04	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	7.4		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.07		
Chromium	200.8	0.19	0.01	5	4/29/03	5/1/03	25.3		
Copper	200.8	0.09	0.08	5	4/29/03	5/1/03	4.19		
Iron	6010B	3.8	0.4	2	4/29/03	5/6/03	14900		
Mercury	7471A	0.019	0.009	1	4/22/03	4/23/03	0.025		
Nickel	200.8	0.19	0.07	5	4/29/03	5/1/03	7.13		
Silver	200.8	0.019	0.002	5	4/29/03	5/5/03	0.029		
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	24.2		

% Solids: 39.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-3 COE
Lab Code: K2302688-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	12.0	8.4	2	4/29/03	5/6/03	11500		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	8.6		
Cadmium	200.8	0.06	0.04	5	4/29/03	5/1/03	0.06		
Chromium	200.8	0.24	0.01	5	4/29/03	5/1/03	31.2		
Copper	200.8	0.12	0.10	5	4/29/03	5/1/03	5.35		
Iron	6010B	4.8	0.5	2	4/29/03	5/6/03	16700		
Mercury	7471A	0.020	0.010	1	4/22/03	4/23/03	0.034		
Nickel	200.8	0.24	0.08	5	4/29/03	5/1/03	8.02		
Silver	200.8	0.024	0.002	5	4/29/03	5/5/03	0.033		
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	31.0		

% Solids: 30.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-4 COE
Lab Code: K2302688-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	12.3	8.6	2	4/29/03	5/6/03	15800		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	10.5		
Cadmium	200.8	0.06	0.04	5	4/29/03	5/1/03	0.09		
Chromium	200.8	0.25	0.01	5	4/29/03	5/1/03	38.9		
Copper	200.8	0.12	0.10	5	4/29/03	5/1/03	6.48		
Iron	6010B	4.9	0.5	2	4/29/03	5/6/03	19300		
Mercury	7471A	0.019	0.010	1	4/22/03	4/23/03	0.035		
Nickel	200.8	0.25	0.09	5	4/29/03	5/1/03	9.94		
Silver	200.8	0.025	0.002	5	4/29/03	5/5/03	0.037		
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	35.5		

% Solids: 30.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-5 COE
Lab Code: K2302688-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	19100		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	6.5		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.08		
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	35.9		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	5.30		
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	17300		
Mercury	7471A	0.020	0.010	1	4/22/03	4/23/03	0.024		
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	9.54		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.031		
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	30.8		

% Solids: 37.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-6 COE
Lab Code: K2302688-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	7230		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.04	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	4.4		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.06		
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	16.5		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	2.56		
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	8520		
Mercury	7471A	0.018	0.009	1	4/22/03	4/23/03	0.014	B	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	4.61		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.017	B	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	14.6		

% Solids: 55.4

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-7 COE
Lab Code: K2302688-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	12.3	8.6	2	4/29/03	5/6/03	14200		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.06	B	N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	10.0		
Cadmium	200.8	0.06	0.04	5	4/29/03	5/1/03	0.09		
Chromium	200.8	0.25	0.01	5	4/29/03	5/1/03	38.5		
Copper	200.8	0.12	0.10	5	4/29/03	5/1/03	6.32		
Iron	6010B	4.9	0.5	2	4/29/03	5/6/03	19000		
Mercury	7471A	0.019	0.009	1	4/22/03	4/23/03	0.031		
Nickel	200.8	0.25	0.09	5	4/29/03	5/1/03	9.75		
Silver	200.8	0.025	0.002	5	4/29/03	5/5/03	0.036		
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	36.5		

% Solids: 30.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/01/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-8 COE
Lab Code: K2302688-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	4310		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.04	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	3.2		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.05		
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	13.0		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	2.22		
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	6320		
Mercury	7471A	0.018	0.009	1	4/22/03	4/23/03	0.009	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	3.50		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.013	B	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	12.8		

% Solids: 55.7

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-18 COE
Lab Code: K2302688-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.2	7.1	2	4/29/03	5/6/03	20800		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.05		N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	8.5		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.09		
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	33.6		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	5.49		
Iron	6010B	4.1	0.4	2	4/29/03	5/6/03	18200		
Mercury	7471A	0.020	0.010	1	4/22/03	4/23/03	0.028		
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	9.29		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.037		
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	31.1		

% Solids: 36.3

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/03/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: RS-CH03
Lab Code: K2302688-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	11.3	7.9	2	4/29/03	5/6/03	7980		
Antimony	200.8	0.06	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.6	0.1	5	4/29/03	5/1/03	3.7		
Cadmium	200.8	0.06	0.03	5	4/29/03	5/1/03	0.07		
Chromium	200.8	0.23	0.01	5	4/29/03	5/1/03	14.9		
Copper	200.8	0.11	0.09	5	4/29/03	5/1/03	2.19		
Iron	6010B	4.5	0.5	2	4/29/03	5/6/03	7870		
Mercury	7471A	0.018	0.009	1	4/22/03	4/23/03	0.012	B	
Nickel	200.8	0.23	0.08	5	4/29/03	5/1/03	3.81		
Silver	200.8	0.023	0.002	5	4/29/03	5/5/03	0.016	B	
Zinc	200.8	0.6	0.2	5	4/29/03	5/1/03	12.9		

% Solids: 63.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected:
Date Received:
Units: MG/KG
Basis: Dry

Sample Name: Method Blank
Lab Code: K2302688-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	7.0	U	
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.01	U	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	0.1	U	
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.03	U	
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	0.10	B	
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.08	U	
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	0.4	B	
Mercury	7471A	0.020	0.010	1	4/22/03	4/23/03	0.010	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	0.07	U	
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.002	U	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	0.4	B	

% Solids: 100.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-1 COE
Lab Code: K2302688-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	5360		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.018	B	N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	2.99		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	10.6		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	1.77		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	6240		
Mercury	7471A	0.006	0.003	1	4/22/03	4/23/03	0.010		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	2.97		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.012		
Zinc	200.8	0.19	0.07	5	4/29/03	5/1/03	10.2		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-2 COE
Lab Code: K2302688-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	4920		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.017	B	N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	2.90		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	9.990		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	1.65		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	5860		
Mercury	7471A	0.007	0.004	1	4/22/03	4/23/03	0.010		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	2.81		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.011		
Zinc	200.8	0.19	0.07	5	4/29/03	5/1/03	9.55		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-3 COE
Lab Code: K2302688-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	3540		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.015	B	N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	2.66		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.02		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	9.620		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	1.65		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	5160		
Mercury	7471A	0.006	0.003	1	4/22/03	4/23/03	0.010		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	2.47		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.010		
Zinc	200.8	0.19	0.07	5	4/29/03	5/1/03	9.55		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-4 COE
Lab Code: K2302688-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	4760		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.016	B	N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	3.17		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	11.8		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	1.96		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	5840		
Mercury	7471A	0.006	0.003	1	4/22/03	4/23/03	0.011		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	3.00		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.011		
Zinc	200.8	0.19	0.07	5	4/29/03	5/1/03	10.7		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-5 COE
Lab Code: K2302688-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	7100		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.018	B	N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	2.40		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	13.4		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	1.97		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	6440		
Mercury	7471A	0.007	0.004	1	4/22/03	4/23/03	0.009		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	3.55		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.012		
Zinc	200.8	0.19	0.07	5	4/29/03	5/1/03	11.5		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-6 COE
Lab Code: K2302688-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.6	3.9	2	4/29/03	5/6/03	4000		
Antimony	200.8	0.028	0.003	5	4/29/03	5/5/03	0.023	B	N
Arsenic	200.8	0.28	0.06	5	4/29/03	5/1/03	2.41		
Cadmium	200.8	0.03	0.02	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.111	0.004	5	4/29/03	5/1/03	9.160		
Copper	200.8	0.06	0.04	5	4/29/03	5/1/03	1.42		
Iron	6010B	2.2	0.2	2	4/29/03	5/6/03	4720		
Mercury	7471A	0.010	0.005	1	4/22/03	4/23/03	0.008	B	
Nickel	200.8	0.11	0.04	5	4/29/03	5/1/03	2.55		
Silver	200.8	0.011	0.001	5	4/29/03	5/5/03	0.009	B	
Zinc	200.8	0.28	0.11	5	4/29/03	5/1/03	8.10		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-7 COE
Lab Code: K2302688-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	4270		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.055	B	N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	2.99		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	11.5		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	1.90		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	5690		
Mercury	7471A	0.006	0.003	1	4/22/03	4/23/03	0.009		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	2.93		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.036		
Zinc	200.8	0.19	0.07	5	4/29/03	5/1/03	10.9		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/01/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-8 COE
Lab Code: K2302688-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.6	3.9	2	4/29/03	5/6/03	2400		
Antimony	200.8	0.028	0.003	5	4/29/03	5/5/03	0.021	B	N
Arsenic	200.8	0.28	0.06	5	4/29/03	5/1/03	1.81		
Cadmium	200.8	0.03	0.02	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.111	0.004	5	4/29/03	5/1/03	7.230		
Copper	200.8	0.06	0.04	5	4/29/03	5/1/03	1.23		
Iron	6010B	2.2	0.2	2	4/29/03	5/6/03	3520		
Mercury	7471A	0.010	0.005	1	4/22/03	4/23/03	0.005	U	
Nickel	200.8	0.11	0.04	5	4/29/03	5/1/03	1.95		
Silver	200.8	0.011	0.001	5	4/29/03	5/5/03	0.007	B	
Zinc	200.8	0.28	0.11	5	4/29/03	5/1/03	7.13		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Matrix: SEDIMENT

Service Request: K2302688
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-18 COE
Lab Code: K2302688-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	7570		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.020		N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	3.09		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	12.2		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	1.99		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	6600		
Mercury	7471A	0.007	0.004	1	4/22/03	4/23/03	0.010		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	3.37		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.013		
Zinc	200.8	0.19	0.07	5	4/29/03	5/1/03	11.3		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/03/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: RS-CH03
Lab Code: K2302688-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	7.1	5.0	2	4/29/03	5/6/03	5040		
Antimony	200.8	0.036	0.004	5	4/29/03	5/5/03	0.030	B	N
Arsenic	200.8	0.36	0.07	5	4/29/03	5/1/03	2.36		
Cadmium	200.8	0.04	0.02	5	4/29/03	5/1/03	0.05		
Chromium	200.8	0.143	0.005	5	4/29/03	5/1/03	9.420		
Copper	200.8	0.07	0.06	5	4/29/03	5/1/03	1.38		
Iron	6010B	2.9	0.3	2	4/29/03	5/6/03	4970		
Mercury	7471A	0.011	0.006	1	4/22/03	4/23/03	0.008	B	
Nickel	200.8	0.14	0.05	5	4/29/03	5/1/03	2.41		
Silver	200.8	0.014	0.001	5	4/29/03	5/5/03	0.010	B	
Zinc	200.8	0.36	0.14	5	4/29/03	5/1/03	8.16		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688
Project No.: NA Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/COE Sample Date Received:
Matrix: SEDIMENT Units: MG/KG
Basis: Wet

Sample Name: Method Blank Lab Code: K2302688-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	7.0	U	
Antimony	200.8	0.050	0.006	5	4/29/03	5/5/03	0.006	U	N
Arsenic	200.8	0.50	0.10	5	4/29/03	5/1/03	0.10	U	
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.03	U	
Chromium	200.8	0.200	0.007	5	4/29/03	5/1/03	0.099	B	
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.08	U	
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	0.4	B	
Mercury	7471A	0.020	0.010	1	4/22/03	4/23/03	0.010	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	0.07	U	
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.002	U	
Zinc	200.8	0.50	0.20	5	4/29/03	5/1/03	0.39	B	

% Solids: NA

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4900	98	5000	5090	102	5030	101	6010B
Antimony	25.0	23.6	94	25.0	24.9	100	25.0	100	200.8
Arsenic	50.0	48.6	97	25.0	25.2	101	25.5	102	200.8
Cadmium	25.0	24.5	98	25.0	25.7	103	25.5	102	200.8
Chromium	20.0	19.9	100	25.0	24.1	96	25.6	102	200.8
Copper	25.0	25.0	100	25.0	25.6	102	25.3	101	200.8
Iron	2500	2460	98	500	505	101	515	103	6010B
Iron	25000	25300	101	25000	25600	102	25000	100	6010B
Mercury	5.0	5.23	105	5.0	4.97	99	5.00	100	7471A
Nickel	50.0	49.8	100	25.0	24.9	100	24.7	99	200.8
Silver	12.5	12.0	96	25.0	24.9	100	24.6	98	200.8
Zinc	50.0	49.6	99	25.0	24.9	100	25.0	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4960	99	4900	98	6010B
Antimony				25.0	24.8	99	25.0	100	200.8
Arsenic				25.0	25.8	103	25.5	102	200.8
Cadmium				25.0	25.7	103	25.1	100	200.8
Chromium				25.0	26.4	106	25.0	100	200.8
Copper				25.0	25.7	103	24.3	97	200.8
Iron				500	512	102	511	102	6010B
Iron				25000	24800	99	24300	97	6010B
Mercury				5.0	5.08	102	5.10	102	7471A
Nickel				25.0	25.0	100	24.4	98	200.8
Silver				25.0	24.4	98	24.3	97	200.8
Zinc				25.0	25.2	101	23.8	95	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4880	98	4910	98	6010B
Antimony				25.0	24.3	97	24.1	97	200.8
Arsenic				25.0	26.5	106	25.8	103	200.8
Cadmium				25.0	25.2	101	24.8	99	200.8
Chromium				25.0	25.7	103	25.3	101	200.8
Copper				25.0	24.9	100	24.7	99	200.8
Iron				500	508	102	500	100	6010B
Iron				25000	24200	97	24000	96	6010B
Nickel				25.0	24.8	99	24.5	98	200.8
Silver				25.0	23.6	94	24.0	96	200.8
Zinc				25.0	25.1	100	24.2	97	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	24.6	98			200.8
Silver				25.0	24.2	97			200.8

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	43.9	88		
Antimony				0.10	0.10	103		
Arsenic				1.0	0.99	99		
Cadmium				0.10	0.10	99		
Chromium				0.40	0.45	112		
Copper				0.20	0.19	95		
Iron				20	21.5	108		
Mercury	0.20	0.198	99					
Nickel				0.40	0.42	104		
Silver				0.04	0.044	110		
Zinc				1.0	1.03	103		

METALS
-3-
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum	35.0	U	35.0	U	35.0	U	35.0	U					6010B
Antimony	0.01	U	0.01	U	0.01	U	0.01	U					200.8
Arsenic	0.2	U	0.2	U	0.2	U	0.2	U					200.8
Cadmium	0.06	U	0.06	U	0.06	U	0.06	U					200.8
Chromium	0.01	U	0.01	U	0.01	U	0.01	U					200.8
Copper	0.16	U	0.16	U	0.16	U	0.16	U					200.8
Iron	2.0	U	2.0	U	2.0	U	2.0	U					6010B
Mercury	0.100	U	0.100	U	0.100	U	0.100	U					7471A
Nickel	0.14	U	0.14	U	0.14	U	0.14	U					200.8
Silver	0.009	B	0.006	B	0.01	B	0.007	B					200.8
Zinc	0.4	U	0.4	U	0.4	U	0.4	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum			35.0	U	35.0	U	35.0	U					6010B
Antimony			0.02	B	0.02	B	0.01	B					200.8
Arsenic			0.2	U	0.2	U	0.2	U					200.8
Cadmium			0.06	U	0.06	U	0.06	U					200.8
Chromium			0.01	U	0.01	U	0.02	B					200.8
Copper			0.16	U	0.16	U	0.16	U					200.8
Iron			2.0	U	2.0	U	2.0	U					6010B
Mercury			0.100	U									7471A
Nickel			0.14	U	0.14	U	0.14	U					200.8
Silver			0.009	B	0.01	B	0.006	B					200.8
Zinc			0.4	U	0.4	U	0.4	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Antimony			0.01	U										200.8
Silver			0.004	B										200.8

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	481000	489000	98	474000	483000	97
Iron	200000	200000	183000	187000	94	177000	179000	89

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/COE Samp
Basis: Dry
Matrix: SEDIMENT
% Solids: 37.4

Sample Name: Batch QC
Lab Code: K2302672-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		9220		14700		396	-1359		6010B
Antimony	70 - 130	25.4		0.04	B	99.0	26	N	200.8
Arsenic	70 - 130	190		4.1		198	94		200.8
Cadmium	70 - 130	8.74		0.09		9.90	87		200.8
Chromium	70 - 130	60.7		26.3		39.6	87		200.8
Copper	70 - 130	51.6		7.17		49.5	90		200.8
Iron		12600		14700		198	-1061		6010B
Mercury	60 - 130	0.495		0.021		0.485	98		7471A
Nickel	70 - 130	95.2		6.77		99.0	89		200.8
Silver	70 - 130	7.520		0.030		9.900	76		200.8
Zinc	70 - 130	121		29.9		99.0	92		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/COE Sampl
Basis: Dry
Matrix: SEDIMENT
% Solids: 37.4

Sample Name: Batch QC
Lab Code: K2302672-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	14700		14700		1		6010B
Antimony		0.04	B	0.04	B	0		200.8
Arsenic	30	4.1		4.0		2		200.8
Cadmium		0.09		0.08		8		200.8
Chromium	30	26.3		26.8		2		200.8
Copper	30	7.17		6.48		10		200.8
Iron	30	14700		14800		1		6010B
Mercury		0.021		0.020		6		7471A
Nickel	30	6.77		6.66		2		200.8
Silver		0.030		0.030		0		200.8
Zinc	30	29.9		28.7		4		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/COE Sample

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L True	Aqueous mg/L Found	Aqueous mg/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	C	Limits		%R
Aluminum				8270	9280		4200	12300	112
Antimony				32.6	24.2		0.0500	68.1	74
Arsenic				187	191		139	235	102
Cadmium				67.9	67.5		52.0	83.6	99
Chromium				144	136		115	173	94
Copper				91.3	88.4		74.8	108	97
Iron				12700	14400		7470	17900	113
Mercury				1.49	1.43		0.852	2.12	96
Nickel				78.0	75.3		61.1	94.9	97
Silver				90.0	83.7		67.0	113	93
Zinc				283	282		219	347	100

METALS
-9-
ICP SERIAL DILUTIONS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.: Units: ug/L

Project Name: Canaveral Harbor 103 Evaluat:

Sample Name: Batch QC Lab Code: K2302672-001L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-	Q	Method
Aluminum	74000		76800		4		6010B
Iron	74300		79300		7		6010B

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.200	0.100	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.10	0.01	200.8
Silver	107		0.040	0.004	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	75		1.0	0.2	200.8
Cadmium	111		0.10	0.06	200.8
Chromium	52		0.40	0.01	200.8
Copper	65		0.20	0.16	200.8
Nickel	60		0.40	0.14	200.8
Zinc	66		1.0	0.4	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum			50.0	35.0	6010B
Iron	259.90		20.0	2.0	6010B

Comments

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0019800	0.0000000	-0.0018000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0163000
Arsenic	189.0	0.0000000	0.0000000	-0.0001080	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0012900	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000630	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000160	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000170	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003210	0.0000000	0.0000000	0.0000000	-0.0002250
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009530	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000660	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0004440	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/02

Analyte	Wave-length (nm)	Mo	Ni	Interelement Correction Factors for: Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	-0.0300000	0.0000000	0.0004130	0.0000000	0.0000000
Arsenic	189.0	0.0012000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012600	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000230	-0.0000300	0.0000630	0.0000000	-0.0000510
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001780	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015500	0.0000000	0.0000000
Copper	324.7	0.0003860	0.0000000	-0.0000330	-0.0017300	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.1740000	0.1020000
Lead	220.3	-0.0015300	0.0005850	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3920000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000300
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0004400	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0006000	0.0000000	-0.0013800	-0.0002090	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0011700	-0.0015900	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0015800	0.0018000	0.0038400
Tin	189.9	0.0000000	0.0000000	-0.0032900	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	0.0000000	0.0000000	0.0000000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/02

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0021700	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003900	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0003380	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0001180	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0006160	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	200.0	200.8
Silver	15.00	100.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic	15.00	1000.0	200.8
Cadmium	15.00	700.0	200.8
Chromium	15.00	500.0	200.8
Copper	15.00	800.0	200.8
Nickel	15.00	800.0	200.8
Zinc	15.00	900.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Iron	5.00	20000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
K2302688-001	4/29/03	EPA 3050B	2.70	100
K2302688-009	4/29/03	EPA 3050B	2.70	100
K2302688-002	4/29/03	EPA 3050B	2.70	100
K2302688-003	4/29/03	EPA 3050B	2.70	100
K2302688-004	4/29/03	EPA 3050B	2.70	100
K2302688-005	4/29/03	EPA 3050B	2.70	100
K2302688-006	4/29/03	EPA 3050B	1.80	100
K2302688-007	4/29/03	EPA 3050B	2.70	100
K2302688-008	4/29/03	EPA 3050B	1.80	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302688-MB	4/29/03	EPA 3050B	1.00	100
K2302688-010	4/29/03	EPA 3050B	1.40	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302672-001D	4/22/03	METHOD	2.79	100
K2302672-001S	4/22/03	METHOD	2.76	100
CALIBRATION ZER	4/22/03	METHOD	100	100
K2302688-001	4/22/03	METHOD	3.29	100
K2302688-009	4/22/03	METHOD	2.78	100
K2302688-002	4/22/03	METHOD	2.68	100
K2302688-003	4/22/03	METHOD	3.33	100
K2302688-004	4/22/03	METHOD	3.46	100
K2302688-005	4/22/03	METHOD	2.68	100
K2302688-006	4/22/03	METHOD	1.99	100
K2302688-007	4/22/03	METHOD	3.59	100
K2302688-008	4/22/03	METHOD	1.99	100
ICV	4/22/03	METHOD	100	100
LCSS	4/22/03	METHOD	0.525	100
K2302688-MB	4/22/03	METHOD	1.00	100
K2302688-010	4/22/03	METHOD	1.81	100
STANDARD #1	4/22/03	METHOD	100	100
STANDARD #2	4/22/03	METHOD	100	100
STANDARD #3	4/22/03	METHOD	100	100
STANDARD #4	4/22/03	METHOD	100	100
STANDARD #5	4/22/03	METHOD	100	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
K2302688-001	4/29/03	EPA 3050B	2.70	100
K2302688-009	4/29/03	EPA 3050B	2.70	100
K2302688-002	4/29/03	EPA 3050B	2.70	100
K2302688-003	4/29/03	EPA 3050B	2.70	100
K2302688-004	4/29/03	EPA 3050B	2.70	100
K2302688-005	4/29/03	EPA 3050B	2.70	100
K2302688-006	4/29/03	EPA 3050B	1.80	100
K2302688-007	4/29/03	EPA 3050B	2.70	100
K2302688-008	4/29/03	EPA 3050B	1.80	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302688-MB	4/29/03	EPA 3050B	1.00	100
K2302688-010	4/29/03	EPA 3050B	1.40	100

K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
K2302688-001	4/29/03	EPA 3050B	2.70	100
K2302688-009	4/29/03	EPA 3050B	2.70	100
K2302688-002	4/29/03	EPA 3050B	2.70	100
K2302688-003	4/29/03	EPA 3050B	2.70	100
K2302688-004	4/29/03	EPA 3050B	2.70	100
K2302688-005	4/29/03	EPA 3050B	2.70	100
K2302688-006	4/29/03	EPA 3050B	1.80	100
K2302688-007	4/29/03	EPA 3050B	2.70	100
K2302688-008	4/29/03	EPA 3050B	1.80	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302688-MB	4/29/03	EPA 3050B	1.00	100
K2302688-010	4/29/03	EPA 3050B	1.40	100

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/23/03 End Date: 4/23/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	09:38																X									
STANDARD #1	1.00	09:39																X									
STANDARD #2	1.00	09:41																X									
STANDARD #3	1.00	09:42																X									
STANDARD #4	1.00	09:44																X									
STANDARD #5	1.00	09:46																X									
ICV	1.00	09:47																X									
ICB	1.00	09:49																X									
CCV1	1.00	09:51																X									
CCB1	1.00	09:52																X									
CRA	1.00	09:54																X									
K2302688-MB	1.00	09:55																X									
LCSS	1.00	09:57																X									
ZZZZZZ	1.00	10:00																									
K2302672-001D	1.00	10:02																X									
K2302672-001S	1.00	10:04																X									
ZZZZZZ	1.00	10:05																									
ZZZZZZ	1.00	10:07																									
ZZZZZZ	1.00	10:08																									
ZZZZZZ	1.00	10:10																									
CCV2	1.00	10:12																X									
CCB2	1.00	10:13																X									
ZZZZZZ	1.00	10:15																									
ZZZZZZ	1.00	10:16																									
ZZZZZZ	1.00	10:18																									
ZZZZZZ	1.00	10:20																									
K2302688-001	1.00	10:21																X									
K2302688-002	1.00	10:23																X									
K2302688-003	1.00	10:25																X									
K2302688-004	1.00	10:26																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/23/03 End Date: 4/23/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302688-005	1.00	10:28																X									
K2302688-006	1.00	10:29																X									
CCV3	1.00	10:31																X									
CCB3	1.00	10:33																X									
K2302688-007	1.00	10:34																X									
K2302688-008	1.00	10:36																X									
K2302688-009	1.00	10:37																X									
K2302688-010	1.00	10:39																X									
CCV4	1.00	10:41																X									
CCB4	1.00	10:42																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	09:20		X										X													
CAL-STDA	1.00	09:22												X													
CAL-STDB	1.00	09:26		X										X													
ICV	1.00	09:31		X										X													
ICV	1.00	09:35												X													
ZZZZZZ	1.00	09:38																									
ICB	1.00	09:41		X										X													
CCV1	1.00	10:21												X													
CCV1	1.00	10:26		X										X													
CCB1	1.00	10:30		X										X													
CRI	1.00	10:41		X										X													
ICSA	1.00	10:45		X										X													
ICSAB	1.00	10:48		X										X													
K2302688-MB	2.00	10:52		X										X													
LCSS	2.00	10:55		X										X													
ZZZZZZ	2.00	10:58																									
K2302672-001D	2.00	11:00		X										X													
K2302672-001S	2.00	11:03		X										X													
K2302672-001L	10.00	11:06		X										X													
ZZZZZZ	2.00	11:09																									
CCV2	1.00	11:13												X													
CCV2	1.00	11:15		X										X													
CCB2	1.00	11:18		X										X													
ZZZZZZ	2.00	11:20																									
ZZZZZZ	2.00	11:23																									
ZZZZZZ	2.00	11:25																									
ZZZZZZ	2.00	11:28																									
ZZZZZZ	2.00	11:30																									
ZZZZZZ	2.00	11:33																									
ZZZZZZ	2.00	11:35																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302688-001	2.00	11:37		X										X													
K2302688-002	2.00	11:52		X										X													
K2302688-003	2.00	11:54		X										X													
CCV3	1.00	11:56												X													
CCV3	1.00	11:59		X										X													
CCB3	1.00	12:02		X										X													
K2302688-004	2.00	12:05		X										X													
K2302688-005	2.00	12:07		X										X													
K2302688-006	2.00	12:09		X										X													
K2302688-007	2.00	12:12		X										X													
K2302688-008	2.00	12:14		X										X													
K2302688-009	2.00	12:16		X										X													
K2302688-010	2.00	12:18		X										X													
ZZZZZZ	1.00	12:21																									
ZZZZZZ	1.00	12:24																									
ZZZZZZ	1.00	12:26																									
CCV4	1.00	12:29												X													
CCV4	1.00	12:32		X										X													
CCB4	1.00	12:34		X										X													
ZZZZZZ	1.00	12:37																									
ZZZZZZ	1.00	12:39																									
ZZZZZZ	5.00	12:41																									
ZZZZZZ	1.00	12:44																									
ZZZZZZ	1.00	12:46																									
ZZZZZZ	1.00	12:49																									
ZZZZZZ	1.00	12:51																									
ZZZZZZ	1.00	12:53																									
ZZZZZZ	1.00	12:55																									
ZZZZZZ	1.00	12:58																									
CCV5	1.00	13:00												X													

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV5	1.00	13:03		X										X													
CCB5	1.00	13:06		X										X													
ZZZZZZ	1.00	13:09																									
ICSA	1.00	13:13		X										X													
ICSAB	1.00	13:15		X										X													
CCV6	1.00	13:21												X													
CCV6	1.00	13:23		X										X													
CCB6	1.00	13:25		X										X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:08			X																	X					
25 PPB STD.	1.00	08:12			X																	X					
ICV	1.00	08:13			X																	X					
CCV1	1.00	08:15			X																	X					
ICB	1.00	08:18			X																	X					
CCB1	1.00	08:19			X																	X					
CRA	1.00	08:21			X																	X					
K2302688-MB	5.00	08:23			X																	X					
ZZZZZZ	5.00	08:24																									
K2302672-001D	5.00	08:25			X																	X					
K2302672-001S	5.00	08:26			X																	X					
LCSS	20.00	08:27			X																	X					
ZZZZZZ	5.00	08:29																									
ZZZZZZ	5.00	08:30																									
ZZZZZZ	5.00	08:31																									
ZZZZZZ	5.00	08:33																									
CCV2	1.00	08:34			X																	X					
CCB2	1.00	08:37			X																	X					
ZZZZZZ	5.00	08:38																									
ZZZZZZ	5.00	08:39																									
ZZZZZZ	5.00	08:41																									
ZZZZZZ	5.00	08:42																									
K2302688-001	5.00	08:43			X																	X					
K2302688-002	5.00	08:44			X																	X					
K2302688-003	5.00	08:45			X																	X					
K2302688-004	5.00	08:46			X																	X					
K2302688-005	5.00	08:47			X																	X					
K2302688-006	5.00	08:48			X																	X					
CCV3	1.00	08:50			X																	X					
CCB3	1.00	08:53			X																	X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302688-007	5.00	08:55			X																	X					
K2302688-008	5.00	08:56			X																	X					
K2302688-009	5.00	08:57			X																	X					
K2302688-010	5.00	08:59			X																	X					
ZZZZZZ	5.00	09:02																									
ZZZZZZ	5.00	09:03																									
ZZZZZZ	5.00	09:05																									
ZZZZZZ	5.00	09:07																									
ZZZZZZ	20.00	09:11																									
CCV4	1.00	09:13			X																	X					
CCB4	1.00	09:16			X																	X					
ZZZZZZ	5.00	09:19																									
ZZZZZZ	5.00	09:20																									
ZZZZZZ	5.00	09:22																									
ZZZZZZ	5.00	09:23																									
ZZZZZZ	5.00	09:24																									
ZZZZZZ	5.00	09:25																									
ZZZZZZ	5.00	09:27																									
ZZZZZZ	5.00	09:28																									
ZZZZZZ	5.00	09:30																									
ZZZZZZ	20.00	09:32																									
CCV5	1.00	09:33			X																	X					
CCB5	1.00	09:36			X																	X					
ZZZZZZ	5.00	09:38																									
ZZZZZZ	5.00	09:39																									
ZZZZZZ	5.00	09:40																									
ZZZZZZ	5.00	09:43																									
ZZZZZZ	5.00	09:44																									
ZZZZZZ	5.00	09:45																									
ZZZZZZ	5.00	09:46																									

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Form XIV - IN

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	09:47																									
ZZZZZZ	5.00	09:49																									
ZZZZZZ	5.00	09:50																									
CCV6	1.00	09:52			X																	X					
CCB6	1.00	09:55			X																	X					
ZZZZZZ	5.00	10:21																									
ZZZZZZ	5.00	10:22																									
ZZZZZZ	5.00	10:23																									
ZZZZZZ	5.00	10:24																									
ZZZZZZ	5.00	10:25																									
ZZZZZZ	5.00	10:30																									
ZZZZZZ	5.00	10:31																									
CCV7	1.00	10:33			X																	X					
CCB7	1.00	10:36			X																	X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/1/03 End Date: 5/1/03

Sample ID.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:25				X			X		X		X						X							X	
CALIBRATION STANDARD	1.00	11:27				X			X		X		X						X							X	
ICV	1.00	11:30				X			X		X		X						X							X	
CCV1	1.00	11:32				X			X		X		X						X							X	
ICB	1.00	11:34				X			X		X		X						X							X	
CCB1	1.00	11:35				X			X		X		X						X							X	
ZZZZZZ	1.00	11:38																									
CRA SOIL	1.00	11:40				X			X		X		X						X							X	
K2302688-MB	5.00	11:42				X			X		X		X						X							X	
LCSS	20.00	11:44				X			X		X		X						X							X	
ZZZZZZ	5.00	11:47																									
K2302672-001D	5.00	11:49				X			X		X		X						X							X	
K2302672-001S	5.00	11:51							X																		
K2302672-001S	25.00	11:53				X					X		X						X							X	
ZZZZZZ	5.00	11:54																									
ZZZZZZ	5.00	11:57																									
CCV2	1.00	11:59				X			X		X		X						X							X	
CCB2	1.00	12:01				X			X		X		X						X							X	
ZZZZZZ	5.00	12:04																									
ZZZZZZ	5.00	12:06																									
ZZZZZZ	5.00	12:09																									
ZZZZZZ	5.00	12:10																									
ZZZZZZ	5.00	12:13																									
ZZZZZZ	5.00	12:15																									
ZZZZZZ	25.00	12:17																									
K2302688-001	5.00	12:19				X			X		X		X						X							X	
K2302688-002	5.00	12:20				X			X		X		X						X							X	
K2302688-003	5.00	12:23				X			X		X		X						X							X	
CCV3	1.00	12:25				X			X		X		X						X							X	
CCB3	1.00	12:28				X			X		X		X						X							X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/1/03 End Date: 5/1/03

Sample ID.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302688-004	5.00	12:30				X			X		X		X						X							X	
K2302688-005	5.00	12:32				X			X		X		X						X							X	
K2302688-006	5.00	12:34				X			X		X		X						X							X	
K2302688-007	5.00	12:36				X			X		X		X						X							X	
K2302688-008	5.00	12:38				X			X		X		X						X							X	
K2302688-009	5.00	12:43				X			X		X		X						X							X	
K2302688-010	5.00	12:45				X			X		X		X						X							X	
ZZZZZZ	5.00	12:47																									
ZZZZZZ	20.00	12:49																									
ZZZZZZ	5.00	12:52																									
CCV4	1.00	12:54				X			X		X		X						X							X	
CCB4	1.00	12:57				X			X		X		X						X							X	
ZZZZZZ	5.00	13:02																									
ZZZZZZ	5.00	13:04																									
ZZZZZZ	25.00	13:07																									
ZZZZZZ	1.00	13:09																									
ZZZZZZ	1.00	13:11																									
ZZZZZZ	1.00	13:13																									
ZZZZZZ	1.00	13:15																									
ZZZZZZ	1.00	13:17																									
ZZZZZZ	1.00	13:18																									
ZZZZZZ	1.00	13:20																									
CCV5	1.00	13:22				X			X		X		X						X							X	
CCB5	1.00	13:24				X			X		X		X						X							X	
ZZZZZZ	1.00	13:26																									
CCV6	1.00	13:28				X			X		X		X						X							X	
CCB6	1.00	13:30				X			X		X		X						X							X	

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1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 30, 2003 Service Request No: K2302688

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/COE Samples

Dear Nadia:

Enclosed is the additional data for the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302688.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302688

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/COE Sample

Sample No.	Lab Sample ID.
Batch QCD	K2302672-001D
Batch QCS	K2302672-001S
E-CH3-1 COE	K2302688-001
E-CH3-2 COE	K2302688-002
E-CH3-3 COE	K2302688-003
E-CH3-4 COE	K2302688-004
E-CH3-5 COE	K2302688-005
E-CH3-6 COE	K2302688-006
E-CH3-7 COE	K2302688-007
E-CH3-8 COE	K2302688-008
E-CH3-18 COE	K2302688-009
RS-CH03	K2302688-010
Method Blank	K2302688-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 7/30/03

00002

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: E-CH3-1 COE Lab Code: K2302688-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	5.37		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-2 COE
Lab Code: K2302688-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	4.91		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: E-CH3-3 COE Lab Code: K2302688-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	5.30		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-4 COE
Lab Code: K2302688-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	5.60		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: E-CH3-5 COE Lab Code: K2302688-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	5.90		

% Solids: NA

Comments:

00007

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-6 COE
Lab Code: K2302688-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.03	0.01	5	4/29/03	6/18/03	4.29		

% Solids: NA

Comments:

00008

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: E-CH3-7 COE Lab Code: K2302688-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	5.72		

% Solids: NA

Comments:

00009

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/01/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-8 COE
Lab Code: K2302688-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.03	0.01	5	4/29/03	6/18/03	2.86		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302688
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/COE Sample	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: E-CH3-18 COE Lab Code: K2302688-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	5.68		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected: 04/03/03
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: RS-CH03
Lab Code: K2302688-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.04	0.01	5	4/29/03	6/18/03	3.98		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302688
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/COE Sample
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2302688-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	0.02	U	

% Solids: NA

Comments:

Oil and Grease
Method 1664

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-1 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-001	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	150	

Approved By: M Gudlin Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-2 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-002	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	100	

Approved By: M Culer Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-3 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-003	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	150	

Approved By: M Cuda Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-4 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-004	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	160	

Approved By: M Gulu Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-5 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-005	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	80	J

Approved By: M Curler Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-6 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-006	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	300	

Approved By: MM Curtin Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-7 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-007	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	180	

Approved By: MR Curlin Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-8 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-008	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	140	

Approved By: M Culer Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-18 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-009	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	230	

Approved By: M Culer Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/3/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	RS-CH03	Units:	mg/Kg (ppm)
Lab Code:	K2302688-010	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	71	J

Approved By: M Curler Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	K030421-SB	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	ND	

Approved By: MM Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-1 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-001	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	50	J

Approved By: M Luke Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-2 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-002	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	ND	

Approved By: MM Cuda Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-3 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-003	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	ND	

Approved By: M Culer Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-4 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-004	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	ND	

Approved By: M Cuda Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-5 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-005	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	ND	

Approved By: M Curtin Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-6 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-006	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	170	

Approved By: M Cuba Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-7 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-007	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	60	J

Approved By: MM Lin Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-8 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-008	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	80	J

Approved By: M Gulu Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-18 COE	Units:	mg/Kg (ppm)
Lab Code:	K2302688-009	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	80	J

Approved By: M Linda Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/3/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	RS-CH03	Units:	mg/Kg (ppm)
Lab Code:	K2302688-010	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	ND	

Approved By: M Gaden Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
LCS Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	4/21/03
		Date Analyzed:	4/23/03

Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K030421-SL1	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	2000	1700	85	78-114	

Approved By: _____ Date: 4/25/03

LCS/071499p
02688PHC.MS1 - LCS 4/25/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03
		Date Extracted:	4/21/03
		Date Analyzed:	4/23/03

Matrix Spike/Duplicate Matrix Spike Summary
Oil and Grease

Sample Name:	E-CH3-4 COE		Units:	mg/Kg (ppm)
Lab Code:	K2302688-004MS,	K2302688-004DMS	Basis:	Dry
Test Notes:				

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	6600	6600	160	6200	6300	92	93	78-114	2

Approved By: M Gilla Date: 4/25/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 4/23/03

Continuing Calibration Verification (CCV) Summary
EPA Method 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery	CCV3 Result	Percent Recovery	CCV4 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	2.0	100	2.0	100	1.9	95	2.0	100

Approved By: M Curlin Date: 4/25/03

CCV 1-4/102194

02688PHC.MS1 - ccv 4/25/03

Page No.:

Butyltins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-1 COE	K2302688-001	04/02/2003	04/10/2003
E-CH3-2 COE	K2302688-002	04/02/2003	04/10/2003
E-CH3-3 COE	K2302688-003	04/02/2003	04/10/2003
E-CH3-4 COE	K2302688-004	04/02/2003	04/10/2003
E-CH3-5 COE	K2302688-005	04/02/2003	04/10/2003
E-CH3-6 COE	K2302688-006	04/02/2003	04/10/2003
E-CH3-7 COE	K2302688-007	04/02/2003	04/10/2003
E-CH3-8 COE	K2302688-008	04/01/2003	04/10/2003
E-CH3-18 COE	K2302688-009	04/02/2003	04/10/2003
RS-CH03	K2302688-010	04/03/2003	04/10/2003
E-CH3-8 COEMS	KWG0305086-1	04/01/2003	04/10/2003
E-CH3-8 COEDMS	KWG0305086-2	04/01/2003	04/10/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature]

Name: Jeff Christian

Date: 5/19/03

Title: Laboratory Director

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-1 COE	**Units:**	ug/Kg
Lab Code:	K2302688-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.7	2.3	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	2.7	1.0	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	2.7	2.1	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	2.7	1.3	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	68	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-2 COE	**Units:**	ug/Kg
Lab Code:	K2302688-002	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.5	2.1	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	2.5	0.92	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	2.5	1.9	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	2.5	1.2	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	60	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-3 COE	**Units:**	ug/Kg
Lab Code:	K2302688-003	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	3.2	2.7	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	3.2	1.2	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	3.2	2.4	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	3.2	1.6	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	52	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-4 COE	**Units:**	ug/Kg
Lab Code:	K2302688-004	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	3.3	2.7	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	3.3	1.2	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	3.3	2.5	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	3.3	1.6	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	72	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-5 COE	**Units:**	ug/Kg
Lab Code:	K2302688-005	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.7	2.2	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	2.7	0.97	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	2.7	2.0	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	2.7	1.3	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	72	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-6 COE	**Units:**	ug/Kg
Lab Code:	K2302688-006	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.8	1.5	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	1.8	0.65	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	1.8	1.4	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	1.8	0.85	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	81	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-7 COE	**Units:**	ug/Kg
Lab Code:	K2302688-007	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	3.2	2.7	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	3.2	1.2	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	3.2	2.5	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	3.2	1.6	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	63	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-8 COE	**Units:**	ug/Kg
Lab Code:	K2302688-008	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.8	1.5	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**0.87**	J	1.8	0.65	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	1.8	1.4	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	1.8	0.85	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	61	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-18 COE	**Units:**	ug/Kg
Lab Code:	K2302688-009	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.7	2.3	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	2.7	1.0	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	2.7	2.1	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	2.7	1.3	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	58	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	RS-CH03	**Units:**	ug/Kg
Lab Code:	K2302688-010	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.6	1.3	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	1.6	0.57	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	1.6	1.2	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	1.6	0.75	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	83	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305086-4	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	1.0	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	1.0	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	13	22-113	04/25/03	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-1 COE	**Units:**	ug/Kg
Lab Code:	K2302688-001	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	0.98	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.98	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.98	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	68	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-2 COE	**Units:**	ug/Kg
Lab Code:	K2302688-002	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	0.99	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.99	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.99	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	60	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-3 COE	**Units:**	ug/Kg
Lab Code:	K2302688-003	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	0.97	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	52	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-4 COE	**Units:**	ug/Kg
Lab Code:	K2302688-004	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	0.98	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.98	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.98	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	72	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-5 COE	**Units:**	ug/Kg
Lab Code:	K2302688-005	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	0.98	0.36	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	0.98	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	0.98	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	72	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-6 COE	**Units:**	ug/Kg
Lab Code:	K2302688-006	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	0.98	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.98	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.98	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	81	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-7 COE	**Units:**	ug/Kg
Lab Code:	K2302688-007	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.96	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	0.96	0.36	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	0.96	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	0.96	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	63	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-8 COE	**Units:**	ug/Kg
Lab Code:	K2302688-008	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**0.48**	J	0.97	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	61	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-18 COE	**Units:**	ug/Kg
Lab Code:	K2302688-009	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	ND	U	0.97	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	58	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	RS-CH03	**Units:**	ug/Kg
Lab Code:	K2302688-010	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	0.97	0.36	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	83	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305086-4	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	1.0	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	1.0	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	13	22-113	04/25/03	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	
E-CH3-1 COE	K2302688-001	68	
E-CH3-2 COE	K2302688-002	60	
E-CH3-3 COE	K2302688-003	52	
E-CH3-4 COE	K2302688-004	72	
E-CH3-5 COE	K2302688-005	72	
E-CH3-6 COE	K2302688-006	81	
E-CH3-7 COE	K2302688-007	63	
E-CH3-8 COE	K2302688-008	61	
E-CH3-18 COE	K2302688-009	58	
RS-CH03	K2302688-010	83	
Method Blank	KWG0305086-4	13	*
E-CH3-8 COEMS	KWG0305086-1	60	
E-CH3-8 COEDMS	KWG0305086-2	91	
Lab Control Sample	KWG0305086-3	65	

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 22-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003 - 04/29/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	E-CH3-8 COE	**Units:**	ug/Kg
Lab Code:	K2302688-008	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305086

		E-CH3-8 COEMS KWG0305086-1 Matrix Spike			E-CH3-8 COEDMS KWG0305086-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	30.3	85.9	35	43.7	85.9	51	25-125	36	50
Tri-n-butyltin	0.87	30.4	85.9	34	42.4	85.9	48	12-138	33	50
Di-n-butyltin	ND	32.8	85.9	38	38.0	85.9	44	10-155	15	50
n-Butyltin	ND	8.62	85.9	10	20.7	85.9	24	10-99	83 *	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/Kg
Analysis Method:	Krone	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305086

	Lab Control Sample KWG0305086-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	21.8	50.0	44	10-126
Tri-n-butyltin	25.5	50.0	51	30-131
Di-n-butyltin	26.1	50.0	52	23-141
n-Butyltin	14.7	50.0	29	10-127

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003
		Time Analyzed:	20:46

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\042503\0425F004.D
Lab Code:	KWG0305086-4	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305086

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305086-3	J:\GC11\DATA\042503\0425F005.D	04/25/03	21:04
E-CH3-5 COE	K2302688-005	J:\GC11\DATA\042503\0425F009.D	04/25/03	22:15
E-CH3-7 COE	K2302688-007	J:\GC11\DATA\042503\0425F010.D	04/25/03	22:33
E-CH3-8 COEDMS	KWG0305086-2	J:\GC11\DATA\042503\0425F011.D	04/25/03	22:51
RS-CH03	K2302688-010	J:\GC11\DATA\042503\0425F012.D	04/25/03	23:09
E-CH3-1 COE	K2302688-001	J:\GC11\DATA\042903\0429F009.D	04/29/03	19:50
E-CH3-2 COE	K2302688-002	J:\GC11\DATA\042903\0429F010.D	04/29/03	20:07
E-CH3-3 COE	K2302688-003	J:\GC11\DATA\042903\0429F011.D	04/29/03	20:25
E-CH3-4 COE	K2302688-004	J:\GC11\DATA\042903\0429F012.D	04/29/03	20:43
E-CH3-6 COE	K2302688-006	J:\GC11\DATA\042903\0429F015.D	04/29/03	21:36
E-CH3-8 COE	K2302688-008	J:\GC11\DATA\042903\0429F016.D	04/29/03	21:53
E-CH3-18 COE	K2302688-009	J:\GC11\DATA\042903\0429F017.D	04/29/03	22:11
E-CH3-8 COEMS	KWG0305086-1	J:\GC11\DATA\042903\0429F018.D	04/29/03	22:28

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003
		Time Analyzed:	21:04

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\042503\0425F005.D
Lab Code:	KWG0305086-3	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305086

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305086-4	J:\GC11\DATA\042503\0425F004.D	04/25/03	20:46
E-CH3-5 COE	K2302688-005	J:\GC11\DATA\042503\0425F009.D	04/25/03	22:15
E-CH3-7 COE	K2302688-007	J:\GC11\DATA\042503\0425F010.D	04/25/03	22:33
E-CH3-8 COEDMS	KWG0305086-2	J:\GC11\DATA\042503\0425F011.D	04/25/03	22:51
RS-CH03	K2302688-010	J:\GC11\DATA\042503\0425F012.D	04/25/03	23:09
E-CH3-1 COE	K2302688-001	J:\GC11\DATA\042903\0429F009.D	04/29/03	19:50
E-CH3-2 COE	K2302688-002	J:\GC11\DATA\042903\0429F010.D	04/29/03	20:07
E-CH3-3 COE	K2302688-003	J:\GC11\DATA\042903\0429F011.D	04/29/03	20:25
E-CH3-4 COE	K2302688-004	J:\GC11\DATA\042903\0429F012.D	04/29/03	20:43
E-CH3-6 COE	K2302688-006	J:\GC11\DATA\042903\0429F015.D	04/29/03	21:36
E-CH3-8 COE	K2302688-008	J:\GC11\DATA\042903\0429F016.D	04/29/03	21:53
E-CH3-18 COE	K2302688-009	J:\GC11\DATA\042903\0429F017.D	04/29/03	22:11
E-CH3-8 COEMS	KWG0305086-1	J:\GC11\DATA\042903\0429F018.D	04/29/03	22:28

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D	D	J:\GC11\DATA\042503\0425F105.D
B	J:\GC11\DATA\042503\0425F103.D	E	J:\GC11\DATA\042503\0425F106.D
C	J:\GC11\DATA\042503\0425F104.D	F	J:\GC11\DATA\042503\0425F107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	669	B	50	620	C	100	626	D	500	576	E	1000	588
	F	2000	576												
Tri-n-butyltin	A	10	835	B	50	789	C	100	794	D	500	708	E	1000	729
	F	2000	704												
Di-n-butyltin	A	10	1090	B	50	1050	C	100	975	D	500	895	E	1000	923
	F	2000	895												
n-Butyltin	A	10	1580	B	50	1310	C	100	1350	D	500	1200	E	1000	1250
	F	2000	1210												
Tri-n-propyltin	A	11	562	B	54	569	C	110	595	D	540	539	E	1100	546
	F	2100	532												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.0		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	10.8		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	490	609	634	4	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	760	752	-1	NA	± 30 %	AverageRF
Di-n-butyltin	480	460	970	934	-4	NA	± 30 %	AverageRF
n-Butyltin	490	470	1320	1260	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D\0425R102.D	D	J:\GC11\DATA\042503\0425F105.D\0425R105.D
B	J:\GC11\DATA\042503\0425F103.D\0425R103.D	E	J:\GC11\DATA\042503\0425F106.D\0425R106.D
C	J:\GC11\DATA\042503\0425F104.D\0425R104.D	F	J:\GC11\DATA\042503\0425F107.D\0425R107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	352	B	50	317	C	100	328	D	500	311	E	1000	324
	F	2000	319												
Tri-n-butyltin	A	10	425	B	50	400	C	100	419	D	500	393	E	1000	406
	F	2000	389												
Di-n-butyltin	A	10	553	B	50	500	C	100	520	D	500	490	E	1000	510
	F	2000	485												
n-Butyltin	A	10	631	B	50	613	C	100	674	D	500	623	E	1000	648
	F	2000	615												
Tri-n-propyltin	A	11	296	B	54	289	C	110	290	D	540	280	E	1100	291
	F	2100	286												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.4		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.7		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	1.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D\0425R108.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	325	326	0	NA	± 30 %	AverageRF
Tri-n-butyltin	480	450	405	378	-7	NA	± 30 %	AverageRF
Di-n-butyltin	480	450	510	479	-6	NA	± 30 %	AverageRF
n-Butyltin	490	490	634	634	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/25/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	609	574	-6	NA	± 25 %	AverageRF
Tri-n-butyltin	500	460	760	702	-8	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	876	-10	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1160	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	538	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Analyzed:**	04/25/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F002.D\0425R002.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	325	287	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	405	367	-10	NA	± 25 %	AverageRF
Di-n-butyltin	500	440	510	452	-11	NA	± 25 %	AverageRF
n-Butyltin	500	460	634	584	-8	NA	± 25 %	AverageRF
Tri-n-propyltin	540	470	289	253	-12	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F017.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	566	-7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	713	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	970	920	-5	NA	± 25 %	AverageRF
n-Butyltin	500	450	1320	1200	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	546	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F017.D\0425R017.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	316	-3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	397	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	504	-1	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	649	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	289	282	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Analyzed:**	04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305965
		Units:	ng/ml
File ID:	J:\GC11\DATA\042903\0429F002.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	450	609	552	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	760	689	-9	NA	± 25 %	AverageRF
Di-n-butyltin	500	440	970	861	-11	NA	± 25 %	AverageRF
n-Butyltin	500	430	1320	1140	-13	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	557	517	-7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F002.D\0429R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	319	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	398	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	480	510	492	-3	NA	± 25 %	AverageRF
n-Butyltin	500	500	634	632	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	289	283	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F014.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	430	609	520	-15	NA	± 25 %	AverageRF
Tri-n-butyltin	500	430	760	648	-15	NA	± 25 %	AverageRF
Di-n-butyltin	500	410	970	788	-19	NA	± 25 %	AverageRF
n-Butyltin	500	410	1320	1080	-18	NA	± 25 %	AverageRF
Tri-n-propyltin	540	460	557	482	-14	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F014.D\0429R014.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	325	313	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	399	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	497	-3	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	643	1	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	289	290	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F026.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	557	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	460	760	694	-9	NA	± 25 %	AverageRF
Di-n-butyltin	500	430	970	843	-13	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1150	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	557	502	-10	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Analyzed:**	04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305965
		Units:	ng/ml
File ID:	J:\GC11\DATA\042903\0429F026.D\0429R026.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	321	-1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	405	413	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	510	508	0	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	648	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	289	292	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302688
Project: Canaveral Harbor 103 Evaluation/COE Samples

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	Instrument Blank	KWG0305835-1	4/25/2003	19:53		4/25/2003	20:05
0425F002.D	Continuing Calibration Verification	KWG0305835-20	4/25/2003	20:10		4/25/2003	20:22
0425F003.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:28		4/25/2003	20:40
0425F004.D	Method Blank	KWG0305086-4	4/25/2003	20:46		4/25/2003	20:58
0425F005.D	Lab Control Sample	KWG0305086-3	4/25/2003	21:04		4/25/2003	21:16
0425F006.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:22		4/25/2003	21:34
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:40		4/25/2003	21:52
0425F008.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:57		4/25/2003	22:09
0425F009.D	E-CH3-5 COE	K2302688-005	4/25/2003	22:15		4/25/2003	22:27
0425F010.D	E-CH3-7 COE	K2302688-007	4/25/2003	22:33		4/25/2003	22:45
0425F011.D	E-CH3-8 COEDMS	KWG0305086-2	4/25/2003	22:51		4/25/2003	23:03
0425F012.D	RS-CH03	K2302688-010	4/25/2003	23:09		4/25/2003	23:21
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:27		4/25/2003	23:39
0425F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:02		4/26/2003	00:14
0425F016.D	Instrument Blank	KWG0305835-3	4/26/2003	00:20		4/26/2003	00:32
0425F017.D	Continuing Calibration Verification	KWG0305835-4	4/26/2003	00:38		4/26/2003	00:50
0425F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:55		4/26/2003	01:07
0425F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:13		4/26/2003	01:25
0425F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:31		4/26/2003	01:43
0425F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:49		4/26/2003	02:01
0425F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:07		4/26/2003	02:19
0425F023.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:24		4/26/2003	02:36
0425F024.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:42		4/26/2003	02:54
0425F025.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:00		4/26/2003	03:12
0425F026.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:18		4/26/2003	03:30
0425F027.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:36		4/26/2003	03:48
0425F028.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:54		4/26/2003	04:06
0425F029.D	ZZZZZZ	ZZZZZZ	4/26/2003	04:12		4/26/2003	04:24
0425F030.D	Instrument Blank	KWG0305835-5	4/26/2003	04:30		4/26/2003	04:42
0425F031.D	Continuing Calibration Verification	KWG0305835-6	4/26/2003	04:48		4/26/2003	05:00
0425F032.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:06		4/26/2003	05:18
0425F034.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:42		4/26/2003	05:54
0425F040.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:29		4/26/2003	07:41
0425F041.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:47		4/26/2003	07:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F042.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:05		4/26/2003	08:17
0425F043.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:24		4/26/2003	08:36
0425F044.D	Instrument Blank	KWG0305835-7	4/26/2003	08:41		4/26/2003	08:53
0425F045.D	Continuing Calibration Verification	KWG0305835-8	4/26/2003	09:00		4/26/2003	09:12
0425F046.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:18		4/26/2003	09:30
0425F047.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:36		4/26/2003	09:48
0425F048.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:54		4/26/2003	10:06
0425F049.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:12		4/26/2003	10:24
0425F050.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:30		4/26/2003	10:42
0425F051.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:48		4/26/2003	11:00
0425F052.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:06		4/26/2003	11:18
0425F053.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:24		4/26/2003	11:36
0425F054.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:42		4/26/2003	11:54
0425F055.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:00		4/26/2003	12:12
0425F056.D	Instrument Blank	KWG0305835-9	4/26/2003	12:18		4/26/2003	12:30
0425F057.D	Continuing Calibration Verification	KWG0305835-10	4/26/2003	12:36		4/26/2003	12:48
0425F058.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:54		4/26/2003	13:06
0425F059.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:12		4/26/2003	13:24
0425F060.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:30		4/26/2003	13:42
0425F061.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:47		4/26/2003	13:59
0425F062.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:05		4/26/2003	14:17
0425F063.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:23		4/26/2003	14:35
0425F064.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:41		4/26/2003	14:53
0425F065.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:59		4/26/2003	15:11
0425F066.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:17		4/26/2003	15:29
0425F072.D	Instrument Blank	KWG0305835-11	4/26/2003	17:05		4/26/2003	17:17
0425F073.D	Continuing Calibration Verification	KWG0305835-12	4/26/2003	17:23		4/26/2003	17:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305965
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0429F001.D	Instrument Blank	KWG0305965-1	4/29/2003	17:28		4/29/2003	17:40
0429F002.D	Continuing Calibration Verification	KWG0305965-2	4/29/2003	17:46		4/29/2003	17:58
0429F003.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:04		4/29/2003	18:16
0429F004.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:21		4/29/2003	18:33
0429F006.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:57		4/29/2003	19:09
0429F007.D	ZZZZZZ	ZZZZZZ	4/29/2003	19:14		4/29/2003	19:26
0429F008.D	ZZZZZZ	ZZZZZZ	4/29/2003	19:32		4/29/2003	19:44
0429F009.D	E-CH3-1 COE	K2302688-001	4/29/2003	19:50		4/29/2003	20:02
0429F010.D	E-CH3-2 COE	K2302688-002	4/29/2003	20:07		4/29/2003	20:19
0429F011.D	E-CH3-3 COE	K2302688-003	4/29/2003	20:25		4/29/2003	20:37
0429F012.D	E-CH3-4 COE	K2302688-004	4/29/2003	20:43		4/29/2003	20:55
0429F013.D	Instrument Blank	KWG0305965-3	4/29/2003	21:00		4/29/2003	21:12
0429F014.D	Continuing Calibration Verification	KWG0305965-4	4/29/2003	21:18		4/29/2003	21:30
0429F015.D	E-CH3-6 COE	K2302688-006	4/29/2003	21:36		4/29/2003	21:48
0429F016.D	E-CH3-8 COE	K2302688-008	4/29/2003	21:53		4/29/2003	22:05
0429F017.D	E-CH3-18 COE	K2302688-009	4/29/2003	22:11		4/29/2003	22:23
0429F018.D	E-CH3-8 COEMS	KWG0305086-1	4/29/2003	22:28		4/29/2003	22:40
0429F019.D	ZZZZZZ	ZZZZZZ	4/29/2003	22:46		4/29/2003	22:58
0429F020.D	ZZZZZZ	ZZZZZZ	4/29/2003	23:04		4/29/2003	23:16
0429F021.D	ZZZZZZ	ZZZZZZ	4/29/2003	23:21		4/29/2003	23:33
0429F024.D	ZZZZZZ	ZZZZZZ	4/30/2003	00:14		4/30/2003	00:26
0429F025.D	Instrument Blank	KWG0305965-5	4/30/2003	00:32		4/30/2003	00:44
0429F026.D	Continuing Calibration Verification	KWG0305965-6	4/30/2003	00:50		4/30/2003	01:02
0429F027.D	ZZZZZZ	ZZZZZZ	4/30/2003	01:07		4/30/2003	01:19
0429F030.D	Instrument Blank	KWG0305965-7	4/30/2003	02:00		4/30/2003	02:12
0429F031.D	Continuing Calibration Verification	KWG0305965-8	4/30/2003	02:18		4/30/2003	02:30

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Extracted: 04/14/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0305086
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-1 COE	K2302688-001	04/02/03	04/10/03	20.53g	1ml	36.3	
E-CH3-2 COE	K2302688-002	04/02/03	04/10/03	20.32g	1ml	39.4	
E-CH3-3 COE	K2302688-003	04/02/03	04/10/03	20.64g	1ml	30.8	
E-CH3-4 COE	K2302688-004	04/02/03	04/10/03	20.48g	1ml	30.2	
E-CH3-5 COE	K2302688-005	04/02/03	04/10/03	20.44g	1ml	37.2	
E-CH3-6 COE	K2302688-006	04/02/03	04/10/03	20.53g	1ml	55.4	
E-CH3-7 COE	K2302688-007	04/02/03	04/10/03	20.89g	1ml	30.0	
E-CH3-8 COE	K2302688-008	04/01/03	04/10/03	20.73g	1ml	55.7	
E-CH3-18 COE	K2302688-009	04/02/03	04/10/03	20.67g	1ml	36.3	
RS-CH03	K2302688-010	04/03/03	04/10/03	20.70g	1ml	63.2	
Method Blank	KWG0305086-4	NA	NA	20.00g	1ml	NA	
E-CH3-8 COEMS	KWG0305086-1	04/01/03	04/10/03	20.90g	1ml	55.7	
E-CH3-8 COEDMS	KWG0305086-2	04/01/03	04/10/03	20.91g	1ml	55.7	
Lab Control Sample	KWG0305086-3	NA	NA	20.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Extracted:	04/14/2003

Butyltins

Sample Name:	E-CH3-8 COE	**Units:**	ug/Kg
Lab Code:	K2302688-008	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.8	0.65	0.87	0.76	13.5	J	1	04/29/03

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-1 COE	K2302688-001	04/02/2003	04/10/2003
E-CH3-2 COE	K2302688-002	04/02/2003	04/10/2003
E-CH3-3 COE	K2302688-003	04/02/2003	04/10/2003
E-CH3-4 COE	K2302688-004	04/02/2003	04/10/2003
E-CH3-5 COE	K2302688-005	04/02/2003	04/10/2003
E-CH3-6 COE	K2302688-006	04/02/2003	04/10/2003
E-CH3-7 COE	K2302688-007	04/02/2003	04/10/2003
E-CH3-8 COE	K2302688-008	04/01/2003	04/10/2003
E-CH3-18 COE	K2302688-009	04/02/2003	04/10/2003
RS-CH03	K2302688-010	04/03/2003	04/10/2003
E-CH3-4 COEMS	KWG0305073-1	04/02/2003	04/10/2003
E-CH3-4 COEDMS	KWG0305073-2	04/02/2003	04/10/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 5/7/03

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-1 COE
Lab Code: K2302688-001

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.1**	J	14	0.58	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	14	0.58	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	14	0.45	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	14	0.58	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	14	0.56	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	14	0.47	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**2.4**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	14	0.53	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**6.4**	J	14	0.47	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**5.8**	J	14	0.31	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**3.1**	J	14	0.36	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**4.8**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**3.8**	J	14	0.39	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**5.5**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**3.2**	J	14	0.39	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**3.4**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**1.6**	J	14	0.50	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**4.4**	J	14	0.28	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	47	39-97	04/18/03	Acceptable
Fluorene-d10	54	43-98	04/18/03	Acceptable
Fluoranthene-d10	57	52-108	04/18/03	Acceptable
Terphenyl-d14	78	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-2 COE
Lab Code: K2302688-002

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.97**	J	13	0.54	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	13	0.54	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	**0.76**	J	13	0.41	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	13	0.54	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	13	0.51	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	13	0.44	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**1.6**	J	13	0.39	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	13	0.49	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**9.0**	J	13	0.44	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**10**	J	13	0.28	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**6.9**	J	13	0.33	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**10**	J	13	0.39	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**6.1**	J	13	0.36	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**8.3**	J	13	0.39	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**6.1**	J	13	0.36	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**4.3**	J	13	0.39	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**1.2**	J	13	0.46	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**5.8**	J	13	0.26	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	57	39-97	04/18/03	Acceptable
Fluorene-d10	64	43-98	04/18/03	Acceptable
Fluoranthene-d10	76	52-108	04/18/03	Acceptable
Terphenyl-d14	98	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-3 COE	**Units:**	ug/Kg
Lab Code:	K2302688-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.0**	J	17	0.69	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	17	0.69	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	17	0.52	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	17	0.69	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	17	0.65	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	17	0.56	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**1.8**	J	17	0.49	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	17	0.62	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**5.9**	J	17	0.56	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**4.5**	J	17	0.36	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**2.5**	J	17	0.43	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**4.0**	J	17	0.49	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**3.1**	J	17	0.46	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**4.3**	J	17	0.49	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**2.0**	J	17	0.46	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.5**	J	17	0.49	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.69**	J	17	0.59	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**3.3**	J	17	0.33	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	49	39-97	04/18/03	Acceptable
Fluorene-d10	57	43-98	04/18/03	Acceptable
Fluoranthene-d10	64	52-108	04/18/03	Acceptable
Terphenyl-d14	87	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-4 COE	**Units:**	ug/Kg
Lab Code:	K2302688-004	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.0**	J	17	0.70	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	17	0.70	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	17	0.53	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	17	0.70	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	17	0.67	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	17	0.57	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**1.8**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	17	0.63	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**6.1**	J	17	0.57	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**5.0**	J	17	0.37	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**2.5**	J	17	0.44	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**4.2**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**4.0**	J	17	0.47	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**4.3**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**2.4**	J	17	0.47	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**4.8**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**3.5**	J	17	0.60	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**6.2**	J	17	0.34	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	45	39-97	04/18/03	Acceptable
Fluorene-d10	60	43-98	04/18/03	Acceptable
Fluoranthene-d10	72	52-108	04/18/03	Acceptable
Terphenyl-d14	92	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-5 COE
Lab Code: K2302688-005

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.93**	J	14	0.57	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	14	0.57	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	14	0.44	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	14	0.57	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	14	0.54	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	14	0.46	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**1.1**	J	14	0.41	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	14	0.52	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**3.2**	J	14	0.46	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**2.7**	J	14	0.30	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.98**	J	14	0.35	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**1.8**	J	14	0.41	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**1.5**	J	14	0.38	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**2.9**	J	14	0.41	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**1.1**	J	14	0.38	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.3**	J	14	0.41	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	14	0.49	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**1.8**	J	14	0.27	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	46	39-97	04/18/03	Acceptable
Fluorene-d10	58	43-98	04/18/03	Acceptable
Fluoranthene-d10	71	52-108	04/18/03	Acceptable
Terphenyl-d14	99	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-6 COE
Lab Code: K2302688-006

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.53**	J	9.1	0.38	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	9.1	0.38	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	9.1	0.29	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	9.1	0.38	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	9.1	0.37	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	9.1	0.31	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.64**	J	9.1	0.28	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	9.1	0.35	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**2.2**	J	9.1	0.31	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**1.7**	J	9.1	0.20	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.71**	J	9.1	0.24	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**1.5**	J	9.1	0.28	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**1.2**	J	9.1	0.26	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**1.9**	J	9.1	0.28	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**0.74**	J	9.1	0.26	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.1**	J	9.1	0.28	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	9.1	0.33	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**1.2**	J	9.1	0.19	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	37	39-97	04/18/03	Outside Control Limits
Fluorene-d10	56	43-98	04/18/03	Acceptable
Fluoranthene-d10	71	52-108	04/18/03	Acceptable
Terphenyl-d14	90	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-7 COE	**Units:**	ug/Kg
Lab Code:	K2302688-007	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.2**	J	17	0.70	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	17	0.70	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	17	0.54	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	17	0.70	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	17	0.67	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	17	0.57	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**2.2**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	17	0.64	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**7.5**	J	17	0.57	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**5.8**	J	17	0.37	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**3.2**	J	17	0.44	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**5.4**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**3.9**	J	17	0.47	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**5.3**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**3.1**	J	17	0.47	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**3.1**	J	17	0.50	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.80**	J	17	0.60	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**4.1**	J	17	0.34	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	50	39-97	04/18/03	Acceptable
Fluorene-d10	63	43-98	04/18/03	Acceptable
Fluoranthene-d10	75	52-108	04/18/03	Acceptable
Terphenyl-d14	95	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/01/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-8 COE
Lab Code: K2302688-008

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.68**	J	9.0	0.38	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	9.0	0.38	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	9.0	0.29	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	9.0	0.38	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	9.0	0.36	1	04/12/03	04/19/03	KWG0305073	
Fluorene	**0.39**	J	9.0	0.31	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**3.4**	J	9.0	0.27	1	04/12/03	04/19/03	KWG0305073	
Anthracene	**0.43**	J	9.0	0.35	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**7.3**	J	9.0	0.31	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**5.2**	J	9.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**2.6**	J	9.0	0.24	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**4.0**	J	9.0	0.27	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**2.7**	J	9.0	0.26	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**3.9**	J	9.0	0.27	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.2**	J	9.0	0.26	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.3**	J	9.0	0.27	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**0.93**	J	9.0	0.33	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**2.8**	J	9.0	0.18	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	41	39-97	04/19/03	Acceptable
Fluorene-d10	53	43-98	04/19/03	Acceptable
Fluoranthene-d10	64	52-108	04/19/03	Acceptable
Terphenyl-d14	81	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-18 COE
Lab Code: K2302688-009

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.87**	J	14	0.58	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	14	0.58	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	14	0.45	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	14	0.58	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	14	0.56	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	14	0.47	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**2.1**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	14	0.53	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**7.8**	J	14	0.47	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**6.1**	J	14	0.31	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**2.7**	J	14	0.36	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**4.6**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**2.9**	J	14	0.39	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**4.1**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**2.0**	J	14	0.39	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.6**	J	14	0.42	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.59**	J	14	0.50	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**2.9**	J	14	0.28	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	58	39-97	04/18/03	Acceptable
Fluorene-d10	62	43-98	04/18/03	Acceptable
Fluoranthene-d10	67	52-108	04/18/03	Acceptable
Terphenyl-d14	91	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03	**Units:**	ug/Kg
Lab Code:	K2302688-010	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.62**	J	7.9	0.34	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	7.9	0.34	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	7.9	0.26	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	7.9	0.34	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	7.9	0.32	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	7.9	0.27	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.95**	J	7.9	0.24	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	7.9	0.31	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**3.0**	J	7.9	0.27	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**3.4**	J	7.9	0.18	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**2.3**	J	7.9	0.21	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**3.0**	J	7.9	0.24	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**1.8**	J	7.9	0.23	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**2.9**	J	7.9	0.24	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.4**	J	7.9	0.23	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.4**	J	7.9	0.24	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**0.42**	J	7.9	0.29	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**2.3**	J	7.9	0.16	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	48	39-97	04/19/03	Acceptable
Fluorene-d10	64	43-98	04/19/03	Acceptable
Fluoranthene-d10	79	52-108	04/19/03	Acceptable
Terphenyl-d14	101	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305073-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	ND	U	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.32**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.36**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**0.39**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	73	39-97	04/18/03	Acceptable
Fluorene-d10	72	43-98	04/18/03	Acceptable
Fluoranthene-d10	77	52-108	04/18/03	Acceptable
Terphenyl-d14	96	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-1 COE	**Units:**	ug/Kg
Lab Code:	K2302688-001	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.39**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.87**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**2.3**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**2.1**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**1.1**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**1.7**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**1.4**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**2.0**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**1.2**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.2**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.60**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**1.6**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	47	39-97	04/18/03	Acceptable
Fluorene-d10	54	43-98	04/18/03	Acceptable
Fluoranthene-d10	57	52-108	04/18/03	Acceptable
Terphenyl-d14	78	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-2 COE
Lab Code: K2302688-002

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.38**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	**0.30**	J	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.65**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**3.5**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**4.0**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**2.7**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**3.9**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**2.4**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**3.3**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**2.4**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.7**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.48**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**2.3**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	57	39-97	04/18/03	Acceptable
Fluorene-d10	64	43-98	04/18/03	Acceptable
Fluoranthene-d10	76	52-108	04/18/03	Acceptable
Terphenyl-d14	98	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-3 COE	**Units:**	ug/Kg
Lab Code:	K2302688-003	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.32**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.56**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**1.8**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**1.4**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.78**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**1.2**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**0.94**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**1.3**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**0.61**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.77**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.21**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**1.0**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	49	39-97	04/18/03	Acceptable
Fluorene-d10	57	43-98	04/18/03	Acceptable
Fluoranthene-d10	64	52-108	04/18/03	Acceptable
Terphenyl-d14	87	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-4 COE
Lab Code: K2302688-004

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.31**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.54**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**1.8**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**1.5**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.75**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**1.3**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**1.2**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**1.3**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**0.72**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.4**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**1.0**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**1.9**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	45	39-97	04/18/03	Acceptable
Fluorene-d10	60	43-98	04/18/03	Acceptable
Fluoranthene-d10	72	52-108	04/18/03	Acceptable
Terphenyl-d14	92	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-5 COE
Lab Code: K2302688-005

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.35**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.40**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**1.2**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**0.99**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.36**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**0.66**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**0.56**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**1.1**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**0.41**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.48**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**0.65**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	46	39-97	04/18/03	Acceptable
Fluorene-d10	58	43-98	04/18/03	Acceptable
Fluoranthene-d10	71	52-108	04/18/03	Acceptable
Terphenyl-d14	99	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-6 COE	**Units:**	ug/Kg
Lab Code:	K2302688-006	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.29**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.36**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**1.2**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**0.93**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.39**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**0.81**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**0.66**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**1.0**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**0.41**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.61**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**0.64**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	37	39-97	04/18/03	Outside Control Limits
Fluorene-d10	56	43-98	04/18/03	Acceptable
Fluoranthene-d10	71	52-108	04/18/03	Acceptable
Terphenyl-d14	90	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-7 COE	**Units:**	ug/Kg
Lab Code:	K2302688-007	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.36**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.66**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**2.2**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**1.8**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.97**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**1.6**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**1.2**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**1.6**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**0.93**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.94**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.24**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**1.2**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	50	39-97	04/18/03	Acceptable
Fluorene-d10	63	43-98	04/18/03	Acceptable
Fluoranthene-d10	75	52-108	04/18/03	Acceptable
Terphenyl-d14	95	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-8 COE	**Units:**	ug/Kg
Lab Code:	K2302688-008	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.38**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	**0.22**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**1.9**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	**0.24**	J	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**4.1**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**2.9**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**1.5**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**2.2**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**1.5**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**2.2**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**1.2**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.3**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**0.52**	J	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**1.6**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	41	39-97	04/19/03	Acceptable
Fluorene-d10	53	43-98	04/19/03	Acceptable
Fluoranthene-d10	64	52-108	04/19/03	Acceptable
Terphenyl-d14	81	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-18 COE	**Units:**	ug/Kg
Lab Code:	K2302688-009	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.32**	J	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	**0.75**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	**2.8**	J	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	**2.2**	J	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	**0.98**	J	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	**1.7**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	**1.1**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	**1.5**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	**0.73**	J	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.95**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.22**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**1.0**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	58	39-97	04/18/03	Acceptable
Fluorene-d10	62	43-98	04/18/03	Acceptable
Fluoranthene-d10	67	52-108	04/18/03	Acceptable
Terphenyl-d14	91	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	04/03/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03	**Units:**	ug/Kg
Lab Code:	K2302688-010	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.39**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.60**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**1.9**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**2.2**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**1.4**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**1.9**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**1.1**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**1.8**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**1.5**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.89**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**0.26**	J	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**1.5**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	48	39-97	04/19/03	Acceptable
Fluorene-d10	64	43-98	04/19/03	Acceptable
Fluoranthene-d10	79	52-108	04/19/03	Acceptable
Terphenyl-d14	101	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305073-5	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	ND	U	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.32**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.36**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**0.39**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	73	39-97	04/18/03	Acceptable
Fluorene-d10	72	43-98	04/18/03	Acceptable
Fluoranthene-d10	77	52-108	04/18/03	Acceptable
Terphenyl-d14	96	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1		Sur2	Sur3	Sur4
E-CH3-1 COE	K2302688-001	47		54	57	78
E-CH3-2 COE	K2302688-002	57		64	76	98
E-CH3-3 COE	K2302688-003	49		57	64	87
E-CH3-4 COE	K2302688-004	45		60	72	92
E-CH3-5 COE	K2302688-005	46		58	71	99
E-CH3-6 COE	K2302688-006	37	*	56	71	90
E-CH3-7 COE	K2302688-007	50		63	75	95
E-CH3-8 COE	K2302688-008	41		53	64	81
E-CH3-18 COE	K2302688-009	58		62	67	91
RS-CH03	K2302688-010	48		64	79	101
Method Blank	KWG0305073-5	73		72	77	96
E-CH3-4 COEMS	KWG0305073-1	63		67	73	81
E-CH3-4 COEDMS	KWG0305073-2	64		68	77	85
Lab Control Sample	KWG0305073-3	80		80	86	88
Duplicate Lab Control Sample	KWG0305073-4	77		76	81	82

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	39-97
Sur2 =	Fluorene-d10	43-98
Sur3 =	Fluoranthene-d10	52-108
Sur4 =	Terphenyl-d14	61-122

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/18/2003
Time Analyzed: 10:11

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041803\0418F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305455-2
Analysis Lot: KWG0305455

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	291,195	5.22	158,247	7.54	256,976	10.35
	Upper Limit ==>	582,390	5.72	316,494	8.04	513,952	10.85
	Lower Limit ==>	145,598	4.72	79,124	7.04	128,488	9.85
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305073-5	347,341	5.21	180,033	7.54	268,928	10.34
Lab Control Sample	KWG0305073-3	289,110	5.21	155,163	7.54	233,501	10.35
Duplicate Lab Control Sample	KWG0305073-4	359,036	5.21	190,192	7.54	282,677	10.34
E-CH3-4 COEMS	KWG0305073-1	271,695	5.22	144,018	7.54	216,822	10.35
E-CH3-4 COEDMS	KWG0305073-2	265,021	5.22	138,564	7.54	197,545	10.35
E-CH3-4 COE	K2302688-004	277,576	5.21	143,528	7.54	214,953	10.34
E-CH3-1 COE	K2302688-001	304,143	5.21	157,846	7.54	241,168	10.34
E-CH3-2 COE	K2302688-002	300,483	5.21	157,726	7.54	236,814	10.34
E-CH3-3 COE	K2302688-003	268,780	5.21	137,571	7.54	195,005	10.34
E-CH3-5 COE	K2302688-005	266,016	5.21	133,178	7.53	180,129	10.34
E-CH3-6 COE	K2302688-006	317,140	5.21	164,909	7.54	251,544	10.34
E-CH3-7 COE	K2302688-007	315,601	5.21	162,007	7.54	240,928	10.35
E-CH3-18 COE	K2302688-009	262,133	5.21	134,071	7.54	199,794	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Analyzed:**	04/18/2003
		Time Analyzed:	10:11

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\041803\0418F003.D	**Lab Code:**	KWG0305455-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305455
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	275,972	16.37	157,998	20.12
	Upper Limit ==>	551,944	16.87	315,996	20.62
	Lower Limit ==>	137,986	15.87	78,999	19.62
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305073-5	241,651	16.38	108,769	20.11
Lab Control Sample	KWG0305073-3	240,147	16.37	122,524	20.11
Duplicate Lab Control Sample	KWG0305073-4	297,371	16.37	156,243	20.11
E-CH3-4 COEMS	KWG0305073-1	231,763	16.37	136,062	20.11
E-CH3-4 COEDMS	KWG0305073-2	190,397	16.37	100,788	20.11
E-CH3-4 COE	K2302688-004	177,050	16.37	81,403	20.11
E-CH3-1 COE	K2302688-001	223,615	16.37	115,169	20.11
E-CH3-2 COE	K2302688-002	204,511	16.37	91,631	20.11
E-CH3-3 COE	K2302688-003	188,593	16.37	98,381	20.10
E-CH3-5 COE	K2302688-005	161,749	16.37	79,959	20.11
E-CH3-6 COE	K2302688-006	243,296	16.37	134,918	20.11
E-CH3-7 COE	K2302688-007	230,215	16.37	129,881	20.11
E-CH3-18 COE	K2302688-009	174,215	16.37	84,764	20.10

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/19/2003
Time Analyzed: 06:30

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041903\0419F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305474-2
Analysis Lot: KWG0305474

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	330,110	5.22	182,318	7.54	289,004	10.34
	Upper Limit ==>	660,220	5.72	364,636	8.04	578,008	10.84
	Lower Limit ==>	165,055	4.72	91,159	7.04	144,502	9.84
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
E-CH3-8 COE	K2302688-008	318,809	5.21	162,709	7.53	239,661	10.34
RS-CH03	K2302688-010	297,819	5.21	155,288	7.53	226,348	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Analyzed:**	04/19/2003
		Time Analyzed:	06:30

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\041903\0419F002.D	**Lab Code:**	KWG0305474-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305474
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	302,378	16.37	161,864	20.11
	Upper Limit ==>	604,756	16.87	323,728	20.61
	Lower Limit ==>	151,189	15.87	80,932	19.61
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
E-CH3-8 COE	K2302688-008	223,253	16.37	109,581	20.11
RS-CH03	K2302688-010	204,421	16.37	101,898	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Extracted:**	04/12/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/18/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-4 COE	**Units:**	ug/Kg
Lab Code:	K2302688-004	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305073

		E-CH3-4 COEMS KWG0305073-1 Matrix Spike			E-CH3-4 COEDMS KWG0305073-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	1.0	538	827	65	463	828	56	19-105	15	40
2-Methylnaphthalene	ND	553	827	67	472	828	57	36-95	16	40
Acenaphthylene	ND	583	827	71	492	828	59	40-99	17	40
Acenaphthene	ND	586	827	71	506	828	61	33-102	15	40
Dibenzofuran	ND	607	827	73	518	828	63	38-100	16	40
Fluorene	ND	614	827	74	529	828	64	38-103	15	40
Phenanthrene	1.8	598	827	72	537	828	65	33-113	11	40
Anthracene	ND	596	827	72	492	828	59	40-114	19	40
Fluoranthene	6.1	644	827	77	569	828	68	41-117	12	40
Pyrene	5.0	585	827	70	568	828	68	26-139	3	40
Benz(a)anthracene	2.5	563	827	68	510	828	61	32-134	10	40
Chrysene	4.2	617	827	74	566	828	68	27-135	9	40
Benzo(b)fluoranthene	4.0	515	827	62	498	828	60	31-136	3	40
Benzo(k)fluoranthene	4.3	556	827	67	541	828	65	32-131	3	40
Benzo(a)pyrene	2.4	553	827	67	512	828	62	26-146	8	40
Indeno(1,2,3-cd)pyrene	4.8	519	827	62	472	828	56	33-133	10	40
Dibenz(a,h)anthracene	3.5	533	827	64	481	828	58	42-114	10	40
Benzo(g,h,i)perylene	6.2	574	827	69	550	828	66	31-122	4	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Extracted:**	04/12/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/18/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305073

	Lab Control Sample KWG0305073-3 Lab Control Spike			Duplicate Lab Control Sample KWG0305073-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	177	250	71	170	250	68	33-98	4	40
2-Methylnaphthalene	185	250	74	176	250	70	36-103	5	40
Acenaphthylene	188	250	75	177	250	71	41-102	6	40
Acenaphthene	191	250	77	180	250	72	41-97	6	40
Dibenzofuran	202	250	81	188	250	75	38-102	7	40
Fluorene	205	250	82	192	250	77	43-101	7	40
Phenanthrene	203	250	81	191	250	77	45-101	6	40
Anthracene	211	250	85	195	250	78	46-109	8	40
Fluoranthene	221	250	88	206	250	82	49-112	7	40
Pyrene	206	250	83	189	250	76	50-112	9	40
Benz(a)anthracene	185	250	74	174	250	69	52-114	6	40
Chrysene	214	250	85	203	250	81	54-109	5	40
Benzo(b)fluoranthene	199	250	80	183	250	73	54-115	8	40
Benzo(k)fluoranthene	215	250	86	200	250	80	54-115	7	40
Benzo(a)pyrene	207	250	83	198	250	79	54-120	5	40
Indeno(1,2,3-cd)pyrene	183	250	73	168	250	67	49-121	9	40
Dibenz(a,h)anthracene	194	250	78	176	250	70	48-114	10	40
Benzo(g,h,i)perylene	213	250	85	194	250	78	45-113	9	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302688
Project:	Canaveral Harbor 103 Evaluation/COE Samples	**Date Extracted:**	04/12/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/18/2003
		Time Analyzed:	12:01

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\041803\0418F006.D
Lab Code:	KWG0305073-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305073

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305073-3	J:\MS11\DATA\041803\0418F009.D	04/18/03	13:50
Duplicate Lab Control Sample	KWG0305073-4	J:\MS11\DATA\041803\0418F010.D	04/18/03	14:26
E-CH3-4 COEMS	KWG0305073-1	J:\MS11\DATA\041803\0418F012.D	04/18/03	15:39
E-CH3-4 COEDMS	KWG0305073-2	J:\MS11\DATA\041803\0418F013.D	04/18/03	16:15
E-CH3-4 COE	K2302688-004	J:\MS11\DATA\041803\0418F014.D	04/18/03	16:52
E-CH3-1 COE	K2302688-001	J:\MS11\DATA\041803\0418F015.D	04/18/03	17:28
E-CH3-2 COE	K2302688-002	J:\MS11\DATA\041803\0418F016.D	04/18/03	18:03
E-CH3-3 COE	K2302688-003	J:\MS11\DATA\041803\0418F017.D	04/18/03	18:39
E-CH3-5 COE	K2302688-005	J:\MS11\DATA\041803\0418F018.D	04/18/03	19:15
E-CH3-6 COE	K2302688-006	J:\MS11\DATA\041803\0418F019.D	04/18/03	19:50
E-CH3-7 COE	K2302688-007	J:\MS11\DATA\041803\0418F020.D	04/18/03	20:26
E-CH3-18 COE	K2302688-009	J:\MS11\DATA\041803\0418F022.D	04/18/03	21:37
E-CH3-8 COE	K2302688-008	J:\MS11\DATA\041903\0419F004.D	04/19/03	07:42
RS-CH03	K2302688-010	J:\MS11\DATA\041903\0419F005.D	04/19/03	08:18

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0305073-3	**Lab Code:**	KWG0305073-4
File ID:	J:\MS11\DATA\041803\0418F009.D	**File ID:**	J:\MS11\DATA\041803\0418F010.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/12/2003	**Date Extracted:**	04/12/2003
Date Analyzed:	04/18/2003	**Date Analyzed:**	04/18/2003
Time Analyzed:	13:50	**Time Analyzed:**	14:26

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305073

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305073-5	J:\MS11\DATA\041803\0418F006.D	04/18/03	12:01
E-CH3-4 COEMS	KWG0305073-1	J:\MS11\DATA\041803\0418F012.D	04/18/03	15:39
E-CH3-4 COEDMS	KWG0305073-2	J:\MS11\DATA\041803\0418F013.D	04/18/03	16:15
E-CH3-4 COE	K2302688-004	J:\MS11\DATA\041803\0418F014.D	04/18/03	16:52
E-CH3-1 COE	K2302688-001	J:\MS11\DATA\041803\0418F015.D	04/18/03	17:28
E-CH3-2 COE	K2302688-002	J:\MS11\DATA\041803\0418F016.D	04/18/03	18:03
E-CH3-3 COE	K2302688-003	J:\MS11\DATA\041803\0418F017.D	04/18/03	18:39
E-CH3-5 COE	K2302688-005	J:\MS11\DATA\041803\0418F018.D	04/18/03	19:15
E-CH3-6 COE	K2302688-006	J:\MS11\DATA\041803\0418F019.D	04/18/03	19:50
E-CH3-7 COE	K2302688-007	J:\MS11\DATA\041803\0418F020.D	04/18/03	20:26
E-CH3-18 COE	K2302688-009	J:\MS11\DATA\041803\0418F022.D	04/18/03	21:37
E-CH3-8 COE	K2302688-008	J:\MS11\DATA\041903\0419F004.D	04/19/03	07:42
RS-CH03	K2302688-010	J:\MS11\DATA\041903\0419F005.D	04/19/03	08:18

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/18/2003
Time Analyzed: 09:49

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041803\0418F002.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305455

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
275	198	10	60	31.6	445952	PASS
365	442	1	50	2.4	54808	PASS
441	443	0	100	75.0	350336	PASS
442	442	100	100	100.0	2309120	PASS
443	442	15	24	20.2	467072	PASS
51	198	10	80	29.1	410240	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.1	466496	PASS
70	69	0	2	0.5	2366	PASS
127	198	10	80	43.9	619136	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	61.1	1410048	PASS
199	198	5	9	6.9	96736	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305455-2	J:\MS11\DATA\041803\0418F003.D	04/18/2003	10:11	
Method Blank	KWG0305073-5	J:\MS11\DATA\041803\0418F006.D	04/18/2003	12:01	
Lab Control Sample	KWG0305073-3	J:\MS11\DATA\041803\0418F009.D	04/18/2003	13:50	
Duplicate Lab Control Sample	KWG0305073-4	J:\MS11\DATA\041803\0418F010.D	04/18/2003	14:26	
E-CH3-4 COEMS	KWG0305073-1	J:\MS11\DATA\041803\0418F012.D	04/18/2003	15:39	
E-CH3-4 COEDMS	KWG0305073-2	J:\MS11\DATA\041803\0418F013.D	04/18/2003	16:15	
E-CH3-4 COE	K2302688-004	J:\MS11\DATA\041803\0418F014.D	04/18/2003	16:52	
E-CH3-1 COE	K2302688-001	J:\MS11\DATA\041803\0418F015.D	04/18/2003	17:28	
E-CH3-2 COE	K2302688-002	J:\MS11\DATA\041803\0418F016.D	04/18/2003	18:03	
E-CH3-3 COE	K2302688-003	J:\MS11\DATA\041803\0418F017.D	04/18/2003	18:39	
E-CH3-5 COE	K2302688-005	J:\MS11\DATA\041803\0418F018.D	04/18/2003	19:15	
E-CH3-6 COE	K2302688-006	J:\MS11\DATA\041803\0418F019.D	04/18/2003	19:50	
E-CH3-7 COE	K2302688-007	J:\MS11\DATA\041803\0418F020.D	04/18/2003	20:26	
E-CH3-18 COE	K2302688-009	J:\MS11\DATA\041803\0418F022.D	04/18/2003	21:37	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/19/2003
Time Analyzed: 06:09

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041903\0419F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305474

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	30.2	410112	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	35.0	475008	PASS
70	69	0	2	0.5	2346	PASS
127	198	10	80	45.3	613952	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	62.1	1356288	PASS
199	198	5	9	6.9	93800	PASS
275	198	10	60	31.8	431296	PASS
365	442	1	50	2.5	53552	PASS
441	443	0	100	74.2	323072	PASS
442	442	100	100	100.0	2183168	PASS
443	442	15	24	19.9	435392	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305474-2	J:\MS11\DATA\041903\0419F002.D	04/19/2003	06:30	
E-CH3-8 COE	K2302688-008	J:\MS11\DATA\041903\0419F004.D	04/19/2003	07:42	
RS-CH03	K2302688-010	J:\MS11\DATA\041903\0419F005.D	04/19/2003	08:18	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/18/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305455
Units: ng/ml

File ID: J:\MS11\DATA\041803\0418F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.658	0	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.75	0	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.58	5	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.26	3	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.11	-6	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.06	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.22	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.944	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.05	-5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.51	-13	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.87	-5	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.28	-5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.902	0.877	-3	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.01	0.952	0.978	3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2100	0.01	1.15	1.19	3	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.737	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.04	0	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.985	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.815	-11	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688
Date Analyzed: 04/19/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305474
Units: ng/ml

File ID: J:\MS11\DATA\041903\0419F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.05	0	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.661	0	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.73	0	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.10	1	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.55	3	NA	± 20 %	AverageRF
Fluorene	2000	2000	0.01	1.22	1.25	2	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.11	-5	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.14	-11	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.945	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.05	-5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1800	0.01	1.73	1.52	-12	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.92	-3	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.24	-8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.737	-18	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1700	0.01	0.952	0.817	-14	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1800	0.01	1.15	1.05	-9	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.741	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.03	-1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.984	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.833	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305455
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0418F002.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305455-1	4/18/2003	09:49		4/18/2003	10:02
0418F003.D	Continuing Calibration Verification	KWG0305455-2	4/18/2003	10:11		4/18/2003	10:37
0418F004.D	Instrument Blank	KWG0305455-3	4/18/2003	10:47		4/18/2003	11:13
0418F005.D	ZZZZZZ	ZZZZZZ	4/18/2003	11:24		4/18/2003	11:50
0418F006.D	Method Blank	KWG0305073-5	4/18/2003	12:01		4/18/2003	12:27
0418F007.D	ZZZZZZ	ZZZZZZ	4/18/2003	12:37		4/18/2003	13:03
0418F008.D	ZZZZZZ	ZZZZZZ	4/18/2003	13:13		4/18/2003	13:39
0418F009.D	Lab Control Sample	KWG0305073-3	4/18/2003	13:50		4/18/2003	14:16
0418F010.D	Duplicate Lab Control Sample	KWG0305073-4	4/18/2003	14:26		4/18/2003	14:52
0418F011.D	ZZZZZZ	ZZZZZZ	4/18/2003	15:03		4/18/2003	15:29
0418F012.D	E-CH3-4 COEMS	KWG0305073-1	4/18/2003	15:39		4/18/2003	16:05
0418F013.D	E-CH3-4 COEDMS	KWG0305073-2	4/18/2003	16:15		4/18/2003	16:41
0418F014.D	E-CH3-4 COE	K2302688-004	4/18/2003	16:52		4/18/2003	17:18
0418F015.D	E-CH3-1 COE	K2302688-001	4/18/2003	17:28		4/18/2003	17:54
0418F016.D	E-CH3-2 COE	K2302688-002	4/18/2003	18:03		4/18/2003	18:29
0418F017.D	E-CH3-3 COE	K2302688-003	4/18/2003	18:39		4/18/2003	19:05
0418F018.D	E-CH3-5 COE	K2302688-005	4/18/2003	19:15		4/18/2003	19:41
0418F019.D	E-CH3-6 COE	K2302688-006	4/18/2003	19:50		4/18/2003	20:16
0418F020.D	E-CH3-7 COE	K2302688-007	4/18/2003	20:26		4/18/2003	20:52
0418F021.D	ZZZZZZ	ZZZZZZ	4/18/2003	21:01		4/18/2003	21:27
0418F022.D	E-CH3-18 COE	K2302688-009	4/18/2003	21:37		4/18/2003	22:03

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples

Service Request: K2302688

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305474
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0419F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305474-1	4/19/2003	06:09		4/19/2003	06:22
0419F002.D	Continuing Calibration Verification	KWG0305474-2	4/19/2003	06:30		4/19/2003	06:56
0419F003.D	Instrument Blank	KWG0305474-3	4/19/2003	07:06		4/19/2003	07:32
0419F004.D	E-CH3-8 COE	K2302688-008	4/19/2003	07:42		4/19/2003	08:08
0419F005.D	RS-CH03	K2302688-010	4/19/2003	08:18		4/19/2003	08:44
0419F006.D	ZZZZZZ	ZZZZZZ	4/19/2003	08:53		4/19/2003	09:19
0419F007.D	ZZZZZZ	ZZZZZZ	4/19/2003	09:29		4/19/2003	09:55
0419F008.D	ZZZZZZ	ZZZZZZ	4/19/2003	10:05		4/19/2003	10:31
0419F009.D	ZZZZZZ	ZZZZZZ	4/19/2003	10:40		4/19/2003	11:06
0419F010.D	ZZZZZZ	ZZZZZZ	4/19/2003	11:16		4/19/2003	11:42
0419F011.D	ZZZZZZ	ZZZZZZ	4/19/2003	11:52		4/19/2003	12:18
0419F012.D	ZZZZZZ	ZZZZZZ	4/19/2003	12:28		4/19/2003	12:54
0419F013.D	ZZZZZZ	ZZZZZZ	4/19/2003	13:03		4/19/2003	13:29
0419F014.D	ZZZZZZ	ZZZZZZ	4/19/2003	13:39		4/19/2003	14:05
0419F019.D	ZZZZZZ	ZZZZZZ	4/19/2003	16:36		4/19/2003	17:02
0419F020.D	ZZZZZZ	ZZZZZZ	4/19/2003	17:12		4/19/2003	17:38
0419F021.D	ZZZZZZ	ZZZZZZ	4/19/2003	17:47		4/19/2003	18:13

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE Samples
Sample Matrix: Sediment

Service Request: K2302688
Date Extracted: 04/12/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0305073
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-1 COE	K2302688-001	04/02/03	04/10/03	20.02g	2ml	36.3	
E-CH3-2 COE	K2302688-002	04/02/03	04/10/03	20.03g	2ml	39.4	
E-CH3-3 COE	K2302688-003	04/02/03	04/10/03	20.00g	2ml	30.8	
E-CH3-4 COE	K2302688-004	04/02/03	04/10/03	20.01g	2ml	30.2	
E-CH3-5 COE	K2302688-005	04/02/03	04/10/03	20.02g	2ml	37.2	
E-CH3-6 COE	K2302688-006	04/02/03	04/10/03	20.02g	2ml	55.4	
E-CH3-7 COE	K2302688-007	04/02/03	04/10/03	20.01g	2ml	30.0	
E-CH3-8 COE	K2302688-008	04/01/03	04/10/03	20.02g	2ml	55.7	
E-CH3-18 COE	K2302688-009	04/02/03	04/10/03	20.05g	2ml	36.3	
RS-CH03	K2302688-010	04/03/03	04/10/03	20.03g	2ml	63.2	
Method Blank	KWG0305073-5	NA	NA	20.07g	2ml	NA	
E-CH3-4 COEMS	KWG0305073-1	04/02/03	04/10/03	20.02g	2ml	30.2	
E-CH3-4 COEDMS	KWG0305073-2	04/02/03	04/10/03	20.00g	2ml	30.2	
Lab Control Sample	KWG0305073-3	NA	NA	20.00g	2ml	NA	
Duplicate Lab Control Sample	KWG0305073-4	NA	NA	20.00g	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 16, 2003 Service Request No: K2302785

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/COE

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 15, 2003. For your reference, these analyses have been assigned our service request number K2302785.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Received:**	4/15/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Ten water samples were received for analysis at Columbia Analytical Services on 4/15/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

Several alternative procedures were used due to difficulties encountered that were primarily related to the associated elutriate samples. Arsenic was analyzed using EPA Method 7062 (Hydride/AAS). Although the Reductive Precipitation/ICP-MS procedure performs very well in typical seawater and other complex salt matrices, an interference was observed in some of the elutriate samples. Therefore, all samples were analyzed by Hydride/AAS.

Iron and Aluminum were initially planned for analysis by EPA Method 6010 (ICP-AES). To circumvent interferences, the Iron was analyzed by EPA Method 7381 (GFAAS) and Aluminum was analyzed by EPA Method 200.8 (ICP-MS after appropriate dilution of the digestate).

No other anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of these samples were observed.

Organotin Compounds

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

No anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 5/15/03

Chain of Custody Documentation

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
COE Samples

K2302785

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH3-1	04/2/03	1112	Sed. / Elut.	Various	7	Per Contract		
E-CH3-2	04/2/03	1155	Sed. / Elut.	Various	7	Per Contract		
E-CH3-3	04/2/03	1220	Sed. / Elut.	Various	7	Per Contract		
E-CH3-4	04/2/03	1243	Sed. / Elut.	Various	7	Per Contract		
E-CH3-5	04/2/03	1307	Sed. / Elut.	Various	7	Per Contract		
E-CH3-6	04/2/03	1336	Sed. / Elut.	Various	7	Per Contract		
E-CH3-7	04/2/03	1401	Sed. / Elut.	Various	7	Per Contract		
E-CH3-8	04/1/03	1250	Sed. / Elut.	Various	7	Per Contract		
E-CH3-18	04/2/03	1220	Sed. / Elut.	Various	7	Per Contract		
RS-CH03	04/3/03	1004	Sed. / Elut.	Various	7	Per Contract		
								Added SD-276-2 As per client instruction

Samples Relinquished by: PPB
Date: 4/14/03 Time: 1700
Samples Relinquished by: Nadia Lombardero
Date: 4/14/03 Time: 1800 → FedEx

Received by: Nadia Lombardero
Date: 4/14/03 Time: 1700
Received by: 4/15/03 1000
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
COE Samples

K2302785

00008

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH3-1	04/ 2 /03	1112	Sed. / Elut.	Various	7	Per Contract		
E-CH3-2	04/ 2 /03	1155	Sed. / Elut.	Various	7	Per Contract		
E-CH3-3	04/ 2 /03	1220	Sed. / Elut.	Various	7	Per Contract		
E-CH3-4	04/ 2 /03	1243	Sed. / Elut.	Various	7	Per Contract		
E-CH3-5	04/ 2 /03	1307	Sed. / Elut.	Various	7	Per Contract		
E-CH3-6	04/ 2 /03	1336	Sed. / Elut.	Various	7	Per Contract		
E-CH3-7	04/ 2 /03	1401	Sed. / Elut.	Various	7	Per Contract		
E-CH3-8	04/ 1 /03	1250	Sed. / Elut.	Various	7	Per Contract		
E-CH3-18	04/ 2 /03	1220	Sed. / Elut.	Various	7	Per Contract		
RS-CH03	04/ 3 /03	1004	Sed. / Elut.	Various	7	Per Contract		

Samples Relinquished by: [signature] - PPB
Date: 4/4/03 Time: 1700
Samples Relinquished by: [signature]
Date: 4/4/03 Time: 1800 → FedEx

Received by: [signature]
Date: 4/4/03 Time: 1700
Received by: [signature] CAS
Date: 4/2/03 Time: 0930

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

COE

K230278

60000

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

Cape Canaveral Samples

SEDIMENTS/SOILS	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ALUMINUM - ICP - 6010	9	11	9	**29**	0.5 mg/kg	Columbia	
ANTIMONY - ICP/MS - 6020	9	11	9	**29**	0.3 mg/kg	Columbia	
ARSENIC	9	11	9	**29**	0.5 mg/kg	Columbia	
CADMIUM	9	11	9	**29**	0.1 mg/kg	Columbia	
CHROMIUM	9	11	9	**29**	0.2 mg/kg	Columbia	
COPPER	9	11	9	**29**	0.1 mg/kg	Columbia	
IRON - ICP - 6010	9	11	9	**29**	1.5 mg/kg	Columbia	
MERCURY - CVAAS	9	11	9	**29**	0.05 mg/kg	Columbia	
NICKEL ICP-MS - 6020	9	11	9	**29**	0.1 mg/kg	Columbia	
SILVER	9	11	9	**29**	0.1 mg/kg	Columbia	
ZINC	9	11	9	**29**	0.2 mg/kg	Columbia	
CYANIDE	0	11	9	**20**	1.0mg/kg	Columbia	
TOTAL AMMONIA	0	11	9	**20**	0.1 mg/kg	Columbia	
TOC	9	11	9	**29**	0.10%	Columbia	
OIL AND GREASE	0	11	9	**20**	1.0 ppm	Columbia	
PAH'S	9	11	9	**29**	0.02 mg/kg	Columbia	
ORGANOTIN	9	11	9	**29**	0.01 mg/kg	Columbia	
%SOLIDS	8	9	8	**25**	n/a	LAW	
GRAIN SIZE DIST.	8	9	8	**25**	n/a	LAW	
SPECIFIC GRAVITY	8	9	8	**25**	n/a	LAW	
ATTERBURG LIMITS	8	9	8	**25**	n/a	LAW	
SETTLING RATES	8	9	8	**25**	n/a	LAW	
10 DAY SEDIMENT BIOASSAY	8	2	9	**19**	n/a	ESE	
28 DAY SED. BIOACCUMULATION	8	2	9	**19**	n/a	ESE	

WATER/ELUTRIAT	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ANTIMONY	9	12	9	**30**	3.5 ug/l	Columbia	
ALUMINUM	9	2	0	**11**	0.5 ug/l	Columbia	Reference Station and control Sediment elutriate need aluminum and iron
ARSENIC	9	12	9	**30**	1.0 ug/l	Columbia	
CADMIUM	9	12	9	**30**	0.5 ug/l	Columbia	
CHROMIUM	9	12	9	**30**	0.5 ug/l	Columbia	

COPPER	9	12	9	**30**	2.5 ug/l	Columbia	
LEAD	9	12	9	**30**	2.5 ug/l	Columbia	
IRON	9	0	0	**9**	0.5 ug/l	Columbia	
MERCURY	9	12	9	**30**	0.2 ug/l	Columbia	
NICKEL	9	12	9	**30**	0.2 ug/l	Columbia	
SILVER	9	12	9	**30**	1.0 ug/l	Columbia	
ZINC	9	12	9	**30**	1.5 ug/l	Columbia	
CYANIDE	0	12	9	**21**	1.0 ppm	Columbia	
TOTAL AMMONIA	0	12	9	**21**	0.10 ppm	Columbia	
TOC	9	12	9	**30**	0.10%	Columbia	
OIL AND GREASE	0	12	9	**21**	1.0 ppm	Columbia	
PAH's	9	12	9	**30**	0.02 ppm	Columbia	
ORGANOTIN	9	12	9	**30**	0.1 ppm	Columbia	
96-HR ELUTRIATE ACUTE BIOASSAY	9	2	9	**20**	n/a	ESE	
Sediments:							
COE Samples: 8 sites, 1 dupe, 1 reference, 1 control sediment (Chem and Phys). (No Phys on control or duplicate sediment) = 11							
NAVY Samples: 8 sites, 1 dupe (Chem, Phys, and Tox) Include Ref and Control on Tox) = 9 or (11 for Tox)							
Port Authority:							
4 Vibracore Samples (Chem, Phys, and Tox) = 4							
6 Upland samples and one dupe to be combined into 4 samples (Chem, Phys, and Tox) = 4							
2 Upland samples to be combined into 1 samples (Chem and Phys) = 1							
Elutriates:							
Same as above except for the COE Samples:							
COE: 8 sites, 1 dupe, 1 reference, 1 control sediment elutriate, 1 site water = 12							

00010

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Pg 1 of 3

Project/Client Water + Air Research Work Order K23 02785

Cooler received on 4-15-03 and opened on 4-15-03 by DM

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex / Attached (Y) N
4. COC #

Temperature of cooler(s) upon receipt:	2.0	-1.4	-1.5	1.0	0.9	-1.1
Temperature Blank:	3.5	–	1.0	2.2	0.7	1.0

5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present ice, ice packs, bubbles
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? missing dates + times (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? Y (N)
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y (N)
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? Y N

Explain any discrepancies: Rec'd Oil + Grease in 1 L Clear Glass.

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
CCO5-6	NaOH	2 mL	EM4103010	1L Other	–	
CT6-7	NaOH	2 mL	EM4103010	1L Other	–	
CCO3-4	NaOH	2 mL	EM4103010	1L Other	–	
ECH3-9	HNO3	2 mL	X40023	1L Plastic	–	
CH3-13	H2SO4	½ mL	EMK2911650	113 250 ml (Amber)	–	

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

pg. 2 of 3

Project/Client Water & Air Research. Work Order K23 02785

Cooler received on 4-15-03 and opened on 4-15-03 by [illegible]

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex. Attached. Y N
4. COC #
   Temperature of cooler(s) upon receipt: -1.2 -1.3 0.3 1.2 1.1 1.7
   Temperature Blank: 1.0 0.5 1.4 0.0 0.2 1.3
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present 1 lg ice packs, bubbles.
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies: See page 1

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

page 3 of 3

Project/Client Water & Air Research Work Order K23 02285

Cooler received on 4-15-03 and opened on 4-15-03 by Kn

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex / Attached Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.5 3.6
   Temperature Blank: 0.0 2.1
5. Were custody papers properly filled out (ink, signed, etc.)? Y (N)
6. Type of packing material present ice, ice packs, bubbles
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies:

See page

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

00013

CRFREV.DOC3/5/2003

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03

Cyanide, Total

Analysis Method : 335.2
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-1	K2302785-001	0.01	0.003	1	04/16/03	ND	
E-CH3-2	K2302785-002	0.01	0.003	1	04/16/03	ND	
E-CH3-3	K2302785-003	0.01	0.003	1	04/16/03	ND	
E-CH3-4	K2302785-004	0.01	0.003	1	04/16/03	ND	
E-CH3-5	K2302785-005	0.01	0.003	1	04/16/03	ND	
E-CH3-6	K2302785-006	0.01	0.003	1	04/16/03	ND	
E-CH3-7	K2302785-007	0.01	0.003	1	04/24/03	ND	
E-CH3-8	K2302785-008	0.01	0.003	1	04/24/03	ND	
E-CH3-18	K2302785-009	0.01	0.003	1	04/24/03	ND	
RS-CH03	K2302785-010	0.01	0.003	1	04/24/03	ND	
Method Blank	K2302785-MB	0.01	0.003	1	04/16/03	ND	
Method Blank	K2302785-MB	0.01	0.003	1	04/24/03	ND	

Approved By _____ Date : 5/1/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-6
Lab Code : K2302785-006DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	335.2	0.01	ND	ND	ND	-	

Approved By _____ Date : 5/1/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/24/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-8
Lab Code : K2302785-008DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	335.2	0.01	ND	ND	ND	-	

Approved By _____ Date : 5/1/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-6
Lab Code : K2302785-006MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	335.2	0.01	0.10	ND	0.09	90	75-125	

Approved By _____ Date : 5/1/03

Report By:PWiest

00018

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/24/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-8
Lab Code : K2302785-008MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	335.2	0.01	0.10	ND	0.10	100	75-125	

Approved By _____ Date : 5/1/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302785
Project Name :	Canaveral Harbor 103 Evaluation/COE	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/16-24/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302785-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	mg/L (ppm)	335.2	0.75	0.78	104	85-115	
Cyanide, Total	mg/L (ppm)	335.2	0.75	0.77	103	85-115	

Approved By _____ Date : 5/1/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Collected: NA
Date Received: NA
Date Analyzed: 4/16, 24/03

Cyanide, Total
EPA Method 335.2
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 5 Result	100	98	98
CCV 6 Result	100	99	99
CCV 3 Result	100	105	105
CCV 4 Result	100	105	105
CCV 5 Result	100	105	105

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 5 Result	10	ND
CCB 6 Result	10	ND
CCB 3 Result	10	ND
CCB 4 Result	10	ND
CCB 5 Result	10	ND

Approved By: _____ Date: 5/3/03

COMBOQCD/042695

Q-CCV.XLT

10/6/95

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03

Carbon, Total Organic

Analysis Method : 415.1
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-1	K2302785-001	0.5	0.2	1	04/28/03	5.9	
E-CH3-2	K2302785-002	0.5	0.2	1	04/28/03	5.1	
E-CH3-3	K2302785-003	0.5	0.2	1	04/28/03	4.9	
E-CH3-4	K2302785-004	0.5	0.2	1	04/28/03	7.0	
E-CH3-5	K2302785-005	0.5	0.2	1	04/28/03	3.6	
E-CH3-6	K2302785-006	0.5	0.2	1	04/28/03	3.9	
E-CH3-7	K2302785-007	0.5	0.2	1	04/28/03	6.6	
E-CH3-8	K2302785-008	0.5	0.2	1	04/28/03	3.7	
E-CH3-18	K2302785-009	0.5	0.2	1	04/28/03	5.1	
RS-CH03	K2302785-010	0.5	0.2	1	04/28/03	4.0	
Method Blank	K2302785-MB	0.5	0.2	1	04/28/03	ND	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-1
Lab Code : K2302785-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	415.1	0.5	5.9	5.8	5.9	2	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-1
Lab Code : K2302785-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	415.1	0.5	25.0	5.9	29.1	93	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302785
Project Name :	Canaveral Harbor 103 Evaluation/COE	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/28/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302785-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	mg/L (ppm)	415.1	27.1	26.8	99	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Collected: NA
Date Received: NA
Date Analyzed: 04/28/03

Carbon, Total Organic
EPA Method 415.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 5 Result	25.0	25.5	102
CCV 6 Result	25.0	25.8	103
CCV 7 Result	25.0	25.4	102

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 5 Result	0.5	ND
CCB 6 Result	0.5	ND
CCB 7 Result	0.5	ND

Approved By: _____ Date: 4/30/03

COMBOQCD/042695

Q-CCV.XLT

10/6/95

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03

Ammonia as Nitrogen

Analysis Method : 350.1
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-1	K2302785-001	0.5	0.2	10	04/18/03	17.8	
E-CH3-2	K2302785-002	0.5	0.2	10	04/18/03	14.4	
E-CH3-3	K2302785-003	0.5	0.2	10	04/18/03	14.1	
E-CH3-4	K2302785-004	0.5	0.2	10	04/18/03	19.8	
E-CH3-5	K2302785-005	0.05	0.02	1	04/18/03	1.41	
E-CH3-6	K2302785-006	0.25	0.1	5	04/18/03	7.69	
E-CH3-7	K2302785-007	0.5	0.2	10	04/18/03	20.3	
E-CH3-8	K2302785-008	0.05	0.02	1	04/18/03	1.95	
E-CH3-18	K2302785-009	0.5	0.2	10	04/18/03	15.8	
RS-CH03	K2302785-010	0.05	0.02	1	04/18/03	0.95	
Method Blank	K2302785-MB	0.05	0.02	1	04/18/03	ND	
Method Blank	K2302785-MB	0.05	0.02	1	04/18/03	ND	

Approved By _____ Date : 5/3/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/18/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-1
Lab Code : K2302785-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	350.1	0.5	17.8	17.2	17.5	3	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/18/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-1
Lab Code : K2302785-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	350.1	0.5	20.0	17.8	34.7	85	75-125	

Approved By _____ Date : 5/3/03

Report By:BReller

00028

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/18/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302785-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	2.29	2.31	101	85-115	
Ammonia as Nitrogen	mg/L (ppm)	350.1	2.29	2.33	102	85-115	

Approved By _____ Date : 5/3/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Collected: NA
Date Received: NA
Date Analyzed: 04/18/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	2.00	1.97	99
CCV 3 Result	2.00	1.95	98
CCV 4 Result	2.00	1.92	96
CCV 8 Result	2.00	1.93	97
CCV 9 Result	2.00	1.91	96

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND
CCB 4 Result	0.05	ND
CCB 8 Result	0.05	ND
CCB 9 Result	0.05	ND

Approved By: _____ Date: 5/3/03

COMBOQCD/042695

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03

Sulfide, Total

Analysis Method : 376.2
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-1	K2302785-001	0.05	0.004	1	04/16/03	0.006	J
E-CH3-2	K2302785-002	0.05	0.004	1	04/16/03	ND	
E-CH3-3	K2302785-003	0.05	0.004	1	04/16/03	0.01	J
E-CH3-4	K2302785-004	0.05	0.004	1	04/16/03	0.005	J
E-CH3-5	K2302785-005	0.05	0.004	1	04/16/03	ND	
E-CH3-6	K2302785-006	0.05	0.004	1	04/16/03	0.007	J
E-CH3-7	K2302785-007	0.05	0.004	1	04/16/03	0.005	J
E-CH3-8	K2302785-008	0.05	0.004	1	04/16/03	0.006	J
E-CH3-18	K2302785-009	0.05	0.004	1	04/16/03	0.005	J
RS-CH03	K2302785-010	0.05	0.004	1	04/16/03	0.006	J
Method Blank	K2302785-MB	0.05	0.004	1	04/16/03	0.007	J

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-1
Lab Code : K2302785-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.05	0.006	0.01	0.008	50	J, *

Approved By _____ Date : 4/30/03

Report By:PWiest

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-1
Lab Code : K2302785-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	376.2	0.05	0.96	0.006	0.85	88	75-125	

Approved By _____ Date : 4/30/03

Report By:PWiest

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/COE
Project Number : NA
Sample Matrix : Water

Service Request : K2302785
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/16/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302785-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	mg/L (ppm)	376.2	0.96	0.98	102	85-115	

Approved By _____ Date : 4/30/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Collected: NA
Date Received: NA
Date Analyzed: 04/16/03

Sulfide
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.96	0.95	99
CCV 2 Result	0.96	0.95	99
CCV 3 Result	0.96	0.95	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	0.007 J
CCB 2 Result	0.05	0.007 J
CCB 3 Result	0.05	0.006 J

Approved By: _____ Date: 4/30/03

COMBOQCD/042695

00035

Q-CCV.XLT

10/6/95

Metals

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/COE

Sample No.	Lab Sample ID.
E-CH3-1	K2302785-001
E-CH3-1D	K2302785-001D
E-CH3-1S	K2302785-001S
E-CH3-2	K2302785-002
E-CH3-2S	K2302785-002S
E-CH3-3	K2302785-003
E-CH3-4	K2302785-004
E-CH3-5	K2302785-005
E-CH3-6	K2302785-006
E-CH3-7	K2302785-007
E-CH3-8	K2302785-008
E-CH3-18	K2302785-009
RS-CH03	K2302785-010
Method Blank	K2302785-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: T. Clt Date: 5/16/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-1
Lab Code: K2302785-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	1.11		
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	56.2		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.19	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.74		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.15	B	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.33		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.7		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-2
Lab Code: K2302785-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	1.11		
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	51.1		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	U	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.24		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.44		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.13		
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.2		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-3
Lab Code: K2302785-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	0.83	B	
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	38.6		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.16	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.77		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.88		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.8		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-4
Lab Code: K2302785-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	1.22		
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	40.6		
Cadmium	200.8	0.05	0.02	1	4/25/03	5/2/03	0.05	B	
Chromium	200.8	0.50	0.10	1	4/25/03	5/2/03	0.18	B	
Copper	200.8	0.25	0.03	1	4/25/03	5/2/03	0.35		
Lead	200.8	0.05	0.05	1	4/25/03	5/2/03	0.11		
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.25	0.10	1	4/25/03	5/2/03	0.54		
Silver	200.8	0.05	0.02	1	4/25/03	5/2/03	0.02	U	
Zinc	200.8	1.3	0.5	1	4/25/03	5/2/03	1.9		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-5
Lab Code: K2302785-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	0.32	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	3.34		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.02	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	U	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.34		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.37		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.0		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302785
Project No.: NA
Date Collected: 04/10/03
Project Name: Canaveral Harbor 103 Evaluation/COE
Date Received: 04/15/03
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: E-CH3-6
Lab Code: K2302785-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	0.87	B	
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	30.9		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	U	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.22		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.44		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.8	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-7
Lab Code: K2302785-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	0.53	B	
Arsenic	7062	10.00	5.00	20	5/12/03	5/14/03	106		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.09	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.15	B	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.36		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.9	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-8
Lab Code: K2302785-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	0.59	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	9.26		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	U	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.32		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.51		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.4		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-18
Lab Code: K2302785-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	0.99	B	
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	52.5		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.25	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.43		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.37		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.8	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/COE
Matrix: WATER

Service Request: K2302785
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: RS-CH03
Lab Code: K2302785-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	1.08		
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	16.9		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.19	B	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.41		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.2		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302785
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/COE
Date Received:
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2302785-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/2/03	5/7/03	0.20	U	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	0.50	U	
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.25	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.02	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.20	0.10	1	4/24/03	4/25/03	0.10	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.08	U	
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.4	U	

% Solids: 0.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony	50.0	10.7	107	25.0	25.1	100	25.4	102	200.8
Arsenic	5.0	4.87	97	5.0	5.18	104	5.44	109	7062
Cadmium	25.0	24.8	99	25.0	25.1	100	25.0	100	200.8
Chromium	20.0	19.8	99	25.0	24.9	100	25.4	102	200.8
Copper	25.0	24.1	96	25.0	24.5	98	24.4	98	200.8
Lead	50.0	47.6	95	25.0	24.9	100	24.7	99	200.8
Mercury	5.0	5.24	105	5.0	5.18	104	5.32	106	7470A
Nickel	50.0	48.2	96	25.0	24.6	98	24.3	97	200.8
Silver	25.0	24.8	99	25.0	24.8	99	24.8	99	200.8
Zinc	50.0	49.5	99	25.0	25.0	100	25.0	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	25.2	101			200.8
Arsenic				5.0	5.22	104	5.12	102	7062
Cadmium				25.0	24.4	98	24.8	99	200.8
Chromium				25.0	25.0	100	25.0	100	200.8
Copper				25.0	24.8	99	25.0	100	200.8
Lead				25.0	24.2	97	24.9	100	200.8
Mercury				5.0	5.39	108	5.22	104	7470A
Nickel				25.0	24.9	100	24.7	99	200.8
Silver				25.0	24.5	98	24.9	100	200.8
Zinc				25.0	25.2	101	25.2	101	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				5.0	4.95	99	5.00	100	7062
Cadmium				25.0	24.7	99			200.8
Chromium				25.0	24.8	99			200.8
Copper				25.0	24.9	100			200.8
Lead				25.0	25.1	100			200.8
Mercury				5.0	5.20	104	5.15	103	7470A
Nickel				25.0	24.6	98			200.8
Silver				25.0	24.9	99			200.8
Zinc				25.0	25.0	100			200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Arsenic				5.0	4.97	99			7062

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Antimony				0.10	0.10	96		
Arsenic	0.50	0.39	78					
Cadmium				0.40	0.43	108		
Chromium				2.0	2.00	100		
Copper				1.0	0.99	99		
Lead				0.20	0.20	98		
Mercury	0.20	0.18	92					
Nickel				2.0	2.21	111		
Silver				0.20	0.17	86		
Zinc				5.0	4.70	94		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Antimony	0.03	B	0.02	U	0.02	U	0.02	U					200.8
Arsenic	0.25	U	0.25	U	0.37	B	0.29	B					7062
Cadmium	0.06	U	0.06	U	0.06	U	0.06	U					200.8
Chromium	0.40	U	0.40	U	0.40	U	0.40	U					200.8
Copper	0.10	U	0.10	U	0.10	U	0.10	U					200.8
Lead	0.20	U	0.20	U	0.20	U	0.20	U					200.8
Mercury	0.10	U	0.10	U	0.10	U	0.10	U					7470A
Nickel	0.40	U	0.40	U	0.40	U	0.40	U					200.8
Silver	0.07	U	0.07	U	0.07	U	0.07	U					200.8
Zinc	2.0	U	2.0	U	2.0	U	2.0	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Arsenic			0.25	U	0.25	U	0.25	U					7062
Cadmium			0.06	U	0.06	U							200.8
Chromium			0.40	U	0.40	U							200.8
Copper			0.10	U	0.10	U							200.8
Lead			0.20	U	0.20	U							200.8
Mercury			0.10	U	0.10	U	0.10	U					7470A
Nickel			0.40	U	0.40	U							200.8
Silver			0.07	U	0.07	U							200.8
Zinc			2.0	U	2.0	U							200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Arsenic			0.25	U									7062

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302785
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/COE
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: E-CH3-1S
Lab Code: K2302785-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	70 - 130	101		1.11		100	100		200.8
Arsenic	75 - 125	75.6		56.2		16.0	121		7062

An empty field in the Control Limit column indicates the control limit is not applicable

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302785
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/COE
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: E-CH3-2S
Lab Code: K2302785-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Cadmium	51 - 127	3.52		0.01	U	4.00	88		200.8
Chromium	48 - 136	3.74		0.08	U	4.00	94		200.8
Copper	47 - 113	3.48		0.24		4.00	81		200.8
Lead	61 - 120	3.46		0.04	U	4.00	87		200.8
Nickel	1 - 111	3.43		0.44		4.00	75		200.8
Silver	66 - 112	3.33		0.13		4.00	80		200.8
Zinc	36 - 143	4.3		1.2		4.0	78		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302785
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/COE
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: E-CH3-1D
Lab Code: K2302785-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony		1.11		1.21		10		200.8
Arsenic	20	56.2		47.6		17		7062
Cadmium		0.02	B	0.01	B	14		200.8
Chromium		0.19	B	0.19	B	2		200.8
Copper		0.74		0.69		6		200.8
Lead		0.04	U	0.04	U			200.8
Nickel		0.33		0.32		4		200.8
Silver		0.02	B	0.01	U	200.0		200.8
Zinc		1.7		1.6		5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

METALS
- 7 -
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/COE

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Antimony	100	97.2	97					
Arsenic	16.0	14.8	93					
Cadmium	4.00	4.12	103					
Chromium	4.00	3.96	99					
Copper	4.00	3.96	99					
Lead	4.00	4.02	101					
Mercury	5.00	4.92	98					
Nickel	4.00	3.98	100					
Silver	4.00	3.86	97					
Zinc	4.00	4.26	107					

METALS

-10-

METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.20	0.10	7470A

Comments:

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Cadmium	111		0.20	0.06	200.8
Chromium	52		2.00	0.40	200.8
Copper	65		1.00	0.10	200.8
Lead	208		0.20	0.20	200.8
Nickel	60		1.00	0.40	200.8
Silver	107		0.20	0.07	200.8
Zinc	66		5.0	2.0	200.8

Comments:

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.10	0.02	200.8

Comments:

METALS

-10-

METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: Varian-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	193.60		0.50	0.25	7062

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Cadmium	15.00	1000.0	200.8
Chromium	15.00	1000.0	200.8
Copper	15.00	400.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	700.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	700.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	600.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Method: AA

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302785-001	5/12/03	EPA 3010A	50	50
K2302785-009	5/12/03	EPA 3010A	50	50
K2302785-001D	5/12/03	EPA 3010A	50	50
K2302785-001S	5/12/03	EPA 3010A	50	50
K2302785-002	5/12/03	EPA 3010A	50	50
K2302785-003	5/12/03	EPA 3010A	50	50
K2302785-004	5/12/03	EPA 3010A	50	50
K2302785-005	5/12/03	EPA 3010A	50	50
K2302785-006	5/12/03	EPA 3010A	50	50
K2302785-007	5/12/03	EPA 3010A	50	50
K2302785-008	5/12/03	EPA 3010A	50	50
LCSW	5/12/03	EPA 3010A	50	50
K2302785-MB	5/12/03	EPA 3010A	50	50
K2302785-010	5/12/03	EPA 3010A	50	50

K2302785-001	4/24/03	METHOD	20	20
K2302785-009	4/24/03	METHOD	20	20
K2302785-002	4/24/03	METHOD	20	20
K2302785-003	4/24/03	METHOD	20	20
K2302785-004	4/24/03	METHOD	20	20
K2302785-005	4/24/03	METHOD	20	20
K2302785-006	4/24/03	METHOD	20	20
K2302785-007	4/24/03	METHOD	20	20
K2302785-008	4/24/03	METHOD	20	20
LCSW	4/24/03	METHOD	20	20
K2302785-MB	4/24/03	METHOD	20	20
K2302785-010	4/24/03	METHOD	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302785-001	4/25/03	RED PPTN	500	100
K2302785-009	4/25/03	RED PPTN	500	100
K2302785-001D	4/25/03	RED PPTN	500	100
K2302785-002	4/25/03	RED PPTN	500	100
K2302785-002S	4/25/03	RED PPTN	500	100
K2302785-003	4/25/03	RED PPTN	500	100
K2302785-004	4/25/03	RED PPTN	400	100
K2302785-005	4/25/03	RED PPTN	500	100
K2302785-006	4/25/03	RED PPTN	500	100
K2302785-007	4/25/03	RED PPTN	500	100
K2302785-008	4/25/03	RED PPTN	500	100
LCSW	4/25/03	RED PPTN	500	100
K2302785-MB	4/25/03	RED PPTN	500	100
K2302785-010	4/25/03	RED PPTN	500	100
K2302785-001	5/2/03	CLFAA	20	20
K2302785-009	5/2/03	CLFAA	20	20
K2302785-001D	5/2/03	CLFAA	20	20
K2302785-001S	5/2/03	CLFAA	20	20
K2302785-002	5/2/03	CLFAA	20	20
K2302785-003	5/2/03	CLFAA	20	20
K2302785-004	5/2/03	CLFAA	20	20
K2302785-005	5/2/03	CLFAA	20	20
K2302785-006	5/2/03	CLFAA	20	20
K2302785-007	5/2/03	CLFAA	20	20
K2302785-008	5/2/03	CLFAA	20	20
LCSW	5/2/03	CLFAA	20	20
K2302785-MB	5/2/03	CLFAA	20	20
K2302785-010	5/2/03	CLFAA	20	20

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	14:04																									
S0.5	1.00	14:08																									
S1	1.00	14:12																									
S5	1.00	14:16																									
S7.5	1.00	14:20				X																					
S10	1.00	14:24																									
ICV	1.00	14:28				X																					
ICB	1.00	14:32				X																					
CCV1	1.00	14:36				X																					
CCB1	1.00	14:40				X																					
CRI	1.00	14:44				X																					
K2302785-MB	2.00	14:48				X																					
LCSW	2.00	14:52				X																					
K2302785-001	10.00	14:56				X																					
K2302785-001D	10.00	15:00				X																					
K2302785-001S	10.00	15:04				X																					
K2302785-002	10.00	15:08				X																					
K2302785-003	10.00	15:12				X																					
K2302785-004	10.00	15:16				X																					
CCV2	1.00	15:20				X																					
CCB2	1.00	15:24				X																					
ZZZZZZ	1.00	15:28																									
K2302785-005	2.00	15:32				X																					
K2302785-006	10.00	15:36				X																					
K2302785-007	20.00	15:40				X																					
K2302785-008	2.00	15:44				X																					
K2302785-009	10.00	15:48				X																					
K2302785-010	10.00	15:52				X																					
ZZZZZZ	2.00	15:56																									
ZZZZZZ	2.00	16:00																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	2.00	16:04																									
ZZZZZZ	10.00	16:08																									
CCV3	1.00	16:12				X																					
CCB3	1.00	16:16				X																					
ZZZZZZ	10.00	16:20																									
ZZZZZZ	10.00	16:24																									
ZZZZZZ	2.00	16:28																									
ZZZZZZ	2.00	16:32																									
ZZZZZZ	2.00	16:36																									
ZZZZZZ	2.00	16:40																									
ZZZZZZ	10.00	16:44																									
ZZZZZZ	2.00	16:48																									
ZZZZZZ	2.00	16:52																									
ZZZZZZ	2.00	16:56																									
CCV4	1.00	17:00				X																					
CCB4	1.00	17:04				X																					
ZZZZZZ	1.00	17:08																									
ZZZZZZ	1.00	17:12																									
CCV5	1.00	17:16				X																					
CCB5	1.00	17:20				X																					
ZZZZZZ	2.00	17:24																									
ZZZZZZ	2.00	17:28																									
ZZZZZZ	2.00	17:32																									
ZZZZZZ	2.00	17:36																									
ZZZZZZ	2.00	17:40																									
ZZZZZZ	2.00	17:44																									
ZZZZZZ	2.00	17:48																									
ZZZZZZ	2.00	17:52																									
ZZZZZZ	2.00	17:56																									
ZZZZZZ	4.00	18:00																									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV6	1.00	18:04				X																					
CCB6	1.00	18:08				X																					
ZZZZZZ	2.00	18:12																									
ZZZZZZ	2.00	18:16																									
ZZZZZZ	2.00	18:20																									
CCV7	1.00	18:24				X																					
CCB7	1.00	18:28				X																					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	14:15																X									
STANDARD #1	1.00	14:16																X									
STANDARD #2	1.00	14:18																X									
STANDARD #3	1.00	14:20																X									
STANDARD #4	1.00	14:21																X									
STANDARD #5	1.00	14:23																X									
ICV	1.00	14:25																X									
ICB	1.00	14:26																X									
CCV1	1.00	14:28																X									
CCB1	1.00	14:29																X									
CRA	1.00	14:31																X									
ZZZZZZ	1.00	14:33																									
ZZZZZZ	1.00	14:34																									
ZZZZZZ	1.00	14:36																									
ZZZZZZ	1.00	14:37																									
ZZZZZZ	1.00	14:39																									
ZZZZZZ	1.00	14:41																									
ZZZZZZ	1.00	14:42																									
ZZZZZZ	1.00	14:44																									
ZZZZZZ	1.00	14:45																									
CCV2	1.00	14:47																X									
CCB2	1.00	14:49																X									
ZZZZZZ	1.00	14:50																									
ZZZZZZ	1.00	14:52																									
ZZZZZZ	1.00	14:53																									
ZZZZZZ	1.00	14:55																									
ZZZZZZ	1.00	14:57																									
ZZZZZZ	1.00	14:58																									
ZZZZZZ	1.00	15:00																									
ZZZZZZ	1.00	15:02																									

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Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	15:03																									
ZZZZZZ	1.00	15:05																									
CCV3	1.00	15:06																X									
CCB3	1.00	15:08																X									
ZZZZZZ	1.00	15:10																									
ZZZZZZ	1.00	15:11																									
K2302785-MB	1.00	15:13																X									
LCSW	1.00	15:15																X									
K2302785-001	1.00	15:16																X									
K2302785-002	1.00	15:18																X									
K2302785-003	1.00	15:19																X									
K2302785-004	1.00	15:21																X									
K2302785-005	1.00	15:23																X									
K2302785-006	1.00	15:24																X									
CCV4	1.00	15:26																X									
CCB4	1.00	15:28																X									
K2302785-007	1.00	15:29																X									
K2302785-008	1.00	15:31																X									
K2302785-009	1.00	15:32																X									
K2302785-010	1.00	15:34																X									
ZZZZZZ	1.00	15:36																									
ZZZZZZ	1.00	15:37																									
ZZZZZZ	1.00	15:39																									
ZZZZZZ	1.00	15:41																									
ZZZZZZ	1.00	15:42																									
ZZZZZZ	1.00	15:44																									
CCV5	1.00	15:45																X									
CCB5	1.00	15:47																X									
ZZZZZZ	1.00	15:49																									
ZZZZZZ	1.00	15:50																									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	15:52																									
ZZZZZZ	1.00	15:54																									
ZZZZZZ	1.00	15:55																									
CCV6	1.00	15:57																X									
CCB6	1.00	15:59																X									

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Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	10:16							X		X		X		X				X			X				X	
25 PPB STD. MS3-6-B	1.00	10:20							X		X		X		X				X			X				X	
ICV	1.00	10:23							X		X		X		X				X			X				X	
CCV1	1.00	10:26							X		X		X		X				X			X				X	
ICB1	1.00	10:31							X		X		X		X				X			X				X	
CCB1	1.00	10:34							X		X		X		X				X			X				X	
ZZZZZZ	1.00	10:36																									
ZZZZZZ	1.00	10:39																									
ZZZZZZ	1.00	10:43																									
ZZZZZZ	1.00	10:45																									
ZZZZZZ	1.00	10:48																									
ZZZZZZ	1.00	10:51																									
ZZZZZZ	1.00	10:54																									
ZZZZZZ	1.00	10:56																									
ZZZZZZ	1.00	10:59																									
ZZZZZZ	1.00	11:02																									
CCV2	1.00	11:05							X		X		X		X				X			X				X	
CCB2	1.00	11:10							X		X		X		X				X			X				X	
CCV3	1.00	11:43							X		X		X		X				X			X				X	
CCB3	1.00	11:47							X		X		X		X				X			X				X	
CRA	1.00	11:50							X		X		X		X				X			X				X	
K2302785-MB	1.00	11:55							X		X		X		X				X			X				X	
LCSW	1.00	11:58							X		X		X		X				X			X				X	
K2302785-001	1.00	12:03							X		X		X		X				X			X				X	
K2302785-001D	1.00	12:06							X		X		X		X				X			X				X	
K2302785-002	1.00	12:09							X		X		X		X				X			X				X	
K2302785-002S	1.00	12:16							X		X		X		X				X			X				X	
K2302785-003	1.00	12:20							X		X		X		X				X			X				X	
K2302785-004	1.00	12:23							X		X		X		X				X			X				X	
K2302785-005	1.00	12:25							X		X		X		X				X			X				X	

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV4	1.00	12:29							X		X		X		X				X			X				X	
CCB4	1.00	12:34							X		X		X		X				X			X				X	
K2302785-006	1.00	12:39							X		X		X		X				X			X				X	
K2302785-007	1.00	12:42							X		X		X		X				X			X				X	
K2302785-008	1.00	12:45							X		X		X		X				X			X				X	
K2302785-009	1.00	12:48							X		X		X		X				X			X				X	
K2302785-010	1.00	12:51							X		X		X		X				X			X				X	
ZZZZZZ	1.00	12:54																									
CCV5	1.00	12:57							X		X		X		X				X			X				X	
CCB5	1.00	13:01							X		X		X		X				X			X				X	

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Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302785

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Instrument ID Number: PQ-S Method: MS

Start Date: 5/7/03 End Date: 5/7/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	09:38			X																						
S25	1.00	09:39			X																						
ZICV	1.00	09:41																									
ICV	5.00	09:42			X																						
CCV1	1.00	09:43			X																						
ICB	1.00	09:47			X																						
CCB1	1.00	09:49			X																						
CRA	1.00	09:51			X																						
K2302785-MB	10.00	09:53			X																						
LCSW	10.00	09:54			X																						
K2302785-001	10.00	10:00			X																						
K2302785-001D	10.00	10:01			X																						
K2302785-001S	10.00	10:06			X																						
CCV2	1.00	10:07			X																						
CCB2	1.00	10:17			X																						
K2302785-002	10.00	10:19			X																						
K2302785-003	10.00	10:21			X																						
K2302785-004	10.00	10:23			X																						
K2302785-005	10.00	10:24			X																						
K2302785-006	10.00	10:25			X																						
K2302785-007	10.00	10:27			X																						
K2302785-008	10.00	10:28			X																						
K2302785-009	10.00	10:29			X																						
K2302785-010	10.00	10:31			X																						
CCV3	1.00	10:33			X																						
CCB3	1.00	10:36			X																						

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Oil & Grease
Method 1664

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	K230422-WB2	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JLS Date: 4/24/03

1S22/020597p

02785PHC.MS1 - MB 4/24/03

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-1	Units:	mg/L (ppm)
Lab Code:	K2302785-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JLS Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-2	Units:	mg/L (ppm)
Lab Code:	K2302785-002	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: _____ Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-3	Units:	mg/L (ppm)
Lab Code:	K2302785-003	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: _____ Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-4	Units:	mg/L (ppm)
Lab Code:	K2302785-004	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JLS Date: 4/24/03

1S22/020597p

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02785PHC.MS1 - 4 4/24/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-5	Units:	mg/L (ppm)
Lab Code:	K2302785-005	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: _____ Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-6	Units:	mg/L (ppm)
Lab Code:	K2302785-006	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JLS Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-7	Units:	mg/L (ppm)
Lab Code:	K2302785-007	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: _____ Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-8	Units:	mg/L (ppm)
Lab Code:	K2302785-008	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: _____ Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-18	Units:	mg/L (ppm)
Lab Code:	K2302785-009	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JS Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	RS-CH03	Units:	mg/L (ppm)
Lab Code:	K2302785-010	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/22/03	4/23/03	ND	

Approved By: JLS Date: 4/24/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	4/22/03
		Date Analyzed:	4/23/03

Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K230422-WL3	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	40	36	90	78-114	

Approved By: JLS Date: 4/24/03

LCS/071499p
02785PHC.MS1 - LCS 4/24/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	4/22/03
		Date Analyzed:	4/23/03

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K230422-WL3, K230422-WL4	Basis:	NA
Test Notes:			

							Percent Recovery				
Analyte	**Prep Method**	**Analysis Method**	**True Value** LCS	**True Value** DLCS	**Result** LCS	**Result** DLCS	LCS	DLCS	CAS Acceptance Limits	**Relative Percent Difference**	**Result Notes**
Oil and Grease, Total (HEM)	METHOD	1664	40	40	36	37	90	92	78-114	3	

Approved By: _____ Date: 4/24/03

DLCS/072898p
02785PHC.MS1 - DLCS 4/24/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03
		Date Extracted:	4/22/03
		Date Analyzed:	4/23/03

Matrix Spike Summary
Oil and Grease

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	K2302849-013MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	38	ND	37	97	78-114	

Approved By: JLS Date: 4/24/03

MS/072898p
02785PHC.MS1 - MS 4/24/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 4/23/03

Continuing Calibration Verification (CCV) Summary
EPA Methods 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery	CCV3 Result	Percent Recovery	CCV4 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	2.0	100	2.0	100	1.9	95	2.0	100

Approved By: _____ Date: 4/24/03

CCV 1-4/102194
02785PHC.MS1 - ccv 4/24/03

Organotins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-1	K2302785-001	04/10/2003	04/15/2003
E-CH3-2	K2302785-002	04/10/2003	04/15/2003
E-CH3-3	K2302785-003	04/10/2003	04/15/2003
E-CH3-4	K2302785-004	04/10/2003	04/15/2003
E-CH3-5	K2302785-005	04/10/2003	04/15/2003
E-CH3-6	K2302785-006	04/10/2003	04/15/2003
E-CH3-7	K2302785-007	04/10/2003	04/15/2003
E-CH3-8	K2302785-008	04/10/2003	04/15/2003
E-CH3-18	K2302785-009	04/10/2003	04/15/2003
RS-CH03	K2302785-010	04/10/2003	04/15/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Daryl Coulombe

Name: Daryl Coulombe

Date: 02 May 2003

Title: Scientist

00095

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-1	**Units:**	ug/L
Lab Code:	K2302785-001	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	78	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-2	**Units:**	ug/L
Lab Code:	K2302785-002	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	85	41-128	04/26/03	Acceptable

Comments:

00097

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-3	**Units:**	ug/L
Lab Code:	K2302785-003	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	96	41-128	04/26/03	Acceptable

Comments:

00098

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-4	**Units:**	ug/L
Lab Code:	K2302785-004	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	77	41-128	04/26/03	Acceptable

Comments:

00099

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-5	**Units:**	ug/L
Lab Code:	K2302785-005	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	79	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-6	**Units:**	ug/L
Lab Code:	K2302785-006	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	96	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-7	**Units:**	ug/L
Lab Code:	K2302785-007	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	88	41-128	04/26/03	Acceptable

Comments:

00102

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-8	**Units:**	ug/L
Lab Code:	K2302785-008	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	99	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-18	**Units:**	ug/L
Lab Code:	K2302785-009	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Collected: 04/10/2003
Date Received: 04/15/2003

Butyltins

Sample Name: RS-CH03
Lab Code: K2302785-010

Units: ug/L
Basis: NA

Extraction Method: EPA 3520
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305222-4	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305222	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305222	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305222	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305222	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	97	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785

Surrogate Recovery Summary
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
E-CH3-1	K2302785-001	78
E-CH3-2	K2302785-002	85
E-CH3-3	K2302785-003	96
E-CH3-4	K2302785-004	77
E-CH3-5	K2302785-005	79
E-CH3-6	K2302785-006	96
E-CH3-7	K2302785-007	88
E-CH3-8	K2302785-008	99
E-CH3-18	K2302785-009	94
RS-CH03	K2302785-010	94
Method Blank	KWG0305222-4	97
Batch QC	K2302808-002	113
Batch QCMS	KWG0305222-1	107
Batch QCDMS	KWG0305222-2	99
Lab Control Sample	KWG0305222-3	91

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 41-128

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K2302808-002	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305222

		Batch QCMS KWG0305222-1 Matrix Spike			Batch QCDMS KWG0305222-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	0.480	1.00	48	0.429	1.00	43	10-110	11	30
Tri-n-butyltin	ND	0.693	1.00	69	0.650	1.00	65	37-138	6	30
Di-n-butyltin	ND	0.523	1.00	52	0.490	1.00	49	29-124	6	30
n-Butyltin	ND	0.821	1.00	82	0.803	1.00	80	10-139	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00108

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	EPA 3520	**Units:**	ug/L
Analysis Method:	Krone	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0305222

	Lab Control Sample KWG0305222-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	0.236	0.500	47	21-115
Tri-n-butyltin	0.311	0.500	62	22-157
Di-n-butyltin	0.217	0.500	43	19-149
n-Butyltin	0.404	0.500	81	23-150

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00109

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003
		Time Analyzed:	07:29

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\042503\0425F040.D
Lab Code:	KWG0305222-4	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305222

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305222-3	J:\GC11\DATA\042503\0425F041.D	04/26/03	07:47
E-CH3-1	K2302785-001	J:\GC11\DATA\042503\0425F042.D	04/26/03	08:05
E-CH3-2	K2302785-002	J:\GC11\DATA\042503\0425F043.D	04/26/03	08:24
E-CH3-3	K2302785-003	J:\GC11\DATA\042503\0425F046.D	04/26/03	09:18
E-CH3-4	K2302785-004	J:\GC11\DATA\042503\0425F047.D	04/26/03	09:36
E-CH3-5	K2302785-005	J:\GC11\DATA\042503\0425F048.D	04/26/03	09:54
E-CH3-6	K2302785-006	J:\GC11\DATA\042503\0425F049.D	04/26/03	10:12
E-CH3-7	K2302785-007	J:\GC11\DATA\042503\0425F050.D	04/26/03	10:30
E-CH3-8	K2302785-008	J:\GC11\DATA\042503\0425F051.D	04/26/03	10:48
E-CH3-18	K2302785-009	J:\GC11\DATA\042503\0425F052.D	04/26/03	11:06
RS-CH03	K2302785-010	J:\GC11\DATA\042503\0425F053.D	04/26/03	11:24
Batch QC	K2302808-002	J:\GC11\DATA\042503\0425F055.D	04/26/03	12:00
Batch QCMS	KWG0305222-1	J:\GC11\DATA\042503\0425F058.D	04/26/03	12:54
Batch QCDMS	KWG0305222-2	J:\GC11\DATA\042503\0425F059.D	04/26/03	13:12

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003
		Time Analyzed:	07:47

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\042503\0425F041.D
Lab Code:	KWG0305222-3	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305222

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305222-4	J:\GC11\DATA\042503\0425F040.D	04/26/03	07:29
E-CH3-1	K2302785-001	J:\GC11\DATA\042503\0425F042.D	04/26/03	08:05
E-CH3-2	K2302785-002	J:\GC11\DATA\042503\0425F043.D	04/26/03	08:24
E-CH3-3	K2302785-003	J:\GC11\DATA\042503\0425F046.D	04/26/03	09:18
E-CH3-4	K2302785-004	J:\GC11\DATA\042503\0425F047.D	04/26/03	09:36
E-CH3-5	K2302785-005	J:\GC11\DATA\042503\0425F048.D	04/26/03	09:54
E-CH3-6	K2302785-006	J:\GC11\DATA\042503\0425F049.D	04/26/03	10:12
E-CH3-7	K2302785-007	J:\GC11\DATA\042503\0425F050.D	04/26/03	10:30
E-CH3-8	K2302785-008	J:\GC11\DATA\042503\0425F051.D	04/26/03	10:48
E-CH3-18	K2302785-009	J:\GC11\DATA\042503\0425F052.D	04/26/03	11:06
RS-CH03	K2302785-010	J:\GC11\DATA\042503\0425F053.D	04/26/03	11:24
Batch QC	K2302808-002	J:\GC11\DATA\042503\0425F055.D	04/26/03	12:00
Batch QCMS	KWG0305222-1	J:\GC11\DATA\042503\0425F058.D	04/26/03	12:54
Batch QCDMS	KWG0305222-2	J:\GC11\DATA\042503\0425F059.D	04/26/03	13:12

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D	D	J:\GC11\DATA\042503\0425F105.D
B	J:\GC11\DATA\042503\0425F103.D	E	J:\GC11\DATA\042503\0425F106.D
C	J:\GC11\DATA\042503\0425F104.D	F	J:\GC11\DATA\042503\0425F107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	669	B	50	620	C	100	626	D	500	576	E	1000	588
	F	2000	576												
Tri-n-butyltin	A	10	835	B	50	789	C	100	794	D	500	708	E	1000	729
	F	2000	704												
Di-n-butyltin	A	10	1090	B	50	1050	C	100	975	D	500	895	E	1000	923
	F	2000	895												
n-Butyltin	A	10	1580	B	50	1310	C	100	1350	D	500	1200	E	1000	1250
	F	2000	1210												
Tri-n-propyltin	A	11	562	B	54	569	C	110	595	D	540	539	E	1100	546
	F	2100	532												

Results flagged with an asterisk (*) indicate values outside control criteria.

00112

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.0		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	10.8		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

00113

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	490	609	634	4	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	760	752	-1	NA	± 30 %	AverageRF
Di-n-butyltin	480	460	970	934	-4	NA	± 30 %	AverageRF
n-Butyltin	490	470	1320	1260	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

00114

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D\0425R102.D	D	J:\GC11\DATA\042503\0425F105.D\0425R105.D
B	J:\GC11\DATA\042503\0425F103.D\0425R103.D	E	J:\GC11\DATA\042503\0425F106.D\0425R106.D
C	J:\GC11\DATA\042503\0425F104.D\0425R104.D	F	J:\GC11\DATA\042503\0425F107.D\0425R107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	352	B	50	317	C	100	328	D	500	311	E	1000	324
	F	2000	319												
Tri-n-butyltin	A	10	425	B	50	400	C	100	419	D	500	393	E	1000	406
	F	2000	389												
Di-n-butyltin	A	10	553	B	50	500	C	100	520	D	500	490	E	1000	510
	F	2000	485												
n-Butyltin	A	10	631	B	50	613	C	100	674	D	500	623	E	1000	648
	F	2000	615												
Tri-n-propyltin	A	11	296	B	54	289	C	110	290	D	540	280	E	1100	291
	F	2100	286												

Results flagged with an asterisk (*) indicate values outside control criteria.

00115

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.4		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.7		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	1.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

00116

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D\0425R108.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	325	326	0	NA	± 30 %	AverageRF
Tri-n-butyltin	480	450	405	378	-7	NA	± 30 %	AverageRF
Di-n-butyltin	480	450	510	479	-6	NA	± 30 %	AverageRF
n-Butyltin	490	490	634	634	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

00117

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

File ID: J:\GC11\DATA\042503\0425F031.D

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml
Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	609	588	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	717	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	874	-10	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1160	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	510	557	534	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00118

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F031.D\0425R031.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	325	337	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	405	426	5	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	510	536	5	NA	± 25 %	AverageRF
n-Butyltin	500	540	634	688	9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	560	289	305	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00119

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F045.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	609	536	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	760	679	-11	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	866	-11	NA	± 25 %	AverageRF
n-Butyltin	500	430	1320	1130	-14	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	557	497	-11	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00120

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F045.D\0425R045.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	325	339	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	405	430	6	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	510	545	7	NA	± 25 %	AverageRF
n-Butyltin	500	550	634	696	10	NA	± 25 %	AverageRF
Tri-n-propyltin	540	570	289	306	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00121

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F057.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	555	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	714	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	460	970	890	-8	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1170	-11	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	537	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00122

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F057.D\0425R057.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	550	325	356	10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	550	405	447	10	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	510	550	8	NA	± 25 %	AverageRF
n-Butyltin	500	550	634	698	10	NA	± 25 %	AverageRF
Tri-n-propyltin	540	580	289	316	9	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00123

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F073.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	565	-7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	707	-7	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	970	906	-7	NA	± 25 %	AverageRF
n-Butyltin	500	460	1320	1200	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	557	524	-6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00124

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
		Analysis Lot:	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F073.D\0425R073.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	550	325	356	9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	560	405	452	11	NA	± 25 %	AverageRF
Di-n-butyltin	500	550	510	559	10	NA	± 25 %	AverageRF
n-Butyltin	500	570	634	720	14	NA	± 25 %	AverageRF
Tri-n-propyltin	540	600	289	324	12	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00125

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	Instrument Blank	KWG0305835-1	4/25/2003	19:53		4/25/2003	20:05
0425F002.D	Continuing Calibration Verification	KWG0305835-20	4/25/2003	20:10		4/25/2003	20:22
0425F003.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:28		4/25/2003	20:40
0425F004.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:46		4/25/2003	20:58
0425F005.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:04		4/25/2003	21:16
0425F006.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:22		4/25/2003	21:34
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:40		4/25/2003	21:52
0425F008.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:57		4/25/2003	22:09
0425F009.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:15		4/25/2003	22:27
0425F010.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:33		4/25/2003	22:45
0425F011.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:51		4/25/2003	23:03
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:09		4/25/2003	23:21
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:27		4/25/2003	23:39
0425F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:02		4/26/2003	00:14
0425F016.D	Instrument Blank	KWG0305835-3	4/26/2003	00:20		4/26/2003	00:32
0425F017.D	Continuing Calibration Verification	KWG0305835-4	4/26/2003	00:38		4/26/2003	00:50
0425F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:55		4/26/2003	01:07
0425F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:13		4/26/2003	01:25
0425F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:31		4/26/2003	01:43
0425F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:49		4/26/2003	02:01
0425F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:07		4/26/2003	02:19
0425F023.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:24		4/26/2003	02:36
0425F024.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:42		4/26/2003	02:54
0425F025.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:00		4/26/2003	03:12
0425F026.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:18		4/26/2003	03:30
0425F027.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:36		4/26/2003	03:48
0425F028.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:54		4/26/2003	04:06
0425F029.D	ZZZZZZ	ZZZZZZ	4/26/2003	04:12		4/26/2003	04:24
0425F030.D	Instrument Blank	KWG0305835-5	4/26/2003	04:30		4/26/2003	04:42
0425F031.D	Continuing Calibration Verification	KWG0305835-6	4/26/2003	04:48		4/26/2003	05:00
0425F032.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:06		4/26/2003	05:18
0425F034.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:42		4/26/2003	05:54
0425F040.D	Method Blank	KWG0305222-4	4/26/2003	07:29		4/26/2003	07:41
0425F041.D	Lab Control Sample	KWG0305222-3	4/26/2003	07:47		4/26/2003	07:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00126

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F042.D	E-CH3-1	K2302785-001	4/26/2003	08:05		4/26/2003	08:17
0425F043.D	E-CH3-2	K2302785-002	4/26/2003	08:24		4/26/2003	08:36
0425F044.D	Instrument Blank	KWG0305835-7	4/26/2003	08:41		4/26/2003	08:53
0425F045.D	Continuing Calibration Verification	KWG0305835-8	4/26/2003	09:00		4/26/2003	09:12
0425F046.D	E-CH3-3	K2302785-003	4/26/2003	09:18		4/26/2003	09:30
0425F047.D	E-CH3-4	K2302785-004	4/26/2003	09:36		4/26/2003	09:48
0425F048.D	E-CH3-5	K2302785-005	4/26/2003	09:54		4/26/2003	10:06
0425F049.D	E-CH3-6	K2302785-006	4/26/2003	10:12		4/26/2003	10:24
0425F050.D	E-CH3-7	K2302785-007	4/26/2003	10:30		4/26/2003	10:42
0425F051.D	E-CH3-8	K2302785-008	4/26/2003	10:48		4/26/2003	11:00
0425F052.D	E-CH3-18	K2302785-009	4/26/2003	11:06		4/26/2003	11:18
0425F053.D	RS-CH03	K2302785-010	4/26/2003	11:24		4/26/2003	11:36
0425F054.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:42		4/26/2003	11:54
0425F055.D	Batch QC	K2302808-002	4/26/2003	12:00		4/26/2003	12:12
0425F056.D	Instrument Blank	KWG0305835-9	4/26/2003	12:18		4/26/2003	12:30
0425F057.D	Continuing Calibration Verification	KWG0305835-10	4/26/2003	12:36		4/26/2003	12:48
0425F058.D	Batch QCMS	KWG0305222-1	4/26/2003	12:54		4/26/2003	13:06
0425F059.D	Batch QCDMS	KWG0305222-2	4/26/2003	13:12		4/26/2003	13:24
0425F060.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:30		4/26/2003	13:42
0425F061.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:47		4/26/2003	13:59
0425F062.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:05		4/26/2003	14:17
0425F063.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:23		4/26/2003	14:35
0425F064.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:41		4/26/2003	14:53
0425F065.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:59		4/26/2003	15:11
0425F066.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:17		4/26/2003	15:29
0425F072.D	Instrument Blank	KWG0305835-11	4/26/2003	17:05		4/26/2003	17:17
0425F073.D	Continuing Calibration Verification	KWG0305835-12	4/26/2003	17:23		4/26/2003	17:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Extracted: 04/16/2003

Extraction Prep Log
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Extraction Lot: KWG0305222
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-1	K2302785-001	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-2	K2302785-002	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-3	K2302785-003	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-4	K2302785-004	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-5	K2302785-005	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-6	K2302785-006	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-7	K2302785-007	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-8	K2302785-008	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-18	K2302785-009	04/10/03	04/15/03	500ml	0.5ml	NA	
RS-CH03	K2302785-010	04/10/03	04/15/03	500ml	0.5ml	NA	
Method Blank	KWG0305222-4	NA	NA	500ml	0.5ml	NA	
Batch QC	K2302808-002	NA	NA	500ml	0.5ml	NA	
Batch QCMS	KWG0305222-1	NA	NA	250ml	0.5ml	NA	
Batch QCDMS	KWG0305222-2	NA	NA	250ml	0.5ml	NA	
Lab Control Sample	KWG0305222-3	NA	NA	500ml	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00128

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-1	K2302785-001	04/10/2003	04/15/2003
E-CH3-2	K2302785-002	04/10/2003	04/15/2003
E-CH3-3	K2302785-003	04/10/2003	04/15/2003
E-CH3-4	K2302785-004	04/10/2003	04/15/2003
E-CH3-5	K2302785-005	04/10/2003	04/15/2003
E-CH3-6	K2302785-006	04/10/2003	04/15/2003
E-CH3-7	K2302785-007	04/10/2003	04/15/2003
E-CH3-8	K2302785-008	04/10/2003	04/15/2003
E-CH3-18	K2302785-009	04/10/2003	04/15/2003
RS-CH03	K2302785-010	04/10/2003	04/15/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 5/2/03

Title: SVM Supervisor

00131

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-1	**Units:**	ug/L
Lab Code:	K2302785-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.013**	J	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	55	34-115	04/25/03	Acceptable
Fluorene-d10	58	43-96	04/25/03	Acceptable
Fluoranthene-d10	31	20-131	04/25/03	Acceptable
Terphenyl-d14	58	13-146	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-2	**Units:**	ug/L
Lab Code:	K2302785-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.014**	J	0.020	0.0032	1	04/17/03	04/24/03	KWG0305247	
2-Methylnaphthalene	**0.0027**	J	0.020	0.0027	1	04/17/03	04/24/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/24/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/24/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/24/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/24/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/24/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/24/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/24/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/24/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/24/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/24/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/24/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/24/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/24/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	**0.0029**	J	0.020	0.0021	1	04/17/03	04/24/03	KWG0305247	
Dibenz(a,h)anthracene	**0.0029**	J	0.020	0.0017	1	04/17/03	04/24/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/24/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	79	34-115	04/24/03	Acceptable
Fluorene-d10	78	43-96	04/24/03	Acceptable
Fluoranthene-d10	40	20-131	04/24/03	Acceptable
Terphenyl-d14	68	13-146	04/24/03	Acceptable

Comments:

00133

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-3	**Units:**	ug/L
Lab Code:	K2302785-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.018**	J	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	70	34-115	04/25/03	Acceptable
Fluorene-d10	74	43-96	04/25/03	Acceptable
Fluoranthene-d10	43	20-131	04/25/03	Acceptable
Terphenyl-d14	76	13-146	04/25/03	Acceptable

Comments:

00134

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-4	**Units:**	ug/L
Lab Code:	K2302785-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.018**	J	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	71	34-115	04/25/03	Acceptable
Fluorene-d10	69	43-96	04/25/03	Acceptable
Fluoranthene-d10	26	20-131	04/25/03	Acceptable
Terphenyl-d14	52	13-146	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-5	**Units:**	ug/L
Lab Code:	K2302785-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.015**	J	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	63	34-115	04/26/03	Acceptable
Fluorene-d10	62	43-96	04/26/03	Acceptable
Fluoranthene-d10	24	20-131	04/26/03	Acceptable
Terphenyl-d14	52	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Collected: 04/10/2003
Date Received: 04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-6
Lab Code: K2302785-006

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.019**	J	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	**0.0030**	J	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	76	34-115	04/25/03	Acceptable
Fluorene-d10	77	43-96	04/25/03	Acceptable
Fluoranthene-d10	54	20-131	04/25/03	Acceptable
Terphenyl-d14	90	13-146	04/25/03	Acceptable

Comments:

00137

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Collected: 04/10/2003
Date Received: 04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-7
Lab Code: K2302785-007

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.019**	J	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	**0.0029**	J	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	76	34-115	04/25/03	Acceptable
Fluorene-d10	79	43-96	04/25/03	Acceptable
Fluoranthene-d10	56	20-131	04/25/03	Acceptable
Terphenyl-d14	94	13-146	04/25/03	Acceptable

Comments:

00138

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Collected: 04/10/2003
Date Received: 04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-8
Lab Code: K2302785-008

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.013**	J	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	68	34-115	04/26/03	Acceptable
Fluorene-d10	70	43-96	04/26/03	Acceptable
Fluoranthene-d10	42	20-131	04/26/03	Acceptable
Terphenyl-d14	64	13-146	04/26/03	Acceptable

Comments:

00139

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Collected: 04/10/2003
Date Received: 04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-18
Lab Code: K2302785-009

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.017**	**J**	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	67	34-115	04/26/03	Acceptable
Fluorene-d10	70	43-96	04/26/03	Acceptable
Fluoranthene-d10	44	20-131	04/26/03	Acceptable
Terphenyl-d14	74	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Collected: 04/10/2003
Date Received: 04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: RS-CH03
Lab Code: K2302785-010

Units: ug/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.015**	J	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
2-Methylnaphthalene	**0.0029**	J	0.020	0.0027	1	04/17/03	04/26/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/26/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/26/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/26/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/26/03	KWG0305247	
Anthracene	**0.0018**	J	0.020	0.0011	1	04/17/03	04/26/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/26/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/26/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Chrysene	**0.0014**	J	0.020	0.0013	1	04/17/03	04/26/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/26/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/26/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/26/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/26/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/26/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/26/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	68	34-115	04/26/03	Acceptable
Fluorene-d10	70	43-96	04/26/03	Acceptable
Fluoranthene-d10	46	20-131	04/26/03	Acceptable
Terphenyl-d14	79	13-146	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305247-5	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/25/03	KWG0305247	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/25/03	KWG0305247	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/25/03	KWG0305247	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/25/03	KWG0305247	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/25/03	KWG0305247	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/25/03	KWG0305247	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/25/03	KWG0305247	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/25/03	KWG0305247	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/25/03	KWG0305247	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/25/03	KWG0305247	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/25/03	KWG0305247	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/25/03	KWG0305247	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/25/03	KWG0305247	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/25/03	KWG0305247	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/25/03	KWG0305247	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	72	34-115	04/25/03	Acceptable
Fluorene-d10	73	43-96	04/25/03	Acceptable
Fluoranthene-d10	82	20-131	04/25/03	Acceptable
Terphenyl-d14	103	13-146	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
E-CH3-1	K2302785-001	55	58	31	58
E-CH3-2	K2302785-002	79	78	40	68
E-CH3-3	K2302785-003	70	74	43	76
E-CH3-4	K2302785-004	71	69	26	52
E-CH3-5	K2302785-005	63	62	24	52
E-CH3-6	K2302785-006	76	77	54	90
E-CH3-7	K2302785-007	76	79	56	94
E-CH3-8	K2302785-008	68	70	42	64
E-CH3-18	K2302785-009	67	70	44	74
RS-CH03	K2302785-010	68	70	46	79
Method Blank	KWG0305247-5	72	73	82	103
Batch QC	K2302808-006	75	76	81	90
Batch QCMS	KWG0305247-1	77	78	90	85
Batch QCDMS	KWG0305247-2	81	81	91	88
Lab Control Sample	KWG0305247-3	71	72	85	81

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Analyzed:**	04/24/2003
		Time Analyzed:	10:54

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042403\0424F005.D	**Lab Code:**	KWG0305843-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305843
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	313,512	5.16	175,776	7.45	298,264	10.25
	Upper Limit ==>	627,024	5.66	351,552	7.95	596,528	10.75
	Lower Limit ==>	156,756	4.66	87,888	6.95	149,132	9.75
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Lab Control Sample	KWG0305247-3	303,015	5.16	163,116	7.45	253,947	10.25
E-CH3-2	K2302785-002	309,344	5.16	162,890	7.45	245,062	10.24

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Analyzed:**	04/24/2003
		Time Analyzed:	10:54

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042403\0424F005.D	**Lab Code:**	KWG0305843-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305843
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	326,718	16.27	202,359	19.94
	Upper Limit ==>	653,436	16.77	404,718	20.44
	Lower Limit ==>	163,359	15.77	101,180	19.44
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Lab Control Sample	KWG0305247-3	283,753	16.27	156,587	19.94
E-CH3-2	K2302785-002	237,390	16.27	119,908	19.93

Results flagged with an asterisk (*) indicate values outside control criteria.

00145

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/25/2003
Time Analyzed: 11:00

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042503\0425F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305844-2
Analysis Lot: KWG0305844

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	314,412	5.16	173,855	7.45	295,386	10.25
	Upper Limit ==>	628,824	5.66	347,710	7.95	590,772	10.75
	Lower Limit ==>	157,206	4.66	86,928	6.95	147,693	9.75
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305247-5	385,674	5.15	198,262	7.45	295,805	10.25
E-CH3-1	K2302785-001	379,889	5.16	198,847	7.45	308,349	10.25
E-CH3-3	K2302785-003	341,321	5.16	177,354	7.45	275,101	10.25
E-CH3-4	K2302785-004	323,096	5.15	167,995	7.45	249,502	10.25
E-CH3-6	K2302785-006	317,368	5.15	167,854	7.45	249,367	10.24
E-CH3-7	K2302785-007	323,123	5.16	162,452	7.45	233,667	10.24
Batch QCMS	KWG0305247-1	279,142	5.15	149,631	7.45	230,121	10.25
Batch QCDMS	KWG0305247-2	284,008	5.16	150,531	7.45	224,187	10.25

Results flagged with an asterisk (*) indicate values outside control criteria.

00146

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Analyzed:**	04/25/2003
		Time Analyzed:	11:00

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042503\0425F002.D	**Lab Code:**	KWG0305844-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305844
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	309,497	16.27	169,264	19.94
	Upper Limit ==>	618,994	16.77	338,528	20.44
	Lower Limit ==>	154,749	15.77	84,632	19.44
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305247-5	259,445	16.27	107,602	19.94
E-CH3-1	K2302785-001	262,948	16.27	111,875	19.94
E-CH3-3	K2302785-003	220,958	16.27	85,538	19.94
E-CH3-4	K2302785-004	212,495	16.27	92,857	19.94
E-CH3-6	K2302785-006	212,404	16.27	86,083	19.94
E-CH3-7	K2302785-007	197,496	16.27	96,460	19.94
Batch QCMS	KWG0305247-1	243,494	16.27	127,865	19.93
Batch QCDMS	KWG0305247-2	232,965	16.27	119,663	19.93

Results flagged with an asterisk (*) indicate values outside control criteria.

00147

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003
Time Analyzed: 10:14

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042603\0426F005.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305889-2
Analysis Lot: KWG0305889

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	344,329	5.11	184,026	7.39	299,232	10.17
	Upper Limit ==>	688,658	5.61	368,052	7.89	598,464	10.67
	Lower Limit ==>	172,165	4.61	92,013	6.89	149,616	9.67
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
E-CH3-5	K2302785-005	368,823	5.12	187,735	7.39	282,028	10.17
E-CH3-8	K2302785-008	387,863	5.11	199,186	7.39	298,364	10.17
E-CH3-18	K2302785-009	378,819	5.11	190,832	7.39	279,121	10.17
RS-CH03	K2302785-010	355,817	5.11	180,558	7.39	262,069	10.17
Batch QC	K2302808-006	355,944	5.12	179,576	7.39	270,505	10.17

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003
Time Analyzed: 10:14

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042603\0426F005.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305889-2
Analysis Lot: KWG0305889

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	297,807	16.18	167,782	19.80
	Upper Limit ==>	595,614	16.68	335,564	20.30
	Lower Limit ==>	148,904	15.68	83,891	19.30
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
E-CH3-5	K2302785-005	268,940	16.18	147,131	19.79
E-CH3-8	K2302785-008	285,613	16.18	154,379	19.80
E-CH3-18	K2302785-009	255,767	16.18	131,116	19.79
RS-CH03	K2302785-010	236,033	16.18	115,867	19.79
Batch QC	K2302808-006	264,696	16.18	146,307	19.79

Results flagged with an asterisk (*) indicate values outside control criteria.

00149

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/25/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K2302808-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305247

Analyte Name	Sample Result	Batch QCMS KWG0305247-1 Matrix Spike			Batch QCDMS KWG0305247-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Naphthalene	0.019	7.82	10.0	78	8.42	10.0	84	30-97	7	30
2-Methylnaphthalene	0.0033	7.95	10.0	80	8.55	10.0	85	33-96	7	30
Acenaphthylene	ND	7.93	10.0	79	8.61	10.0	86	39-104	8	30
Acenaphthene	0.0020	8.07	10.0	81	8.71	10.0	87	34-99	8	30
Dibenzofuran	ND	8.25	10.0	83	8.79	10.0	88	16-110	6	30
Fluorene	ND	8.50	10.0	85	9.05	10.0	91	36-105	6	30
Phenanthrene	ND	8.47	10.0	85	8.88	10.0	89	31-106	5	30
Anthracene	ND	7.91	10.0	79	8.11	10.0	81	24-111	3	30
Fluoranthene	ND	9.39	10.0	94	9.63	10.0	96	16-121	3	30
Pyrene	ND	8.64	10.0	86	9.02	10.0	90	11-125	4	30
Benz(a)anthracene	ND	6.46	10.0	65	7.36	10.0	74	14-125	13	30
Chrysene	ND	7.48	10.0	75	8.44	10.0	84	16-117	12	30
Benzo(b)fluoranthene	ND	5.23	10.0	52	6.38	10.0	64	16-124	20	30
Benzo(k)fluoranthene	ND	6.56	10.0	66	7.67	10.0	77	14-127	16	30
Benzo(a)pyrene	ND	5.80	10.0	58	6.83	10.0	68	19-126	16	30
Indeno(1,2,3-cd)pyrene	ND	5.30	10.0	53	5.98	10.0	60	10-137	12	30
Dibenz(a,h)anthracene	ND	5.96	10.0	60	6.40	10.0	64	16-124	7	30
Benzo(g,h,i)perylene	ND	6.53	10.0	65	7.26	10.0	73	15-119	11	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/24/2003

Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3520C	**Units:**	ug/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0305247

	Lab Control Sample KWG0305247-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	3.70	5.00	74	37-95
2-Methylnaphthalene	3.64	5.00	73	26-110
Acenaphthylene	3.89	5.00	78	44-103
Acenaphthene	3.84	5.00	77	41-97
Dibenzofuran	4.02	5.00	80	17-130
Fluorene	4.23	5.00	85	46-102
Phenanthrene	4.27	5.00	85	47-101
Anthracene	3.95	5.00	79	45-104
Fluoranthene	4.83	5.00	97	51-112
Pyrene	4.20	5.00	84	45-111
Benz(a)anthracene	4.06	5.00	81	50-111
Chrysene	4.52	5.00	90	51-108
Benzo(b)fluoranthene	4.23	5.00	85	54-114
Benzo(k)fluoranthene	4.51	5.00	90	51-117
Benzo(a)pyrene	4.54	5.00	91	51-119
Indeno(1,2,3-cd)pyrene	4.40	5.00	88	43-127
Dibenz(a,h)anthracene	4.63	5.00	93	47-119
Benzo(g,h,i)perylene	4.86	5.00	97	44-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/25/2003
		Time Analyzed:	12:49

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\042503\0425F005.D
Lab Code:	KWG0305247-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305247

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305247-3	J:\MS11\DATA\042403\0424F020.D	04/24/03	20:02
E-CH3-2	K2302785-002	J:\MS11\DATA\042403\0424F022.D	04/24/03	21:14
E-CH3-1	K2302785-001	J:\MS11\DATA\042503\0425F009.D	04/25/03	15:15
E-CH3-3	K2302785-003	J:\MS11\DATA\042503\0425F010.D	04/25/03	15:51
E-CH3-4	K2302785-004	J:\MS11\DATA\042503\0425F011.D	04/25/03	16:27
E-CH3-6	K2302785-006	J:\MS11\DATA\042503\0425F013.D	04/25/03	17:39
E-CH3-7	K2302785-007	J:\MS11\DATA\042503\0425F014.D	04/25/03	18:14
Batch QCMS	KWG0305247-1	J:\MS11\DATA\042503\0425F018.D	04/25/03	20:38
Batch QCDMS	KWG0305247-2	J:\MS11\DATA\042503\0425F019.D	04/25/03	21:13
E-CH3-5	K2302785-005	J:\MS11\DATA\042603\0426F010.D	04/26/03	13:13
E-CH3-8	K2302785-008	J:\MS11\DATA\042603\0426F011.D	04/26/03	13:49
E-CH3-18	K2302785-009	J:\MS11\DATA\042603\0426F012.D	04/26/03	14:25
RS-CH03	K2302785-010	J:\MS11\DATA\042603\0426F013.D	04/26/03	15:00
Batch QC	K2302808-006	J:\MS11\DATA\042603\0426F014.D	04/26/03	15:36

00152

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302785
Project:	Canaveral Harbor 103 Evaluation/COE	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/24/2003
		Time Analyzed:	20:02

Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**File ID:**	J:\MS11\DATA\042403\0424F020.D
Lab Code:	KWG0305247-3	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305247

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
E-CH3-2	K2302785-002	J:\MS11\DATA\042403\0424F022.D	04/24/03	21:14
Method Blank	KWG0305247-5	J:\MS11\DATA\042503\0425F005.D	04/25/03	12:49
E-CH3-1	K2302785-001	J:\MS11\DATA\042503\0425F009.D	04/25/03	15:15
E-CH3-3	K2302785-003	J:\MS11\DATA\042503\0425F010.D	04/25/03	15:51
E-CH3-4	K2302785-004	J:\MS11\DATA\042503\0425F011.D	04/25/03	16:27
E-CH3-6	K2302785-006	J:\MS11\DATA\042503\0425F013.D	04/25/03	17:39
E-CH3-7	K2302785-007	J:\MS11\DATA\042503\0425F014.D	04/25/03	18:14
Batch QCMS	KWG0305247-1	J:\MS11\DATA\042503\0425F018.D	04/25/03	20:38
Batch QCDMS	KWG0305247-2	J:\MS11\DATA\042503\0425F019.D	04/25/03	21:13
E-CH3-5	K2302785-005	J:\MS11\DATA\042603\0426F010.D	04/26/03	13:13
E-CH3-8	K2302785-008	J:\MS11\DATA\042603\0426F011.D	04/26/03	13:49
E-CH3-18	K2302785-009	J:\MS11\DATA\042603\0426F012.D	04/26/03	14:25
RS-CH03	K2302785-010	J:\MS11\DATA\042603\0426F013.D	04/26/03	15:00
Batch QC	K2302808-006	J:\MS11\DATA\042603\0426F014.D	04/26/03	15:36

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/24/2003
Time Analyzed: 10:31

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042403\0424F004.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305843

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.4	429312	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.4	487808	PASS
70	69	0	2	0.5	2593	PASS
127	198	10	80	44.5	650688	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	64.8	1460736	PASS
199	198	5	9	6.8	99936	PASS
275	198	10	60	31.7	463296	PASS
365	442	1	50	2.3	52696	PASS
441	443	0	100	72.6	331904	PASS
442	442	100	100	100.0	2255360	PASS
443	442	15	24	20.3	457216	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305843-2	J:\MS11\DATA\042403\0424F005.D	04/24/2003	10:54	
Lab Control Sample	KWG0305247-3	J:\MS11\DATA\042403\0424F020.D	04/24/2003	20:02	
E-CH3-2	K2302785-002	J:\MS11\DATA\042403\0424F022.D	04/24/2003	21:14	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

00154

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/25/2003
Time Analyzed: 10:38

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042503\0425F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305844

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	26.5	397824	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	31.2	467200	PASS
70	69	0	2	0.5	2334	PASS
127	198	10	80	42.0	630016	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	56.8	1498624	PASS
199	198	5	9	6.7	100888	PASS
275	198	10	60	33.7	505728	PASS
365	442	1	50	2.3	61808	PASS
441	443	0	100	74.8	393664	PASS
442	442	100	100	100.0	2640384	PASS
443	442	15	24	19.9	526208	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305844-2	J:\MS11\DATA\042503\0425F002.D	04/25/2003	11:00	
Method Blank	KWG0305247-5	J:\MS11\DATA\042503\0425F005.D	04/25/2003	12:49	
E-CH3-1	K2302785-001	J:\MS11\DATA\042503\0425F009.D	04/25/2003	15:15	
E-CH3-3	K2302785-003	J:\MS11\DATA\042503\0425F010.D	04/25/2003	15:51	
E-CH3-4	K2302785-004	J:\MS11\DATA\042503\0425F011.D	04/25/2003	16:27	
E-CH3-6	K2302785-006	J:\MS11\DATA\042503\0425F013.D	04/25/2003	17:39	
E-CH3-7	K2302785-007	J:\MS11\DATA\042503\0425F014.D	04/25/2003	18:14	
Batch QCMS	KWG0305247-1	J:\MS11\DATA\042503\0425F018.D	04/25/2003	20:38	
Batch QCDMS	KWG0305247-2	J:\MS11\DATA\042503\0425F019.D	04/25/2003	21:13	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

00155

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003
Time Analyzed: 09:53

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042603\0426F004.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305889

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.5	417600	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	34.2	483520	PASS
70	69	0	2	0.5	2547	PASS
127	198	10	80	43.8	619648	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	63.7	1414144	PASS
199	198	5	9	6.7	95416	PASS
275	198	10	60	32.2	455936	PASS
365	442	1	50	2.3	51776	PASS
441	443	0	100	74.7	331392	PASS
442	442	100	100	100.0	2219008	PASS
443	442	15	24	20.0	443520	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305889-2	J:\MS11\DATA\042603\0426F005.D	04/26/2003	10:14	
E-CH3-5	K2302785-005	J:\MS11\DATA\042603\0426F010.D	04/26/2003	13:13	
E-CH3-8	K2302785-008	J:\MS11\DATA\042603\0426F011.D	04/26/2003	13:49	
E-CH3-18	K2302785-009	J:\MS11\DATA\042603\0426F012.D	04/26/2003	14:25	
RS-CH03	K2302785-010	J:\MS11\DATA\042603\0426F013.D	04/26/2003	15:00	
Batch QC	K2302808-006	J:\MS11\DATA\042603\0426F014.D	04/26/2003	15:36	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00160

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

00161

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/24/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305843
Units: ng/ml

File ID: J:\MS11\DATA\042403\0424F005.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.683	4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.80	3	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.61	7	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.30	6	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-6	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	1.09	1.06	-2	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.966	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.45	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1800	0.01	1.98	1.75	-12	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.26	-6	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.902	0.897	-1	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.01	0.952	0.976	3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.18	2	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.758	7	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.981	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	0.915	0.798	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/25/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305844
Units: ng/ml

File ID: J:\MS11\DATA\042503\0425F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.678	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.61	7	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.30	7	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.10	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.22	1	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.15	-10	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.964	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.46	-16	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.85	-7	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.23	-8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.723	-20	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1600	0.01	0.952	0.784	-18	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1800	0.01	1.15	1.01	-12	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.751	6	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.985	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.831	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

00163

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305889
Units: ng/ml

File ID: J:\MS11\DATA\042603\0426F005.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.08	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.670	2	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.14	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.60	6	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.28	5	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.09	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.18	-2	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.18	-8	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.967	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-7	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.50	-13	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.86	-6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.25	-7	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.737	-18	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1600	0.01	0.952	0.780	-18	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1700	0.01	1.15	0.991	-14	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.735	3	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.04	-1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.953	-6	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.837	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305843
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0424F004.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305843-1	4/24/2003	10:31		4/24/2003	10:44
0424F005.D	Continuing Calibration Verification	KWG0305843-2	4/24/2003	10:54		4/24/2003	11:20
0424F007.D	ZZZZZZ	ZZZZZZ	4/24/2003	12:09		4/24/2003	12:35
0424F008.D	ZZZZZZ	ZZZZZZ	4/24/2003	12:46		4/24/2003	13:12
0424F009.D	ZZZZZZ	ZZZZZZ	4/24/2003	13:23		4/24/2003	13:49
0424F010.D	ZZZZZZ	ZZZZZZ	4/24/2003	14:00		4/24/2003	14:26
0424F011.D	ZZZZZZ	ZZZZZZ	4/24/2003	14:37		4/24/2003	15:03
0424F012.D	ZZZZZZ	ZZZZZZ	4/24/2003	15:13		4/24/2003	15:39
0424F013.D	ZZZZZZ	ZZZZZZ	4/24/2003	15:50		4/24/2003	16:16
0424F014.D	ZZZZZZ	ZZZZZZ	4/24/2003	16:26		4/24/2003	16:52
0424F015.D	ZZZZZZ	ZZZZZZ	4/24/2003	17:02		4/24/2003	17:28
0424F016.D	ZZZZZZ	ZZZZZZ	4/24/2003	17:38		4/24/2003	18:04
0424F017.D	ZZZZZZ	ZZZZZZ	4/24/2003	18:14		4/24/2003	18:40
0424F018.D	ZZZZZZ	ZZZZZZ	4/24/2003	18:50		4/24/2003	19:16
0424F020.D	Lab Control Sample	KWG0305247-3	4/24/2003	20:02		4/24/2003	20:28
0424F021.D	ZZZZZZ	ZZZZZZ	4/24/2003	20:38		4/24/2003	21:04
0424F022.D	E-CH3-2	K2302785-002	4/24/2003	21:14		4/24/2003	21:40
0424F023.D	ZZZZZZ	ZZZZZZ	4/24/2003	21:50		4/24/2003	22:16
0424F024.D	ZZZZZZ	ZZZZZZ	4/24/2003	22:26		4/24/2003	22:52

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305844
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305844-1	4/25/2003	10:38		4/25/2003	10:51
0425F002.D	Continuing Calibration Verification	KWG0305844-2	4/25/2003	11:00		4/25/2003	11:26
0425F004.D	ZZZZZZ	ZZZZZZ	4/25/2003	12:13		4/25/2003	12:39
0425F005.D	Method Blank	KWG0305247-5	4/25/2003	12:49		4/25/2003	13:15
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	14:02		4/25/2003	14:28
0425F009.D	E-CH3-1	K2302785-001	4/25/2003	15:15		4/25/2003	15:41
0425F010.D	E-CH3-3	K2302785-003	4/25/2003	15:51		4/25/2003	16:17
0425F011.D	E-CH3-4	K2302785-004	4/25/2003	16:27		4/25/2003	16:53
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	17:03		4/25/2003	17:29
0425F013.D	E-CH3-6	K2302785-006	4/25/2003	17:39		4/25/2003	18:05
0425F014.D	E-CH3-7	K2302785-007	4/25/2003	18:14		4/25/2003	18:40
0425F015.D	ZZZZZZ	ZZZZZZ	4/25/2003	18:50		4/25/2003	19:16
0425F016.D	ZZZZZZ	ZZZZZZ	4/25/2003	19:26		4/25/2003	19:52
0425F017.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:02		4/25/2003	20:28
0425F018.D	Batch QCMS	KWG0305247-1	4/25/2003	20:38		4/25/2003	21:04
0425F019.D	Batch QCDMS	KWG0305247-2	4/25/2003	21:13		4/25/2003	21:39
0425F021.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:25		4/25/2003	22:51

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00166

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE

Service Request: K2302785

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305889
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0426F004.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305889-1	4/26/2003	09:53		4/26/2003	10:06
0426F005.D	Continuing Calibration Verification	KWG0305889-2	4/26/2003	10:14		4/26/2003	10:40
0426F007.D	Instrument Blank	KWG0305889-3	4/26/2003	11:26		4/26/2003	11:52
0426F008.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:02		4/26/2003	12:28
0426F010.D	E-CH3-5	K2302785-005	4/26/2003	13:13		4/26/2003	13:39
0426F011.D	E-CH3-8	K2302785-008	4/26/2003	13:49		4/26/2003	14:15
0426F012.D	E-CH3-18	K2302785-009	4/26/2003	14:25		4/26/2003	14:51
0426F013.D	RS-CH03	K2302785-010	4/26/2003	15:00		4/26/2003	15:26
0426F014.D	Batch QC	K2302808-006	4/26/2003	15:36		4/26/2003	16:02
0426F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	16:11		4/26/2003	16:37
0426F016.D	ZZZZZZ	ZZZZZZ	4/26/2003	16:47		4/26/2003	17:13
0426F017.D	ZZZZZZ	ZZZZZZ	4/26/2003	17:23		4/26/2003	17:49
0426F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	17:58		4/26/2003	18:24
0426F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	18:34		4/26/2003	19:00
0426F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	19:10		4/26/2003	19:36
0426F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	19:46		4/26/2003	20:12
0426F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	20:21		4/26/2003	20:47

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/COE
Sample Matrix: Water

Service Request: K2302785
Date Extracted: 04/17/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0305247
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-1	K2302785-001	04/10/03	04/15/03	1050ml	1ml	NA	
E-CH3-2	K2302785-002	04/10/03	04/15/03	1050ml	1ml	NA	
E-CH3-3	K2302785-003	04/10/03	04/15/03	1050ml	1ml	NA	
E-CH3-4	K2302785-004	04/10/03	04/15/03	1030ml	1ml	NA	
E-CH3-5	K2302785-005	04/10/03	04/15/03	1020ml	1ml	NA	
E-CH3-6	K2302785-006	04/10/03	04/15/03	1050ml	1ml	NA	
E-CH3-7	K2302785-007	04/10/03	04/15/03	1030ml	1ml	NA	
E-CH3-8	K2302785-008	04/10/03	04/15/03	1050ml	1ml	NA	
E-CH3-18	K2302785-009	04/10/03	04/15/03	1050ml	1ml	NA	
RS-CH03	K2302785-010	04/10/03	04/15/03	1030ml	1ml	NA	
Method Blank	KWG0305247-5	NA	NA	1000ml	1ml	NA	
Batch QC	K2302808-006	NA	NA	1010ml	1ml	NA	
Batch QCMS	KWG0305247-1	NA	NA	500ml	1ml	NA	
Batch QCDMS	KWG0305247-2	NA	NA	500ml	1ml	NA	
Lab Control Sample	KWG0305247-3	NA	NA	1000ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 20, 2003

Service Request No: K2302672

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/NAVY Samples

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302672.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/dj

NELAP Accredited ACIL Seal of Excellence Award

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/Navy	**Date Received:**	4/10/03
Sample Matrix:	Sediment		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nine sediment samples were received for analysis at Columbia Analytical Services on 4/10/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

Total Sulfides by EPA Method 9030M:
The Relative Percent Difference (RPD) for the replicate analysis of Total Sulfides showed a high bias, which indicates non-homogenous distribution of sulfide in the sample. The value of 25% was not unusually high for this analysis. No further corrective action was appropriate.

The CAS/Kelso QA/QC policy calls for no more than ten determinations between Continuing Calibration Verification (CCV) checks. As the result of an inadvertent error, twenty readings were performed between CCV2 and CCV3. Very little fluctuation in the two CCVs was observed (i.e. CCV2=101% recovery; CCV3=101% recovery), and other QA/QC samples analyzed between CCV2 and CCV3 yielded acceptable results. Since the samples were past the recommended hold time when the error was discovered, a reanalysis was not performed. The affect on the results appears to be negligible or non-existent.

Total Cyanide by EPA Method 9010:
The reporting limit is elevated for Total Cyanide in samples E-CH3-12 NAVY and E-CH3-15 NAVY because the samples required dilution. The distillates contained a significant amount of carbonate from distillation of carbon dioxide from the bulk sediment sample. The carbonate prevented analysis of the distillate without dilution.

The Matrix Spike (MS) recovery of Total Cyanide for sample E-CH3-9 NAVY was outside control criteria because of matrix interference. The samples contained high levels of sulfide. Lead acetate scrubbers were used in the distillation, but did not provide adequate removal of the sulfide. As a result of the interference, the results for this analyte might contain a low bias. A Matrix Spike Duplicate (MSD) was also analyzed with the batch, but yielded similar results. No further corrective action was taken.

No other anomalies associated with the analysis of these samples were observed.

Total Metals

The control criteria for matrix spike recoveries of Aluminum and Iron for sample E-CH3-9 Navy are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

Approved by F. Clk **Date** 5/19/03

The matrix spike recovery of Antimony for sample E-CH3-9 was below the CAS control criterion. Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analyses. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. Since low recoveries result from a method defect and can be magnified by certain matrix components, no corrective action is appropriate other than using alternative procedures, which specifically target Antimony. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicate the analysis was in control.

No other anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of this sample were observed.

Organotin Compounds

Surrogate Exceptions:
The lower control criterion was exceeded for the following surrogate in Method Blank KWG0304819-4: Tri-n-propyltin. Since the problem indicates a potential negative bias in the analytical batch, all associated field samples containing target analytes were re-extracted and reanalyzed. The Method Blank met control criteria for the reanalysis. Results for the samples were comparable for both determinations, which indicates the problem with the initial analysis was restricted to the Method Blank. Therefore, the results from the original analysis are reported. The data is flagged to indicate the problem.

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) for the following analyte in the replicate matrix spike analyses of sample Batch QC was outside control criteria: n-Butyltin. All spike recoveries in the MS, DMS, and associated Laboratory Control Sample (LCS) were within acceptance limits, indicating the analytical batch was in control. No further corrective action was appropriate.

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Surrogate Exceptions:
The CAS/Kelso control criterion was exceeded for the following surrogate in sample E-CH3-15 NAVY due to matrix interferences: Fluoranthene-d10 (49% recovery versus a control limit of 52%). A re-extraction was performed past the recommended hold time and produced similar results, which confirmed the interference. Three other surrogates were evaluated with this analysis and all were within control criteria. The results of the original analysis are reported. No further corrective action was required.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 5/19/03

Chain of Custody Documentation

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
NAVY Samples

12302672

PPB: Please homogenize and elutriate samples

	Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
1	✓E-CH3-9 NAVY	03/04/3/03	1109	Sediment	16 oz ~~1 Gallon~~ Clear Glass Jars	2	Per Contract		All containers = 16 oz wide mouth clear glass jars.
2	✓E-CH3-10 NAVY	04/ / /03	1420	Sediment	1 ~~Gallon~~ Clear Glass	2	Per Contract		
3	✓E-CH3-11 NAVY	04/ 2 /03	0924	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
4	✓E-CH3-12 NAVY	04/ / /03	1346	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
5	✓E-CH3-13 NAVY	04/ / /03	0930	Sediment	1 ~~Gallon~~ Clear Glass	2	Per Contract		Note: Please add Total sulfites to the analysis requested in the contract.
6	✓E-CH3-14 NAVY	03/04/3/03	1554	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
7	✓E-CH3-15 NAVY	03/04/3/03	1332	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
8	✓E-CH3-16 NAVY	04/ / /03	0835	Sediment	1 ~~Gallon~~ Clear Glass	2	Per Contract		
9	✓E-CH3-17 NAVY	03/04/3/03	1635	Sediment	~~1 Gallon~~ Clear Glass	2	Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		→ Total Sulfide
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		
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		04/ /03					Per Contract		
		04/ /03					Per Contract		
		04/ /03					Per Contract		

Note: Precleaned containers shipped by UPS from Columbia Analytical - Received 3/21/03 @ 1132 by Jeff.

~~Precleaned~~ Containers Relinquished by: [signature]
Date: 4/9/03 Time: 1200
Received by: Brian A. Wade
Date: 4/9/03 Time: 1200

Samples Relinquished by: Connie Steen
Date: 4/9/03 Time: 1500
Received by: [signature]
Date: 4/10/03 Time: 1030

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

NAVY

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

Cape Canaveral Samples							
SEDIMENTS/SOILS	Port /CPA	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ALUMINUM	9	11	9	29	0.5 mg/kg	Columbia	
ANTIMONY	9	11	9	29	0.3 mg/kg	Columbia	
ARSENIC	9	11	9	29	0.5 mg/kg	Columbia	
CADMIUM	9	11	9	29	0.1 mg/kg	Columbia	
CHROMIUM	9	11	9	29	0.2 mg/kg	Columbia	
COPPER	9	11	9	29	0.1 mg/kg	Columbia	
IRON	9	11	9	29	1.5 mg/kg	Columbia	
MERCURY	9	11	9	29	0.05 mg/kg	Columbia	
NICKEL	9	11	9	29	0.1 mg/kg	Columbia	
SILVER	9	11	9	29	0.1 mg/kg	Columbia	
ZINC	9	11	9	29	0.2 mg/kg	Columbia	
CYANIDE	0	11	9	20	1.0mg/kg	Columbia	
TOTAL AMMONIA	0	11	9	20	0.1 mg/kg	Columbia	
TOC	9	11	9	29	0.10%	Columbia	
OIL AND GREASE	0	11	9	20	1.0 ppm	Columbia	
PAH'S	9	11	9	29	0.02 mg/kg	Columbia	
ORGANOTIN	9	11	9	29	0.01 mg/kg	Columbia	
%SOLIDS	8	9	8	25	n/a	LAW	
GRAIN SIZE DIST.	8	9	8	25	n/a	LAW	
SPECIFIC GRAVITY	8	9	8	25	n/a	LAW	
ATTERBURG LIMITS	8	9	8	25	n/a	LAW	
SETTLING RATES	8	9	8	25	n/a	LAW	
10 DAY SEDIMENT BIOASSAY	8	2	9	19	n/a	ESE	
28 DAY SED. BIOACCUMULATION	8	2	9	19	n/a	ESE	
WATER/ELUTRIATE	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ANTIMONY	9	12	9	30	3.5 ug/l	Columbia	
ALUMINUM	9	2	0	11	0.5 ug/l	Columbia	Reference Station → Control Sediment Elut. need aluminum and iron
ARSENIC	9	12	9	30	1.0 ug/l	Columbia	
CADMIUM	9	12	9	30	0.5 ug/l	Columbia	
CHROMIUM	9	12	9	30	0.5 ug/l	Columbia	

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Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

COPPER	9	12	9	30	2.5 ug/l	Columbia	
LEAD	9	12	9	30	2.5 ug/l	Columbia	
IRON	9	0	0	9	0.5 ug/l	Columbia	
MERCURY	9	12	9	30	0.2 ug/l	Columbia	
NICKEL	9	12	9	30	0.2 ug/l	Columbia	
SILVER	9	12	9	30	1.0 ug/l	Columbia	
ZINC	9	12	9	30	1.5 ug/l	Columbia	
CYANIDE	0	12	9	21	1.0 ppm	Columbia	
TOTAL AMMONIA	0	12	9	21	0.10 ppm	Columbia	
TOC	9	12	9	30	0.10%	Columbia	
OIL AND GREASE	0	12	9	21	1.0 ppm	Columbia	
PAH's	9	12	9	30	0.02 ppm	Columbia	
ORGANOTIN	9	12	9	30	0.1 ppm	Columbia	
96-HR ELUTRIATE ACUTE BIOASSAY	9	2	9	20	n/a	ESE	

Sediments:
COE Samples: 8 sites, 1 dupe, 1 reference, 1 control sediment (Chem and Phys). (No Phys on control or duplicate sediment) = 11
NAVY Samples: 8 sites, 1 dupe (Chem, Phys, and Tox) Include Ref and Control on Tox) = 9 or (11 for Tox)
Port Authority:
4 Vibracore Samples (Chem, Phys, and Tox) = 4
6 Upland samples and one dupe to be combined into 4 samples (Chem, Phys, and Tox) = 4
2 Upland samples to be combined into 1 samples (Chem and Phys) = 1

Elutriates:
Same as above except for the COE Samples:
COE: 8 sites, 1 dupe, 1 reference, 1 control sediment elutriate, 1 site water = 12

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client ANAMAR Work Order K23 02672

Cooler received on 4/10/03 and opened on 4/10/03 by AP

1. Were custody seals on outside of cooler? – Y (N)
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? ~~Y N~~
3. Is the shipper's airbill available and filed? If no, record airbill number: 1Z 364 518 01 4061 385 3 Y N
4. COC # _____ _____ _____ _____
   Temperature of cooler(s) upon receipt: 0.6 0.7 _____ _____
   Temperature Blank: N/P 0.2 _____ _____
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present BUBBLE
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies: _____

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103
Sample Matrix: Sediment

Service Request: K2302672

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	03/31/2003	04/10/2003	04/11/2003	37.4	
E-CH3-10 NAVY	K2302672-002	04/01/2003	04/10/2003	04/11/2003	23.5	
E-CH3-11 NAVY	K2302672-003	04/02/2003	04/10/2003	04/11/2003	23.0	
E-CH3-12 NAVY	K2302672-004	04/01/2003	04/10/2003	04/11/2003	35.0	
E-CH3-13 NAVY	K2302672-005	04/01/2003	04/10/2003	04/11/2003	22.4	
E-CH3-14 NAVY	K2302672-006	03/31/2003	04/10/2003	04/11/2003	21.8	
E-CH3-15 NAVY	K2302672-007	03/31/2003	04/10/2003	04/11/2003	21.6	
E-CH3-16 NAVY	K2302672-008	04/01/2003	04/10/2003	04/11/2003	22.7	
E-CH3-17 NAVY	K2302672-009	03/31/2003	04/10/2003	04/11/2003	22.4	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Analyzed:	04/11/2003

Duplicate Sample Summary
Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	WET
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
E-CH3-9 NAVY	K2302672-001	37.4	37.8	37.6	1	

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31-04/02/03
Date Received : 04/10/03

Carbon, Total Organic

Analysis Method ASTM D4129-82M
Test Notes :

Units : Percent
Basis : Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	0.05	0.02	1	04/22/03	1.58	
E-CH3-10 NAVY	K2302672-002	0.05	0.02	1	04/22/03	2.42	
E-CH3-11 NAVY	K2302672-003	0.05	0.02	1	04/22/03	2.51	
E-CH3-12 NAVY	K2302672-004	0.05	0.02	1	04/22/03	1.39	
E-CH3-13 NAVY	K2302672-005	0.05	0.02	1	04/22/03	2.53	
E-CH3-14 NAVY	K2302672-006	0.05	0.02	1	04/22/03	2.74	
E-CH3-15 NAVY	K2302672-007	0.05	0.02	1	04/22/03	2.62	
E-CH3-16 NAVY	K2302672-008	0.05	0.02	1	04/22/03	2.52	
E-CH3-17 NAVY	K2302672-009	0.05	0.02	1	04/22/03	2.68	
Method Blank	K2302672-MB	0.05	0.02	1	04/22/03	ND	

Approved By _____ Date : 5/15/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 3/31-4/2/03
Date Received: 04/10/03

Carbon, Total Organic

Prep Method: NONE
Analysis Method: ASTM D4129-82M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	0.05	0.02	1	NA	04/22/03	0.59	
E-CH3-10 NAVY	K2302672-002	0.05	0.02	1	NA	04/22/03	0.57	
E-CH3-11 NAVY	K2302672-003	0.05	0.02	1	NA	04/22/03	0.58	
E-CH3-12 NAVY	K2302672-004	0.05	0.02	1	NA	04/22/03	0.49	
E-CH3-13 NAVY	K2302672-005	0.05	0.02	1	NA	04/22/03	0.57	
E-CH3-14 NAVY	K2302672-006	0.05	0.02	1	NA	04/22/03	0.60	
E-CH3-15 NAVY	K2302672-007	0.05	0.02	1	NA	04/22/03	0.57	
E-CH3-16 NAVY	K2302672-008	0.05	0.02	1	NA	04/22/03	0.57	
E-CH3-17 NAVY	K2302672-009	0.05	0.02	1	NA	04/22/03	0.60	
Method Blank	K2302672-MB	0.05	0.02	1	NA	04/22/03	ND	

Approved By: _____ Date: 5/15/03

IA/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 04/01/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/22/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-13 NAVY
Lab Code : K2302672-005DUP
Test Notes :

Units : Percent
Basis : Dry

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	ASTM D4129-82M	0.05	2.53	2.53	2.53	<1	

Approved By _____ Date : 5/15/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 04/01/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/22/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-13 NAVY
Lab Code : K2302672-005MS
Test Notes :

Units : Percent
Basis : Dry

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	ASTM D4129-82M	0.05	11.9	2.53	15.5	109	75-125	

Approved By _____ Date : 5/15/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302672
Project Name :	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Sediment	**Date Extracted :**	NA
		Date Analyzed :	04/22/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302672-LCS
Test Notes :

Basis : Dry

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	Percent	ASTM D4129-82M	0.57	0.65	114	85-115	

Approved By _____ Date : 5/15/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Collected: NA
Date Received: NA
Date Analyzed: 04/22/03

Carbon, Total Organic
ASTM D4129-82M
Units: PERCENT

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	20.0	18.7	94
CCV 2 Result	20.0	19.5	98
CCV 3 Result	20.0	19.5	98

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	0.03 J

Approved By: _____ Date: 5/2/03

COMBOQCD/042695

Q-CCV.XLT

10/6/95

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31-04/02/03
Date Received : 04/10/03

Sulfide, Total

Analysis Method : 9030M
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	480	280	20	04/13/03	1480	
E-CH3-10 NAVY	K2302672-002	240	140	10	04/13/03	2030	
E-CH3-11 NAVY	K2302672-003	240	140	10	04/13/03	1580	
E-CH3-12 NAVY	K2302672-004	480	280	20	04/13/03	1910	
E-CH3-13 NAVY	K2302672-005	240	140	10	04/13/03	1140	
E-CH3-14 NAVY	K2302672-006	240	140	10	04/13/03	2180	
E-CH3-15 NAVY	K2302672-007	240	140	10	04/13/03	1640	
E-CH3-16 NAVY	K2302672-008	120	70	5	04/13/03	1200	
E-CH3-17 NAVY	K2302672-009	480	280	20	04/13/03	2410	
Method Blank	K2302672-MB	24	14	1	04/13/03	ND	

Approved By _____ Date : 5/2/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 3/31-4/2/03
Date Received: 04/10/03

Sulfide, Total

Prep Method: NONE
Analysis Method: 9030M
Test Notes:

Units: mg/Kg (ppm)
Basis: WET

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	100	60	20	NA	04/13/03	555	
E-CH3-10 NAVY	K2302672-002	50	30	10	NA	04/13/03	477	
E-CH3-11 NAVY	K2302672-003	50	30	10	NA	04/13/03	364	
E-CH3-12 NAVY	K2302672-004	100	60	20	NA	04/13/03	667	
E-CH3-13 NAVY	K2302672-005	50	30	10	NA	04/13/03	255	
E-CH3-14 NAVY	K2302672-006	50	30	10	NA	04/13/03	476	
E-CH3-15 NAVY	K2302672-007	50	30	10	NA	04/13/03	354	
E-CH3-16 NAVY	K2302672-008	25	15	5	NA	04/13/03	273	
E-CH3-17 NAVY	K2302672-009	100	60	20	NA	04/13/03	540	
Method Blank	K2302672-MB	5	3	1	NA	04/13/03	ND	

M Modified for analysis of soil.

Approved By: MI F A Date: 5/15/03

1A/020597p

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 04/02/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/13/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-11 NAVY
Lab Code : K2302672-003DUP
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	9030M	240	1580	1230	1410	25	*

Approved By _____ Date : 5/2/03

Report By:PWiest

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 04/02/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/13/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-11 NAVY
Lab Code : K2302672-003MS
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	9030M	2400	8580	1580	12500	127	60-130	

Approved By _____ Date : 5/2/03

Report By:PWiest

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Water

Service Request : K2302672
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/13/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302672-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	mg/L (ppm)	9030M	0.95	0.89	94	60-130	

Approved By _____ Date : 5/2/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Collected: NA
Date Received: NA
Date Analyzed: 04/13/03

Sulfide
EPA Method 9030M
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.95	0.96	101
CCV 2 Result	0.95	0.96	101
CCV 3 Result	0.95	0.96	101
CCV 4 Result	0.95	0.96	101

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.1	ND
CCB 2 Result	0.1	ND
CCB 3 Result	0.1	ND
CCB 4 Result	0.1	ND

Approved By: _____ Date: 5/2/03

COMBOQCD/042695

Q-CCV.XLT

10/6/95

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31-04/02/03
Date Received : 04/10/03

Ammonia as Nitrogen

Prep Method : None
Analysis Method : 350.1M
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Date Extracted	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	12	5	10	04/15/03	NA	134	
E-CH3-10 NAVY	K2302672-002	12	5	10	04/15/03	NA	412	
E-CH3-11 NAVY	K2302672-003	12	5	10	04/15/03	NA	360	
E-CH3-12 NAVY	K2302672-004	12	5	10	04/15/03	NA	114	
E-CH3-13 NAVY	K2302672-005	12	5	10	04/15/03	NA	340	
E-CH3-14 NAVY	K2302672-006	12	5	10	04/15/03	NA	355	
E-CH3-15 NAVY	K2302672-007	12	5	10	04/15/03	NA	400	
E-CH3-16 NAVY	K2302672-008	12	5	10	04/15/03	NA	325	
E-CH3-17 NAVY	K2302672-009	12	5	10	04/15/03	NA	411	
Method Blank	K2302672-MB	1.2	0.5	1	04/15/03	NA	ND	

Approved By _____ Date : 5/2/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 3/31-4/2/03
Date Received: 04/10/03

Ammonia as Nitrogen

Prep Method: NONE
Analysis Method: 350.1M
Test Notes:

Units: mg/Kg (ppm)
Basis: WET

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	3	1	10	NA	04/14/03	50	
E-CH3-10 NAVY	K2302672-002	3	1	10	NA	04/14/03	97	
E-CH3-11 NAVY	K2302672-003	3	1	10	NA	04/14/03	83	
E-CH3-12 NAVY	K2302672-004	3	1	10	NA	04/14/03	40	
E-CH3-13 NAVY	K2302672-005	3	1	10	NA	04/14/03	76	
E-CH3-14 NAVY	K2302672-006	3	1	10	NA	04/14/03	77	
E-CH3-15 NAVY	K2302672-007	3	1	10	NA	04/14/03	86	
E-CH3-16 NAVY	K2302672-008	3	1	10	NA	04/14/03	74	
E-CH3-17 NAVY	K2302672-009	3	1	10	NA	04/14/03	92	
Method Blank	K2302672-MB	0.3	0.1	1	NA	04/14/03	ND	

M Modified for analysis of soil.

Approved By: MI Sit Date: 5/15/03

1A/020597p

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/15/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-9 NAVY
Lab Code : K2302672-001DUP
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	350.1M	12	134	123	129	9	

Approved By _____ Date : 5/2/03

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/15/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-9 NAVY
Lab Code : K2302672-001MS
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	350.1M	57	1250	134	1360	98	75-125	

Approved By _____ Date : 8/2/03

Report By:PWiest

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Water

Service Request : K2302672
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/15/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302672-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	2.29	2.30	100	85-115	

Approved By _____ Date : 5/2/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Collected: NA
Date Received: NA
Date Analyzed: 04/15/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	2.00	2.00	100
CCV 2 Result	2.00	2.00	100
CCV 3 Result	2.00	2.00	100

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND

Approved By: _____ Date: 5/2/03

COMBOQCD/042695

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31-04/02/03
Date Received : 04/10/03

Cyanide, Total

Analysis Method : 9010
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	0.59	0.18	1	04/14/03	0.18	J
E-CH3-10 NAVY	K2302672-002	0.59	0.18	1	04/14/03	ND	
E-CH3-11 NAVY	K2302672-003	0.59	0.18	1	04/14/03	1.04	
E-CH3-12 NAVY	K2302672-004	1.2	0.36	2	04/14/03	ND	i
E-CH3-13 NAVY	K2302672-005	0.59	0.18	1	04/14/03	ND	
E-CH3-14 NAVY	K2302672-006	0.59	0.18	1	04/14/03	0.25	J
E-CH3-15 NAVY	K2302672-007	1.2	0.36	2	04/14/03	ND	i
E-CH3-16 NAVY	K2302672-008	0.59	0.18	1	04/14/03	0.31	J
E-CH3-17 NAVY	K2302672-009	0.59	0.18	1	04/14/03	0.22	J
Method Blank	K2302672-MB	0.59	0.18	1	04/14/03	ND	

Approved By _____ Date : 5/2/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 3/31-4/2/03
Date Received: 04/10/03

Cyanide, Total

Prep Method: NONE
Analysis Method: 9010
Test Notes:

Units: mg/Kg (ppm)
Basis: WET

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH3-9 NAVY	K2302672-001	0.2	0.04	1	NA	04/14/03	0.07	J
E-CH3-10 NAVY	K2302672-002	0.2	0.04	1	NA	04/14/03	ND	
E-CH3-11 NAVY	K2302672-003	0.2	0.04	1	NA	04/14/03	0.2	
E-CH3-12 NAVY	K2302672-004	0.4	0.08	2	NA	04/14/03	0.05	J
E-CH3-13 NAVY	K2302672-005	0.2	0.04	1	NA	04/14/03	ND	
E-CH3-14 NAVY	K2302672-006	0.2	0.04	1	NA	04/14/03	0.05	J
E-CH3-15 NAVY	K2302672-007	0.4	0.08	2	NA	04/14/03	ND	i
E-CH3-16 NAVY	K2302672-008	0.2	0.04	1	NA	04/14/03	0.07	J
E-CH3-17 NAVY	K2302672-009	0.2	0.04	1	NA	04/14/03	0.05	J
Method Blank	K2302672-MB	0.2	0.04	1	NA	04/14/03	ND	

M Modified for analysis of soil.

Approved By: _____ Date: 5/15/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/14/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-9 NAVY
Lab Code : K2302672-001DUP
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	9010	0.59	0.18	ND	NC	NC	

Approved By _____ Date : 5/2/03

Report By:BReller

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY Samples
Project Number : NA
Sample Matrix : Sediment

Service Request : K2302672
Date Collected : 03/31/03
Date Received : 04/10/03
Date Extracted : NA
Date Analyzed : 04/14/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-9 NAVY
Lab Code : K2302672-001MS
Test Notes :

Units : mg/Kg (ppm)
Basis : Dry

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	9010	0.59	6.7	0.18	4.2	60	75-125	*

Approved By _____ Date : 5/2/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302672
Project Name :	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Sediment	**Date Extracted :**	NA
		Date Analyzed :	04/14/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302672-LCS
Test Notes :

Basis : Dry

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	mg/Kg (ppm)	9010	26.6	24.5	92	85-115	

Approved By _____ Date : 5/2/03

Report By:BReller

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Collected: NA
Date Received: NA
Date Analyzed: 04/16/03

Cyanide, Total
EPA Method 9010B
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	100	100	100
CCV 2 Result	100	99	99
CCV 3 Result	100	99	99
CCV 4 Result	100	99	99
CCV 5 Result	100	98	98
CCV 6 Result	100	97	97

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	10	ND
CCB 2 Result	10	ND
CCB 3 Result	10	ND
CCB 4 Result	10	ND
CCB 5 Result	10	ND
CCB 6 Result	10	ND

Approved By: _____ Date: 5/2/03

COMBOQCD/042695

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl

Sample No.	Lab Sample ID.
E-CH3-9 NAVY	K2302672-001
E-CH3-9 NAVYD	K2302672-001D
E-CH3-9 NAVYS	K2302672-001S
E-CH3-10 NAVY	K2302672-002
E-CH3-11 NAVY	K2302672-003
E-CH3-12 NAVY	K2302672-004
E-CH3-13 NAVY	K2302672-005
E-CH3-14 NAVY	K2302672-006
E-CH3-15 NAVY	K2302672-007
E-CH3-16 NAVY	K2302672-008
E-CH3-17 NAVY	K2302672-009
Method Blank	K2302672-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/7/03

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	03/31/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-9 NAVY Lab Code: K2302672-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	9.9	6.9	2	4/29/03	5/6/03	14700		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.04	B	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	4.1		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.09		
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	26.3		
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	7.17		
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	14700		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.02		
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	6.77		
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.030		
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	29.9		

% Solids: 37.4

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-10 NAVY Lab Code: K2302672-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	14.2	9.9	2	4/29/03	5/6/03	18800		
Antimony	200.8	0.07	0.01	5	4/29/03	5/5/03	0.04	B	N
Arsenic	200.8	0.7	0.1	5	4/29/03	5/1/03	4.9		
Cadmium	200.8	0.07	0.04	5	4/29/03	5/1/03	0.14		
Chromium	200.8	0.28	0.01	5	4/29/03	5/1/03	38.6		
Copper	200.8	0.14	0.11	5	4/29/03	5/1/03	13.5		
Iron	6010B	5.7	0.6	2	4/29/03	5/6/03	20000		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.03		
Nickel	200.8	0.28	0.10	5	4/29/03	5/1/03	9.48		
Silver	200.8	0.028	0.003	5	4/29/03	5/5/03	0.064		
Zinc	200.8	0.7	0.3	5	4/29/03	5/1/03	51.9		

% Solids: 23.5

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-11 NAVY Lab Code: K2302672-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	14.5	10.1	2	4/29/03	5/6/03	28600		
Antimony	200.8	0.07	0.01	5	4/29/03	5/5/03	0.06	B	N
Arsenic	200.8	0.7	0.1	5	4/29/03	5/1/03	4.8		
Cadmium	200.8	0.07	0.04	5	4/29/03	5/1/03	0.17		
Chromium	200.8	0.29	0.01	5	4/29/03	5/1/03	41.9		
Copper	200.8	0.15	0.12	5	4/29/03	5/1/03	13.0		
Iron	6010B	5.8	0.6	2	4/29/03	5/6/03	23800		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.03		
Nickel	200.8	0.29	0.10	5	4/29/03	5/1/03	11.1		
Silver	200.8	0.029	0.003	5	4/29/03	5/5/03	0.068		
Zinc	200.8	0.7	0.3	5	4/29/03	5/1/03	55.1		

% Solids: 23.0

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-12 NAVY Lab Code: K2302672-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.6	7.4	2	4/29/03	5/6/03	8550		
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.07		N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	4.1		
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.37		
Chromium	200.8	0.21	0.01	5	4/29/03	5/1/03	20.2		
Copper	200.8	0.11	0.08	5	4/29/03	5/1/03	50.9		
Iron	6010B	4.2	0.4	2	4/29/03	5/6/03	10700		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.03		
Nickel	200.8	0.21	0.07	5	4/29/03	5/1/03	18.6		
Silver	200.8	0.021	0.002	5	4/29/03	5/5/03	0.037		
Zinc	200.8	2.7	1.1	25	4/29/03	5/1/03	310		

% Solids: 35.0

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-13 NAVY Lab Code: K2302672-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	14.9	10.4	2	4/29/03	5/6/03	19100		
Antimony	200.8	0.07	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.7	0.1	5	4/29/03	5/1/03	4.5		
Cadmium	200.8	0.07	0.04	5	4/29/03	5/1/03	0.17		
Chromium	200.8	0.30	0.01	5	4/29/03	5/1/03	37.0		
Copper	200.8	0.15	0.12	5	4/29/03	5/1/03	15.4		
Iron	6010B	6.0	0.6	2	4/29/03	5/6/03	19600		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.03		
Nickel	200.8	0.30	0.10	5	4/29/03	5/1/03	9.46		
Silver	200.8	0.030	0.003	5	4/29/03	5/5/03	0.056		
Zinc	200.8	0.7	0.3	5	4/29/03	5/1/03	57.7		

% Solids: 22.4

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	03/31/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-14 NAVY Lab Code: K2302672-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	15.3	10.7	2	4/29/03	5/6/03	29900		
Antimony	200.8	0.08	0.01	5	4/29/03	5/5/03	0.06	B	N
Arsenic	200.8	0.8	0.2	5	4/29/03	5/1/03	6.2		
Cadmium	200.8	0.08	0.05	5	4/29/03	5/1/03	0.21		
Chromium	200.8	0.31	0.01	5	4/29/03	5/1/03	44.0		
Copper	200.8	0.15	0.12	5	4/29/03	5/1/03	25.4		
Iron	6010B	6.1	0.6	2	4/29/03	5/6/03	24000		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.04		
Nickel	200.8	0.31	0.11	5	4/29/03	5/1/03	12.4		
Silver	200.8	0.031	0.003	5	4/29/03	5/5/03	0.070		
Zinc	200.8	0.8	0.3	5	4/29/03	5/1/03	88.8		

% Solids: 21.8

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	03/31/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-15 NAVY Lab Code: K2302672-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	15.4	10.8	2	4/29/03	5/6/03	27100		
Antimony	200.8	0.08	0.01	5	4/29/03	5/5/03	0.06	B	N
Arsenic	200.8	0.8	0.2	5	4/29/03	5/1/03	5.0		
Cadmium	200.8	0.08	0.05	5	4/29/03	5/1/03	0.22		
Chromium	200.8	0.31	0.01	5	4/29/03	5/1/03	48.6		
Copper	200.8	0.15	0.12	5	4/29/03	5/1/03	21.2		
Iron	6010B	6.2	0.6	2	4/29/03	5/6/03	22700		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.03		
Nickel	200.8	0.31	0.11	5	4/29/03	5/1/03	12.2		
Silver	200.8	0.031	0.003	5	4/29/03	5/5/03	0.068		
Zinc	200.8	0.8	0.3	5	4/29/03	5/1/03	76.1		

% Solids: 21.6

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-16 NAVY Lab Code: K2302672-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	14.7	10.3	2	4/29/03	5/6/03	19100		
Antimony	200.8	0.07	0.01	5	4/29/03	5/5/03	0.05	B	N
Arsenic	200.8	0.7	0.1	5	4/29/03	5/1/03	5.0		
Cadmium	200.8	0.07	0.04	5	4/29/03	5/1/03	0.20		
Chromium	200.8	0.29	0.01	5	4/29/03	5/1/03	38.9		
Copper	200.8	0.15	0.12	5	4/29/03	5/1/03	16.5		
Iron	6010B	5.9	0.6	2	4/29/03	5/6/03	20500		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.03		
Nickel	200.8	0.29	0.10	5	4/29/03	5/1/03	9.52		
Silver	200.8	0.029	0.003	5	4/29/03	5/5/03	0.061		
Zinc	200.8	0.7	0.3	5	4/29/03	5/1/03	62.5		

% Solids: 22.7

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	03/31/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH3-17 NAVY Lab Code: K2302672-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	14.9	10.4	2	4/29/03	5/6/03	17500		
Antimony	200.8	0.07	0.01	5	4/29/03	5/5/03	0.06	B	N
Arsenic	200.8	0.7	0.1	5	4/29/03	5/1/03	5.7		
Cadmium	200.8	0.07	0.04	5	4/29/03	5/1/03	0.18		
Chromium	200.8	0.30	0.01	5	4/29/03	5/1/03	37.3		
Copper	200.8	0.15	0.12	5	4/29/03	5/1/03	23.8		
Iron	6010B	6.0	0.6	2	4/29/03	5/6/03	22900		
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.03		
Nickel	200.8	0.30	0.10	5	4/29/03	5/1/03	9.68		
Silver	200.8	0.030	0.003	5	4/29/03	5/5/03	0.061		
Zinc	200.8	0.7	0.3	5	4/29/03	5/1/03	85.5		

% Solids: 22.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	NA
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: Method Blank Lab Code: K2302672-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	7.0	U	
Antimony	200.8	0.05	0.01	5	4/29/03	5/5/03	0.01	U	N
Arsenic	200.8	0.5	0.1	5	4/29/03	5/1/03	0.1	U	
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.03	U	
Chromium	200.8	0.20	0.01	5	4/29/03	5/1/03	0.10	B	
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.08	U	
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	0.4	B	
Mercury	7471A	0.02	0.01	1	4/22/03	4/23/03	0.01	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	0.07	U	
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.002	U	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	0.4	B	

% Solids: 100.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 03/31/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-9 NAVY
Lab Code: K2302672-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	5480		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.013	B	N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	1.52		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	9.850		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	2.68		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	5500		
Mercury	7471A	0.007	0.004	1	4/22/03	4/23/03	0.008		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	2.53		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.011		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	11.2		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 04/01/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-10 NAVY
Lab Code: K2302672-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.3	2.3	2	4/29/03	5/6/03	4410		
Antimony	200.8	0.017	0.002	5	4/29/03	5/5/03	0.010	B	N
Arsenic	200.8	0.17	0.03	5	4/29/03	5/1/03	1.14		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.03		
Chromium	200.8	0.067	0.002	5	4/29/03	5/1/03	9.060		
Copper	200.8	0.03	0.03	5	4/29/03	5/1/03	3.17		
Iron	6010B	1.3	0.1	2	4/29/03	5/6/03	4700		
Mercury	7471A	0.005	0.002	1	4/22/03	4/23/03	0.007		
Nickel	200.8	0.07	0.02	5	4/29/03	5/1/03	2.23		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.015		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	12.2		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 04/02/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-11 NAVY
Lab Code: K2302672-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.3	2.3	2	4/29/03	5/6/03	6580		
Antimony	200.8	0.017	0.002	5	4/29/03	5/5/03	0.013	B	N
Arsenic	200.8	0.17	0.03	5	4/29/03	5/1/03	1.10		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.04		
Chromium	200.8	0.067	0.002	5	4/29/03	5/1/03	9.650		
Copper	200.8	0.03	0.03	5	4/29/03	5/1/03	3.00		
Iron	6010B	1.3	0.1	2	4/29/03	5/6/03	5460		
Mercury	7471A	0.004	0.002	1	4/22/03	4/23/03	0.006		
Nickel	200.8	0.07	0.02	5	4/29/03	5/1/03	2.55		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.016		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	12.7		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 04/01/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-12 NAVY
Lab Code: K2302672-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.7	2.6	2	4/29/03	5/6/03	2990		
Antimony	200.8	0.019	0.002	5	4/29/03	5/5/03	0.025		N
Arsenic	200.8	0.19	0.04	5	4/29/03	5/1/03	1.45		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.13		
Chromium	200.8	0.074	0.003	5	4/29/03	5/1/03	7.070		
Copper	200.8	0.04	0.03	5	4/29/03	5/1/03	17.8		
Iron	6010B	1.5	0.1	2	4/29/03	5/6/03	3760		
Mercury	7471A	0.007	0.003	1	4/22/03	4/23/03	0.009		
Nickel	200.8	0.07	0.03	5	4/29/03	5/1/03	6.52		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.013		
Zinc	200.8	0.9	0.4	25	4/29/03	5/1/03	108		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 04/01/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-13 NAVY
Lab Code: K2302672-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.3	2.3	2	4/29/03	5/6/03	4270		
Antimony	200.8	0.017	0.002	5	4/29/03	5/5/03	0.010	B	N
Arsenic	200.8	0.17	0.03	5	4/29/03	5/1/03	1.02		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.04		
Chromium	200.8	0.067	0.002	5	4/29/03	5/1/03	8.300		
Copper	200.8	0.03	0.03	5	4/29/03	5/1/03	3.46		
Iron	6010B	1.3	0.1	2	4/29/03	5/6/03	4400		
Mercury	7471A	0.004	0.002	1	4/22/03	4/23/03	0.007		
Nickel	200.8	0.07	0.02	5	4/29/03	5/1/03	2.12		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.013		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	12.9		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 03/31/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-14 NAVY
Lab Code: K2302672-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.3	2.3	2	4/29/03	5/6/03	6520		
Antimony	200.8	0.017	0.002	5	4/29/03	5/5/03	0.013	B	N
Arsenic	200.8	0.17	0.03	5	4/29/03	5/1/03	1.35		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.05		
Chromium	200.8	0.067	0.002	5	4/29/03	5/1/03	9.590		
Copper	200.8	0.03	0.03	5	4/29/03	5/1/03	5.55		
Iron	6010B	1.3	0.1	2	4/29/03	5/6/03	5220		
Mercury	7471A	0.004	0.002	1	4/22/03	4/23/03	0.008		
Nickel	200.8	0.07	0.02	5	4/29/03	5/1/03	2.71		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.015		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	19.4		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 03/31/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-15 NAVY
Lab Code: K2302672-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.3	2.3	2	4/29/03	5/6/03	5860		
Antimony	200.8	0.017	0.002	5	4/29/03	5/5/03	0.013	B	N
Arsenic	200.8	0.17	0.03	5	4/29/03	5/1/03	1.09		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.05		
Chromium	200.8	0.067	0.002	5	4/29/03	5/1/03	10.5		
Copper	200.8	0.03	0.03	5	4/29/03	5/1/03	4.58		
Iron	6010B	1.3	0.1	2	4/29/03	5/6/03	4910		
Mercury	7471A	0.004	0.002	1	4/22/03	4/23/03	0.007		
Nickel	200.8	0.07	0.02	5	4/29/03	5/1/03	2.63		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.015		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	16.4		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 04/01/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-16 NAVY
Lab Code: K2302672-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.3	2.3	2	4/29/03	5/6/03	4340		
Antimony	200.8	0.017	0.002	5	4/29/03	5/5/03	0.011	B	N
Arsenic	200.8	0.17	0.03	5	4/29/03	5/1/03	1.12		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.04		
Chromium	200.8	0.067	0.002	5	4/29/03	5/1/03	8.840		
Copper	200.8	0.03	0.03	5	4/29/03	5/1/03	3.74		
Iron	6010B	1.3	0.1	2	4/29/03	5/6/03	4660		
Mercury	7471A	0.004	0.002	1	4/22/03	4/23/03	0.007		
Nickel	200.8	0.07	0.02	5	4/29/03	5/1/03	2.16		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.014		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	14.2		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected: 03/31/03
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received: 04/10/03
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-17 NAVY
Lab Code: K2302672-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	3.3	2.3	2	4/29/03	5/6/03	3920		
Antimony	200.8	0.017	0.002	5	4/29/03	5/5/03	0.013	B	N
Arsenic	200.8	0.17	0.03	5	4/29/03	5/1/03	1.27		
Cadmium	200.8	0.02	0.01	5	4/29/03	5/1/03	0.04		
Chromium	200.8	0.067	0.002	5	4/29/03	5/1/03	8.340		
Copper	200.8	0.03	0.03	5	4/29/03	5/1/03	5.34		
Iron	6010B	1.3	0.1	2	4/29/03	5/6/03	5130		
Mercury	7471A	0.004	0.002	1	4/22/03	4/23/03	0.008		
Nickel	200.8	0.07	0.02	5	4/29/03	5/1/03	2.17		
Silver	200.8	0.007	0.001	5	4/29/03	5/5/03	0.014		
Zinc	200.8	0.2	0.1	5	4/29/03	5/1/03	19.1		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2302672-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	4/29/03	5/6/03	7.0	U	
Antimony	200.8	0.050	0.006	5	4/29/03	5/5/03	0.006	U	N
Arsenic	200.8	0.50	0.10	5	4/29/03	5/1/03	0.10	U	
Cadmium	200.8	0.05	0.03	5	4/29/03	5/1/03	0.03	U	
Chromium	200.8	0.200	0.007	5	4/29/03	5/1/03	0.099	B	
Copper	200.8	0.10	0.08	5	4/29/03	5/1/03	0.08	U	
Iron	6010B	4.0	0.4	2	4/29/03	5/6/03	0.4	B	
Mercury	7471A	0.020	0.010	1	4/22/03	4/23/03	0.010	U	
Nickel	200.8	0.20	0.07	5	4/29/03	5/1/03	0.07	U	
Silver	200.8	0.020	0.002	5	4/29/03	5/5/03	0.002	U	
Zinc	200.8	0.5	0.2	5	4/29/03	5/1/03	0.4	B	

% Solids: NA

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4900	98	5000	5090	102	5030	101	6010B
Antimony	25.0	23.6	94	25.0	24.9	100	25.0	100	200.8
Arsenic	50.0	48.6	97	25.0	25.2	101	25.5	102	200.8
Cadmium	25.0	24.5	98	25.0	25.7	103	25.5	102	200.8
Chromium	20.0	19.9	100	25.0	24.1	96	25.6	102	200.8
Copper	25.0	25.0	100	25.0	25.6	102	25.3	101	200.8
Iron	2500	2460	98	500	505	101	515	103	6010B
Iron	25000	25300	101	25000	25600	102	25000	100	6010B
Mercury	5.0	5.23	105	5.0	4.97	99	5.00	100	7471A
Nickel	50.0	49.8	100	25.0	24.9	100	24.7	99	200.8
Silver	12.5	12.0	96	25.0	24.9	100	24.6	98	200.8
Zinc	50.0	49.6	99	25.0	24.9	100	25.0	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4960	99	4900	98	6010B
Antimony				25.0	24.8	99	25.0	100	200.8
Arsenic				25.0	25.8	103	25.5	102	200.8
Cadmium				25.0	25.7	103	25.1	100	200.8
Chromium				25.0	26.4	106	25.0	100	200.8
Copper				25.0	25.7	103	24.3	97	200.8
Iron				500	512	102	511	102	6010B
Iron				25000	24800	99	24300	97	6010B
Mercury				5.0	5.08	102	5.10	102	7471A
Nickel				25.0	25.0	100	24.4	98	200.8
Silver				25.0	24.4	98	24.3	97	200.8
Zinc				25.0	25.2	101	23.8	95	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4880	98	4910	98	6010B
Antimony				25.0	24.3	97	24.1	97	200.8
Arsenic				25.0	26.5	106	25.8	103	200.8
Cadmium				25.0	25.2	101	24.8	99	200.8
Chromium				25.0	25.7	103	25.3	101	200.8
Copper				25.0	24.9	100	24.7	99	200.8
Iron				500	508	102	500	100	6010B
Iron				25000	24200	97	24000	96	6010B
Nickel				25.0	24.8	99	24.5	98	200.8
Silver				25.0	23.6	94	24.0	96	200.8
Zinc				25.0	25.1	100	24.2	97	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	24.6	98			200.8
Silver				25.0	24.2	97			200.8

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	43.9	88		
Antimony				0.10	0.10	103		
Arsenic				1.0	0.99	99		
Cadmium				0.10	0.10	99		
Chromium				0.40	0.45	112		
Copper				0.20	0.19	95		
Iron				20	21.5	108		
Mercury	0.20	0.20	99					
Nickel				0.40	0.42	104		
Silver				0.04	0.044	110		
Zinc				1.0	1.03	103		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	35.0	U	35.0	U	35.0	U	35.0	U					6010B
Antimony	0.01	U	0.01	U	0.01	U	0.01	U					200.8
Arsenic	0.2	U	0.2	U	0.2	U	0.2	U					200.8
Cadmium	0.06	U	0.06	U	0.06	U	0.06	U					200.8
Chromium	0.01	U	0.01	U	0.01	U	0.01	U					200.8
Copper	0.16	U	0.16	U	0.16	U	0.16	U					200.8
Iron	2.0	U	2.0	U	2.0	U	2.0	U					6010B
Mercury	0.10	U	0.10	U	0.10	U	0.10	U					7471A
Nickel	0.14	U	0.14	U	0.14	U	0.14	U					200.8
Silver	0.009	B	0.006	B	0.01	B	0.007	B					200.8
Zinc	0.4	U	0.4	U	0.4	U	0.4	U					200.8

METALS
-3-
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum			35.0	U	35.0	U	35.0	U					6010B
Antimony			0.02	B	0.02	B	0.01	B					200.8
Arsenic			0.2	U	0.2	U	0.2	U					200.8
Cadmium			0.06	U	0.06	U	0.06	U					200.8
Chromium			0.01	U	0.01	U	0.02	B					200.8
Copper			0.16	U	0.16	U	0.16	U					200.8
Iron			2.0	U	2.0	U	2.0	U					6010B
Mercury			0.10	U									7471A
Nickel			0.14	U	0.14	U	0.14	U					200.8
Silver			0.009	B	0.01	B	0.006	B					200.8
Zinc			0.4	U	0.4	U	0.4	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Antimony			0.01	U										200.8
Silver			0.004	B										200.8

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	481000	489000	98	474000	483000	97
Iron	200000	200000	183000	187000	94	177000	179000	89

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/NAVY San
Basis: Dry
Matrix: SEDIMENT
% Solids: 37.4

Sample Name: E-CH3-9 NAVYS
Lab Code: K2302672-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		9220		14700		396	-1359		6010B
Antimony	70 - 130	25.4		0.04	B	99.0	26	N	200.8
Arsenic	70 - 130	190		4.1		198	94		200.8
Cadmium	70 - 130	8.74		0.09		9.90	87		200.8
Chromium	70 - 130	60.7		26.3		39.6	87		200.8
Copper	70 - 130	51.6		7.17		49.5	90		200.8
Iron		12600		14700		198	-1061		6010B
Mercury	60 - 130	0.50		0.02		0.49	98		7471A
Nickel	70 - 130	95.2		6.77		99.0	89		200.8
Silver	70 - 130	7.520		0.030		9.900	76		200.8
Zinc	70 - 130	121		29.9		99.0	92		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/NAVY Samp
Basis: Dry
Matrix: SEDIMENT
% Solids: 37.4

Sample Name: E-CH3-9 NAVYD
Lab Code: K2302672-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	14700		14700		1		6010B
Antimony		0.04	B	0.04	B	0		200.8
Arsenic	30	4.1		4.0		2		200.8
Cadmium		0.09		0.08		8		200.8
Chromium	30	26.3		26.8		2		200.8
Copper	30	7.17		6.48		10		200.8
Iron	30	14700		14800		1		6010B
Mercury		0.02		0.02		6		7471A
Nickel	30	6.77		6.66		2		200.8
Silver		0.030		0.030		0		200.8
Zinc	30	29.9		28.7		4		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-7-
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L True	Aqueous mg/L Found	Aqueous mg/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	C	Limits		%R
Aluminum				8270	9280		4200	12300	112
Antimony				32.6	24.2		0.0500	68.1	74
Arsenic				187	191		139	235	102
Cadmium				67.9	67.5		52.0	83.6	99
Chromium				144	136		115	173	94
Copper				91.3	88.4		74.8	108	97
Iron				12700	14400		7470	17900	113
Mercury				1.49	1.43		0.852	2.12	96
Nickel				78.0	75.3		61.1	94.9	97
Silver				90.0	83.7		67.0	113	93
Zinc				283	282		219	347	100

METALS
-9-
ICP SERIAL DILUTIONS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.: Units: ug/L

Project Name: Canaveral Harbor 103 Evaluat:

Sample Name: E-CH3-9 NAVYL Lab Code: K2302672-001L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-	Q	Method
Aluminum	74000		76800		4		6010B
Iron	74300		79300		7		6010B

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.20	0.10	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.10	0.01	200.8
Silver	107		0.040	0.004	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	75		1.0	0.2	200.8
Cadmium	111		0.10	0.06	200.8
Chromium	52		0.40	0.01	200.8
Copper	65		0.20	0.16	200.8
Nickel	60		0.40	0.14	200.8
Zinc	66		1.0	0.4	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	237.30		50.0	35.0	6010B
Iron	259.90		20.0	2.0	6010B

Comments

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0019800	0.0000000	-0.0018000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0163000
Arsenic	189.0	0.0000000	0.0000000	-0.0001080	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0012900	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000630	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000160	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000170	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003210	0.0000000	0.0000000	0.0000000	-0.0002250
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009530	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000660	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0004440	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/02

Analyte	Wave-length (nm)	Mo	Ni	Interelement Correction Factors for: Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	-0.0300000	0.0000000	0.0004130	0.0000000	0.0000000
Arsenic	189.0	0.0012000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012600	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000230	-0.0000300	0.0000630	0.0000000	-0.0000510
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001780	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015500	0.0000000	0.0000000
Copper	324.7	0.0003860	0.0000000	-0.0000330	-0.0017300	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.1740000	0.1020000
Lead	220.3	-0.0015300	0.0005850	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3920000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000300
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0004400	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0006000	0.0000000	-0.0013800	-0.0002090	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0011700	-0.0015900	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0015800	0.0018000	0.0038400
Tin	189.9	0.0000000	0.0000000	-0.0032900	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	0.0000000	0.0000000	0.0000000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/02

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0021700	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003900	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0003380	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0001180	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0006160	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	200.0	200.8
Silver	15.00	100.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic	15.00	1000.0	200.8
Cadmium	15.00	700.0	200.8
Chromium	15.00	500.0	200.8
Copper	15.00	800.0	200.8
Nickel	15.00	800.0	200.8
Zinc	15.00	900.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Iron	5.00	20000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302672-002	4/29/03	EPA 3050B	3.00	100
K2302672-003	4/29/03	EPA 3050B	3.00	100
K2302672-004	4/29/03	EPA 3050B	2.70	100
K2302672-005	4/29/03	EPA 3050B	3.00	100
K2302672-006	4/29/03	EPA 3050B	3.00	100
K2302672-007	4/29/03	EPA 3050B	3.00	100
K2302672-008	4/29/03	EPA 3050B	3.00	100
K2302672-009	4/29/03	EPA 3050B	3.00	100
K2302672-001	4/29/03	EPA 3050B	2.70	100
K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302672-MB	4/29/03	EPA 3050B	1.00	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
CALIBRATION ZER	4/22/03	METHOD	100	100
K2302672-002	4/22/03	METHOD	4.39	100
K2302672-003	4/22/03	METHOD	4.53	100
K2302672-004	4/22/03	METHOD	3.07	100
K2302672-005	4/22/03	METHOD	5.03	100
K2302672-006	4/22/03	METHOD	4.84	100
K2302672-007	4/22/03	METHOD	4.68	100
K2302672-008	4/22/03	METHOD	4.71	100
K2302672-009	4/22/03	METHOD	4.67	100
K2302672-001	4/22/03	METHOD	2.83	100
K2302672-001D	4/22/03	METHOD	2.79	100
K2302672-001S	4/22/03	METHOD	2.76	100
ICV	4/22/03	METHOD	100	100
LCSS	4/22/03	METHOD	0.525	100
K2302672-MB	4/22/03	METHOD	1.00	100
STANDARD #1	4/22/03	METHOD	100	100
STANDARD #2	4/22/03	METHOD	100	100
STANDARD #3	4/22/03	METHOD	100	100
STANDARD #4	4/22/03	METHOD	100	100
STANDARD #5	4/22/03	METHOD	100	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302672-002	4/29/03	EPA 3050B	3.00	100
K2302672-003	4/29/03	EPA 3050B	3.00	100
K2302672-004	4/29/03	EPA 3050B	2.70	100
K2302672-005	4/29/03	EPA 3050B	3.00	100
K2302672-006	4/29/03	EPA 3050B	3.00	100
K2302672-007	4/29/03	EPA 3050B	3.00	100
K2302672-008	4/29/03	EPA 3050B	3.00	100
K2302672-009	4/29/03	EPA 3050B	3.00	100
K2302672-001	4/29/03	EPA 3050B	2.70	100
K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302672-MB	4/29/03	EPA 3050B	1.00	100

K2302672-002	4/29/03	EPA 3050B	3.00	100
K2302672-003	4/29/03	EPA 3050B	3.00	100
K2302672-004	4/29/03	EPA 3050B	2.70	100
K2302672-005	4/29/03	EPA 3050B	3.00	100
K2302672-006	4/29/03	EPA 3050B	3.00	100
K2302672-007	4/29/03	EPA 3050B	3.00	100
K2302672-008	4/29/03	EPA 3050B	3.00	100
K2302672-009	4/29/03	EPA 3050B	3.00	100
K2302672-001	4/29/03	EPA 3050B	2.70	100
K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302672-MB	4/29/03	EPA 3050B	1.00	100

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/23/03 End Date: 4/23/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	09:38																X									
STANDARD #1	1.00	09:39																X									
STANDARD #2	1.00	09:41																X									
STANDARD #3	1.00	09:42																X									
STANDARD #4	1.00	09:44																X									
STANDARD #5	1.00	09:46																X									
ICV	1.00	09:47																X									
ICB	1.00	09:49																X									
CCV1	1.00	09:51																X									
CCB1	1.00	09:52																X									
CRA	1.00	09:54																X									
K2302672-MB	1.00	09:55																X									
LCSS	1.00	09:57																X									
K2302672-001	1.00	10:00																X									
K2302672-001D	1.00	10:02																X									
K2302672-001S	1.00	10:04																X									
K2302672-002	1.00	10:05																X									
K2302672-003	1.00	10:07																X									
K2302672-004	1.00	10:08																X									
K2302672-005	1.00	10:10																X									
CCV2	1.00	10:12																X									
CCB2	1.00	10:13																X									
K2302672-006	1.00	10:15																X									
K2302672-007	1.00	10:16																X									
K2302672-008	1.00	10:18																X									
K2302672-009	1.00	10:20																X									
ZZZZZZ	1.00	10:21																									
ZZZZZZ	1.00	10:23																									
ZZZZZZ	1.00	10:25																									
ZZZZZZ	1.00	10:26																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/23/03 End Date: 4/23/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:28																									
ZZZZZZ	1.00	10:29																									
CCV3	1.00	10:31																X									
CCB3	1.00	10:33																X									
ZZZZZZ	1.00	10:34																									
ZZZZZZ	1.00	10:36																									
ZZZZZZ	1.00	10:37																									
ZZZZZZ	1.00	10:39																									
CCV4	1.00	10:41																X									
CCB4	1.00	10:42																X									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	09:20		X										X													
CAL-STDA	1.00	09:22												X													
CAL-STDB	1.00	09:26		X										X													
ICV	1.00	09:31		X										X													
ICV	1.00	09:35												X													
ZZZZZZ	1.00	09:38																									
ICB	1.00	09:41		X										X													
CCV1	1.00	10:21												X													
CCV1	1.00	10:26		X										X													
CCB1	1.00	10:30		X										X													
CRI	1.00	10:41		X										X													
ICSA	1.00	10:45		X										X													
ICSAB	1.00	10:48		X										X													
K2302672-MB	2.00	10:52		X										X													
LCSS	2.00	10:55		X										X													
K2302672-001	2.00	10:58		X										X													
K2302672-001D	2.00	11:00		X										X													
K2302672-001S	2.00	11:03		X										X													
K2302672-001L	10.00	11:06		X										X													
K2302672-002	2.00	11:09		X										X													
CCV2	1.00	11:13												X													
CCV2	1.00	11:15		X										X													
CCB2	1.00	11:18		X										X													
K2302672-003	2.00	11:20		X										X													
K2302672-004	2.00	11:23		X										X													
K2302672-005	2.00	11:25		X										X													
K2302672-006	2.00	11:28		X										X													
K2302672-007	2.00	11:30		X										X													
K2302672-008	2.00	11:33		X										X													
K2302672-009	2.00	11:35		X										X													

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	11:37																									
ZZZZZZ	1.00	11:52																									
ZZZZZZ	1.00	11:54																									
CCV3	1.00	11:56												X													
CCV3	1.00	11:59		X										X													
CCB3	1.00	12:02		X										X													
ZZZZZZ	1.00	12:05																									
ZZZZZZ	1.00	12:07																									
ZZZZZZ	1.00	12:09																									
ZZZZZZ	1.00	12:12																									
ZZZZZZ	1.00	12:14																									
ZZZZZZ	1.00	12:16																									
ZZZZZZ	1.00	12:18																									
ZZZZZZ	1.00	12:21																									
ZZZZZZ	1.00	12:24																									
ZZZZZZ	1.00	12:26																									
CCV4	1.00	12:29												X													
CCV4	1.00	12:32		X										X													
CCB4	1.00	12:34		X										X													
ZZZZZZ	1.00	12:37																									
ZZZZZZ	1.00	12:39																									
ZZZZZZ	5.00	12:41																									
ZZZZZZ	1.00	12:44																									
ZZZZZZ	1.00	12:46																									
ZZZZZZ	1.00	12:49																									
ZZZZZZ	1.00	12:51																									
ZZZZZZ	1.00	12:53																									
ZZZZZZ	1.00	12:55																									
ZZZZZZ	1.00	12:58																									
CCV5	1.00	13:00												X													

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 5/6/03 End Date: 5/6/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV5	1.00	13:03		X										X													
CCB5	1.00	13:06		X										X													
ZZZZZZ	1.00	13:09																									
ICSA	1.00	13:13		X										X													
ICSAB	1.00	13:15		X										X													
CCV6	1.00	13:21												X													
CCV6	1.00	13:23		X										X													
CCB6	1.00	13:25		X										X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	08:08			X																	X					
25 PPB STD.	1.00	08:12			X																	X					
ICV	1.00	08:13			X																	X					
CCV1	1.00	08:15			X																	X					
ICB	1.00	08:18			X																	X					
CCB1	1.00	08:19			X																	X					
CRA	1.00	08:21			X																	X					
K2302672-MB	5.00	08:23			X																	X					
K2302672-001	5.00	08:24			X																	X					
K2302672-001D	5.00	08:25			X																	X					
K2302672-001S	5.00	08:26			X																	X					
LCSS	20.00	08:27			X																	X					
K2302672-002	5.00	08:29			X																	X					
K2302672-003	5.00	08:30			X																	X					
K2302672-004	5.00	08:31			X																	X					
K2302672-005	5.00	08:33			X																	X					
CCV2	1.00	08:34			X																	X					
CCB2	1.00	08:37			X																	X					
K2302672-006	5.00	08:38			X																	X					
K2302672-007	5.00	08:39			X																	X					
K2302672-008	5.00	08:41			X																	X					
K2302672-009	5.00	08:42			X																	X					
ZZZZZZ	5.00	08:43																									
ZZZZZZ	5.00	08:44																									
ZZZZZZ	5.00	08:45																									
ZZZZZZ	5.00	08:46																									
ZZZZZZ	5.00	08:47																									
ZZZZZZ	5.00	08:48																									
CCV3	1.00	08:50			X																	X					
CCB3	1.00	08:53			X																	X					

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	08:55																									
ZZZZZZ	5.00	08:56																									
ZZZZZZ	5.00	08:57																									
ZZZZZZ	5.00	08:59																									
ZZZZZZ	5.00	09:02																									
ZZZZZZ	5.00	09:03																									
ZZZZZZ	5.00	09:05																									
ZZZZZZ	5.00	09:07																									
ZZZZZZ	20.00	09:11																									
CCV4	1.00	09:13			X																	X					
CCB4	1.00	09:16			X																	X					
ZZZZZZ	5.00	09:19																									
ZZZZZZ	5.00	09:20																									
ZZZZZZ	5.00	09:22																									
ZZZZZZ	5.00	09:23																									
ZZZZZZ	5.00	09:24																									
ZZZZZZ	5.00	09:25																									
ZZZZZZ	5.00	09:27																									
ZZZZZZ	5.00	09:28																									
ZZZZZZ	5.00	09:30																									
ZZZZZZ	20.00	09:32																									
CCV5	1.00	09:33			X																	X					
CCB5	1.00	09:36			X																	X					
ZZZZZZ	5.00	09:38																									
ZZZZZZ	5.00	09:39																									
ZZZZZZ	5.00	09:40																									
ZZZZZZ	5.00	09:43																									
ZZZZZZ	5.00	09:44																									
ZZZZZZ	5.00	09:45																									
ZZZZZZ	5.00	09:46																									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/5/03 End Date: 5/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	09:47																									
ZZZZZZ	5.00	09:49																									
ZZZZZZ	5.00	09:50																									
CCV6	1.00	09:52			X																	X					
CCB6	1.00	09:55			X																	X					
ZZZZZZ	5.00	10:21																									
ZZZZZZ	5.00	10:22																									
ZZZZZZ	5.00	10:23																									
ZZZZZZ	5.00	10:24																									
ZZZZZZ	5.00	10:25																									
ZZZZZZ	5.00	10:30																									
ZZZZZZ	5.00	10:31																									
CCV7	1.00	10:33			X																	X					
CCB7	1.00	10:36			X																	X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/1/03 End Date: 5/1/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:25				X			X		X		X						X							X	
CALIBRATION STANDARD	1.00	11:27				X			X		X		X						X							X	
ICV	1.00	11:30				X			X		X		X						X							X	
CCV1	1.00	11:32				X			X		X		X						X							X	
ICB	1.00	11:34				X			X		X		X						X							X	
CCB1	1.00	11:35				X			X		X		X						X							X	
ZZZZZZ	1.00	11:38																									
CRA SOIL	1.00	11:40				X			X		X		X						X							X	
K2302672-MB	5.00	11:42				X			X		X		X						X							X	
LCSS	20.00	11:44				X			X		X		X						X							X	
K2302672-001	5.00	11:47				X			X		X		X						X							X	
K2302672-001D	5.00	11:49				X			X		X		X						X							X	
K2302672-001S	5.00	11:51							X																		
K2302672-001S	25.00	11:53				X					X		X						X							X	
K2302672-002	5.00	11:54				X			X		X		X						X							X	
K2302672-003	5.00	11:57				X			X		X		X						X							X	
CCV2	1.00	11:59				X			X		X		X						X							X	
CCB2	1.00	12:01				X			X		X		X						X							X	
K2302672-004	5.00	12:04				X			X		X		X						X								
K2302672-005	5.00	12:06				X			X		X		X						X							X	
K2302672-006	5.00	12:09				X			X		X		X						X							X	
K2302672-007	5.00	12:10				X			X		X		X						X							X	
K2302672-008	5.00	12:13				X			X		X		X						X							X	
K2302672-009	5.00	12:15				X			X		X		X						X							X	
K2302672-004	25.00	12:17																								X	
ZZZZZZ	5.00	12:19																									
ZZZZZZ	5.00	12:20																									
ZZZZZZ	2.00	12:23																									
CCV3	1.00	12:25				X			X		X		X						X							X	
CCB3	1.00	12:28				X			X		X		X						X							X	

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/1/03 End Date: 5/1/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	12:30																									
ZZZZZZ	5.00	12:32																									
ZZZZZZ	5.00	12:34																									
ZZZZZZ	5.00	12:36																									
ZZZZZZ	5.00	12:38																									
ZZZZZZ	5.00	12:43																									
ZZZZZZ	5.00	12:45																									
ZZZZZZ	5.00	12:47																									
ZZZZZZ	20.00	12:49																									
ZZZZZZ	5.00	12:52																									
CCV4	1.00	12:54				X			X		X		X						X							X	
CCB4	1.00	12:57				X			X		X		X						X							X	
ZZZZZZ	5.00	13:02																									
ZZZZZZ	5.00	13:04																									
ZZZZZZ	25.00	13:07																									
ZZZZZZ	1.00	13:09																									
ZZZZZZ	1.00	13:11																									
ZZZZZZ	1.00	13:13																									
ZZZZZZ	1.00	13:15																									
ZZZZZZ	1.00	13:17																									
ZZZZZZ	1.00	13:18																									
ZZZZZZ	1.00	13:20																									
CCV5	1.00	13:22				X			X		X		X						X							X	
CCB5	1.00	13:24				X			X		X		X						X							X	
ZZZZZZ	1.00	13:26																									
CCV6	1.00	13:28				X			X		X		X						X							X	
CCB6	1.00	13:30				X			X		X		X						X							X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 19, 2003 Service Request No: K2302672

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation.NAVY Samples

Dear Nadia:

Enclosed are additional pages for the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302672.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl

Sample No.	Lab Sample ID.
E-CH3-9 NAVY	K2302672-001
E-CH3-9 NAVYD	K2302672-001D
E-CH3-9 NAVYS	K2302672-001S
E-CH3-10 NAVY	K2302672-002
E-CH3-11 NAVY	K2302672-003
E-CH3-12 NAVY	K2302672-004
E-CH3-13 NAVY	K2302672-005
E-CH3-14 NAVY	K2302672-006
E-CH3-15 NAVY	K2302672-007
E-CH3-16 NAVY	K2302672-008
E-CH3-17 NAVY	K2302672-009
Method Blank	K2302672-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 10/18/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	03/31/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-9 NAVY Lab Code: K2302672-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	11.6		

% Solids: 37.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-10 NAVY Lab Code: K2302672-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.07	0.03	5	4/29/03	6/18/03	16.5		

% Solids: 23.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/02/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-11 NAVY Lab Code: K2302672-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.07	0.03	5	4/29/03	6/18/03	17.2		

% Solids: 23.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-12 NAVY Lab Code: K2302672-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	9.99		

% Solids: 35.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-13 NAVY Lab Code: K2302672-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.07	0.03	5	4/29/03	6/18/03	16.4		

% Solids: 22.4

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 03/31/03
Date Received: 04/10/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH3-14 NAVY
Lab Code: K2302672-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.08	0.03	5	4/29/03	6/18/03	18.5		

% Solids: 21.8

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	03/31/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-15 NAVY Lab Code: K2302672-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.08	0.03	5	4/29/03	6/18/03	18.4		

% Solids: 21.6

Comments:

00011

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-16 NAVY Lab Code: K2302672-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.07	0.03	5	4/29/03	6/18/03	17.2		

% Solids: 22.7

Comments:

00012

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	03/31/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Dry

Sample Name: E-CH3-17 NAVY Lab Code: K2302672-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.07	0.03	5	4/29/03	6/18/03	17.2		

% Solids: 22.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Dry

Sample Name: Method Blank
Lab Code: K2302672-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	0.02	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	50.0	49.6	99	25.0	25.6	102	24.8	99	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	Method
Lead				25.0	25.7	103	25.3	101	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	Method
Lead				25.0	25.7	103			200.8

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Lead				0.04	0.04	88		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Lead	0.04	U	0.04	U	0.04	U	0.04	U					200.8

00019

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Lead			0.04	U	0.04	U							200.8

00020

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Project No.:
Project Name: Canaveral Harbor 103 Evaluation/NAVY San
Matrix: SEDIMENT

Service Request: K2302672
Units: mg/kg
Basis: Dry
% Solids: 37.4

Sample Name: E-CH3-9 NAVYS
Lab Code: K2302672-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Lead	70 - 130	109		11.6		99.0	98		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation/NAVY Samp
Basis: Dry
Matrix: SEDIMENT
% Solids: 37.4

Sample Name: E-CH3-9 NAVYD
Lab Code: K2302672-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Lead	30	11.6		11.2		4		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

-7-

LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Lead				125	132		95.2 155	106

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Lead	208		0.10	0.04	200.8

Comments

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Lead	15.00	800.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302672-002	4/29/03	EPA 3050B	3.00	100
K2302672-003	4/29/03	EPA 3050B	3.00	100
K2302672-004	4/29/03	EPA 3050B	2.70	100
K2302672-005	4/29/03	EPA 3050B	3.00	100
K2302672-006	4/29/03	EPA 3050B	3.00	100
K2302672-007	4/29/03	EPA 3050B	3.00	100
K2302672-008	4/29/03	EPA 3050B	3.00	100
K2302672-009	4/29/03	EPA 3050B	3.00	100
K2302672-001	4/29/03	EPA 3050B	2.70	100
K2302672-001D	4/29/03	EPA 3050B	2.70	100
K2302672-001S	4/29/03	EPA 3050B	2.70	100
LCSS	4/29/03	EPA 3050B	1.00	100
K2302672-MB	4/29/03	EPA 3050B	1.00	100

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	08:22													X												
S25	1.00	08:23													X												
ICV	1.00	08:24													X												
CCV1	1.00	08:26													X												
ZZZZZZ	1.00	08:28																									
ZZZZZZ	1.00	08:29																									
ICB	1.00	08:33													X												
CCB1	1.00	08:34													X												
CRA	1.00	08:36													X												
ZZZZZZ	5.00	08:38																									
ZZZZZZ	20.00	08:39																									
ZZZZZZ	5.00	08:41																									
ZZZZZZ	5.00	08:42																									
ZZZZZZ	5.00	08:43																									
ZZZZZZ	5.00	08:44																									
ZZZZZZ	5.00	08:45																									
ZZZZZZ	5.00	08:47																									
ZZZZZZ	5.00	08:49																									
CCV2	1.00	08:51													X												
CCB2	1.00	08:59													X												
ZZZZZZ	5.00	09:00																									
ZZZZZZ	5.00	09:01																									
ZZZZZZ	5.00	09:03																									
ZZZZZZ	5.00	09:05																									
K2302672-MB	5.00	09:07													X												
LCSS	20.00	09:08													X												
K2302672-001	5.00	09:12													X												
K2302672-001D	5.00	09:14													X												
K2302672-001S	5.00	09:15													X												
ZK2302672-002	5.00	09:16																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV3	1.00	09:17													X												
CCB3	1.00	10:25													X												
K2302672-002	5.00	10:26													X												
K2302672-003	5.00	10:32													X												
K2302672-004	5.00	10:35													X												
K2302672-005	5.00	10:37													X												
K2302672-006	5.00	10:39													X												
K2302672-007	5.00	10:41													X												
K2302672-008	5.00	10:43													X												
K2302672-009	5.00	10:45													X												
ZZZZZZ	5.00	10:49																									
ZZZZZZ	5.00	10:51																									
CCV4	1.00	10:52													X												
CCB4	1.00	10:59													X												
ZZZZZZ	5.00	11:00																									
ZZZZZZ	5.00	11:01																									
ZZZZZZ	5.00	11:02																									
ZZZZZZ	5.00	11:04																									
ZZZZZZ	5.00	11:04																									
ZZZZZZ	5.00	11:05																									
ZZZZZZ	5.00	11:06																									
ZZZZZZ	5.00	11:08																									
CCV5	1.00	11:09													X												
CCB5	1.00	11:14													X												

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 9, 2003

Service Request No: K2303706

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed are the additional pages for the sample(s) submitted to our laboratory on May 17, 2003. For your reference, these analyses have been assigned our service request number K2303706.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/jeb

NELAP Accredited ACIL Seal of Excellence Award

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03

Ammonia as Nitrogen

Prep Method: NONE
Analysis Method: 350.1M
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	0.3	0.1	1	NA	05/22/03	11.6	
E-CH03-20	K2303706-002	1.4	0.7	5	NA	05/22/03	30	
E-CH03-21/22	K2303706-003	0.6	0.3	2	NA	05/22/03	21.5	
Method Blank	K2303706-MB	0.3	0.1	1	NA	05/22/03	ND	

* Analysis was performed on a 2M KCl extract.
M Modified for analysis of soil.

Approved By: _____ Date: 7/8/03

1A/020597p

03706wetbr5.xls - Sample 07/08/03

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03

Carbon, Total Organic

Prep Method: NONE
Analysis Method: ASTM D4129-82M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	0.02	0.01	1	NA	05/27/03	0.24	
E-CH03-20	K2303706-002	0.02	0.01	1	NA	05/27/03	0.43	
E-CH03-21/22	K2303706-003	0.02	0.01	1	NA	05/27/03	0.48	
Method Blank	K2303706-MB	0.02	0.01	1	NA	05/27/03	ND	

M Modified

Approved By: _____ Date: 7/8/03

1A/020597p

03706wetbr6.xls - Sample 07/08/03

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03

Sulfide

Prep Method: NONE
Analysis Method: 9030M
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	12	6	10	NA	05/24/03	104	
E-CH03-20	K2303706-002	30	14	25	NA	05/24/03	299	
E-CH03-21/22	K2303706-003	30	14	25	NA	05/24/03	327	
Method Blank	K2303706-MB	1.2	0.6	1	NA	05/24/03	ND	

M Modified for analysis of soil.

Approved By: _____ Date: 7/8/03

1A/020597p

03706wetbr7.xls - Sample 07/08/03

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03

Cyanide, Total

Prep Method: NONE
Analysis Method: 9010B
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	0.14	0.04	1	NA	05/29/03	ND	
E-CH03-20	K2303706-002	0.14	0.04	1	NA	05/29/03	0.07	J
E-CH03-21/22	K2303706-003	0.14	0.04	1	NA	05/29/03	0.05	J
Method Blank	K2303706-MB	0.14	0.04	1	NA	05/29/03	ND	

Approved By: _____ Date: 7/8/03

1A/020597p

03706wetbr8.xls - Sample 07/08/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: SEDIMENT

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-19
Lab Code: K2303706-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	7.1	5.0	2	5/28/03	6/12/03	2240		
Antimony	200.8	0.036	0.007	5	5/28/03	6/18/03	0.029	B	N
Arsenic	200.8	0.36	0.07	5	5/28/03	6/17/03	1.70		
Cadmium	200.8	0.04	0.02	5	5/28/03	6/17/03	0.04		
Chromium	200.8	0.143	0.005	5	5/28/03	6/17/03	4.840		
Copper	200.8	0.07	0.06	5	5/28/03	6/17/03	0.87		
Iron	6010B	2.9	0.3	2	5/28/03	6/12/03	2700		
Lead	200.8	0.071	0.014	5	5/28/03	6/17/03	1.660		
Mercury	7471A	0.007	0.003	1	5/29/03	5/30/03	0.003	U	
Nickel	200.8	0.14	0.05	5	5/28/03	6/17/03	1.56		
Silver	200.8	0.014	0.014	5	5/28/03	6/18/03	0.033		
Zinc	200.8	0.36	0.14	5	5/28/03	6/17/03	4.63		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: SEDIMENT

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-20
Lab Code: K2303706-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	4.6	3.2	2	5/28/03	6/12/03	6000		
Antimony	200.8	0.023	0.005	5	5/28/03	6/18/03	0.062		N
Arsenic	200.8	0.23	0.05	5	5/28/03	6/17/03	1.78		
Cadmium	200.8	0.02	0.01	5	5/28/03	6/17/03	0.04		
Chromium	200.8	0.091	0.003	5	5/28/03	6/17/03	7.850		
Copper	200.8	0.05	0.04	5	5/28/03	6/17/03	2.16		
Iron	6010B	1.8	0.2	2	5/28/03	6/12/03	5100		
Lead	200.8	0.046	0.009	5	5/28/03	6/17/03	3.590		
Mercury	7471A	0.006	0.003	1	5/29/03	5/30/03	0.007		
Nickel	200.8	0.09	0.03	5	5/28/03	6/17/03	2.29		
Silver	200.8	0.009	0.009	5	5/28/03	6/18/03	0.023		
Zinc	200.8	0.23	0.09	5	5/28/03	6/17/03	9.61		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: SEDIMENT

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-21/22
Lab Code: K2303706-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	4.6	3.2	2	5/28/03	6/12/03	5390		
Antimony	200.8	0.023	0.005	5	5/28/03	6/18/03	0.029		N
Arsenic	200.8	0.23	0.05	5	5/28/03	6/17/03	1.60		
Cadmium	200.8	0.02	0.01	5	5/28/03	6/17/03	0.04		
Chromium	200.8	0.091	0.003	5	5/28/03	6/17/03	7.300		
Copper	200.8	0.05	0.04	5	5/28/03	6/17/03	2.04		
Iron	6010B	1.8	0.2	2	5/28/03	6/12/03	4740		
Lead	200.8	0.046	0.009	5	5/28/03	6/17/03	3.130		
Mercury	7471A	0.006	0.003	1	5/29/03	5/30/03	0.006	B	
Nickel	200.8	0.09	0.03	5	5/28/03	6/17/03	2.13		
Silver	200.8	0.009	0.009	5	5/28/03	6/18/03	0.013		
Zinc	200.8	0.23	0.09	5	5/28/03	6/17/03	8.64		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: SEDIMENT

Service Request: K2303706
Date Collected:
Date Received:
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2303706-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	3.5	2	5/28/03	6/12/03	3.5	U	
Antimony	200.8	0.025	0.005	5	5/28/03	6/18/03	0.011	B	N
Arsenic	200.8	0.25	0.05	5	5/28/03	6/17/03	0.05	U	
Cadmium	200.8	0.03	0.02	5	5/28/03	6/17/03	0.02	U	
Chromium	200.8	0.100	0.004	5	5/28/03	6/17/03	0.047	B	
Copper	200.8	0.05	0.04	5	5/28/03	6/17/03	0.04	U	
Iron	6010B	2.0	0.2	2	5/28/03	6/12/03	0.2	U	
Lead	200.8	0.050	0.010	5	5/28/03	6/17/03	0.010	U	
Mercury	7471A	0.008	0.004	1	5/29/03	5/30/03	0.004	U	
Nickel	200.8	0.10	0.04	5	5/28/03	6/17/03	0.04	U	
Silver	200.8	0.010	0.010	5	5/28/03	6/18/03	0.010	U	
Zinc	200.8	0.25	0.10	5	5/28/03	6/17/03	0.10	U	

% Solids: NA

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Sediment	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	60	J

Approved By: M Cush Date: 7/8/03

1S22/020597p

03706PHC.ME1 - 1 7/8/03

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Sediment	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-20	Units:	mg/Kg (ppm)
Lab Code:	K2303706-002	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	70	J

Approved By: M Gulu Date: 7/8/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Sediment	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-21/22	Units:	mg/Kg (ppm)
Lab Code:	K2303706-003	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	130	

Approved By: M Gulla Date: 7/8/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	K030523-SB	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	ND	

Approved By: MB Urlu Date: 7/8/03

1S22/020597p

03706PHC.ME1 - MB 7/8/03

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/2003
Date Received: 05/17/2003

Butyltins

Sample Name: E-CH03-19
Lab Code: K2303706-001

Units: ug/Kg
Basis: Wet

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.81	1	05/20/03	06/14/03	KWG0307235	
Tri-n-butyltin	**1.0**		0.99	0.36	1	05/20/03	06/14/03	KWG0307235	
Di-n-butyltin	ND	U	0.99	0.73	1	05/20/03	06/14/03	KWG0307235	
n-Butyltin	ND	U	0.99	0.47	1	05/20/03	06/14/03	KWG0307235	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	78	22-113	06/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/2003
Date Received: 05/17/2003

Butyltins

Sample Name: E-CH03-20
Lab Code: K2303706-002

Units: ug/Kg
Basis: Wet

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.81	1	05/20/03	06/14/03	KWG0307235	
Tri-n-butyltin	**2.4**		0.99	0.36	1	05/20/03	06/14/03	KWG0307235	
Di-n-butyltin	ND	U	0.99	0.73	1	05/20/03	06/14/03	KWG0307235	
n-Butyltin	ND	U	0.99	0.47	1	05/20/03	06/14/03	KWG0307235	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	85	22-113	06/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/2003
Date Received: 05/17/2003

Butyltins

Sample Name: E-CH03-21/22
Lab Code: K2303706-003

Units: ug/Kg
Basis: Wet

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.81	1	05/20/03	06/14/03	KWG0307235	
Tri-n-butyltin	**1.7**		0.99	0.36	1	05/20/03	06/14/03	KWG0307235	
Di-n-butyltin	ND	U	0.99	0.73	1	05/20/03	06/14/03	KWG0307235	
n-Butyltin	ND	U	0.99	0.47	1	05/20/03	06/14/03	KWG0307235	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	88	22-113	06/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-19	**Units:**	ug/Kg
Lab Code:	K2303706-001	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.22**	J	3.3	0.21	1	05/23/03	06/03/03	KWG0307438	
2-Methylnaphthalene	ND	U	3.3	0.21	1	05/23/03	06/03/03	KWG0307438	
Acenaphthylene	ND	U	3.3	0.16	1	05/23/03	06/03/03	KWG0307438	
Acenaphthene	ND	U	3.3	0.21	1	05/23/03	06/03/03	KWG0307438	
Dibenzofuran	ND	U	3.3	0.20	1	05/23/03	06/03/03	KWG0307438	
Fluorene	ND	U	3.3	0.17	1	05/23/03	06/03/03	KWG0307438	
Phenanthrene	**0.81**	J	3.3	0.15	1	05/23/03	06/03/03	KWG0307438	
Anthracene	ND	U	3.3	0.19	1	05/23/03	06/03/03	KWG0307438	
Fluoranthene	**2.0**	J	3.3	0.17	1	05/23/03	06/03/03	KWG0307438	
Pyrene	**1.9**	J	3.3	0.11	1	05/23/03	06/03/03	KWG0307438	
Benz(a)anthracene	**0.74**	J	3.3	0.13	1	05/23/03	06/03/03	KWG0307438	
Chrysene	**1.2**	J	3.3	0.15	1	05/23/03	06/03/03	KWG0307438	
Benzo(b)fluoranthene	**0.87**	J	3.3	0.14	1	05/23/03	06/03/03	KWG0307438	
Benzo(k)fluoranthene	**0.89**	J	3.3	0.15	1	05/23/03	06/03/03	KWG0307438	
Benzo(a)pyrene	**0.59**	J	3.3	0.14	1	05/23/03	06/03/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	**0.62**	J	3.3	0.15	1	05/23/03	06/03/03	KWG0307438	
Dibenz(a,h)anthracene	ND	U	3.3	0.18	1	05/23/03	06/03/03	KWG0307438	
Benzo(g,h,i)perylene	**0.55**	J	3.3	0.10	1	05/23/03	06/03/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	33	39-97	06/03/03	Outside Control Limits
Fluorene-d10	42	43-98	06/03/03	Outside Control Limits
Fluoranthene-d10	43	52-108	06/03/03	Outside Control Limits
Terphenyl-d14	79	61-122	06/03/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/2003
Date Received: 05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH03-20
Lab Code: K2303706-002

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.26**	J	2.4	0.21	1	05/23/03	06/03/03	KWG0307438	
2-Methylnaphthalene	ND	U	2.4	0.21	1	05/23/03	06/03/03	KWG0307438	
Acenaphthylene	ND	U	2.4	0.16	1	05/23/03	06/03/03	KWG0307438	
Acenaphthene	ND	U	2.4	0.21	1	05/23/03	06/03/03	KWG0307438	
Dibenzofuran	ND	U	2.4	0.20	1	05/23/03	06/03/03	KWG0307438	
Fluorene	ND	U	2.4	0.17	1	05/23/03	06/03/03	KWG0307438	
Phenanthrene	**1.0**	J	2.4	0.15	1	05/23/03	06/03/03	KWG0307438	
Anthracene	**0.23**	J	2.4	0.19	1	05/23/03	06/03/03	KWG0307438	
Fluoranthene	**3.2**		2.4	0.17	1	05/23/03	06/03/03	KWG0307438	
Pyrene	**2.9**		2.4	0.11	1	05/23/03	06/03/03	KWG0307438	
Benz(a)anthracene	**1.4**	J	2.4	0.13	1	05/23/03	06/03/03	KWG0307438	
Chrysene	**2.4**	J	2.4	0.15	1	05/23/03	06/03/03	KWG0307438	
Benzo(b)fluoranthene	**1.5**	J	2.4	0.14	1	05/23/03	06/03/03	KWG0307438	
Benzo(k)fluoranthene	**2.0**	J	2.4	0.15	1	05/23/03	06/03/03	KWG0307438	
Benzo(a)pyrene	**1.3**	J	2.4	0.14	1	05/23/03	06/03/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	**1.1**	J	2.4	0.15	1	05/23/03	06/03/03	KWG0307438	
Dibenz(a,h)anthracene	**0.21**	J	2.4	0.18	1	05/23/03	06/03/03	KWG0307438	
Benzo(g,h,i)perylene	**1.1**	J	2.4	0.10	1	05/23/03	06/03/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	29	39-97	06/03/03	Outside Control Limits
Fluorene-d10	36	43-98	06/03/03	Outside Control Limits
Fluoranthene-d10	37	52-108	06/03/03	Outside Control Limits
Terphenyl-d14	74	61-122	06/03/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-21/22	**Units:**	ug/Kg
Lab Code:	K2303706-003	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.23**	J	2.5	0.21	1	05/23/03	06/03/03	KWG0307438	
2-Methylnaphthalene	ND	U	2.5	0.21	1	05/23/03	06/03/03	KWG0307438	
Acenaphthylene	ND	U	2.5	0.16	1	05/23/03	06/03/03	KWG0307438	
Acenaphthene	ND	U	2.5	0.21	1	05/23/03	06/03/03	KWG0307438	
Dibenzofuran	ND	U	2.5	0.20	1	05/23/03	06/03/03	KWG0307438	
Fluorene	ND	U	2.5	0.17	1	05/23/03	06/03/03	KWG0307438	
Phenanthrene	**0.69**	J	2.5	0.15	1	05/23/03	06/03/03	KWG0307438	
Anthracene	ND	U	2.5	0.19	1	05/23/03	06/03/03	KWG0307438	
Fluoranthene	**2.4**	J	2.5	0.17	1	05/23/03	06/03/03	KWG0307438	
Pyrene	**2.7**		2.5	0.11	1	05/23/03	06/03/03	KWG0307438	
Benz(a)anthracene	**0.91**	J	2.5	0.13	1	05/23/03	06/03/03	KWG0307438	
Chrysene	**1.5**	J	2.5	0.15	1	05/23/03	06/03/03	KWG0307438	
Benzo(b)fluoranthene	**1.1**	J	2.5	0.14	1	05/23/03	06/03/03	KWG0307438	
Benzo(k)fluoranthene	**1.3**	J	2.5	0.15	1	05/23/03	06/03/03	KWG0307438	
Benzo(a)pyrene	**0.90**	J	2.5	0.14	1	05/23/03	06/03/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	**0.86**	J	2.5	0.15	1	05/23/03	06/03/03	KWG0307438	
Dibenz(a,h)anthracene	ND	U	2.5	0.18	1	05/23/03	06/03/03	KWG0307438	
Benzo(g,h,i)perylene	**0.94**	J	2.5	0.10	1	05/23/03	06/03/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	22	39-97	06/03/03	Outside Control Limits
Fluorene-d10	33	43-98	06/03/03	Outside Control Limits
Fluoranthene-d10	38	52-108	06/03/03	Outside Control Limits
Terphenyl-d14	71	61-122	06/03/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Soil

Service Request: K2303706
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
Lab Code: KWG0307438-5

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	2.4	0.21	1	05/23/03	05/31/03	KWG0307438	
2-Methylnaphthalene	ND	U	2.4	0.21	1	05/23/03	05/31/03	KWG0307438	
Acenaphthylene	ND	U	2.4	0.16	1	05/23/03	05/31/03	KWG0307438	
Acenaphthene	ND	U	2.4	0.21	1	05/23/03	05/31/03	KWG0307438	
Dibenzofuran	ND	U	2.4	0.20	1	05/23/03	05/31/03	KWG0307438	
Fluorene	ND	U	2.4	0.17	1	05/23/03	05/31/03	KWG0307438	
Phenanthrene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Anthracene	ND	U	2.4	0.19	1	05/23/03	05/31/03	KWG0307438	
Fluoranthene	ND	U	2.4	0.17	1	05/23/03	05/31/03	KWG0307438	
Pyrene	ND	U	2.4	0.11	1	05/23/03	05/31/03	KWG0307438	
Benz(a)anthracene	ND	U	2.4	0.13	1	05/23/03	05/31/03	KWG0307438	
Chrysene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Benzo(b)fluoranthene	ND	U	2.4	0.14	1	05/23/03	05/31/03	KWG0307438	
Benzo(k)fluoranthene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Benzo(a)pyrene	ND	U	2.4	0.14	1	05/23/03	05/31/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Dibenz(a,h)anthracene	ND	U	2.4	0.18	1	05/23/03	05/31/03	KWG0307438	
Benzo(g,h,i)perylene	**0.11**	J	2.4	0.10	1	05/23/03	05/31/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	11	39-97	06/03/03	Outside Control Limits
Fluorene-d10	34	43-98	05/31/03	Outside Control Limits
Fluoranthene-d10	75	52-108	05/31/03	Acceptable
Terphenyl-d14	88	61-122	05/31/03	Acceptable

Comments:

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 30, 2003 Service Request No: K2302672

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/NAVY Samples

Dear Nadia:

Enclosed is the additional data for the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302672.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302672

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl

Sample No.	Lab Sample ID.
E-CH3-9 NAVY	K2302672-001
E-CH3-9 NAVYD	K2302672-001D
E-CH3-9 NAVYS	K2302672-001S
E-CH3-10 NAVY	K2302672-002
E-CH3-11 NAVY	K2302672-003
E-CH3-12 NAVY	K2302672-004
E-CH3-13 NAVY	K2302672-005
E-CH3-14 NAVY	K2302672-006
E-CH3-15 NAVY	K2302672-007
E-CH3-16 NAVY	K2302672-008
E-CH3-17 NAVY	K2302672-009
Method Blank	K2302672-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 7/30/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 03/31/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-9 NAVY
Lab Code: K2302672-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	4.33		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 04/01/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-10 NAVY
Lab Code: K2302672-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	3.87		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 04/02/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-11 NAVY
Lab Code: K2302672-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	3.95		

% Solids: NA

Comments:

00007

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2302672
Project No.:	NA	Date Collected:	04/01/03
Project Name:	Canaveral Harbor 103 Evaluation/NAVY Sampl	Date Received:	04/10/03
Matrix:	SEDIMENT	Units:	MG/KG
		Basis:	Wet

Sample Name: E-CH3-12 NAVY Lab Code: K2302672-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	3.50		

% Solids: NA

Comments:

00008

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 04/01/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-13 NAVY
Lab Code: K2302672-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	3.68		

% Solids: NA

Comments:

00009

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 03/31/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-14 NAVY
Lab Code: K2302672-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	4.03		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 03/31/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-15 NAVY
Lab Code: K2302672-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	3.98		

% Solids: NA

Comments:

00011

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 04/01/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-16 NAVY
Lab Code: K2302672-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	3.90		

% Solids: NA

Comments:

00012

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Matrix: SEDIMENT

Service Request: K2302672
Date Collected: 03/31/03
Date Received: 04/10/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH3-17 NAVY
Lab Code: K2302672-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.02	0.01	5	4/29/03	6/18/03	3.86		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302672
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation/NAVY Sampl
Date Received:
Matrix: SEDIMENT
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2302672-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Lead	200.8	0.05	0.02	5	4/29/03	6/18/03	0.02	U	

% Solids: NA

Comments:

Oil and Grease

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-9 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-001	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	220	

Approved By: M Culer Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-10 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-002	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	440	

Approved By: M Curlin Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-11 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-003	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	300	

Approved By: M Culer Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-12 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-004	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	250	

Approved By: M Culer Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-13 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-005	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	440	

Approved By: M Cuter Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-14 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-006	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	610	

Approved By: M Culer Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-15 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-007	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	530	

Approved By: M Culer Date: 4/25/03

1S22/020597p

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Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-16 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-008	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	350	

Approved By: M Curlin Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-17 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-009	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	400	

Approved By: M Lu Date: 4/25/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	K030421-SB	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	ND	

Approved By: M Luke Date: 4/25/03

1S22/020597p

02672PHC.MS1 - MB 4/25/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-9 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-001	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	80	J

Approved By: M Curtis Date: 5/15/03

1S22/020597p

02672PHC.ME1 - 1 5/15/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-10 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-002	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	100	

Approved By: MM Gulm Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/2/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-11 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-003	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	70	J

Approved By: M Cuda Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-12 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-004	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	90	J

Approved By: MM Cuda Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-13 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-005	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	100	J

Approved By: M Cuba Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-14 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-006	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	130	

Approved By: M Gulu Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-15 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-007	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	110	

Approved By: MR Curtis Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	4/1/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-16 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-008	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	80	J

Approved By: MR Culer Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	3/31/03
Sample Matrix:	Sediment	**Date Received:**	4/10/03

Oil and Grease

Sample Name:	E-CH3-17 NAVY	Units:	mg/Kg (ppm)
Lab Code:	K2302672-009	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	4/21/03	4/23/03	90	J

Approved By: MM Curtis Date: 5/15/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	NA
LCS Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	4/21/03
		Date Analyzed:	4/23/03

Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K030421-SL1	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	2000	1700	85	78-114	

Approved By: M Culer Date: 4/25/03

LCS/071499p
02672PHC.MS1 - LCS 4/25/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	4/21/03
		Date Analyzed:	4/23/03

Matrix Spike/Duplicate Matrix Spike Summary
Oil and Grease

Sample Name:	Batch QC	Units:	mg/Kg (ppm)
Lab Code:	K2302688-004MS, K2302688-004DMS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	6600	6600	160	6200	6300	92	93	78-114	2

Approved By: M Gulu Date: 4/25/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 4/23/03

Continuing Calibration Verification (CCV) Summary
EPA Method 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery	CCV3 Result	Percent Recovery	CCV4 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	2.0	100	2.0	100	1.9	95	2.0	100

Approved By: M Curlin Date: 4/25/03

CCV 1-4/102194

02672PHC.MS1 - ccv 4/25/03

Page No.:

Organotins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302672
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-9 NAVY	K2302672-001	03/31/2003	04/10/2003
E-CH3-10 NAVY	K2302672-002	04/01/2003	04/10/2003
E-CH3-11 NAVY	K2302672-003	04/02/2003	04/10/2003
E-CH3-12 NAVY	K2302672-004	04/01/2003	04/10/2003
E-CH3-13 NAVY	K2302672-005	04/01/2003	04/10/2003
E-CH3-14 NAVY	K2302672-006	03/31/2003	04/10/2003
E-CH3-15 NAVY	K2302672-007	03/31/2003	04/10/2003
E-CH3-16 NAVY	K2302672-008	04/01/2003	04/10/2003
E-CH3-17 NAVY	K2302672-009	03/31/2003	04/10/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: 5/19/03 Title: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-9 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.6	2.2	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**3.3**		2.6	0.97	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	2.6	2.0	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	2.6	1.3	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	60	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-10 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-002	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	4.1	3.5	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**10**		4.1	1.6	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	**3.4**	J	4.1	3.2	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	4.1	2.0	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-11 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-003	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	4.3	3.6	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	Ui	4.3	4.3	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	4.3	3.2	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	4.3	2.1	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	62	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-12 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-004	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.8	2.4	1	04/14/03	05/14/03	KWG0305086	
Tri-n-butyltin	**18**		2.8	1.1	1	04/14/03	05/14/03	KWG0305086	
Di-n-butyltin	**5.2**		2.8	2.1	1	04/14/03	05/14/03	KWG0305086	
n-Butyltin	**1.7**	J	2.8	1.4	1	04/14/03	05/14/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	80	22-113	05/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-13 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-005	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	4.3	3.7	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**4.8**		4.3	1.7	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	4.3	3.3	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	4.3	2.1	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-14 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-006	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	4.5	3.8	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**9.8**		4.5	1.7	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	**3.9**	J	4.5	3.4	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	4.5	2.2	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	63	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-15 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-007	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	4.5	3.8	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**6.8**		4.5	1.7	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	4.5	3.4	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	4.5	2.2	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	59	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-16 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-008	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	4.3	3.6	1	04/14/03	05/14/03	KWG0305086	
Tri-n-butyltin	**6.4**		4.3	1.6	1	04/14/03	05/14/03	KWG0305086	
Di-n-butyltin	ND	U	4.3	3.3	1	04/14/03	05/14/03	KWG0305086	
n-Butyltin	ND	U	4.3	2.1	1	04/14/03	05/14/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	22-113	05/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-17 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-009	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	4.4	3.7	1	04/14/03	05/14/03	KWG0305086	
Tri-n-butyltin	**15**		4.4	1.7	1	04/14/03	05/14/03	KWG0305086	
Di-n-butyltin	**5.4**		4.4	3.3	1	04/14/03	05/14/03	KWG0305086	
n-Butyltin	ND	U	4.4	2.1	1	04/14/03	05/14/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	74	22-113	05/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305086-4	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	1.0	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	1.0	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	13	22-113	04/25/03	Outside Control Limits

Comments:

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

July 10, 2003 Service Request No: K2302672

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation.NAVY Samples

Dear Nadia:

Enclosed are additional pages for the sample(s) submitted to our laboratory on April 10, 2003. For your reference, these analyses have been assigned our service request number K2302672.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-9 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-001	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**1.2**		0.97	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	60	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-10 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-002	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**2.4**		0.97	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	**0.80**	J	0.97	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	69	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-11 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-003	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	Ui	0.98	0.98	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	0.98	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	0.98	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	62	22-113	04/25/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-12 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-004	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	05/14/03	KWG0305086	
Tri-n-butyltin	**6.2**		0.97	0.36	1	04/14/03	05/14/03	KWG0305086	
Di-n-butyltin	**1.8**		0.97	0.73	1	04/14/03	05/14/03	KWG0305086	
n-Butyltin	**0.61**	J	0.97	0.47	1	04/14/03	05/14/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	80	22-113	05/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 04/01/2003
Date Received: 04/10/2003

Butyltins

Sample Name: E-CH3-13 NAVY
Lab Code: K2302672-005

Units: ug/Kg
Basis: Wet

Extraction Method: METHOD
Analysis Method: Krone

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**1.1**		0.97	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	42	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-14 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-006	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**2.1**		0.98	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	**0.85**	J	0.98	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.98	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	63	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-15 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-007	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	04/29/03	KWG0305086	
Tri-n-butyltin	**1.5**		0.97	0.36	1	04/14/03	04/29/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	04/29/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	04/29/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	59	22-113	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-16 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-008	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	04/14/03	05/14/03	KWG0305086	
Tri-n-butyltin	**1.4**		0.97	0.36	1	04/14/03	05/14/03	KWG0305086	
Di-n-butyltin	ND	U	0.97	0.73	1	04/14/03	05/14/03	KWG0305086	
n-Butyltin	ND	U	0.97	0.47	1	04/14/03	05/14/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	56	22-113	05/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Butyltins

Sample Name:	E-CH3-17 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-009	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.81	1	04/14/03	05/14/03	KWG0305086	
Tri-n-butyltin	**3.4**		0.98	0.36	1	04/14/03	05/14/03	KWG0305086	
Di-n-butyltin	**1.2**		0.98	0.73	1	04/14/03	05/14/03	KWG0305086	
n-Butyltin	ND	U	0.98	0.47	1	04/14/03	05/14/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	74	22-113	05/14/03	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305086-4	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.81	1	04/14/03	04/25/03	KWG0305086	
Tri-n-butyltin	ND	U	1.0	0.36	1	04/14/03	04/25/03	KWG0305086	
Di-n-butyltin	ND	U	1.0	0.73	1	04/14/03	04/25/03	KWG0305086	
n-Butyltin	ND	U	1.0	0.47	1	04/14/03	04/25/03	KWG0305086	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	13	22-113	04/25/03	Outside Control Limits

Comments:

0001

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	
E-CH3-9 NAVY	K2302672-001	60	
E-CH3-10 NAVY	K2302672-002	69	
E-CH3-11 NAVY	K2302672-003	62	
E-CH3-12 NAVY	K2302672-004	80	
E-CH3-13 NAVY	K2302672-005	42	
E-CH3-14 NAVY	K2302672-006	63	
E-CH3-15 NAVY	K2302672-007	59	
E-CH3-16 NAVY	K2302672-008	56	
E-CH3-17 NAVY	K2302672-009	74	
Method Blank	KWG0305086-4	13	*
Batch QC	K2302688-008	61	
Batch QCMS	KWG0305086-1	60	
Batch QCDMS	KWG0305086-2	91	
Lab Control Sample	KWG0305086-3	65	

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 22-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003 - 04/29/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	Batch QC	**Units:**	ug/Kg
Lab Code:	K2302688-008	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305086

		Batch QCMS KWG0305086-1 Matrix Spike			Batch QCDMS KWG0305086-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	30.3	85.9	35	43.7	85.9	51	25-125	36	50
Tri-n-butyltin	0.87	30.4	85.9	34	42.4	85.9	48	12-138	33	50
Di-n-butyltin	ND	32.8	85.9	38	38.0	85.9	44	10-155	15	50
n-Butyltin	ND	8.62	85.9	10	20.7	85.9	24	10-99	83 *	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/Kg
Analysis Method:	Krone	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305086

	Lab Control Sample KWG0305086-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	21.8	50.0	44	10-126
Tri-n-butyltin	25.5	50.0	51	30-131
Di-n-butyltin	26.1	50.0	52	23-141
n-Butyltin	14.7	50.0	29	10-127

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003
		Time Analyzed:	20:46

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\042503\0425F004.D
Lab Code:	KWG0305086-4	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305086

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305086-3	J:\GC11\DATA\042503\0425F005.D	04/25/03	21:04
E-CH3-11 NAVY	K2302672-003	J:\GC11\DATA\042503\0425F006.D	04/25/03	21:22
Batch QCDMS	KWG0305086-2	J:\GC11\DATA\042503\0425F011.D	04/25/03	22:51
E-CH3-9 NAVY	K2302672-001	J:\GC11\DATA\042903\0429F003.D	04/29/03	18:04
E-CH3-10 NAVY	K2302672-002	J:\GC11\DATA\042903\0429F004.D	04/29/03	18:21
E-CH3-13 NAVY	K2302672-005	J:\GC11\DATA\042903\0429F006.D	04/29/03	18:57
E-CH3-14 NAVY	K2302672-006	J:\GC11\DATA\042903\0429F007.D	04/29/03	19:14
E-CH3-15 NAVY	K2302672-007	J:\GC11\DATA\042903\0429F008.D	04/29/03	19:32
Batch QC	K2302688-008	J:\GC11\DATA\042903\0429F016.D	04/29/03	21:53
Batch QCMS	KWG0305086-1	J:\GC11\DATA\042903\0429F018.D	04/29/03	22:28
E-CH3-12 NAVY	K2302672-004	J:\GC11\DATA\051403\0514F003.D	05/14/03	18:20
E-CH3-16 NAVY	K2302672-008	J:\GC11\DATA\051403\0514F004.D	05/14/03	18:38
E-CH3-17 NAVY	K2302672-009	J:\GC11\DATA\051403\0514F005.D	05/14/03	18:56

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Extracted:**	04/14/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/25/2003
		Time Analyzed:	21:04

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\042503\0425F005.D
Lab Code:	KWG0305086-3	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305086

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305086-4	J:\GC11\DATA\042503\0425F004.D	04/25/03	20:46
E-CH3-11 NAVY	K2302672-003	J:\GC11\DATA\042503\0425F006.D	04/25/03	21:22
Batch QCDMS	KWG0305086-2	J:\GC11\DATA\042503\0425F011.D	04/25/03	22:51
E-CH3-9 NAVY	K2302672-001	J:\GC11\DATA\042903\0429F003.D	04/29/03	18:04
E-CH3-10 NAVY	K2302672-002	J:\GC11\DATA\042903\0429F004.D	04/29/03	18:21
E-CH3-13 NAVY	K2302672-005	J:\GC11\DATA\042903\0429F006.D	04/29/03	18:57
E-CH3-14 NAVY	K2302672-006	J:\GC11\DATA\042903\0429F007.D	04/29/03	19:14
E-CH3-15 NAVY	K2302672-007	J:\GC11\DATA\042903\0429F008.D	04/29/03	19:32
Batch QC	K2302688-008	J:\GC11\DATA\042903\0429F016.D	04/29/03	21:53
Batch QCMS	KWG0305086-1	J:\GC11\DATA\042903\0429F018.D	04/29/03	22:28
E-CH3-12 NAVY	K2302672-004	J:\GC11\DATA\051403\0514F003.D	05/14/03	18:20
E-CH3-16 NAVY	K2302672-008	J:\GC11\DATA\051403\0514F004.D	05/14/03	18:38
E-CH3-17 NAVY	K2302672-009	J:\GC11\DATA\051403\0514F005.D	05/14/03	18:56

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D	D	J:\GC11\DATA\042503\0425F105.D
B	J:\GC11\DATA\042503\0425F103.D	E	J:\GC11\DATA\042503\0425F106.D
C	J:\GC11\DATA\042503\0425F104.D	F	J:\GC11\DATA\042503\0425F107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	669	B	50	620	C	100	626	D	500	576	E	1000	588
	F	2000	576												
Tri-n-butyltin	A	10	835	B	50	789	C	100	794	D	500	708	E	1000	729
	F	2000	704												
Di-n-butyltin	A	10	1090	B	50	1050	C	100	975	D	500	895	E	1000	923
	F	2000	895												
n-Butyltin	A	10	1580	B	50	1310	C	100	1350	D	500	1200	E	1000	1250
	F	2000	1210												
Tri-n-propyltin	A	11	562	B	54	569	C	110	595	D	540	539	E	1100	546
	F	2100	532												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.0		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	10.8		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	490	609	634	4	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	760	752	-1	NA	± 30 %	AverageRF
Di-n-butyltin	480	460	970	934	-4	NA	± 30 %	AverageRF
n-Butyltin	490	470	1320	1260	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D\0425R102.D	D	J:\GC11\DATA\042503\0425F105.D\0425R105.D
B	J:\GC11\DATA\042503\0425F103.D\0425R103.D	E	J:\GC11\DATA\042503\0425F106.D\0425R106.D
C	J:\GC11\DATA\042503\0425F104.D\0425R104.D	F	J:\GC11\DATA\042503\0425F107.D\0425R107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	352	B	50	317	C	100	328	D	500	311	E	1000	324
	F	2000	319												
Tri-n-butyltin	A	10	425	B	50	400	C	100	419	D	500	393	E	1000	406
	F	2000	389												
Di-n-butyltin	A	10	553	B	50	500	C	100	520	D	500	490	E	1000	510
	F	2000	485												
n-Butyltin	A	10	631	B	50	613	C	100	674	D	500	623	E	1000	648
	F	2000	615												
Tri-n-propyltin	A	11	296	B	54	289	C	110	290	D	540	280	E	1100	291
	F	2100	286												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.4		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.7		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	1.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D\0425R108.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	325	326	0	NA	± 30 %	AverageRF
Tri-n-butyltin	480	450	405	378	-7	NA	± 30 %	AverageRF
Di-n-butyltin	480	450	510	479	-6	NA	± 30 %	AverageRF
n-Butyltin	490	490	634	634	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\051403\0514F004.D	D	J:\GC11\DATA\051403\0514F007.D
B	J:\GC11\DATA\051403\0514F005.D	E	J:\GC11\DATA\051403\0514F008.D
C	J:\GC11\DATA\051403\0514F006.D	F	J:\GC11\DATA\051403\0514F009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	536	B	50	528	C	100	542	D	500	516	E	1000	571
	F	2000	625												
Tri-n-butyltin	A	10	688	B	50	659	C	100	673	D	500	636	E	1000	702
	F	2000	748												
Di-n-butyltin	A	10	839	B	50	818	C	100	837	D	500	799	E	1000	884
	F	2000	950												
n-Butyltin	A	10	1080	B	50	1130	C	100	1120	D	500	1070	E	1000	1190
	F	2000	1260												
Tri-n-propyltin	A	11	472	B	54	483	C	110	479	D	540	468	E	1100	511
	F	2100	551												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	7.2		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	5.6		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	6.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	6.4		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 05/14/2003
Date Analyzed: 05/14/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2621
Units: ng/ml

File ID: J:\GC11\DATA\051403\0514F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	520	553	614	11	NA	± 30 %	AverageRF
Tri-n-butyltin	480	500	684	708	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	510	854	907	6	NA	± 30 %	AverageRF
n-Butyltin	490	540	1140	1250	10	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\051403\0514F004.D\0514R004.D	D	J:\GC11\DATA\051403\0514F007.D\0514R007.D
B	J:\GC11\DATA\051403\0514F005.D\0514R005.D	E	J:\GC11\DATA\051403\0514F008.D\0514R008.D
C	J:\GC11\DATA\051403\0514F006.D\0514R006.D	F	J:\GC11\DATA\051403\0514F009.D\0514R009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	243	B	50	258	C	100	262	D	500	259	E	1000	288
	F	2000	314												
Tri-n-butyltin	A	10	325	B	50	343	C	100	339	D	500	337	E	1000	373
	F	2000	403												
Di-n-butyltin	A	10	446	B	50	418	C	100	431	D	500	422	E	1000	474
	F	2000	515												
n-Butyltin	A	10	550	B	50	556	C	100	562	D	500	553	E	1000	616
	F	2000	669												
Tri-n-propyltin	A	11	238	B	54	244	C	110	237	D	540	227	E	1100	251
	F	2100	272												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	9.5		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	8.3		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.3		≤ 20
n-Butyltin	MS	AverageRF	% RSD	8.3		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 05/14/2003
Date Analyzed: 05/14/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2621
Units: ng/ml

File ID: J:\GC11\DATA\051403\0514F010.D\0514R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	530	270	307	14	NA	± 30 %	AverageRF
Tri-n-butyltin	480	500	353	367	4	NA	± 30 %	AverageRF
Di-n-butyltin	480	490	451	468	4	NA	± 30 %	AverageRF
n-Butyltin	490	520	585	620	6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/25/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	609	574	-6	NA	± 25 %	AverageRF
Tri-n-butyltin	500	460	760	702	-8	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	876	-10	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1160	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	538	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/25/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F002.D\0425R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	325	287	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	405	367	-10	NA	± 25 %	AverageRF
Di-n-butyltin	500	440	510	452	-11	NA	± 25 %	AverageRF
n-Butyltin	500	460	634	584	-8	NA	± 25 %	AverageRF
Tri-n-propyltin	540	470	289	253	-12	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F017.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	566	-7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	713	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	970	920	-5	NA	± 25 %	AverageRF
n-Butyltin	500	450	1320	1200	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	546	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305835
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F017.D\0425R017.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	316	-3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	397	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	504	-1	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	649	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	289	282	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	450	609	552	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	760	689	-9	NA	± 25 %	AverageRF
Di-n-butyltin	500	440	970	861	-11	NA	± 25 %	AverageRF
n-Butyltin	500	430	1320	1140	-13	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	557	517	-7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F002.D\0429R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	319	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	398	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	480	510	492	-3	NA	± 25 %	AverageRF
n-Butyltin	500	500	634	632	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	289	283	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F014.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	430	609	520	-15	NA	± 25 %	AverageRF
Tri-n-butyltin	500	430	760	648	-15	NA	± 25 %	AverageRF
Di-n-butyltin	500	410	970	788	-19	NA	± 25 %	AverageRF
n-Butyltin	500	410	1320	1080	-18	NA	± 25 %	AverageRF
Tri-n-propyltin	540	460	557	482	-14	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F014.D\0429R014.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	325	313	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	399	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	497	-3	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	643	1	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	289	290	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F026.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	557	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	460	760	694	-9	NA	± 25 %	AverageRF
Di-n-butyltin	500	430	970	843	-13	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1150	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	557	502	-10	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F026.D\0429R026.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	321	-1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	405	413	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	510	508	0	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	648	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	289	292	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 05/14/2003
Calibration ID: CAL2621
Analysis Lot: KWG0306913
Units: ng/ml

File ID: J:\GC11\DATA\051403\0514F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	553	530	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	684	661	-3	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	854	829	-3	NA	± 25 %	AverageRF
n-Butyltin	500	480	1140	1100	-3	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	494	481	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Analyzed:**	05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	05/14/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2621
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0306913
		Units:	ng/ml
File ID:	J:\GC11\DATA\051403\0514F002.D\0514R002.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	270	259	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	353	336	-5	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	451	421	-7	NA	± 25 %	AverageRF
n-Butyltin	500	470	585	545	-7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	245	229	-6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 05/14/2003
Calibration ID: CAL2621
Analysis Lot: KWG0306913
Units: ng/ml

File ID: J:\GC11\DATA\051403\0514F021.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	510	553	563	2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	520	684	705	3	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	870	2	NA	± 25 %	AverageRF
n-Butyltin	500	510	1140	1170	3	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	494	505	2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 05/14/2003
Calibration ID: CAL2621
Analysis Lot: KWG0306913
Units: ng/ml

File ID: J:\GC11\DATA\051403\0514F021.D\0514R021.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	570	270	307	13	NA	± 25 %	AverageRF
Tri-n-butyltin	500	570	353	402	14	NA	± 25 %	AverageRF
Di-n-butyltin	500	550	451	497	10	NA	± 25 %	AverageRF
n-Butyltin	500	540	585	637	9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	590	245	269	10	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	Instrument Blank	KWG0305835-1	4/25/2003	19:53		4/25/2003	20:05
0425F002.D	Continuing Calibration Verification	KWG0305835-20	4/25/2003	20:10		4/25/2003	20:22
0425F003.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:28		4/25/2003	20:40
0425F004.D	Method Blank	KWG0305086-4	4/25/2003	20:46		4/25/2003	20:58
0425F005.D	Lab Control Sample	KWG0305086-3	4/25/2003	21:04		4/25/2003	21:16
0425F006.D	E-CH3-11 NAVY	K2302672-003	4/25/2003	21:22		4/25/2003	21:34
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:40		4/25/2003	21:52
0425F008.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:57		4/25/2003	22:09
0425F009.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:15		4/25/2003	22:27
0425F010.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:33		4/25/2003	22:45
0425F011.D	Batch QCDMS	KWG0305086-2	4/25/2003	22:51		4/25/2003	23:03
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:09		4/25/2003	23:21
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:27		4/25/2003	23:39
0425F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:02		4/26/2003	00:14
0425F016.D	Instrument Blank	KWG0305835-3	4/26/2003	00:20		4/26/2003	00:32
0425F017.D	Continuing Calibration Verification	KWG0305835-4	4/26/2003	00:38		4/26/2003	00:50
0425F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:55		4/26/2003	01:07
0425F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:13		4/26/2003	01:25
0425F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:31		4/26/2003	01:43
0425F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:49		4/26/2003	02:01
0425F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:07		4/26/2003	02:19
0425F023.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:24		4/26/2003	02:36
0425F024.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:42		4/26/2003	02:54
0425F025.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:00		4/26/2003	03:12
0425F026.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:18		4/26/2003	03:30
0425F027.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:36		4/26/2003	03:48
0425F028.D	ZZZZZZ	ZZZZZZ	4/26/2003	03:54		4/26/2003	04:06
0425F029.D	ZZZZZZ	ZZZZZZ	4/26/2003	04:12		4/26/2003	04:24
0425F030.D	Instrument Blank	KWG0305835-5	4/26/2003	04:30		4/26/2003	04:42
0425F031.D	Continuing Calibration Verification	KWG0305835-6	4/26/2003	04:48		4/26/2003	05:00
0425F032.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:06		4/26/2003	05:18
0425F034.D	ZZZZZZ	ZZZZZZ	4/26/2003	05:42		4/26/2003	05:54
0425F040.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:29		4/26/2003	07:41
0425F041.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:47		4/26/2003	07:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F042.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:05		4/26/2003	08:17
0425F043.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:24		4/26/2003	08:36
0425F044.D	Instrument Blank	KWG0305835-7	4/26/2003	08:41		4/26/2003	08:53
0425F045.D	Continuing Calibration Verification	KWG0305835-8	4/26/2003	09:00		4/26/2003	09:12
0425F046.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:18		4/26/2003	09:30
0425F047.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:36		4/26/2003	09:48
0425F048.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:54		4/26/2003	10:06
0425F049.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:12		4/26/2003	10:24
0425F050.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:30		4/26/2003	10:42
0425F051.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:48		4/26/2003	11:00
0425F052.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:06		4/26/2003	11:18
0425F053.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:24		4/26/2003	11:36
0425F054.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:42		4/26/2003	11:54
0425F055.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:00		4/26/2003	12:12
0425F056.D	Instrument Blank	KWG0305835-9	4/26/2003	12:18		4/26/2003	12:30
0425F057.D	Continuing Calibration Verification	KWG0305835-10	4/26/2003	12:36		4/26/2003	12:48
0425F058.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:54		4/26/2003	13:06
0425F059.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:12		4/26/2003	13:24
0425F060.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:30		4/26/2003	13:42
0425F061.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:47		4/26/2003	13:59
0425F062.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:05		4/26/2003	14:17
0425F063.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:23		4/26/2003	14:35
0425F064.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:41		4/26/2003	14:53
0425F065.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:59		4/26/2003	15:11
0425F066.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:17		4/26/2003	15:29
0425F072.D	Instrument Blank	KWG0305835-11	4/26/2003	17:05		4/26/2003	17:17
0425F073.D	Continuing Calibration Verification	KWG0305835-12	4/26/2003	17:23		4/26/2003	17:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305965
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0429F001.D	Instrument Blank	KWG0305965-1	4/29/2003	17:28		4/29/2003	17:40
0429F002.D	Continuing Calibration Verification	KWG0305965-2	4/29/2003	17:46		4/29/2003	17:58
0429F003.D	E-CH3-9 NAVY	K2302672-001	4/29/2003	18:04		4/29/2003	18:16
0429F004.D	E-CH3-10 NAVY	K2302672-002	4/29/2003	18:21		4/29/2003	18:33
0429F005.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:39		4/29/2003	18:51
0429F006.D	E-CH3-13 NAVY	K2302672-005	4/29/2003	18:57		4/29/2003	19:09
0429F007.D	E-CH3-14 NAVY	K2302672-006	4/29/2003	19:14		4/29/2003	19:26
0429F008.D	E-CH3-15 NAVY	K2302672-007	4/29/2003	19:32		4/29/2003	19:44
0429F009.D	ZZZZZZ	ZZZZZZ	4/29/2003	19:50		4/29/2003	20:02
0429F010.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:07		4/29/2003	20:19
0429F011.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:25		4/29/2003	20:37
0429F012.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:43		4/29/2003	20:55
0429F013.D	Instrument Blank	KWG0305965-3	4/29/2003	21:00		4/29/2003	21:12
0429F014.D	Continuing Calibration Verification	KWG0305965-4	4/29/2003	21:18		4/29/2003	21:30
0429F015.D	ZZZZZZ	ZZZZZZ	4/29/2003	21:36		4/29/2003	21:48
0429F016.D	Batch QC	K2302688-008	4/29/2003	21:53		4/29/2003	22:05
0429F017.D	ZZZZZZ	ZZZZZZ	4/29/2003	22:11		4/29/2003	22:23
0429F018.D	Batch QCMS	KWG0305086-1	4/29/2003	22:28		4/29/2003	22:40
0429F019.D	ZZZZZZ	ZZZZZZ	4/29/2003	22:46		4/29/2003	22:58
0429F020.D	ZZZZZZ	ZZZZZZ	4/29/2003	23:04		4/29/2003	23:16
0429F021.D	ZZZZZZ	ZZZZZZ	4/29/2003	23:21		4/29/2003	23:33
0429F022.D	ZZZZZZ	ZZZZZZ	4/29/2003	23:39		4/29/2003	23:51
0429F024.D	ZZZZZZ	ZZZZZZ	4/30/2003	00:14		4/30/2003	00:26
0429F025.D	Instrument Blank	KWG0305965-5	4/30/2003	00:32		4/30/2003	00:44
0429F026.D	Continuing Calibration Verification	KWG0305965-6	4/30/2003	00:50		4/30/2003	01:02
0429F027.D	ZZZZZZ	ZZZZZZ	4/30/2003	01:07		4/30/2003	01:19
0429F030.D	Instrument Blank	KWG0305965-7	4/30/2003	02:00		4/30/2003	02:12
0429F031.D	Continuing Calibration Verification	KWG0305965-8	4/30/2003	02:18		4/30/2003	02:30

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0306913
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0514F001.D	Instrument Blank	KWG0306913-1	5/14/2003	17:45		5/14/2003	17:57
0514F002.D	Continuing Calibration Verification	KWG0306913-2	5/14/2003	18:02		5/14/2003	18:14
0514F003.D	E-CH3-12 NAVY	K2302672-004	5/14/2003	18:20		5/14/2003	18:32
0514F004.D	E-CH3-16 NAVY	K2302672-008	5/14/2003	18:38		5/14/2003	18:50
0514F005.D	E-CH3-17 NAVY	K2302672-009	5/14/2003	18:56		5/14/2003	19:08
0514F006.D	ZZZZZZ	ZZZZZZ	5/14/2003	19:13		5/14/2003	19:25
0514F007.D	ZZZZZZ	ZZZZZZ	5/14/2003	19:31		5/14/2003	19:43
0514F008.D	ZZZZZZ	ZZZZZZ	5/14/2003	19:49		5/14/2003	20:01
0514F020.D	Instrument Blank	KWG0306913-3	5/14/2003	23:21		5/14/2003	23:33
0514F021.D	Continuing Calibration Verification	KWG0306913-4	5/14/2003	23:38		5/14/2003	23:50

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Extracted: 04/14/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0305086
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-9 NAVY	K2302672-001	03/31/03	04/10/03	20.62g	1ml	37.4	
E-CH3-10 NAVY	K2302672-002	04/01/03	04/10/03	20.80g	1ml	23.5	
E-CH3-11 NAVY	K2302672-003	04/02/03	04/10/03	20.51g	1ml	23.0	
E-CH3-12 NAVY	K2302672-004	04/01/03	04/10/03	20.72g	1ml	35.0	
E-CH3-13 NAVY	K2302672-005	04/01/03	04/10/03	20.82g	1ml	22.4	
E-CH3-14 NAVY	K2302672-006	03/31/03	04/10/03	20.48g	1ml	21.8	
E-CH3-15 NAVY	K2302672-007	03/31/03	04/10/03	20.83g	1ml	21.6	
E-CH3-16 NAVY	K2302672-008	04/01/03	04/10/03	20.63g	1ml	22.7	
E-CH3-17 NAVY	K2302672-009	03/31/03	04/10/03	20.53g	1ml	22.4	
Method Blank	KWG0305086-4	NA	NA	20.00g	1ml	NA	
Batch QC	K2302688-008	NA	NA	20.73g	1ml	55.7	
Batch QCMS	KWG0305086-1	NA	NA	20.90g	1ml	55.7	
Batch QCDMS	KWG0305086-2	NA	NA	20.91g	1ml	55.7	
Lab Control Sample	KWG0305086-3	NA	NA	20.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Extracted:	04/14/2003

Butyltins

Sample Name:	E-CH3-9 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	2.6	0.97	3.3	3.1	6.3		1	04/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 04/01/2003
Date Received: 04/10/2003
Date Extracted: 04/14/2003

Butyltins

Sample Name: E-CH3-10 NAVY
Lab Code: K2302672-002
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	4.1	1.6	10	9.1	9.4		1	04/29/03
Di-n-butyltin	4.1	3.2	3.4	3.2	6.1	J	1	04/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Extracted:	04/14/2003

Butyltins

Sample Name:	E-CH3-12 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-004	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	2.8	1.1	18	17	5.7		1	05/14/03
Di-n-butyltin	2.8	2.1	5.2	4.9	5.9		1	05/14/03
n-Butyltin	2.8	1.4	1.7	1.7	0.0	J	1	05/14/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Extracted:	04/14/2003

Butyltins

Sample Name:	E-CH3-13 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-005	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	4.3	1.7	4.8	4.5	6.5		1	04/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 03/31/2003
Date Received: 04/10/2003
Date Extracted: 04/14/2003

Butyltins

Sample Name: E-CH3-14 NAVY
Lab Code: K2302672-006
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	4.5	1.7	9.8	8.8	10.8		1	04/29/03
Di-n-butyltin	4.5	3.4	3.9	3.6	8.0	J	1	04/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Extracted:	04/14/2003

Butyltins

Sample Name:	E-CH3-15 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-007	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	4.5	1.7	6.8	6.5	4.5		1	04/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 04/01/2003
Date Received: 04/10/2003
Date Extracted: 04/14/2003

Butyltins

Sample Name: E-CH3-16 NAVY
Lab Code: K2302672-008
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	4.3	1.6	6.4	6.0	6.5		1	05/14/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003
		Date Extracted:	04/14/2003

Butyltins

Sample Name:	E-CH3-17 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-009	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	4.4	1.7	15	14	6.9		1	05/14/03
Di-n-butyltin	4.4	3.3	5.4	5.2	3.8		1	05/14/03

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-9 NAVY	K2302672-001	03/31/2003	04/10/2003
E-CH3-10 NAVY	K2302672-002	04/01/2003	04/10/2003
E-CH3-11 NAVY	K2302672-003	04/02/2003	04/10/2003
E-CH3-12 NAVY	K2302672-004	04/01/2003	04/10/2003
E-CH3-13 NAVY	K2302672-005	04/01/2003	04/10/2003
E-CH3-14 NAVY	K2302672-006	03/31/2003	04/10/2003
E-CH3-15 NAVY	K2302672-007	03/31/2003	04/10/2003
E-CH3-16 NAVY	K2302672-008	04/01/2003	04/10/2003
E-CH3-17 NAVY	K2302672-009	03/31/2003	04/10/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 5/8/03

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 03/31/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-9 NAVY
Lab Code: K2302672-001

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.1**	J	14	0.57	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	**0.59**	J	14	0.57	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	14	0.43	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	14	0.57	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	14	0.54	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	14	0.46	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**4.3**	J	14	0.41	1	04/12/03	04/19/03	KWG0305073	
Anthracene	**0.62**	J	14	0.51	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**14**	J	14	0.46	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**11**	J	14	0.30	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**5.2**	J	14	0.35	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**8.1**	J	14	0.41	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**5.9**	J	14	0.38	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**8.1**	J	14	0.41	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**4.5**	J	14	0.38	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**4.2**	J	14	0.41	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**0.91**	J	14	0.49	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**5.3**	J	14	0.27	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	55	39-97	04/19/03	Acceptable
Fluorene-d10	61	43-98	04/19/03	Acceptable
Fluoranthene-d10	70	52-108	04/19/03	Acceptable
Terphenyl-d14	91	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 04/01/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-10 NAVY
Lab Code: K2302672-002

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.3**	J	22	0.90	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	22	0.90	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	22	0.69	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	22	0.90	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	22	0.86	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	22	0.73	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**4.1**	J	22	0.64	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	22	0.81	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**9.1**	J	22	0.73	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**7.5**	J	22	0.47	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**3.6**	J	22	0.56	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**5.2**	J	22	0.64	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**3.6**	J	22	0.60	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**6.3**	J	22	0.64	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.8**	J	22	0.60	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.6**	J	22	0.64	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**1.0**	J	22	0.77	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**3.3**	J	22	0.43	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	52	39-97	04/19/03	Acceptable
Fluorene-d10	60	43-98	04/19/03	Acceptable
Fluoranthene-d10	66	52-108	04/19/03	Acceptable
Terphenyl-d14	98	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 04/02/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-11 NAVY
Lab Code: K2302672-003

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.3**	J	22	0.92	1	04/12/03	04/21/03	KWG0305073	
2-Methylnaphthalene	ND	U	22	0.92	1	04/12/03	04/21/03	KWG0305073	
Acenaphthylene	ND	U	22	0.70	1	04/12/03	04/21/03	KWG0305073	
Acenaphthene	ND	U	22	0.92	1	04/12/03	04/21/03	KWG0305073	
Dibenzofuran	ND	U	22	0.87	1	04/12/03	04/21/03	KWG0305073	
Fluorene	ND	U	22	0.74	1	04/12/03	04/21/03	KWG0305073	
Phenanthrene	**3.1**	J	22	0.66	1	04/12/03	04/21/03	KWG0305073	
Anthracene	ND	U	22	0.83	1	04/12/03	04/21/03	KWG0305073	
Fluoranthene	**11**	J	22	0.74	1	04/12/03	04/21/03	KWG0305073	
Pyrene	**8.3**	J	22	0.48	1	04/12/03	04/21/03	KWG0305073	
Benz(a)anthracene	**5.0**	J	22	0.57	1	04/12/03	04/21/03	KWG0305073	
Chrysene	**6.1**	J	22	0.66	1	04/12/03	04/21/03	KWG0305073	
Benzo(b)fluoranthene	**5.6**	J	22	0.61	1	04/12/03	04/21/03	KWG0305073	
Benzo(k)fluoranthene	**5.4**	J	22	0.66	1	04/12/03	04/21/03	KWG0305073	
Benzo(a)pyrene	**5.0**	J	22	0.61	1	04/12/03	04/21/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**6.0**	J	22	0.66	1	04/12/03	04/21/03	KWG0305073	
Dibenz(a,h)anthracene	**1.0**	J	22	0.79	1	04/12/03	04/21/03	KWG0305073	
Benzo(g,h,i)perylene	**5.2**	J	22	0.44	1	04/12/03	04/21/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	46	39-97	04/21/03	Acceptable
Fluorene-d10	58	43-98	04/21/03	Acceptable
Fluoranthene-d10	73	52-108	04/21/03	Acceptable
Terphenyl-d14	88	61-122	04/21/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 04/01/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-12 NAVY
Lab Code: K2302672-004

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**140**		15	0.60	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	**29**		15	0.60	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	15	0.46	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	15	0.60	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	15	0.58	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	15	0.49	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**2.0**	J	15	0.43	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	15	0.55	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**7.8**	J	15	0.49	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**7.0**	J	15	0.32	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**2.6**	J	15	0.38	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**3.8**	J	15	0.43	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**3.3**	J	15	0.40	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**4.6**	J	15	0.43	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.1**	J	15	0.40	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.0**	J	15	0.43	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	15	0.52	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**2.6**	J	15	0.29	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	53	39-97	04/19/03	Acceptable
Fluorene-d10	61	43-98	04/19/03	Acceptable
Fluoranthene-d10	67	52-108	04/19/03	Acceptable
Terphenyl-d14	94	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Collected: 04/01/2003
Date Received: 04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH3-13 NAVY
Lab Code: K2302672-005

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.0**	J	23	0.94	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	23	0.94	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	23	0.72	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	23	0.94	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	23	0.90	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	23	0.76	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**1.9**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	23	0.85	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**6.6**	J	23	0.76	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**5.2**	J	23	0.50	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**2.9**	J	23	0.59	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**3.8**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**3.0**	J	23	0.63	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**4.5**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.2**	J	23	0.63	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.1**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	23	0.81	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**2.9**	J	23	0.45	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	43	39-97	04/19/03	Acceptable
Fluorene-d10	56	43-98	04/19/03	Acceptable
Fluoranthene-d10	68	52-108	04/19/03	Acceptable
Terphenyl-d14	93	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-14 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-006	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.1**	J	23	0.97	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	23	0.97	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	23	0.74	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	23	0.97	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	23	0.92	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	23	0.78	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**4.0**	J	23	0.69	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	23	0.88	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**8.9**	J	23	0.78	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**9.4**	J	23	0.51	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**3.1**	J	23	0.60	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**5.7**	J	23	0.69	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**4.1**	J	23	0.65	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**6.0**	J	23	0.69	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.6**	J	23	0.65	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**3.1**	J	23	0.69	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	23	0.83	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**4.0**	J	23	0.46	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	54	39-97	04/19/03	Acceptable
Fluorene-d10	57	43-98	04/19/03	Acceptable
Fluoranthene-d10	65	52-108	04/19/03	Acceptable
Terphenyl-d14	90	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-15 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-007	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.3**	J	24	0.98	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	24	0.98	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	24	0.75	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	24	0.98	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	24	0.93	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	24	0.79	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**1.7**	J	24	0.70	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	24	0.88	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**8.7**	J	24	0.79	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**7.4**	J	24	0.51	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**3.4**	J	24	0.61	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**5.2**	J	24	0.70	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**4.8**	J	24	0.65	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**4.7**	J	24	0.70	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.8**	J	24	0.65	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.5**	J	24	0.70	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	24	0.84	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**3.8**	J	24	0.47	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	45	39-97	04/19/03	Acceptable
Fluorene-d10	48	43-98	04/19/03	Acceptable
Fluoranthene-d10	49	52-108	04/19/03	Outside Control Limits
Terphenyl-d14	75	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-16 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-008	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.1**	J	23	0.93	1	04/12/03	04/21/03	KWG0305073	
2-Methylnaphthalene	ND	U	23	0.93	1	04/12/03	04/21/03	KWG0305073	
Acenaphthylene	ND	U	23	0.71	1	04/12/03	04/21/03	KWG0305073	
Acenaphthene	ND	U	23	0.93	1	04/12/03	04/21/03	KWG0305073	
Dibenzofuran	ND	U	23	0.89	1	04/12/03	04/21/03	KWG0305073	
Fluorene	ND	U	23	0.75	1	04/12/03	04/21/03	KWG0305073	
Phenanthrene	**2.1**	J	23	0.67	1	04/12/03	04/21/03	KWG0305073	
Anthracene	ND	U	23	0.84	1	04/12/03	04/21/03	KWG0305073	
Fluoranthene	**8.5**	J	23	0.75	1	04/12/03	04/21/03	KWG0305073	
Pyrene	**6.6**	J	23	0.49	1	04/12/03	04/21/03	KWG0305073	
Benz(a)anthracene	**3.9**	J	23	0.58	1	04/12/03	04/21/03	KWG0305073	
Chrysene	**5.0**	J	23	0.67	1	04/12/03	04/21/03	KWG0305073	
Benzo(b)fluoranthene	**4.4**	J	23	0.62	1	04/12/03	04/21/03	KWG0305073	
Benzo(k)fluoranthene	**5.8**	J	23	0.67	1	04/12/03	04/21/03	KWG0305073	
Benzo(a)pyrene	**3.7**	J	23	0.62	1	04/12/03	04/21/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**3.7**	J	23	0.67	1	04/12/03	04/21/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	23	0.80	1	04/12/03	04/21/03	KWG0305073	
Benzo(g,h,i)perylene	**4.3**	J	23	0.45	1	04/12/03	04/21/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	44	39-97	04/21/03	Acceptable
Fluorene-d10	57	43-98	04/21/03	Acceptable
Fluoranthene-d10	64	52-108	04/21/03	Acceptable
Terphenyl-d14	79	61-122	04/21/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-17 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-009	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.0**	J	23	0.94	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	23	0.94	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	23	0.72	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	23	0.94	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	23	0.90	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	23	0.76	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**1.9**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	23	0.85	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**7.6**	J	23	0.76	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**6.2**	J	23	0.50	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**1.8**	J	23	0.59	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**5.1**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**3.5**	J	23	0.63	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**4.9**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**2.7**	J	23	0.63	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**2.3**	J	23	0.67	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	23	0.81	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**3.2**	J	23	0.45	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	47	39-97	04/19/03	Acceptable
Fluorene-d10	56	43-98	04/19/03	Acceptable
Fluoranthene-d10	64	52-108	04/19/03	Acceptable
Terphenyl-d14	90	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305073-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	ND	U	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.32**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.36**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**0.39**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	73	39-97	04/18/03	Acceptable
Fluorene-d10	72	43-98	04/18/03	Acceptable
Fluoranthene-d10	77	52-108	04/18/03	Acceptable
Terphenyl-d14	96	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-9 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-001	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.40**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	**0.22**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**1.6**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	**0.23**	J	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**5.2**		5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**4.2**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**2.0**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**3.0**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**2.2**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**3.0**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**1.7**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.6**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**0.34**	J	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**2.0**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	55	39-97	04/19/03	Acceptable
Fluorene-d10	61	43-98	04/19/03	Acceptable
Fluoranthene-d10	70	52-108	04/19/03	Acceptable
Terphenyl-d14	91	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-10 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-002	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.30**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.97**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**2.1**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**1.8**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**0.84**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**1.2**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**0.85**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**1.5**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**0.65**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.62**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	**0.24**	J	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**0.77**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	52	39-97	04/19/03	Acceptable
Fluorene-d10	60	43-98	04/19/03	Acceptable
Fluoranthene-d10	66	52-108	04/19/03	Acceptable
Terphenyl-d14	98	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/02/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-11 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-003	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.29**	J	5.0	0.21	1	04/12/03	04/21/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/21/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/21/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/21/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/21/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/21/03	KWG0305073	
Phenanthrene	**0.72**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/21/03	KWG0305073	
Fluoranthene	**2.5**	J	5.0	0.17	1	04/12/03	04/21/03	KWG0305073	
Pyrene	**1.9**	J	5.0	0.11	1	04/12/03	04/21/03	KWG0305073	
Benz(a)anthracene	**1.2**	J	5.0	0.13	1	04/12/03	04/21/03	KWG0305073	
Chrysene	**1.4**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Benzo(b)fluoranthene	**1.3**	J	5.0	0.14	1	04/12/03	04/21/03	KWG0305073	
Benzo(k)fluoranthene	**1.2**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Benzo(a)pyrene	**1.1**	J	5.0	0.14	1	04/12/03	04/21/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**1.4**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Dibenz(a,h)anthracene	**0.23**	J	5.0	0.18	1	04/12/03	04/21/03	KWG0305073	
Benzo(g,h,i)perylene	**1.2**	J	5.0	0.10	1	04/12/03	04/21/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	46	39-97	04/21/03	Acceptable
Fluorene-d10	58	43-98	04/21/03	Acceptable
Fluoranthene-d10	73	52-108	04/21/03	Acceptable
Terphenyl-d14	88	61-122	04/21/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-12 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-004	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**50**		5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	**10**		5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.69**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**2.7**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**2.5**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**0.92**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**1.3**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**1.2**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**1.6**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**0.72**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.70**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**0.91**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	53	39-97	04/19/03	Acceptable
Fluorene-d10	61	43-98	04/19/03	Acceptable
Fluoranthene-d10	67	52-108	04/19/03	Acceptable
Terphenyl-d14	94	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-13 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-005	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.23**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.43**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**1.5**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**1.2**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**0.65**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**0.85**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**0.67**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**1.0**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**0.50**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.48**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**0.65**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	43	39-97	04/19/03	Acceptable
Fluorene-d10	56	43-98	04/19/03	Acceptable
Fluoranthene-d10	68	52-108	04/19/03	Acceptable
Terphenyl-d14	93	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-14 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-006	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.25**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.87**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**1.9**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**2.1**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**0.67**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**1.2**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**0.90**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**1.3**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**0.58**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.67**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**0.88**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	54	39-97	04/19/03	Acceptable
Fluorene-d10	57	43-98	04/19/03	Acceptable
Fluoranthene-d10	65	52-108	04/19/03	Acceptable
Terphenyl-d14	90	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-15 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-007	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.27**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.38**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**1.9**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**1.6**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**0.73**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**1.1**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**1.0**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**1.0**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**0.60**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.53**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**0.81**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	45	39-97	04/19/03	Acceptable
Fluorene-d10	48	43-98	04/19/03	Acceptable
Fluoranthene-d10	49	52-108	04/19/03	Outside Control Limits
Terphenyl-d14	75	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	04/01/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-16 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-008	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.26**	J	5.0	0.21	1	04/12/03	04/21/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/21/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/21/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/21/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/21/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/21/03	KWG0305073	
Phenanthrene	**0.47**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/21/03	KWG0305073	
Fluoranthene	**1.9**	J	5.0	0.17	1	04/12/03	04/21/03	KWG0305073	
Pyrene	**1.5**	J	5.0	0.11	1	04/12/03	04/21/03	KWG0305073	
Benz(a)anthracene	**0.89**	J	5.0	0.13	1	04/12/03	04/21/03	KWG0305073	
Chrysene	**1.1**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Benzo(b)fluoranthene	**1.0**	J	5.0	0.14	1	04/12/03	04/21/03	KWG0305073	
Benzo(k)fluoranthene	**1.3**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Benzo(a)pyrene	**0.83**	J	5.0	0.14	1	04/12/03	04/21/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.83**	J	5.0	0.15	1	04/12/03	04/21/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/21/03	KWG0305073	
Benzo(g,h,i)perylene	**0.97**	J	5.0	0.10	1	04/12/03	04/21/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	44	39-97	04/21/03	Acceptable
Fluorene-d10	57	43-98	04/21/03	Acceptable
Fluoranthene-d10	64	52-108	04/21/03	Acceptable
Terphenyl-d14	79	61-122	04/21/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	03/31/2003
Sample Matrix:	Sediment	**Date Received:**	04/10/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-17 NAVY	**Units:**	ug/Kg
Lab Code:	K2302672-009	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.23**	J	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/19/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/19/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/19/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Phenanthrene	**0.43**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/19/03	KWG0305073	
Fluoranthene	**1.7**	J	5.0	0.17	1	04/12/03	04/19/03	KWG0305073	
Pyrene	**1.4**	J	5.0	0.11	1	04/12/03	04/19/03	KWG0305073	
Benz(a)anthracene	**0.40**	J	5.0	0.13	1	04/12/03	04/19/03	KWG0305073	
Chrysene	**1.1**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(b)fluoranthene	**0.79**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Benzo(k)fluoranthene	**1.1**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Benzo(a)pyrene	**0.60**	J	5.0	0.14	1	04/12/03	04/19/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.51**	J	5.0	0.15	1	04/12/03	04/19/03	KWG0305073	
Dibenz(a,h)anthracene	ND	U	5.0	0.18	1	04/12/03	04/19/03	KWG0305073	
Benzo(g,h,i)perylene	**0.71**	J	5.0	0.10	1	04/12/03	04/19/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	47	39-97	04/19/03	Acceptable
Fluorene-d10	56	43-98	04/19/03	Acceptable
Fluoranthene-d10	64	52-108	04/19/03	Acceptable
Terphenyl-d14	90	61-122	04/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0305073-5	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
2-Methylnaphthalene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Acenaphthylene	ND	U	5.0	0.16	1	04/12/03	04/18/03	KWG0305073	
Acenaphthene	ND	U	5.0	0.21	1	04/12/03	04/18/03	KWG0305073	
Dibenzofuran	ND	U	5.0	0.20	1	04/12/03	04/18/03	KWG0305073	
Fluorene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Phenanthrene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Anthracene	ND	U	5.0	0.19	1	04/12/03	04/18/03	KWG0305073	
Fluoranthene	ND	U	5.0	0.17	1	04/12/03	04/18/03	KWG0305073	
Pyrene	ND	U	5.0	0.11	1	04/12/03	04/18/03	KWG0305073	
Benz(a)anthracene	ND	U	5.0	0.13	1	04/12/03	04/18/03	KWG0305073	
Chrysene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(b)fluoranthene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Benzo(k)fluoranthene	ND	U	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Benzo(a)pyrene	ND	U	5.0	0.14	1	04/12/03	04/18/03	KWG0305073	
Indeno(1,2,3-cd)pyrene	**0.32**	J	5.0	0.15	1	04/12/03	04/18/03	KWG0305073	
Dibenz(a,h)anthracene	**0.36**	J	5.0	0.18	1	04/12/03	04/18/03	KWG0305073	
Benzo(g,h,i)perylene	**0.39**	J	5.0	0.10	1	04/12/03	04/18/03	KWG0305073	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	73	39-97	04/18/03	Acceptable
Fluorene-d10	72	43-98	04/18/03	Acceptable
Fluoranthene-d10	77	52-108	04/18/03	Acceptable
Terphenyl-d14	96	61-122	04/18/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3		Sur4
E-CH3-9 NAVY	K2302672-001	55	61	70		91
E-CH3-10 NAVY	K2302672-002	52	60	66		98
E-CH3-11 NAVY	K2302672-003	46	58	73		88
E-CH3-12 NAVY	K2302672-004	53	61	67		94
E-CH3-13 NAVY	K2302672-005	43	56	68		93
E-CH3-14 NAVY	K2302672-006	54	57	65		90
E-CH3-15 NAVY	K2302672-007	45	48	49	*	75
E-CH3-16 NAVY	K2302672-008	44	57	64		79
E-CH3-17 NAVY	K2302672-009	47	56	64		90
Method Blank	KWG0305073-5	73	72	77		96
Batch QC	K2302688-004	45	60	72		92
Batch QCMS	KWG0305073-1	63	67	73		81
Batch QCDMS	KWG0305073-2	64	68	77		85
Lab Control Sample	KWG0305073-3	80	80	86		88
Duplicate Lab Control Sample	KWG0305073-4	77	76	81		82

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	39-97
Sur2 =	Fluorene-d10	43-98
Sur3 =	Fluoranthene-d10	52-108
Sur4 =	Terphenyl-d14	61-122

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/18/2003
Time Analyzed: 10:11

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041803\0418F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305455-2
Analysis Lot: KWG0305455

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	291,195	5.22	158,247	7.54	256,976	10.35
	Upper Limit ==>	582,390	5.72	316,494	8.04	513,952	10.85
	Lower Limit ==>	145,598	4.72	79,124	7.04	128,488	9.85
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305073-5	347,341	5.21	180,033	7.54	268,928	10.34
Lab Control Sample	KWG0305073-3	289,110	5.21	155,163	7.54	233,501	10.35
Duplicate Lab Control Sample	KWG0305073-4	359,036	5.21	190,192	7.54	282,677	10.34
Batch QCMS	KWG0305073-1	271,695	5.22	144,018	7.54	216,822	10.35
Batch QCDMS	KWG0305073-2	265,021	5.22	138,564	7.54	197,545	10.35
Batch QC	K2302688-004	277,576	5.21	143,528	7.54	214,953	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/18/2003
Time Analyzed: 10:11

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041803\0418F003.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305455-2
Analysis Lot: KWG0305455

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	275,972	16.37	157,998	20.12
	Upper Limit ==>	551,944	16.87	315,996	20.62
	Lower Limit ==>	137,986	15.87	78,999	19.62
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305073-5	241,651	16.38	108,769	20.11
Lab Control Sample	KWG0305073-3	240,147	16.37	122,524	20.11
Duplicate Lab Control Sample	KWG0305073-4	297,371	16.37	156,243	20.11
Batch QCMS	KWG0305073-1	231,763	16.37	136,062	20.11
Batch QCDMS	KWG0305073-2	190,397	16.37	100,788	20.11
Batch QC	K2302688-004	177,050	16.37	81,403	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/19/2003
Time Analyzed: 06:30

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041903\0419F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305474-2
Analysis Lot: KWG0305474

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	330,110	5.22	182,318	7.54	289,004	10.34
	Upper Limit ==>	660,220	5.72	364,636	8.04	578,008	10.84
	Lower Limit ==>	165,055	4.72	91,159	7.04	144,502	9.84
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
E-CH3-9 NAVY	K2302672-001	294,532	5.21	153,915	7.53	227,311	10.34
E-CH3-10 NAVY	K2302672-002	294,307	5.21	147,936	7.54	210,580	10.34
E-CH3-12 NAVY	K2302672-004	304,864	5.21	156,573	7.54	237,130	10.34
E-CH3-13 NAVY	K2302672-005	350,534	5.21	186,614	7.53	278,322	10.34
E-CH3-14 NAVY	K2302672-006	283,664	5.21	145,528	7.53	207,471	10.34
E-CH3-15 NAVY	K2302672-007	308,667	5.21	157,691	7.54	226,771	10.34
E-CH3-17 NAVY	K2302672-009	359,381	5.21	187,354	7.53	278,427	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/19/2003
Time Analyzed: 06:30

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041903\0419F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305474-2
Analysis Lot: KWG0305474

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	302,378	16.37	161,864	20.11
	Upper Limit ==>	604,756	16.87	323,728	20.61
	Lower Limit ==>	151,189	15.87	80,932	19.61
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
E-CH3-9 NAVY	K2302672-001	215,659	16.37	111,549	20.11
E-CH3-10 NAVY	K2302672-002	176,465	16.37	81,690	20.11
E-CH3-12 NAVY	K2302672-004	224,103	16.37	122,180	20.11
E-CH3-13 NAVY	K2302672-005	253,757	16.37	132,409	20.10
E-CH3-14 NAVY	K2302672-006	200,247	16.37	105,246	20.10
E-CH3-15 NAVY	K2302672-007	185,694	16.37	85,949	20.11
E-CH3-17 NAVY	K2302672-009	236,269	16.37	106,663	20.10

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/21/2003
Time Analyzed: 06:24

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042103\0421F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305605-2
Analysis Lot: KWG0305605

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	274,447	5.22	151,791	7.53	253,925	10.34
	Upper Limit ==>	548,894	5.72	303,582	8.03	507,850	10.84
	Lower Limit ==>	137,224	4.72	75,896	7.03	126,963	9.84
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
E-CH3-11 NAVY	K2302672-003	291,117	5.22	158,251	7.54	233,983	10.34
E-CH3-16 NAVY	K2302672-008	234,636	5.22	127,159	7.54	199,837	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Analyzed:**	04/21/2003
		Time Analyzed:	06:24

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042103\0421F002.D	**Lab Code:**	KWG0305605-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305605
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	266,688	16.37	156,874	20.10
	Upper Limit ==>	533,376	16.87	313,748	20.60
	Lower Limit ==>	133,344	15.87	78,437	19.60
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
E-CH3-11 NAVY	K2302672-003	233,317	16.37	146,199	20.11
E-CH3-16 NAVY	K2302672-008	191,533	16.37	112,161	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Extracted:**	04/12/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/18/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Batch QC	**Units:**	ug/Kg
Lab Code:	K2302688-004	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305073

Analyte Name	Sample Result	Batch QCMS KWG0305073-1 Matrix Spike			Batch QCDMS KWG0305073-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Naphthalene	1.0	538	827	65	463	828	56	19-105	15	40
2-Methylnaphthalene	ND	553	827	67	472	828	57	36-95	16	40
Acenaphthylene	ND	583	827	71	492	828	59	40-99	17	40
Acenaphthene	ND	586	827	71	506	828	61	33-102	15	40
Dibenzofuran	ND	607	827	73	518	828	63	38-100	16	40
Fluorene	ND	614	827	74	529	828	64	38-103	15	40
Phenanthrene	1.8	598	827	72	537	828	65	33-113	11	40
Anthracene	ND	596	827	72	492	828	59	40-114	19	40
Fluoranthene	6.1	644	827	77	569	828	68	41-117	12	40
Pyrene	5.0	585	827	70	568	828	68	26-139	3	40
Benz(a)anthracene	2.5	563	827	68	510	828	61	32-134	10	40
Chrysene	4.2	617	827	74	566	828	68	27-135	9	40
Benzo(b)fluoranthene	4.0	515	827	62	498	828	60	31-136	3	40
Benzo(k)fluoranthene	4.3	556	827	67	541	828	65	32-131	3	40
Benzo(a)pyrene	2.4	553	827	67	512	828	62	26-146	8	40
Indeno(1,2,3-cd)pyrene	4.8	519	827	62	472	828	56	33-133	10	40
Dibenz(a,h)anthracene	3.5	533	827	64	481	828	58	42-114	10	40
Benzo(g,h,i)perylene	6.2	574	827	69	550	828	66	31-122	4	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Extracted:**	04/12/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/18/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0305073

	Lab Control Sample KWG0305073-3 Lab Control Spike			Duplicate Lab Control Sample KWG0305073-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	177	250	71	170	250	68	33-98	4	40
2-Methylnaphthalene	185	250	74	176	250	70	36-103	5	40
Acenaphthylene	188	250	75	177	250	71	41-102	6	40
Acenaphthene	191	250	77	180	250	72	41-97	6	40
Dibenzofuran	202	250	81	188	250	75	38-102	7	40
Fluorene	205	250	82	192	250	77	43-101	7	40
Phenanthrene	203	250	81	191	250	77	45-101	6	40
Anthracene	211	250	85	195	250	78	46-109	8	40
Fluoranthene	221	250	88	206	250	82	49-112	7	40
Pyrene	206	250	83	189	250	76	50-112	9	40
Benz(a)anthracene	185	250	74	174	250	69	52-114	6	40
Chrysene	214	250	85	203	250	81	54-109	5	40
Benzo(b)fluoranthene	199	250	80	183	250	73	54-115	8	40
Benzo(k)fluoranthene	215	250	86	200	250	80	54-115	7	40
Benzo(a)pyrene	207	250	83	198	250	79	54-120	5	40
Indeno(1,2,3-cd)pyrene	183	250	73	168	250	67	49-121	9	40
Dibenz(a,h)anthracene	194	250	78	176	250	70	48-114	10	40
Benzo(g,h,i)perylene	213	250	85	194	250	78	45-113	9	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302672
Project:	Canaveral Harbor 103 Evaluation/NAVY Samples	**Date Extracted:**	04/12/2003
Sample Matrix:	Sediment	**Date Analyzed:**	04/18/2003
		Time Analyzed:	12:01

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\041803\0418F006.D
Lab Code:	KWG0305073-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305073

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305073-3	J:\MS11\DATA\041803\0418F009.D	04/18/03	13:50
Duplicate Lab Control Sample	KWG0305073-4	J:\MS11\DATA\041803\0418F010.D	04/18/03	14:26
Batch QCMS	KWG0305073-1	J:\MS11\DATA\041803\0418F012.D	04/18/03	15:39
Batch QCDMS	KWG0305073-2	J:\MS11\DATA\041803\0418F013.D	04/18/03	16:15
Batch QC	K2302688-004	J:\MS11\DATA\041803\0418F014.D	04/18/03	16:52
E-CH3-9 NAVY	K2302672-001	J:\MS11\DATA\041903\0419F006.D	04/19/03	08:53
E-CH3-10 NAVY	K2302672-002	J:\MS11\DATA\041903\0419F007.D	04/19/03	09:29
E-CH3-12 NAVY	K2302672-004	J:\MS11\DATA\041903\0419F009.D	04/19/03	10:40
E-CH3-13 NAVY	K2302672-005	J:\MS11\DATA\041903\0419F010.D	04/19/03	11:16
E-CH3-14 NAVY	K2302672-006	J:\MS11\DATA\041903\0419F011.D	04/19/03	11:52
E-CH3-15 NAVY	K2302672-007	J:\MS11\DATA\041903\0419F012.D	04/19/03	12:28
E-CH3-17 NAVY	K2302672-009	J:\MS11\DATA\041903\0419F014.D	04/19/03	13:39
E-CH3-11 NAVY	K2302672-003	J:\MS11\DATA\042103\0421F013.D	04/21/03	13:11
E-CH3-16 NAVY	K2302672-008	J:\MS11\DATA\042103\0421F014.D	04/21/03	13:48

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302672
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0305073-3	**Lab Code:**	KWG0305073-4
File ID:	J:\MS11\DATA\041803\0418F009.D	**File ID:**	J:\MS11\DATA\041803\0418F010.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	04/12/2003	**Date Extracted:**	04/12/2003
Date Analyzed:	04/18/2003	**Date Analyzed:**	04/18/2003
Time Analyzed:	13:50	**Time Analyzed:**	14:26

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305073

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305073-5	J:\MS11\DATA\041803\0418F006.D	04/18/03	12:01
Batch QCMS	KWG0305073-1	J:\MS11\DATA\041803\0418F012.D	04/18/03	15:39
Batch QCDMS	KWG0305073-2	J:\MS11\DATA\041803\0418F013.D	04/18/03	16:15
Batch QC	K2302688-004	J:\MS11\DATA\041803\0418F014.D	04/18/03	16:52
E-CH3-9 NAVY	K2302672-001	J:\MS11\DATA\041903\0419F006.D	04/19/03	08:53
E-CH3-10 NAVY	K2302672-002	J:\MS11\DATA\041903\0419F007.D	04/19/03	09:29
E-CH3-12 NAVY	K2302672-004	J:\MS11\DATA\041903\0419F009.D	04/19/03	10:40
E-CH3-13 NAVY	K2302672-005	J:\MS11\DATA\041903\0419F010.D	04/19/03	11:16
E-CH3-14 NAVY	K2302672-006	J:\MS11\DATA\041903\0419F011.D	04/19/03	11:52
E-CH3-15 NAVY	K2302672-007	J:\MS11\DATA\041903\0419F012.D	04/19/03	12:28
E-CH3-17 NAVY	K2302672-009	J:\MS11\DATA\041903\0419F014.D	04/19/03	13:39
E-CH3-11 NAVY	K2302672-003	J:\MS11\DATA\042103\0421F013.D	04/21/03	13:11
E-CH3-16 NAVY	K2302672-008	J:\MS11\DATA\042103\0421F014.D	04/21/03	13:48

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/18/2003
Time Analyzed: 09:49

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041803\0418F002.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305455

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	29.1	410240	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.1	466496	PASS
70	69	0	2	0.5	2366	PASS
127	198	10	80	43.9	619136	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	61.1	1410048	PASS
199	198	5	9	6.9	96736	PASS
275	198	10	60	31.6	445952	PASS
365	442	1	50	2.4	54808	PASS
441	443	0	100	75.0	350336	PASS
442	442	100	100	100.0	2309120	PASS
443	442	15	24	20.2	467072	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305455-2	J:\MS11\DATA\041803\0418F003.D	04/18/2003	10:11	
Method Blank	KWG0305073-5	J:\MS11\DATA\041803\0418F006.D	04/18/2003	12:01	
Lab Control Sample	KWG0305073-3	J:\MS11\DATA\041803\0418F009.D	04/18/2003	13:50	
Duplicate Lab Control Sample	KWG0305073-4	J:\MS11\DATA\041803\0418F010.D	04/18/2003	14:26	
Batch QCMS	KWG0305073-1	J:\MS11\DATA\041803\0418F012.D	04/18/2003	15:39	
Batch QCDMS	KWG0305073-2	J:\MS11\DATA\041803\0418F013.D	04/18/2003	16:15	
Batch QC	K2302688-004	J:\MS11\DATA\041803\0418F014.D	04/18/2003	16:52	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/19/2003
Time Analyzed: 06:09

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\041903\0419F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305474

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	30.2	410112	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	35.0	475008	PASS
70	69	0	2	0.5	2346	PASS
127	198	10	80	45.3	613952	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	62.1	1356288	PASS
199	198	5	9	6.9	93800	PASS
275	198	10	60	31.8	431296	PASS
365	442	1	50	2.5	53552	PASS
441	443	0	100	74.2	323072	PASS
442	442	100	100	100.0	2183168	PASS
443	442	15	24	19.9	435392	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305474-2	J:\MS11\DATA\041903\0419F002.D	04/19/2003	06:30	
E-CH3-9 NAVY	K2302672-001	J:\MS11\DATA\041903\0419F006.D	04/19/2003	08:53	
E-CH3-10 NAVY	K2302672-002	J:\MS11\DATA\041903\0419F007.D	04/19/2003	09:29	
E-CH3-12 NAVY	K2302672-004	J:\MS11\DATA\041903\0419F009.D	04/19/2003	10:40	
E-CH3-13 NAVY	K2302672-005	J:\MS11\DATA\041903\0419F010.D	04/19/2003	11:16	
E-CH3-14 NAVY	K2302672-006	J:\MS11\DATA\041903\0419F011.D	04/19/2003	11:52	
E-CH3-15 NAVY	K2302672-007	J:\MS11\DATA\041903\0419F012.D	04/19/2003	12:28	
E-CH3-17 NAVY	K2302672-009	J:\MS11\DATA\041903\0419F014.D	04/19/2003	13:39	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/21/2003
Time Analyzed: 06:03

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042103\0421F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305605

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	28.2	343360	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	32.2	392448	PASS
70	69	0	2	0.5	1845	PASS
127	198	10	80	42.3	514880	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	53.6	1217024	PASS
199	198	5	9	6.7	82032	PASS
275	198	10	60	33.1	402688	PASS
365	442	1	50	2.2	50928	PASS
441	443	0	100	74.4	330560	PASS
442	442	100	100	100.0	2271232	PASS
443	442	15	24	19.6	444352	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305605-2	J:\MS11\DATA\042103\0421F002.D	04/21/2003	06:24	
E-CH3-11 NAVY	K2302672-003	J:\MS11\DATA\042103\0421F013.D	04/21/2003	13:11	
E-CH3-16 NAVY	K2302672-008	J:\MS11\DATA\042103\0421F014.D	04/21/2003	13:48	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/18/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305455
Units: ng/ml

File ID: J:\MS11\DATA\041803\0418F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.06	1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.658	0	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.75	0	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.58	5	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.26	3	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.11	-6	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.06	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.22	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.11	-13	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.944	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.05	-5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.51	-13	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.87	-5	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.28	-5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.902	0.877	-3	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.01	0.952	0.978	3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2100	0.01	1.15	1.19	3	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.737	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.04	0	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.985	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.815	-11	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/19/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305474
Units: ng/ml

File ID: J:\MS11\DATA\041903\0419F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.05	1.05	0	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.658	0.661	0	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	0.01	1.74	1.73	0	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.10	1	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.55	3	NA	± 20 %	AverageRF
Fluorene	2000	2000	0.01	1.22	1.25	2	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.11	-5	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.14	-11	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.945	-12	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.05	-5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1800	0.01	1.73	1.52	-12	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	0.01	1.98	1.92	-3	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.24	-8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1600	0.01	0.902	0.737	-18	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1700	0.01	0.952	0.817	-14	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1800	0.01	1.15	1.05	-9	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.741	4	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.03	-1	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.984	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.915	0.833	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672
Date Analyzed: 04/21/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305605
Units: ng/ml

File ID: J:\MS11\DATA\042103\0421F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.678	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.82	5	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.13	3	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.59	6	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.28	5	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.17	1.08	-8	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.19	-1	NA	± 20 %	AverageRF
Pyrene	2000	1800	0.01	1.28	1.13	-11	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1700	0.01	1.08	0.933	-13	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.04	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.44	-17	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1800	0.01	1.98	1.81	-8	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1800	0.01	1.34	1.24	-8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.902	0.867	-4	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.952	0.946	-1	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.18	2	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.750	5	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.04	0	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.958	-5	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	0.915	0.799	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305455
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0418F002.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305455-1	4/18/2003	09:49		4/18/2003	10:02
0418F003.D	Continuing Calibration Verification	KWG0305455-2	4/18/2003	10:11		4/18/2003	10:37
0418F004.D	Instrument Blank	KWG0305455-3	4/18/2003	10:47		4/18/2003	11:13
0418F005.D	ZZZZZZ	ZZZZZZ	4/18/2003	11:24		4/18/2003	11:50
0418F006.D	Method Blank	KWG0305073-5	4/18/2003	12:01		4/18/2003	12:27
0418F007.D	ZZZZZZ	ZZZZZZ	4/18/2003	12:37		4/18/2003	13:03
0418F008.D	ZZZZZZ	ZZZZZZ	4/18/2003	13:13		4/18/2003	13:39
0418F009.D	Lab Control Sample	KWG0305073-3	4/18/2003	13:50		4/18/2003	14:16
0418F010.D	Duplicate Lab Control Sample	KWG0305073-4	4/18/2003	14:26		4/18/2003	14:52
0418F011.D	ZZZZZZ	ZZZZZZ	4/18/2003	15:03		4/18/2003	15:29
0418F012.D	Batch QCMS	KWG0305073-1	4/18/2003	15:39		4/18/2003	16:05
0418F013.D	Batch QCDMS	KWG0305073-2	4/18/2003	16:15		4/18/2003	16:41
0418F014.D	Batch QC	K2302688-004	4/18/2003	16:52		4/18/2003	17:18
0418F015.D	ZZZZZZ	ZZZZZZ	4/18/2003	17:28		4/18/2003	17:54
0418F016.D	ZZZZZZ	ZZZZZZ	4/18/2003	18:03		4/18/2003	18:29
0418F017.D	ZZZZZZ	ZZZZZZ	4/18/2003	18:39		4/18/2003	19:05
0418F018.D	ZZZZZZ	ZZZZZZ	4/18/2003	19:15		4/18/2003	19:41
0418F019.D	ZZZZZZ	ZZZZZZ	4/18/2003	19:50		4/18/2003	20:16
0418F020.D	ZZZZZZ	ZZZZZZ	4/18/2003	20:26		4/18/2003	20:52
0418F021.D	ZZZZZZ	ZZZZZZ	4/18/2003	21:01		4/18/2003	21:27
0418F022.D	ZZZZZZ	ZZZZZZ	4/18/2003	21:37		4/18/2003	22:03

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Service Request: K2302672

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305474
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0419F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305474-1	4/19/2003	06:09		4/19/2003	06:22
0419F002.D	Continuing Calibration Verification	KWG0305474-2	4/19/2003	06:30		4/19/2003	06:56
0419F003.D	Instrument Blank	KWG0305474-3	4/19/2003	07:06		4/19/2003	07:32
0419F004.D	ZZZZZZ	ZZZZZZ	4/19/2003	07:42		4/19/2003	08:08
0419F005.D	ZZZZZZ	ZZZZZZ	4/19/2003	08:18		4/19/2003	08:44
0419F006.D	E-CH3-9 NAVY	K2302672-001	4/19/2003	08:53		4/19/2003	09:19
0419F007.D	E-CH3-10 NAVY	K2302672-002	4/19/2003	09:29		4/19/2003	09:55
0419F008.D	ZZZZZZ	ZZZZZZ	4/19/2003	10:05		4/19/2003	10:31
0419F009.D	E-CH3-12 NAVY	K2302672-004	4/19/2003	10:40		4/19/2003	11:06
0419F010.D	E-CH3-13 NAVY	K2302672-005	4/19/2003	11:16		4/19/2003	11:42
0419F011.D	E-CH3-14 NAVY	K2302672-006	4/19/2003	11:52		4/19/2003	12:18
0419F012.D	E-CH3-15 NAVY	K2302672-007	4/19/2003	12:28		4/19/2003	12:54
0419F013.D	ZZZZZZ	ZZZZZZ	4/19/2003	13:03		4/19/2003	13:29
0419F014.D	E-CH3-17 NAVY	K2302672-009	4/19/2003	13:39		4/19/2003	14:05
0419F019.D	ZZZZZZ	ZZZZZZ	4/19/2003	16:36		4/19/2003	17:02
0419F020.D	ZZZZZZ	ZZZZZZ	4/19/2003	17:12		4/19/2003	17:38
0419F021.D	ZZZZZZ	ZZZZZZ	4/19/2003	17:47		4/19/2003	18:13

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2302672
Project: Canaveral Harbor 103 Evaluation/NAVY Samples

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0305605
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0421F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305605-1	4/21/2003	06:03		4/21/2003	06:16
0421F002.D	Continuing Calibration Verification	KWG0305605-2	4/21/2003	06:24		4/21/2003	06:50
0421F004.D	ZZZZZZ	ZZZZZZ	4/21/2003	07:41		4/21/2003	08:07
0421F005.D	ZZZZZZ	ZZZZZZ	4/21/2003	08:17		4/21/2003	08:43
0421F006.D	ZZZZZZ	ZZZZZZ	4/21/2003	08:54		4/21/2003	09:20
0421F007.D	ZZZZZZ	ZZZZZZ	4/21/2003	09:31		4/21/2003	09:57
0421F008.D	ZZZZZZ	ZZZZZZ	4/21/2003	10:08		4/21/2003	10:34
0421F009.D	ZZZZZZ	ZZZZZZ	4/21/2003	10:44		4/21/2003	11:10
0421F010.D	ZZZZZZ	ZZZZZZ	4/21/2003	11:21		4/21/2003	11:47
0421F011.D	ZZZZZZ	ZZZZZZ	4/21/2003	11:58		4/21/2003	12:24
0421F012.D	ZZZZZZ	ZZZZZZ	4/21/2003	12:34		4/21/2003	13:00
0421F013.D	E-CH3-11 NAVY	K2302672-003	4/21/2003	13:11		4/21/2003	13:37
0421F014.D	E-CH3-16 NAVY	K2302672-008	4/21/2003	13:48		4/21/2003	14:14
0421F015.D	ZZZZZZ	ZZZZZZ	4/21/2003	14:25		4/21/2003	14:51
0421F016.D	ZZZZZZ	ZZZZZZ	4/21/2003	15:03		4/21/2003	15:29
0421F017.D	ZZZZZZ	ZZZZZZ	4/21/2003	15:40		4/21/2003	16:06
0421F018.D	ZZZZZZ	ZZZZZZ	4/21/2003	16:16		4/21/2003	16:42
0421F019.D	ZZZZZZ	ZZZZZZ	4/21/2003	16:52		4/21/2003	17:18
0421F020.D	ZZZZZZ	ZZZZZZ	4/21/2003	17:28		4/21/2003	17:54

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY Samples
Sample Matrix: Sediment

Service Request: K2302672
Date Extracted: 04/12/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0305073
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-9 NAVY	K2302672-001	03/31/03	04/10/03	20.06g	2ml	37.4	
E-CH3-10 NAVY	K2302672-002	04/01/03	04/10/03	20.01g	2ml	23.5	
E-CH3-11 NAVY	K2302672-003	04/02/03	04/10/03	20.00g	2ml	23.0	
E-CH3-12 NAVY	K2302672-004	04/01/03	04/10/03	20.01g	2ml	35.0	
E-CH3-13 NAVY	K2302672-005	04/01/03	04/10/03	20.02g	2ml	22.4	
E-CH3-14 NAVY	K2302672-006	03/31/03	04/10/03	20.08g	2ml	21.8	
E-CH3-15 NAVY	K2302672-007	03/31/03	04/10/03	20.01g	2ml	21.6	
E-CH3-16 NAVY	K2302672-008	04/01/03	04/10/03	20.02g	2ml	22.7	
E-CH3-17 NAVY	K2302672-009	03/31/03	04/10/03	20.06g	2ml	22.4	
Method Blank	KWG0305073-5	NA	NA	20.07g	2ml	NA	
Batch QC	K2302688-004	NA	NA	20.01g	2ml	30.2	
Batch QCMS	KWG0305073-1	NA	NA	20.02g	2ml	30.2	
Batch QCDMS	KWG0305073-2	NA	NA	20.00g	2ml	30.2	
Lab Control Sample	KWG0305073-3	NA	NA	20.00g	2ml	NA	
Duplicate Lab Control Sample	KWG0305073-4	NA	NA	20.00g	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

May 20, 2003 Service Request No: K2302793

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation/NAVY

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on April 15, 2003. For your reference, these analyses have been assigned our service request number K2302793.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/Navy	**Date Received:**	4/15/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nine water samples were received for analysis at Columbia Analytical Services on 4/15/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

Several alternative procedures were used due to difficulties encountered that were primarily related to the associated elutriate samples. Arsenic was analyzed using EPA Method 7062 (Hydride/AAS). Although the Reductive Precipitation/ICP-MS procedure performs very well in typical seawater and other complex salt matrices, an interference was observed in some of the elutriate samples. Therefore, all samples were analyzed by Hydride/AAS.

No other anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

Matrix Spike Recovery Exceptions:
The Duplicate Matrix Spike (DMS) recovery of Oil and Grease for sample E-CH3-9 was outside CAS/Kelso control criteria (74% recovery versus a control limit of 78%). The recovery in the Laboratory Control Sample (LCS) was acceptable, as was the recovery in the Matrix Spike (MS). The RPD between the two matrix spike samples was within control criteria. No further corrective action was feasible.

No other anomalies associated with the analysis of these samples were observed.

Organotin Compounds

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) for the following analyte in the replicate matrix spike analyses of C019R001 was outside control criteria: Tetra-n-butyltin. In general, the RPD was relatively high for all spiked compounds, which indicates a low bias in the Matrix Spike Duplicate (MSD). All spike recoveries in the MS, DMS, and associated Laboratory Control Sample (LCS) were within acceptance limits, indicating the analytical batch was in control. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved by F. Cl **Date** 5/19/03

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Surrogate Exceptions:
The control criteria were exceeded for the following surrogates in E-CH3-9: Fluorene-d10 (40% recovery versus 43% control limit) and Fluoranthene-d10 (15% recovery versus 20% control limit). A reanalysis was not performed because insufficient sample was available. Two other surrogates were evaluated for this analysis and both were within acceptance criteria. No further corrective action was possible.

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) for the following analytes in the replicate matrix spike analyses of sample E-CH3-9 was outside control criteria: Indeno(1,2,3-cd)pyrene and Dibenz(a,h)anthracene. In general, the RPD was relatively high for all spiked compounds. All spike recoveries in the MS, DMS, and associated Laboratory Control Sample (LCS) were within acceptance limits, indicating the analytical batch was in control. No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Approved by [signature] Date 5/19/03

Chain of Custody Documentation

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
NAVY Samples

K2302793

00008

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH3-9	03 04/3/ /03	1109	Sed. / Elut.	Various	7+6	Per Contract		QC
E-CH3-10	04/ 1 /03	1420	Sed. / Elut.	Various	7	Per Contract		
E-CH3-11	04/ 1 /03	0924	Sed. / Elut.	Various	7	Per Contract		
E-CH3-12	04/ 1 /03	1346	Sed. / Elut.	Various	7	Per Contract		
E-CH3-13	04/ 1 /03	0930	Sed. / Elut.	Various	7	Per Contract		
E-CH3-14	03 04/3/ /03	1554	Sed. / Elut.	Various	7	Per Contract		
E-CH3-15	03 04/3/ /03	1332	Sed. / Elut.	Various	7	Per Contract		
E-CH3-16	04/ 1 /03	0835	Sed. / Elut.	Various	7	Per Contract		
E-CH3-17	03 04/3/ /03	1635	Sed. / Elut.	Various	7	Per Contract		

Samples Relinquished by: [illegible] - PPB
Date: 4/14/03 Time: 1700
Samples Relinquished by: [illegible]
Date: 4/14/03 Time: 1800 → FedEx

Received by: [illegible]
Date: 4/14/03 Time: 1700
Received by: [illegible] CAS
Date: 4/21/03 Time: 0930

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

60000

12307793

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
NAVY Samples

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH3-9	03 04/3/ /03	1109	Sed. / Elut.	Various	7+6	Per Contract		QC
E-CH3-10	04/ / /03	1420	Sed. / Elut.	Various	7	Per Contract		
E-CH3-11	04/ / /03	0924	Sed. / Elut.	Various	7	Per Contract		
E-CH3-12	04/ / /03	1346	Sed. / Elut.	Various	7	Per Contract		
E-CH3-13	04/ / /03	0930	Sed. / Elut.	Various	7	Per Contract		
E-CH3-14	03 04/3/ /03	1554	Sed. / Elut.	Various	7	Per Contract		
E-CH3-15	03 04/3/ /03	1332	Sed. / Elut.	Various	7	Per Contract		
E-CH3-16	04/ / /03	0835	Sed. / Elut.	Various	7	Per Contract		
E-CH3-17	03 04/3/ /03	1635	Sed. / Elut.	Various	7	Per Contract		

Added S2-376-2 as per client instruction

Samples Relinquished by: PAC - PPB
Date: 4/14/03 Time: 1700
Samples Relinquished by: Nadia Lombardero
Date: 4/14/03 Time: 1800 → FedEx

Received by: Nadia Lombardero
Date: 4/14/03 Time: 1700
Received by: [illegible] 4/15/03 1000
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

NAVY

Solicitation DACW17-03-R-0014
Schedule of Line Items
Optional Line Item

Cape Canaveral Samples							
SEDIMENTS/SOILS	Port/CPA	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ALUMINUM	9	11	9	29	0.5 mg/kg	Columbia	
ANTIMONY	9	11	9	29	0.3 mg/kg	Columbia	
ARSENIC	9	11	9	29	0.5 mg/kg	Columbia	
CADMIUM	9	11	9	29	0.1 mg/kg	Columbia	
CHROMIUM	9	11	9	29	0.2 mg/kg	Columbia	
COPPER	9	11	9	29	0.1 mg/kg	Columbia	
IRON	9	11	9	29	1.5 mg/kg	Columbia	
MERCURY	9	11	9	29	0.05 mg/kg	Columbia	
NICKEL	9	11	9	29	0.1 mg/kg	Columbia	
SILVER	9	11	9	29	0.1 mg/kg	Columbia	
ZINC	9	11	9	29	0.2 mg/kg	Columbia	
CYANIDE	0	11	9	20	1.0mg/kg	Columbia	
TOTAL AMMONIA	0	11	9	20	0.1 mg/kg	Columbia	
TOC	9	11	9	29	0.10%	Columbia	
OIL AND GREASE	0	11	9	20	1.0 ppm	Columbia	
PAHS	9	11	9	29	0.02 mg/kg	Columbia	
ORGANOTIN	9	11	9	29	0.01 mg/kg	Columbia	
%SOLIDS	8	9	8	25	n/a	LAW	
GRAIN SIZE DIST.	8	9	8	25	n/a	LAW	
SPECIFIC GRAVITY	8	9	8	25	n/a	LAW	
ATTERBURG LIMITS	8	9	8	25	n/a	LAW	
SETTLING RATES	8	9	8	25	n/a	LAW	
10 DAY SEDIMENT BIOASSAY	8	2	9	19	n/a	ESE	
28 DAY SED. BIOACCUMULATION	8	2	9	19	n/a	ESE	
WATER/ELUTRIATE	Port	COE	NAVY	Total	Detection Limit	Laboratory	Comments
ANTIMONY	9	12	9	30	3.5 ug/l	Columbia	
ALUMINUM	9	2	0	11	0.5 ug/l	Columbia	Reference Station - Control Sediment did need aluminum and iron
ARSENIC	9	12	9	30	1.0 ug/l	Columbia	
CADMIUM	9	12	9	30	0.5 ug/l	Columbia	
CHROMIUM	9	12	9	30	0.5 ug/l	Columbia	

00010

COPPER	9	12	9	30	2.5 ug/l	Columbia	
LEAD	9	12	9	30	2.5 ug/l	Columbia	
IRON	9	0	0	9	0.5 ug/l	Columbia	
MERCURY	9	12	9	30	0.2 ug/l	Columbia	
NICKEL	9	12	9	30	0.2 ug/l	Columbia	
SILVER	9	12	9	30	1.0 ug/l	Columbia	
ZINC	9	12	9	30	1.5 ug/l	Columbia	
CYANIDE	0	12	9	21	1.0 ppm	Columbia	
TOTAL AMMONIA	0	12	9	21	0.10 ppm	Columbia	
TOC	9	12	9	30	0.10%	Columbia	
OIL AND GREASE	0	12	9	21	1.0 ppm	Columbia	
PAHS	9	12	9	30	0.02 ppm	Columbia	
ORGANOTIN	9	12	9	30	0.1 ppm	Columbia	
96-HR ELUTRIATE ACUTE BIOASSAY	9	2	9	20	n/a	ESE	
Sediments:							
COE Samples: 8 sites, 1 dupe, 1 reference, 1 control sediment (Chem and Phys). (No Phys on control or duplicate sediment) = 11							
NAVY Samples: 8 sites, 1 dupe (Chem, Phys, and Tox) Include Ref and Control on Tox) = 9 or (11 for Tox)							
Port Authority:							
4 Vibracore Samples (Chem, Phys, and Tox) = 4							
6 Upland samples and one dupe to be combined into 4 samples (Chem, Phys, and Tox) = 4							
2 Upland samples to be combined into 1 samples (Chem and Phys) = 1							
Elutriates:							
Same as above except for the COE Samples:							
COE: 8 sites, 1 dupe, 1 reference, 1 control sediment elutriate, 1 site water = 12							

00011

Columbia Analytical Services Inc.

Cooler Receipt And Preservation Form

pg 1 of 5

Project/Client Water + Air Research Work Order K23 02793

Cooler received on 4-15-03 and opened on 4-15-03. by DM

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex / Attached (Y) N
4. COC #

Temperature of cooler(s) upon receipt:	2.0	-1.4	-1.5	1.0	0.9	-1.1
Temperature Blank:	3.5	–	1.0	2.2	0.7	1.0

5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present ice, ice packs, bubbles.
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? missing dates + times. (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) N
10. Were the correct types of bottles used for the tests indicated? Y (N)
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y (N)
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y (N)
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? Y N

Explain any discrepancies: Rec'd Oil + Grease in 1 L Clear Glass.

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
CC05-6	NaOH	2 mil.	EM4103010 9	1L Other	–	[illegible]
CT6-7	NaOH	2 mil	EM4103010 9	1L Other	–	[illegible]
CC03-4	NaOH	2 mil	EM4103010 9	1L Other	–	[illegible]
ECH3-9	HNO_3	2 mil.	X40023	1L Plastic	–	[illegible]
CH3-13	H_2SO_4	½ mil.	EMK291162	113 250 ml (Amb)	–	[illegible]

CRFREV.DOC3/5/2003

00012

Pg. 2 of 3

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Water & Air Research. Work Order K23 _____

Cooler received on 4-15-03 and opened on 4-15-03 by [illegible]

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex. Attached. Y N
4. COC #
   Temperature of cooler(s) upon receipt: -1.2 -1.3 0.3 1.2 1.1 1.7
   Temperature Blank: 1.0 0.5 1.4 0.0 0.2 1.3
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present 1 lg ice packs, bubbles.
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies: See page 1

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

page 3 of 3

Project/Client Water & Air Research Work Order K23 _____

Cooler received on 4-15-03 and opened on 4-15-03 by Kn

1. Were custody seals on outside of cooler? Y (N)
   If yes, how many and where? _____
2. Were seals intact and signature & date correct? Y (N)
3. Is the shipper's airbill available and filed? If no, record airbill number: Fed Ex / Attached Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.5 3.6
   Temperature Blank: 0.0 2.1
5. Were custody papers properly filled out (ink, signed, etc.)? Y (N)
6. Type of packing material present ice, ice packs, bubble
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? Y N
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? Y N
15. Was Cl2/Res negative? Y N

Explain any discrepancies: See page

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03

Carbon, Total Organic

Analysis Method : 415.1
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-9	K2302793-001	0.5	0.2	1	04/28/03	6.1	
E-CH3-10	K2302793-002	0.5	0.2	1	04/28/03	7.9	
E-CH3-11	K2302793-003	0.5	0.2	1	04/28/03	6.7	
E-CH3-12	K2302793-004	0.5	0.2	1	04/28/03	4.5	
E-CH3-13	K2302793-005	0.5	0.2	1	04/28/03	7.1	
E-CH3-14	K2302793-006	0.5	0.2	1	04/28/03	8.3	
E-CH3-15	K2302793-007	0.5	0.2	1	04/28/03	7.1	
E-CH3-16	K2302793-008	0.5	0.2	1	04/28/03	7.4	
E-CH3-17	K2302793-009	0.5	0.2	1	04/28/03	9.2	
Method Blank	K2302793-MB	0.5	0.2	1	04/28/03	ND	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-9
Lab Code : K2302793-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	415.1	0.5	6.1	6.1	6.1	<1	

Approved By _____ Date : 5/02/03

00017

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/28/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-9
Lab Code : K2302793-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	415.1	0.5	25.0	6.1	28.1	88	85-115	

00018

Approved By [signature] Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302793
Project Name :	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/28/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302793-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	mg/L (ppm)	415.1	27.1	26.6	98	85-115	

00019

Approved By [signature] Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Collected: NA
Date Received: NA
Date Analyzed: 04/28/03

Carbon, Total Organic
EPA Method 415.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 3 Result	25.0	24.7	99
CCV 4 Result	25.0	24.8	99
CCV 5 Result	25.0	25.5	102

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 3 Result	0.5	ND
CCB 4 Result	0.5	ND
CCB 5 Result	0.5	ND

Approved By: _____ Date: 5/02/03

00020

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03

Ammonia as Nitrogen

Analysis Method : 350.1
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-9	K2302793-001	0.5	0.2	10	04/18/03	17.8	
E-CH3-10	K2302793-002	0.5	0.2	10	04/18/03	25.6	
E-CH3-11	K2302793-003	0.5	0.2	10	04/18/03	23.6	
E-CH3-12	K2302793-004	0.5	0.2	10	04/18/03	12.2	
E-CH3-13	K2302793-005	0.5	0.2	10	04/18/03	24.8	
E-CH3-14	K2302793-006	0.5	0.2	10	04/18/03	27.0	
E-CH3-15	K2302793-007	0.5	0.2	10	04/18/03	26.8	
E-CH3-16	K2302793-008	0.5	0.2	10	04/18/03	22.5	
E-CH3-17	K2302793-009	0.5	0.2	10	04/18/03	27.6	
Method Blank	K2302793-MB	0.05	0.02	1	04/18/03	ND	

Approved By MY Dt Date : 5/5/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/18/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-9
Lab Code : K2302793-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	350.1	0.5	17.8	17.2	17.5	3	

00022

Approved By PL Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/18/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-9
Lab Code : K2302793-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	350.1	0.5	20.0	17.8	33.8	80	75-125	

00023

Approved By M. Fitt Date : 5/5/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302793
Project Name :	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/18/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302793-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	mg/L (ppm)	350.1	2.29	2.30	100	85-115	

00024

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Collected: NA
Date Received: NA
Date Analyzed: 04/18/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 4 Result	2.00	1.92	96
CCV 5 Result	2.00	1.89	95
CCV 6 Result	2.00	1.89	95

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 4 Result	0.05	ND
CCB 5 Result	0.05	ND
CCB 6 Result	0.05	ND

Approved By: PR Date: 5/02/03

COMBOQCD/042695

00025

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03

Sulfide, Total

Analysis Method : 376.2
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-9	K2302793-001	0.05	0.004	1	04/16/03	0.04	J
E-CH3-10	K2302793-002	0.05	0.004	1	04/16/03	0.006	J
E-CH3-11	K2302793-003	0.5	0.04	10	04/16/03	8.2	
E-CH3-12	K2302793-004	0.05	0.004	1	04/16/03	0.009	J
E-CH3-13	K2302793-005	1	0.08	20	04/16/03	15	
E-CH3-14	K2302793-006	1	0.08	20	04/16/03	11	
E-CH3-15	K2302793-007	1	0.08	20	04/16/03	12	
E-CH3-16	K2302793-008	0.3	0.02	5	04/16/03	3.9	
E-CH3-17	K2302793-009	0.5	0.04	10	04/16/03	6.4	
Method Blank	K2302793-MB	0.05	0.004	1	04/16/03	0.007	J

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Duplicate Summary
Inorganic Parameters

Sample Name : E-CH3-9
Lab Code : K2302793-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.005	0.04	0.05	0.05	20	

Approved By M S H Date : 5/5/03

00027

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03
Date Extracted : NA
Date Analyzed : 04/16/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : E-CH3-9
Lab Code : K2302793-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	376.2	0.05	0.96	0.04	0.86	85	75-125	

00028

Approved By [signature] Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302793
Project Name :	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/16/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302793-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide, Total	mg/L (ppm)	376.2	0.96	0.98	102	85-115	

00029

Approved By [signature] Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	04/16/03

Sulfide
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	0.96	0.95	99
CCV 2 Result	0.96	0.95	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	0.007 J
CCB 2 Result	0.05	0.007 J

Approved By: PL Date: 5/02/03

COMBOQCD/042695

00030

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : 04/10/03
Date Received : 04/15/03

Cyanide, Total

Analysis Method : 335.2
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
E-CH3-9	K2302793-001	0.01	0.003	1	04/16/03	ND	
E-CH3-10	K2302793-002	0.01	0.003	1	04/24/03	ND	
E-CH3-11	K2302793-003	0.01	0.003	1	04/24/03	ND	
E-CH3-12	K2302793-004	0.01	0.003	1	04/24/03	ND	
E-CH3-13	K2302793-005	0.01	0.003	1	04/24/03	ND	
E-CH3-14	K2302793-006	0.01	0.003	1	04/16/03	ND	
E-CH3-15	K2302793-007	0.01	0.003	1	04/16/03	ND	
E-CH3-16	K2302793-008	0.01	0.003	1	04/24/03	ND	
E-CH3-17	K2302793-009	0.01	0.003	1	04/24/03	ND	
Method Blank	K2302793-MB	0.01	0.003	1	04/16/03	ND	
Method Blank	K2302793-MB	0.01	0.003	1	04/24/03	ND	

Approved By _____ Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/24/03

Duplicate Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K2302785-008DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	335.2	0.01	ND	ND	ND	-	

Approved By [signature] Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : ANAMAR Environmental Chemistry, Inc.
Project Name : Canaveral Harbor 103 Evaluation/NAVY
Project Number : NA
Sample Matrix : Water

Service Request : K2302793
Date Collected : NA
Date Received : NA
Date Extracted : NA
Date Analyzed : 04/24/03

Matrix Spike Summary
Inorganic Parameters

Sample Name : BatchQC
Lab Code : K2302785-008MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	335.2	0.01	0.10	ND	0.10	100	75-125	

Approved By [signature] Date : 5/02/03

00033

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	ANAMAR Environmental Chemistry, Inc.	**Service Request :**	K2302793
Project Name :	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	Water	**Date Extracted :**	NA
		Date Analyzed :	04/16-24/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : K2302793-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	mg/L (ppm)	335.2	0.75	0.77	103	85-115	
Cyanide, Total	mg/L (ppm)	335.2	0.75	0.78	104	85-115	

Approved By RL Date : 5/02/03

Report By:EMihaila

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	4/16,24/03

Cyanide, Total
EPA Method 335.2
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	100	108	108
CCV 3 Result	100	109	109
CCV 4 Result	100	105	105
CCV 5 Result	100	105	105

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	10	ND
CCB 3 Result	10	ND
CCB 4 Result	10	ND
CCB 5 Result	10	ND

Approved By: _____ Date: 5/5/03

COMBOQCD/042695

00035

Metals

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY

Sample No.	Lab Sample ID.
E-CH3-9	K2302793-001
E-CH3-9D	K2302793-001D
E-CH3-9S	K2302793-001S
E-CH3-10	K2302793-002
E-CH3-11	K2302793-003
E-CH3-12	K2302793-004
E-CH3-13	K2302793-005
E-CH3-14	K2302793-006
E-CH3-15	K2302793-007
E-CH3-16	K2302793-008
E-CH3-17	K2302793-009
Method Blank	K2302793-MB
Batch QCD	K2302808-001D
Batch QCD	K2302808-002D
Batch QCS	K2302808-002S
Batch QC2S	K2302808-004S
Batch QC3D	K2302808-006D
Batch QC3S	K2302808-006S

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 5/15/03

00037

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-9
Lab Code: K2302793-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.80	B	
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	47.8		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.39	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.15	B	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.91		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.8	B	

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-10
Lab Code: K2302793-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.93	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	14.4		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.37	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.47		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04		
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.72		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.2		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-11
Lab Code: K2302793-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	1.37		
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	7.12		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.14	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.42		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.85		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.4		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-12
Lab Code: K2302793-004

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.50	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	2.32		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.08	U	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.12	B	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	B	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.20		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.5	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-13
Lab Code: K2302793-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.55	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	7.58		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.31	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.16	B	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.89		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.0	B	

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-14
Lab Code: K2302793-006

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.58	B	
Arsenic	7062	5.00	2.50	10	5/12/03	5/14/03	35.2		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.38	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.42		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.05		
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	1.59		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.5		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-15
Lab Code: K2302793-007

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.60	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	12.8		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.44		
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.25		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	1.06		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.0		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-16
Lab Code: K2302793-008

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.73	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	7.92		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	B	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.58		
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.21		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	1.05		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.1		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected: 04/10/03
Date Received: 04/15/03
Units: µG/L
Basis: NA

Sample Name: E-CH3-17
Lab Code: K2302793-009

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.70	B	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	18.0		
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.15	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.27		
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	1.08		
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	1.6		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Matrix: WATER

Service Request: K2302793
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2302793-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.20	10	5/7/03	5/8/03	0.20	U	
Arsenic	7062	1.00	0.50	2	5/12/03	5/14/03	0.50	U	
Cadmium	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Chromium	200.8	0.40	0.08	1	4/25/03	5/2/03	0.34	B	
Copper	200.8	0.20	0.02	1	4/25/03	5/2/03	0.02	U	
Lead	200.8	0.04	0.04	1	4/25/03	5/2/03	0.04	U	
Mercury	7470A	0.2	0.1	1	4/24/03	4/25/03	0.1	U	
Nickel	200.8	0.20	0.08	1	4/25/03	5/2/03	0.08	U	
Silver	200.8	0.04	0.01	1	4/25/03	5/2/03	0.01	U	
Zinc	200.8	1.0	0.4	1	4/25/03	5/2/03	0.4	U	

% Solids: 0.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony	50.0	10.6	106	25.0	24.9	100	25.2	101	200.8
Arsenic	5.0	4.87	97	5.0	5.18	104	5.44	109	7062
Cadmium	25.0	24.9	100	25.0	25.1	100	25.7	103	200.8
Chromium	20.0	19.7	99	25.0	25.0	100	24.8	99	200.8
Copper	25.0	24.2	97	25.0	24.5	98	24.6	98	200.8
Lead	50.0	48.2	96	25.0	25.1	100	26.1	104	200.8
Mercury	5.0	5.24	105	5.0	5.18	104	5.32	106	7470A
Nickel	50.0	48.4	97	25.0	24.6	98	24.4	98	200.8
Silver	25.0	24.8	99	25.0	25.1	100	25.4	102	200.8
Zinc	50.0	49.0	98	25.0	24.8	99	24.8	99	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	25.0	100	25.4	102	200.8
Arsenic				5.0	5.22	104	5.12	102	7062
Cadmium				25.0	24.8	99	25.5	102	200.8
Chromium				25.0	23.9	96	25.1	100	200.8
Copper				25.0	23.9	96	24.5	98	200.8
Lead				25.0	25.2	101	26.3	105	200.8
Mercury				5.0	5.39	108	5.22	104	7470A
Nickel				25.0	23.8	95	24.2	97	200.8
Silver				25.0	24.7	99	25.3	101	200.8
Zinc				25.0	23.9	96	24.4	98	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	Method
Arsenic				5.0	4.95	99	5.00	100	7062
Mercury				5.0	5.20	104	5.15	103	7470A

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	Method
Arsenic				5.0	4.97	99			7062

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Antimony				0.05	0.07	136		
Arsenic	0.50	0.39	78					
Cadmium				0.40	0.46	115		
Chromium				2.0	2.03	102		
Copper				1.0	1.05	105		
Lead				0.20	0.22	108		
Mercury	0.20	0.2	92					
Nickel				2.0	2.21	111		
Silver				0.20	0.18	92		
Zinc				5.0	4.66	93		

METALS
-3-
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Antimony	0.03	B	0.02	B	0.02	U	0.02	U						200.8
Arsenic	0.25	U	0.25	U	0.37	B	0.29	B						7062
Cadmium	0.06	U	0.06	U	0.06	U	0.06	U						200.8
Chromium	0.40	U	0.40	U	0.40	U	0.40	U						200.8
Copper	0.10	U	0.10	U	0.10	U	0.10	U						200.8
Lead	0.20	U	0.20	U	0.20	U	0.20	U						200.8
Mercury	0.1	U	0.1	U	0.1	U	0.1	U						7470A
Nickel	0.40	U	0.40	U	0.40	U	0.40	U						200.8
Silver	0.07	U	0.07	U	0.07	U	0.07	U						200.8
Zinc	2.0	U	2.0	U	2.0	U	2.0	U						200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat.

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Antimony			0.02	U									200.8
Arsenic			0.25	U	0.25	U	0.25	U					7062
Cadmium			0.06	U									200.8
Chromium			0.40	U									200.8
Copper			0.10	U									200.8
Lead			0.20	U									200.8
Mercury			0.1	U	0.1	U	0.1	U					7470A
Nickel			0.40	U									200.8
Silver			0.07	U									200.8
Zinc			2.0	U									200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Arsenic			0.25	U										7062

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302793
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: E-CH3-9S
Lab Code: K2302793-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Arsenic	75 - 125	59.9		47.8		16.0	76		7062
Mercury	74 - 120	0.9		0.1	U	1.0	93		7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302793
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QC2S
Lab Code: K2302808-004S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Cadmium	51 - 127	3.68		0.01	B	4.00	92		200.8
Chromium	48 - 136	4.66		0.53		4.00	103		200.8
Copper	47 - 113	5.05		1.79		4.00	82		200.8
Lead	61 - 120	3.81		0.06		4.00	94		200.8
Nickel	1 - 111	4.08		0.76		4.00	83		200.8
Silver	66 - 112	3.55		0.01	U	4.00	89		200.8
Zinc	36 - 143	5.5		2.4		4.0	77		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302793
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QC3S
Lab Code: K2302808-006S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	70 - 130	89.4		0.31	B	100	89		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302793
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: E-CH3-9D
Lab Code: K2302793-001D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Arsenic	20	47.8		47.8		0		7062
Mercury		0.1	U	0.1	U			7470A

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2302793
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation/NAVY
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: Batch QC3D
Lab Code: K2302808-006D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony		0.31	B	0.31	B	2		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.: Units: µg/L

Project Name: Canaveral Harbor 103 Evaluation/NAVY Basis: NA

Matrix: WATER % Solids: 0.0

Sample Name:Batch QCD Lab Code: K2302808-002D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony		0.40	B	0.37	B	5		200.8
Cadmium		0.01	U	0.01	U			200.8
Chromium		0.09	B	0.09	B	1		200.8
Copper		0.20	B	0.22		9		200.8
Lead		0.04	U	0.04	U			200.8
Nickel		0.37		0.33		12		200.8
Silver		0.01	U	0.01	U			200.8
Zinc		0.5	B	0.5	B	0		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluation/NAVY

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Aqueous ug/L Found	Aqueous ug/L %R	Solid (mg/kg) True	Solid (mg/kg) Found	Solid (mg/kg) C	Solid (mg/kg) Limits	Solid (mg/kg) %R
Antimony	100	85.2	85					
Arsenic	16.0	14.2	89					
Cadmium	4.00	4.14	104					
Chromium	4.00	4.24	106					
Copper	4.00	3.86	96					
Lead	4.00	4.02	101					
Mercury	5.00	4.92	98					
Nickel	4.00	3.86	97					
Silver	4.00	3.90	97					
Zinc	4.00	4.12	103					

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.2	0.1	7470A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Cadmium	111		0.20	0.06	200.8
Chromium	52		2.00	0.40	200.8
Copper	65		1.00	0.10	200.8
Lead	208		0.20	0.20	200.8
Nickel	60		1.00	0.40	200.8
Silver	107		0.20	0.07	200.8
Zinc	66		5.0	2.0	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.10	0.02	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: Varian-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	193.60		0.50	0.25	7062

Comments

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Cadmium	15.00	1000.0	200.8
Chromium	15.00	1000.0	200.8
Copper	15.00	400.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	700.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	700.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	600.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: AA

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302793-002	5/12/03	EPA 3010A	50	50
K2302793-003	5/12/03	EPA 3010A	50	50
K2302793-004	5/12/03	EPA 3010A	50	50
K2302793-005	5/12/03	EPA 3010A	50	50
K2302793-006	5/12/03	EPA 3010A	50	50
K2302793-007	5/12/03	EPA 3010A	50	50
K2302793-008	5/12/03	EPA 3010A	50	50
K2302793-009	5/12/03	EPA 3010A	50	50
K2302793-001	5/12/03	EPA 3010A	50	50
K2302793-001D	5/12/03	EPA 3010A	50	50
K2302793-001S	5/12/03	EPA 3010A	50	50
LCSW	5/12/03	EPA 3010A	50	50
K2302793-MB	5/12/03	EPA 3010A	50	50
K2302793-002	4/24/03	METHOD	20	20
K2302793-003	4/24/03	METHOD	20	20
K2302793-004	4/24/03	METHOD	20	20
K2302793-005	4/24/03	METHOD	20	20
K2302793-006	4/24/03	METHOD	20	20
K2302793-007	4/24/03	METHOD	20	20
K2302793-008	4/24/03	METHOD	20	20
K2302793-009	4/24/03	METHOD	20	20
K2302793-001	4/24/03	METHOD	20	20
K2302793-001D	4/24/03	METHOD	20	20
K2302793-001S	4/24/03	METHOD	20	20
LCSW	4/24/03	METHOD	20	20
K2302793-MB	4/24/03	METHOD	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2302808-006D	5/7/03	CLFAA	20	20
K2302808-006S	5/7/03	CLFAA	20	20
K2302808-002D	5/7/03	CLFAA	20	20
K2302808-002S	5/7/03	CLFAA	20	20
K2302793-002	5/7/03	CLFAA	20	20
K2302793-003	5/7/03	CLFAA	20	20
K2302793-004	5/7/03	CLFAA	20	20
K2302793-005	5/7/03	CLFAA	20	20
K2302793-006	5/7/03	CLFAA	20	20
K2302793-007	5/7/03	CLFAA	20	20
K2302793-008	5/7/03	CLFAA	20	20
K2302793-009	5/7/03	CLFAA	20	20
K2302793-001	5/7/03	CLFAA	20	20
LCSW	5/7/03	CLFAA	20	20
K2302793-MB	5/7/03	CLFAA	20	20
K2302808-004S	4/25/03	RED PPTN	500	100
K2302808-001D	4/25/03	RED PPTN	500	100
K2302793-002	4/25/03	RED PPTN	500	100
K2302793-003	4/25/03	RED PPTN	500	100
K2302793-004	4/25/03	RED PPTN	500	100
K2302793-005	4/25/03	RED PPTN	500	100
K2302793-006	4/25/03	RED PPTN	500	100
K2302793-007	4/25/03	RED PPTN	500	100
K2302793-008	4/25/03	RED PPTN	500	100
K2302793-009	4/25/03	RED PPTN	500	100
K2302793-001	4/25/03	RED PPTN	500	100
LCSW	4/25/03	RED PPTN	500	100
K2302793-MB	4/25/03	RED PPTN	500	100

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	14:04																									
S0.5	1.00	14:08																									
S1	1.00	14:12																									
S5	1.00	14:16																									
S7.5	1.00	14:20				X																					
S10	1.00	14:24																									
ICV	1.00	14:28				X																					
ICB	1.00	14:32				X																					
CCV1	1.00	14:36				X																					
CCB1	1.00	14:40				X																					
CRI	1.00	14:44				X																					
ZZZZZZ	2.00	14:48																									
ZZZZZZ	2.00	14:52																									
ZZZZZZ	10.00	14:56																									
ZZZZZZ	10.00	15:00																									
ZZZZZZ	10.00	15:04																									
ZZZZZZ	10.00	15:08																									
ZZZZZZ	10.00	15:12																									
ZZZZZZ	10.00	15:16																									
CCV2	1.00	15:20				X																					
CCB2	1.00	15:24				X																					
ZZZZZZ	1.00	15:28																									
ZZZZZZ	2.00	15:32																									
ZZZZZZ	10.00	15:36																									
ZZZZZZ	20.00	15:40																									
ZZZZZZ	2.00	15:44																									
ZZZZZZ	10.00	15:48																									
ZZZZZZ	10.00	15:52																									
ZZZZZZ	2.00	15:56																									
K2302793-MB	2.00	16:00				X																					

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Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
LCSW	2.00	16:04				X																					
K2302793-001	10.00	16:08				X																					
CCV3	1.00	16:12				X																					
CCB3	1.00	16:16				X																					
K2302793-001D	10.00	16:20				X																					
K2302793-001S	10.00	16:24				X																					
K2302793-002	2.00	16:28				X																					
K2302793-003	2.00	16:32				X																					
K2302793-004	2.00	16:36				X																					
K2302793-005	2.00	16:40				X																					
K2302793-006	10.00	16:44				X																					
K2302793-007	2.00	16:48				X																					
K2302793-008	2.00	16:52				X																					
K2302793-009	2.00	16:56				X																					
CCV4	1.00	17:00				X																					
CCB4	1.00	17:04				X																					
ZZZZZZ	1.00	17:08																									
ZZZZZZ	1.00	17:12																									
CCV5	1.00	17:16				X																					
CCB5	1.00	17:20				X																					
ZZZZZZ	2.00	17:24																									
ZZZZZZ	2.00	17:28																									
ZZZZZZ	2.00	17:32																									
ZZZZZZ	2.00	17:36																									
ZZZZZZ	2.00	17:40																									
ZZZZZZ	2.00	17:44																									
ZZZZZZ	2.00	17:48																									
ZZZZZZ	2.00	17:52																									
ZZZZZZ	2.00	17:56																									
ZZZZZZ	4.00	18:00																									

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 5/14/03 End Date: 5/14/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV6	1.00	18:04				X																					
CCB6	1.00	18:08				X																					
ZZZZZZ	2.00	18:12																									
ZZZZZZ	2.00	18:16																									
ZZZZZZ	2.00	18:20																									
CCV7	1.00	18:24				X																					
CCB7	1.00	18:28				X																					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	14:15																X									
STANDARD #1	1.00	14:16																X									
STANDARD #2	1.00	14:18																X									
STANDARD #3	1.00	14:20																X									
STANDARD #4	1.00	14:21																X									
STANDARD #5	1.00	14:23																X									
ICV	1.00	14:25																X									
ICB	1.00	14:26																X									
CCV1	1.00	14:28																X									
CCB1	1.00	14:29																X									
CRA	1.00	14:31																X									
ZZZZZZ	1.00	14:33																									
ZZZZZZ	1.00	14:34																									
ZZZZZZ	1.00	14:36																									
ZZZZZZ	1.00	14:37																									
ZZZZZZ	1.00	14:39																									
ZZZZZZ	1.00	14:41																									
ZZZZZZ	1.00	14:42																									
ZZZZZZ	1.00	14:44																									
ZZZZZZ	1.00	14:45																									
CCV2	1.00	14:47																X									
CCB2	1.00	14:49																X									
ZZZZZZ	1.00	14:50																									
ZZZZZZ	1.00	14:52																									
ZZZZZZ	1.00	14:53																									
ZZZZZZ	1.00	14:55																									
ZZZZZZ	1.00	14:57																									
ZZZZZZ	1.00	14:58																									
ZZZZZZ	1.00	15:00																									
ZZZZZZ	1.00	15:02																									

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Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	15:03																									
ZZZZZZ	1.00	15:05																									
CCV3	1.00	15:06																X									
CCB3	1.00	15:08																X									
ZZZZZZ	1.00	15:10																									
ZZZZZZ	1.00	15:11																									
K2302793-MB	1.00	15:13																X									
LCSW	1.00	15:15																X									
ZZZZZZ	1.00	15:16																									
ZZZZZZ	1.00	15:18																									
ZZZZZZ	1.00	15:19																									
ZZZZZZ	1.00	15:21																									
ZZZZZZ	1.00	15:23																									
ZZZZZZ	1.00	15:24																									
CCV4	1.00	15:26																X									
CCB4	1.00	15:28																X									
ZZZZZZ	1.00	15:29																									
ZZZZZZ	1.00	15:31																									
ZZZZZZ	1.00	15:32																									
ZZZZZZ	1.00	15:34																									
K2302793-001	1.00	15:36																X									
K2302793-001D	1.00	15:37																X									
K2302793-001S	1.00	15:39																X									
K2302793-002	1.00	15:41																X									
K2302793-003	1.00	15:42																X									
K2302793-004	1.00	15:44																X									
CCV5	1.00	15:45																X									
CCB5	1.00	15:47																X									
K2302793-005	1.00	15:49																X									
K2302793-006	1.00	15:50																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 4/25/03 End Date: 4/25/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302793-007	1.00	15:52																X									
K2302793-008	1.00	15:54																X									
K2302793-009	1.00	15:55																X									
CCV6	1.00	15:57																X									
CCB6	1.00	15:59																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	13:14							X		X		X		X				X			X				X	
25 PPB STD. MS3-6-B	1.00	13:18							X		X		X		X				X			X				X	
ICV	1.00	13:23							X		X		X		X				X			X				X	
CCV1	1.00	13:27							X		X		X		X				X			X				X	
ICB1	1.00	13:32							X		X		X		X				X			X				X	
CCB1	1.00	13:35							X		X		X		X				X			X				X	
CRA	1.00	13:38							X		X		X		X				X			X				X	
K2302793-MB	1.00	13:43							X		X		X		X				X			X				X	
LCSW	1.00	13:47							X		X		X		X				X			X				X	
ZZZZZZ	1.00	13:51																									
K2302808-001D	1.00	13:53							X		X		X		X				X			X				X	
ZZZZZZ	1.00	13:56																									
ZZZZZZ	1.00	13:59																									
ZZZZZZ	1.00	14:02																									
K2302808-004S	1.00	14:04							X		X		X		X				X			X				X	
ZZZZZZ	1.00	14:08																									
CCV2	1.00	14:11							X		X		X		X				X			X				X	
CCB2	1.00	14:16							X		X		X		X				X			X				X	
ZZZZZZ	1.00	14:19																									
ZZZZZZ	1.00	14:24																									
ZZZZZZ	1.00	14:27																									
ZZZZZZ	1.00	14:29																									
K2302793-001	1.00	14:33							X		X		X		X				X			X				X	
K2302793-002	1.00	14:36							X		X		X		X				X			X				X	
K2302793-003	1.00	14:39							X		X		X		X				X			X				X	
K2302793-004	1.00	14:42							X		X		X		X				X			X				X	
K2302793-005	1.00	14:45							X		X		X		X				X			X				X	
K2302793-006	1.00	14:47							X		X		X		X				X			X				X	
CCV3	1.00	14:51							X		X		X		X				X			X				X	
CCB3	1.00	14:59							X		X		X		X				X			X				X	

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 5/2/03 End Date: 5/2/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302793-007	1.00	15:02							X		X		X		X				X			X				X	
K2302793-008	1.00	15:05							X		X		X		X				X			X				X	
K2302793-009	1.00	15:08							X		X		X		X				X			X				X	
ZZZZZZ	1.00	15:11																									
ZZZZZZ	1.00	15:13																									
ZZZZZZ	1.00	15:16																									
CCV4	1.00	15:19							X		X		X		X				X			X				X	
CCB4	1.00	15:25							X		X		X		X				X			X				X	

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Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	11:37			X																						
S25	1.00	11:39			X																						
ICV	1.00	11:40			X																						
ICV	5.00	11:42			X																						
CCV1	1.00	11:43			X																						
ICB	1.00	11:47			X																						
CCB1	1.00	11:49			X																						
CRA	1.00	11:50			X																						
K2302793-MB	10.00	11:52			X																						
LCSW	10.00	11:53			X																						
ZZZZZZ	10.00	11:56																									
K2302808-002D	10.00	11:57			X																						
K2302808-002S	10.00	11:58			X																						
ZZZZZZ	10.00	12:01																									
K2302808-006D	10.00	12:02			X																						
K2302808-006S	10.00	12:04			X																						
CCV2	1.00	12:06			X																						
CCB2	1.00	12:11			X																						
ZZZZZZ	10.00	12:13																									
ZZZZZZ	10.00	12:14																									
ZZZZZZ	10.00	12:16																									
ZZZZZZ	10.00	12:17																									
ZZZZZZ	10.00	12:19																									
ZZZZZZ	10.00	12:20																									
ZZZZZZ	10.00	12:21																									
K2302793-001	10.00	12:23			X																						
K2302793-002	10.00	12:24			X																						
CCV3	1.00	12:25			X																						
CCB3	1.00	12:30			X																						
K2302793-003	10.00	12:32			X																						

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2302793

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 5/8/03 End Date: 5/8/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2302793-004	10.00	12:33			X																						
K2302793-005	10.00	12:35			X																						
K2302793-006	10.00	12:36			X																						
K2302793-007	10.00	12:38			X																						
K2302793-008	10.00	12:39			X																						
K2302793-009	10.00	12:45			X																						
ZZZZZZ	10.00	12:46																									
CCV4	1.00	12:48			X																						
CCB4	1.00	12:53			X																						

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Oil and Grease
Method 1664

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-9	Units:	mg/L (ppm)
Lab Code:	K2302793-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	ND	

Approved By: M Cullen Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-10	Units:	mg/L (ppm)
Lab Code:	K2302793-002	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	ND	

Approved By: MR Culer Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-11	Units:	mg/L (ppm)
Lab Code:	K2302793-003	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	3	J

Approved By: M Curla Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-12	Units:	mg/L (ppm)
Lab Code:	K2302793-004	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	ND	

Approved By: M Kula Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-13	Units:	mg/L (ppm)
Lab Code:	K2302793-005	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	5.5	

Approved By: M Hurler Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-14	Units:	mg/L (ppm)
Lab Code:	K2302793-006	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	5.1	

Approved By: M Gulu Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-15	Units:	mg/L (ppm)
Lab Code:	K2302793-007	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	5.4	

Approved By: M Gulu Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-16	Units:	mg/L (ppm)
Lab Code:	K2302793-008	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	4	J

Approved By: M Gulu Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03

Oil and Grease

Sample Name:	E-CH3-17	Units:	mg/L (ppm)
Lab Code:	K2302793-009	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	17	

Approved By: M Gillen Date: 4/29/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	K030424-WB	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	4/24/03	4/24/03	ND	

Approved By: M Culer Date: 4/29/03

1S22/020597p

02793PHC.ME1 - MB 4/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY
LCS Matrix: Water

Service Request: K2302793
Date Collected: NA
Date Received: NA
Date Extracted: 4/24/03
Date Analyzed: 4/24/03

Laboratory Control Sample Summary
Oil and Grease

Sample Name: Lab Control Sample
Lab Code: K030424-WL
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	40	40	100	78-114	

Approved By: MM Wilk Date: 4/29/03

LCS/071499p
02793PHC.ME1 - LCS 4/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	4/10/03
Sample Matrix:	Water	**Date Received:**	4/15/03
		Date Extracted:	4/24/03
		Date Analyzed:	4/24/03

Matrix Spike/Duplicate Matrix Spike Summary
Oil and Grease

Sample Name:	E-CH3-9	Units:	mg/L (ppm)
Lab Code:	K2302793-001MS, K2302793-001DMS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	40	40	5.4	41	35	89	74	78-114	16	*

Approved By: M Cuba Date: 4/29/03

DMS/072898p 02793PHC.ME1 - DMS 4/29/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Analyzed: 4/24/03

Continuing Calibration Verification (CCV) Summary
EPA Methods 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery	CCV3 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	1.9	95	1.9	95	2.0	100

Approved By: M Curlu Date: 4/29/03

CCV 1-4/102194

02793PHC.ME1 - ccv 4/29/03

Organotins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-9	K2302793-001	04/10/2003	04/15/2003
E-CH3-10	K2302793-002	04/10/2003	04/15/2003
E-CH3-11	K2302793-003	04/10/2003	04/15/2003
E-CH3-12	K2302793-004	04/10/2003	04/15/2003
E-CH3-13	K2302793-005	04/10/2003	04/15/2003
E-CH3-14	K2302793-006	04/10/2003	04/15/2003
E-CH3-15	K2302793-007	04/10/2003	04/15/2003
E-CH3-16	K2302793-008	04/10/2003	04/15/2003
E-CH3-17	K2302793-009	04/10/2003	04/15/2003
E-CH3-9MS	KWG0305223-1	04/10/2003	04/15/2003
E-CH3-9DMS	KWG0305223-2	04/10/2003	04/15/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: J. Clt

Name: Jeff Christian

Date: 5/19/03

Title: Laboratory Director

00097

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-9	**Units:**	ug/L
Lab Code:	K2302793-001	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305223	
n-Butyltin	**0.0090**	J	0.050	0.0065	1	04/16/03	04/26/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	70	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-10	**Units:**	ug/L
Lab Code:	K2302793-002	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	75	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-11	**Units:**	ug/L
Lab Code:	K2302793-003	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/29/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/29/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/29/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/29/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	77	41-128	04/29/03	Acceptable

Comments:

00100

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-12	**Units:**	ug/L
Lab Code:	K2302793-004	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	93	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-13	**Units:**	ug/L
Lab Code:	K2302793-005	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/29/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/29/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/29/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/29/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	78	41-128	04/29/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-14	**Units:**	ug/L
Lab Code:	K2302793-006	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	05/14/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	05/14/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	05/14/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	05/14/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	53	41-128	05/14/03	Acceptable

Comments:

00103

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-15	**Units:**	ug/L
Lab Code:	K2302793-007	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	05/14/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	05/14/03	KWG0305223	
Di-n-butyltin	**0.018**	J	0.050	0.0057	1	04/16/03	05/14/03	KWG0305223	
n-Butyltin	**0.019**	JP	0.050	0.0065	1	04/16/03	05/14/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	58	41-128	05/14/03	Acceptable

Comments:

00104

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-16	**Units:**	ug/L
Lab Code:	K2302793-008	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/30/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/30/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/30/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/30/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	67	41-128	04/30/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Butyltins

Sample Name:	E-CH3-17	**Units:**	ug/L
Lab Code:	K2302793-009	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	05/14/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	05/14/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	05/14/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	05/14/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	63	41-128	05/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305223-4	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	04/16/03	04/26/03	KWG0305223	
Tri-n-butyltin	ND	U	0.020	0.0056	1	04/16/03	04/26/03	KWG0305223	
Di-n-butyltin	ND	U	0.050	0.0057	1	04/16/03	04/26/03	KWG0305223	
n-Butyltin	ND	U	0.050	0.0065	1	04/16/03	04/26/03	KWG0305223	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	76	41-128	04/26/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY
Sample Matrix: Water

Service Request: K2302793

Surrogate Recovery Summary
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
E-CH3-9	K2302793-001	70
E-CH3-10	K2302793-002	75
E-CH3-11	K2302793-003	77
E-CH3-12	K2302793-004	93
E-CH3-13	K2302793-005	78
E-CH3-14	K2302793-006	53
E-CH3-15	K2302793-007	58
E-CH3-16	K2302793-008	67
E-CH3-17	K2302793-009	63
Method Blank	KWG0305223-4	76
E-CH3-9MS	KWG0305223-1	79
E-CH3-9DMS	KWG0305223-2	56
Lab Control Sample	KWG0305223-3	78

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 41-128

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	E-CH3-9	**Units:**	ug/L
Lab Code:	K2302793-001	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305223

Analyte Name	Sample Result	E-CH3-9MS KWG0305223-1 Matrix Spike			E-CH3-9DMS KWG0305223-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Tetra-n-butyltin	ND	0.303	1.00	30	0.249	1.00	25	10-110	19	30
Tri-n-butyltin	ND	0.644	1.00	64	0.410	1.00	41	37-138	44 *	30
Di-n-butyltin	ND	0.441	1.00	44	0.313	1.00	31	29-124	34 *	30
n-Butyltin	0.0090	0.641	1.00	63	0.402	1.00	39	10-139	46 *	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00109

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	EPA 3520	**Units:**	ug/L
Analysis Method:	Krone	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0305223

	Lab Control Sample KWG0305223-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	0.199	0.500	40	21-115
Tri-n-butyltin	0.279	0.500	56	22-157
Di-n-butyltin	0.210	0.500	42	19-149
n-Butyltin	0.292	0.500	58	23-150

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003
		Time Analyzed:	03:00

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\042503\0425F025.D
Lab Code:	KWG0305223-4	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305223

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0305223-3	J:\GC11\DATA\042503\0425F026.D	04/26/03	03:18
E-CH3-9	K2302793-001	J:\GC11\DATA\042503\0425F027.D	04/26/03	03:36
E-CH3-9MS	KWG0305223-1	J:\GC11\DATA\042503\0425F028.D	04/26/03	03:54
E-CH3-9DMS	KWG0305223-2	J:\GC11\DATA\042503\0425F029.D	04/26/03	04:12
E-CH3-10	K2302793-002	J:\GC11\DATA\042503\0425F032.D	04/26/03	05:06
E-CH3-12	K2302793-004	J:\GC11\DATA\042503\0425F034.D	04/26/03	05:42
E-CH3-11	K2302793-003	J:\GC11\DATA\042903\0429F021.D	04/29/03	23:21
E-CH3-13	K2302793-005	J:\GC11\DATA\042903\0429F022.D	04/29/03	23:39
E-CH3-16	K2302793-008	J:\GC11\DATA\042903\0429F027.D	04/30/03	01:07
E-CH3-14	K2302793-006	J:\GC11\DATA\051403\0514F006.D	05/14/03	19:13
E-CH3-15	K2302793-007	J:\GC11\DATA\051403\0514F007.D	05/14/03	19:31
E-CH3-17	K2302793-009	J:\GC11\DATA\051403\0514F008.D	05/14/03	19:49

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/16/2003
Sample Matrix:	Water	**Date Analyzed:**	04/26/2003
		Time Analyzed:	03:18

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\042503\0425F026.D
Lab Code:	KWG0305223-3	**Instrument ID:**	GC11
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0305223

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305223-4	J:\GC11\DATA\042503\0425F025.D	04/26/03	03:00
E-CH3-9	K2302793-001	J:\GC11\DATA\042503\0425F027.D	04/26/03	03:36
E-CH3-9MS	KWG0305223-1	J:\GC11\DATA\042503\0425F028.D	04/26/03	03:54
E-CH3-9DMS	KWG0305223-2	J:\GC11\DATA\042503\0425F029.D	04/26/03	04:12
E-CH3-10	K2302793-002	J:\GC11\DATA\042503\0425F032.D	04/26/03	05:06
E-CH3-12	K2302793-004	J:\GC11\DATA\042503\0425F034.D	04/26/03	05:42
E-CH3-11	K2302793-003	J:\GC11\DATA\042903\0429F021.D	04/29/03	23:21
E-CH3-13	K2302793-005	J:\GC11\DATA\042903\0429F022.D	04/29/03	23:39
E-CH3-16	K2302793-008	J:\GC11\DATA\042903\0429F027.D	04/30/03	01:07
E-CH3-14	K2302793-006	J:\GC11\DATA\051403\0514F006.D	05/14/03	19:13
E-CH3-15	K2302793-007	J:\GC11\DATA\051403\0514F007.D	05/14/03	19:31
E-CH3-17	K2302793-009	J:\GC11\DATA\051403\0514F008.D	05/14/03	19:49

00112

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D	D	J:\GC11\DATA\042503\0425F105.D
B	J:\GC11\DATA\042503\0425F103.D	E	J:\GC11\DATA\042503\0425F106.D
C	J:\GC11\DATA\042503\0425F104.D	F	J:\GC11\DATA\042503\0425F107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	669	B	50	620	C	100	626	D	500	576	E	1000	588
	F	2000	576												
Tri-n-butyltin	A	10	835	B	50	789	C	100	794	D	500	708	E	1000	729
	F	2000	704												
Di-n-butyltin	A	10	1090	B	50	1050	C	100	975	D	500	895	E	1000	923
	F	2000	895												
n-Butyltin	A	10	1580	B	50	1310	C	100	1350	D	500	1200	E	1000	1250
	F	2000	1210												
Tri-n-propyltin	A	11	562	B	54	569	C	110	595	D	540	539	E	1100	546
	F	2100	532												

Results flagged with an asterisk (*) indicate values outside control criteria.

00113

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	6.0		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	7.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	10.8		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	4.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

00114

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	490	609	634	4	NA	± 30 %	AverageRF
Tri-n-butyltin	480	480	760	752	-1	NA	± 30 %	AverageRF
Di-n-butyltin	480	460	970	934	-4	NA	± 30 %	AverageRF
n-Butyltin	490	470	1320	1260	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00115

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\042503\0425F102.D\0425R102.D	D	J:\GC11\DATA\042503\0425F105.D\0425R105.D
B	J:\GC11\DATA\042503\0425F103.D\0425R103.D	E	J:\GC11\DATA\042503\0425F106.D\0425R106.D
C	J:\GC11\DATA\042503\0425F104.D\0425R104.D	F	J:\GC11\DATA\042503\0425F107.D\0425R107.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	352	B	50	317	C	100	328	D	500	311	E	1000	324
	F	2000	319												
Tri-n-butyltin	A	10	425	B	50	400	C	100	419	D	500	393	E	1000	406
	F	2000	389												
Di-n-butyltin	A	10	553	B	50	500	C	100	520	D	500	490	E	1000	510
	F	2000	485												
n-Butyltin	A	10	631	B	50	613	C	100	674	D	500	623	E	1000	648
	F	2000	615												
Tri-n-propyltin	A	11	296	B	54	289	C	110	290	D	540	280	E	1100	291
	F	2100	286												

Results flagged with an asterisk (*) indicate values outside control criteria.

00116

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/25/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2579
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.4		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.7		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	1.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

00117

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/25/2003
Date Analyzed: 04/25/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2579
Units: ng/ml

File ID: J:\GC11\DATA\042503\0425F108.D\0425R108.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	325	326	0	NA	± 30 %	AverageRF
Tri-n-butyltin	480	450	405	378	-7	NA	± 30 %	AverageRF
Di-n-butyltin	480	450	510	479	-6	NA	± 30 %	AverageRF
n-Butyltin	490	490	634	634	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00118

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\051403\0514F004.D	D	J:\GC11\DATA\051403\0514F007.D
B	J:\GC11\DATA\051403\0514F005.D	E	J:\GC11\DATA\051403\0514F008.D
C	J:\GC11\DATA\051403\0514F006.D	F	J:\GC11\DATA\051403\0514F009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	536	B	50	528	C	100	542	D	500	516	E	1000	571
	F	2000	625												
Tri-n-butyltin	A	10	688	B	50	659	C	100	673	D	500	636	E	1000	702
	F	2000	748												
Di-n-butyltin	A	10	839	B	50	818	C	100	837	D	500	799	E	1000	884
	F	2000	950												
n-Butyltin	A	10	1080	B	50	1130	C	100	1120	D	500	1070	E	1000	1190
	F	2000	1260												
Tri-n-propyltin	A	11	472	B	54	483	C	110	479	D	540	468	E	1100	511
	F	2100	551												

Results flagged with an asterisk (*) indicate values outside control criteria.

00119

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	7.2		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	5.6		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	6.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	6.4		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 05/14/2003
Date Analyzed: 05/14/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2621
Units: ng/ml

File ID: J:\GC11\DATA\051403\0514F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	520	553	614	11	NA	± 30 %	AverageRF
Tri-n-butyltin	480	500	684	708	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	510	854	907	6	NA	± 30 %	AverageRF
n-Butyltin	490	540	1140	1250	10	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00121

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\051403\0514F004.D\0514R004.D	D	J:\GC11\DATA\051403\0514F007.D\0514R007.D
B	J:\GC11\DATA\051403\0514F005.D\0514R005.D	E	J:\GC11\DATA\051403\0514F008.D\0514R008.D
C	J:\GC11\DATA\051403\0514F006.D\0514R006.D	F	J:\GC11\DATA\051403\0514F009.D\0514R009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	243	B	50	258	C	100	262	D	500	259	E	1000	288
	F	2000	314												
Tri-n-butyltin	A	10	325	B	50	343	C	100	339	D	500	337	E	1000	373
	F	2000	403												
Di-n-butyltin	A	10	446	B	50	418	C	100	431	D	500	422	E	1000	474
	F	2000	515												
n-Butyltin	A	10	550	B	50	556	C	100	562	D	500	553	E	1000	616
	F	2000	669												
Tri-n-propyltin	A	11	238	B	54	244	C	110	237	D	540	227	E	1100	251
	F	2100	272												

Results flagged with an asterisk (*) indicate values outside control criteria.

00122

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 05/14/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2621
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	9.5		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	8.3		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	8.3		≤ 20
n-Butyltin	MS	AverageRF	% RSD	8.3		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

00123

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 05/14/2003
Date Analyzed: 05/14/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2621
Units: ng/ml

File ID: J:\GC11\DATA\051403\0514F010.D\0514R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	530	270	307	14	NA	± 30 %	AverageRF
Tri-n-butyltin	480	500	353	367	4	NA	± 30 %	AverageRF
Di-n-butyltin	480	490	451	468	4	NA	± 30 %	AverageRF
n-Butyltin	490	520	585	620	6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00124

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F017.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	566	-7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	713	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	970	920	-5	NA	± 25 %	AverageRF
n-Butyltin	500	450	1320	1200	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	557	546	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00125

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F017.D\0425R017.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	316	-3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	397	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	504	-1	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	649	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	289	282	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00126

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F031.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	609	588	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	760	717	-6	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	874	-10	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1160	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	510	557	534	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F031.D\0425R031.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	325	337	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	405	426	5	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	510	536	5	NA	± 25 %	AverageRF
n-Butyltin	500	540	634	688	9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	560	289	305	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00128

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F045.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	609	536	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	760	679	-11	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	970	866	-11	NA	± 25 %	AverageRF
n-Butyltin	500	430	1320	1130	-14	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	557	497	-11	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00129

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/26/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305835
		Units:	ng/ml
File ID:	J:\GC11\DATA\042503\0425F045.D\0425R045.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	325	339	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	405	430	6	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	510	545	7	NA	± 25 %	AverageRF
n-Butyltin	500	550	634	696	10	NA	± 25 %	AverageRF
Tri-n-propyltin	540	570	289	306	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305965
		Units:	ng/ml
File ID:	J:\GC11\DATA\042903\0429F014.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	430	609	520	-15	NA	± 25 %	AverageRF
Tri-n-butyltin	500	430	760	648	-15	NA	± 25 %	AverageRF
Di-n-butyltin	500	410	970	788	-19	NA	± 25 %	AverageRF
n-Butyltin	500	410	1320	1080	-18	NA	± 25 %	AverageRF
Tri-n-propyltin	540	460	557	482	-14	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/29/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305965
		Units:	ng/ml
File ID:	J:\GC11\DATA\042903\0429F014.D\0429R014.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	325	313	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	405	399	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	510	497	-3	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	643	1	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	289	290	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00132

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305965
		Units:	ng/ml
File ID:	J:\GC11\DATA\042903\0429F026.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	609	557	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	460	760	694	-9	NA	± 25 %	AverageRF
Di-n-butyltin	500	430	970	843	-13	NA	± 25 %	AverageRF
n-Butyltin	500	440	1320	1150	-12	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	557	502	-10	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00133

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	04/25/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2579
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0305965
		Units:	ng/ml
File ID:	J:\GC11\DATA\042903\0429F026.D\0429R026.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	325	321	-1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	405	413	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	510	508	0	NA	± 25 %	AverageRF
n-Butyltin	500	510	634	648	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	289	292	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00134

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Analyzed: 04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

File ID: J:\GC11\DATA\042903\0429F031.D

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml
Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	440	609	537	-12	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	760	686	-10	NA	± 25 %	AverageRF
Di-n-butyltin	500	430	970	841	-13	NA	± 25 %	AverageRF
n-Butyltin	500	420	1320	1110	-15	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	557	503	-10	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00135

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Analyzed: 04/30/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT3-15-A

Calibration Date: 04/25/2003
Calibration ID: CAL2579
Analysis Lot: KWG0305965
Units: ng/ml

File ID: J:\GC11\DATA\042903\0429F031.D\0429R031.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	510	325	332	2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	405	405	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	510	515	1	NA	± 25 %	AverageRF
n-Butyltin	500	520	634	659	4	NA	± 25 %	AverageRF
Tri-n-propyltin	540	570	289	309	7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	05/14/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2621
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0306913
		Units:	ng/ml
File ID:	J:\GC11\DATA\051403\0514F002.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	553	530	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	684	661	-3	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	854	829	-3	NA	± 25 %	AverageRF
n-Butyltin	500	480	1140	1100	-3	NA	± 25 %	AverageRF
Tri-n-propyltin	540	520	494	481	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00137

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	05/14/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2621
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0306913
		Units:	ng/ml
File ID:	J:\GC11\DATA\051403\0514F002.D\0514R002.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	270	259	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	353	336	-5	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	451	421	-7	NA	± 25 %	AverageRF
n-Butyltin	500	470	585	545	-7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	245	229	-6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00138

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	05/14/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2621
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0306913
		Units:	ng/ml
File ID:	J:\GC11\DATA\051403\0514F021.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	510	553	563	2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	520	684	705	3	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	870	2	NA	± 25 %	AverageRF
n-Butyltin	500	510	1140	1170	3	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	494	505	2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00139

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	05/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	05/14/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2621
CCV Standard ID:	OT3-15-A	**Analysis Lot:**	KWG0306913
		Units:	ng/ml
File ID:	J:\GC11\DATA\051403\0514F021.D\0514R021.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	570	270	307	13	NA	± 25 %	AverageRF
Tri-n-butyltin	500	570	353	402	14	NA	± 25 %	AverageRF
Di-n-butyltin	500	550	451	497	10	NA	± 25 %	AverageRF
n-Butyltin	500	540	585	637	9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	590	245	269	10	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

00140

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F001.D	Instrument Blank	KWG0305835-1	4/25/2003	19:53		4/25/2003	20:05
0425F002.D	Continuing Calibration Verification	KWG0305835-20	4/25/2003	20:10		4/25/2003	20:22
0425F003.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:28		4/25/2003	20:40
0425F004.D	ZZZZZZ	ZZZZZZ	4/25/2003	20:46		4/25/2003	20:58
0425F005.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:04		4/25/2003	21:16
0425F006.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:22		4/25/2003	21:34
0425F007.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:40		4/25/2003	21:52
0425F008.D	ZZZZZZ	ZZZZZZ	4/25/2003	21:57		4/25/2003	22:09
0425F009.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:15		4/25/2003	22:27
0425F010.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:33		4/25/2003	22:45
0425F011.D	ZZZZZZ	ZZZZZZ	4/25/2003	22:51		4/25/2003	23:03
0425F012.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:09		4/25/2003	23:21
0425F013.D	ZZZZZZ	ZZZZZZ	4/25/2003	23:27		4/25/2003	23:39
0425F015.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:02		4/26/2003	00:14
0425F016.D	Instrument Blank	KWG0305835-3	4/26/2003	00:20		4/26/2003	00:32
0425F017.D	Continuing Calibration Verification	KWG0305835-4	4/26/2003	00:38		4/26/2003	00:50
0425F018.D	ZZZZZZ	ZZZZZZ	4/26/2003	00:55		4/26/2003	01:07
0425F019.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:13		4/26/2003	01:25
0425F020.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:31		4/26/2003	01:43
0425F021.D	ZZZZZZ	ZZZZZZ	4/26/2003	01:49		4/26/2003	02:01
0425F022.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:07		4/26/2003	02:19
0425F023.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:24		4/26/2003	02:36
0425F024.D	ZZZZZZ	ZZZZZZ	4/26/2003	02:42		4/26/2003	02:54
0425F025.D	Method Blank	KWG0305223-4	4/26/2003	03:00		4/26/2003	03:12
0425F026.D	Lab Control Sample	KWG0305223-3	4/26/2003	03:18		4/26/2003	03:30
0425F027.D	E-CH3-9	K2302793-001	4/26/2003	03:36		4/26/2003	03:48
0425F028.D	E-CH3-9MS	KWG0305223-1	4/26/2003	03:54		4/26/2003	04:06
0425F029.D	E-CH3-9DMS	KWG0305223-2	4/26/2003	04:12		4/26/2003	04:24
0425F030.D	Instrument Blank	KWG0305835-5	4/26/2003	04:30		4/26/2003	04:42
0425F031.D	Continuing Calibration Verification	KWG0305835-6	4/26/2003	04:48		4/26/2003	05:00
0425F032.D	E-CH3-10	K2302793-002	4/26/2003	05:06		4/26/2003	05:18
0425F034.D	E-CH3-12	K2302793-004	4/26/2003	05:42		4/26/2003	05:54
0425F040.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:29		4/26/2003	07:41
0425F041.D	ZZZZZZ	ZZZZZZ	4/26/2003	07:47		4/26/2003	07:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305835
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0425F042.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:05		4/26/2003	08:17
0425F043.D	ZZZZZZ	ZZZZZZ	4/26/2003	08:24		4/26/2003	08:36
0425F044.D	Instrument Blank	KWG0305835-7	4/26/2003	08:41		4/26/2003	08:53
0425F045.D	Continuing Calibration Verification	KWG0305835-8	4/26/2003	09:00		4/26/2003	09:12
0425F046.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:18		4/26/2003	09:30
0425F047.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:36		4/26/2003	09:48
0425F048.D	ZZZZZZ	ZZZZZZ	4/26/2003	09:54		4/26/2003	10:06
0425F049.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:12		4/26/2003	10:24
0425F050.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:30		4/26/2003	10:42
0425F051.D	ZZZZZZ	ZZZZZZ	4/26/2003	10:48		4/26/2003	11:00
0425F052.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:06		4/26/2003	11:18
0425F053.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:24		4/26/2003	11:36
0425F054.D	ZZZZZZ	ZZZZZZ	4/26/2003	11:42		4/26/2003	11:54
0425F055.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:00		4/26/2003	12:12
0425F056.D	Instrument Blank	KWG0305835-9	4/26/2003	12:18		4/26/2003	12:30
0425F057.D	Continuing Calibration Verification	KWG0305835-10	4/26/2003	12:36		4/26/2003	12:48
0425F058.D	ZZZZZZ	ZZZZZZ	4/26/2003	12:54		4/26/2003	13:06
0425F059.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:12		4/26/2003	13:24
0425F060.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:30		4/26/2003	13:42
0425F061.D	ZZZZZZ	ZZZZZZ	4/26/2003	13:47		4/26/2003	13:59
0425F062.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:05		4/26/2003	14:17
0425F063.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:23		4/26/2003	14:35
0425F064.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:41		4/26/2003	14:53
0425F065.D	ZZZZZZ	ZZZZZZ	4/26/2003	14:59		4/26/2003	15:11
0425F066.D	ZZZZZZ	ZZZZZZ	4/26/2003	15:17		4/26/2003	15:29
0425F072.D	Instrument Blank	KWG0305835-11	4/26/2003	17:05		4/26/2003	17:17
0425F073.D	Continuing Calibration Verification	KWG0305835-12	4/26/2003	17:23		4/26/2003	17:35

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0305965
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0429F001.D	Instrument Blank	KWG0305965-1	4/29/2003	17:28		4/29/2003	17:40
0429F002.D	Continuing Calibration Verification	KWG0305965-2	4/29/2003	17:46		4/29/2003	17:58
0429F003.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:04		4/29/2003	18:16
0429F004.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:21		4/29/2003	18:33
0429F005.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:39		4/29/2003	18:51
0429F006.D	ZZZZZZ	ZZZZZZ	4/29/2003	18:57		4/29/2003	19:09
0429F007.D	ZZZZZZ	ZZZZZZ	4/29/2003	19:14		4/29/2003	19:26
0429F008.D	ZZZZZZ	ZZZZZZ	4/29/2003	19:32		4/29/2003	19:44
0429F009.D	ZZZZZZ	ZZZZZZ	4/29/2003	19:50		4/29/2003	20:02
0429F010.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:07		4/29/2003	20:19
0429F011.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:25		4/29/2003	20:37
0429F012.D	ZZZZZZ	ZZZZZZ	4/29/2003	20:43		4/29/2003	20:55
0429F013.D	Instrument Blank	KWG0305965-3	4/29/2003	21:00		4/29/2003	21:12
0429F014.D	Continuing Calibration Verification	KWG0305965-4	4/29/2003	21:18		4/29/2003	21:30
0429F015.D	ZZZZZZ	ZZZZZZ	4/29/2003	21:36		4/29/2003	21:48
0429F016.D	ZZZZZZ	ZZZZZZ	4/29/2003	21:53		4/29/2003	22:05
0429F017.D	ZZZZZZ	ZZZZZZ	4/29/2003	22:11		4/29/2003	22:23
0429F018.D	ZZZZZZ	ZZZZZZ	4/29/2003	22:28		4/29/2003	22:40
0429F019.D	ZZZZZZ	ZZZZZZ	4/29/2003	22:46		4/29/2003	22:58
0429F020.D	ZZZZZZ	ZZZZZZ	4/29/2003	23:04		4/29/2003	23:16
0429F021.D	E-CH3-11	K2302793-003	4/29/2003	23:21		4/29/2003	23:33
0429F022.D	E-CH3-13	K2302793-005	4/29/2003	23:39		4/29/2003	23:51
0429F024.D	ZZZZZZ	ZZZZZZ	4/30/2003	00:14		4/30/2003	00:26
0429F025.D	Instrument Blank	KWG0305965-5	4/30/2003	00:32		4/30/2003	00:44
0429F026.D	Continuing Calibration Verification	KWG0305965-6	4/30/2003	00:50		4/30/2003	01:02
0429F027.D	E-CH3-16	K2302793-008	4/30/2003	01:07		4/30/2003	01:19
0429F030.D	Instrument Blank	KWG0305965-7	4/30/2003	02:00		4/30/2003	02:12
0429F031.D	Continuing Calibration Verification	KWG0305965-8	4/30/2003	02:18		4/30/2003	02:30

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0306913
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0514F001.D	Instrument Blank	KWG0306913-1	5/14/2003	17:45		5/14/2003	17:57
0514F002.D	Continuing Calibration Verification	KWG0306913-2	5/14/2003	18:02		5/14/2003	18:14
0514F003.D	ZZZZZZ	ZZZZZZ	5/14/2003	18:20		5/14/2003	18:32
0514F004.D	ZZZZZZ	ZZZZZZ	5/14/2003	18:38		5/14/2003	18:50
0514F005.D	ZZZZZZ	ZZZZZZ	5/14/2003	18:56		5/14/2003	19:08
0514F006.D	E-CH3-14	K2302793-006	5/14/2003	19:13		5/14/2003	19:25
0514F007.D	E-CH3-15	K2302793-007	5/14/2003	19:31		5/14/2003	19:43
0514F008.D	E-CH3-17	K2302793-009	5/14/2003	19:49		5/14/2003	20:01
0514F020.D	Instrument Blank	KWG0306913-3	5/14/2003	23:21		5/14/2003	23:33
0514F021.D	Continuing Calibration Verification	KWG0306913-4	5/14/2003	23:38		5/14/2003	23:50

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY
Sample Matrix: Water

Service Request: K2302793
Date Extracted: 04/16/2003

Extraction Prep Log
Butyltins

Extraction Method: EPA 3520
Analysis Method: Krone

Extraction Lot: KWG0305223
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-9	K2302793-001	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-10	K2302793-002	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-11	K2302793-003	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-12	K2302793-004	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-13	K2302793-005	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-14	K2302793-006	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-15	K2302793-007	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-16	K2302793-008	04/10/03	04/15/03	500ml	0.5ml	NA	
E-CH3-17	K2302793-009	04/10/03	04/15/03	500ml	0.5ml	NA	
Method Blank	KWG0305223-4	NA	NA	500ml	0.5ml	NA	
E-CH3-9MS	KWG0305223-1	04/10/03	04/15/03	250ml	0.5ml	NA	
E-CH3-9DMS	KWG0305223-2	04/10/03	04/15/03	250ml	0.5ml	NA	
Lab Control Sample	KWG0305223-3	NA	NA	500ml	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY
Sample Matrix: Water

Service Request: K2302793
Date Collected: 04/10/2003
Date Received: 04/15/2003
Date Extracted: 04/16/2003

Butyltins

Sample Name: E-CH3-9
Lab Code: K2302793-001
Extraction Method: EPA 3520
Analysis Method: Krone

Units: ug/L
Basis: NA
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
n-Butyltin	0.050	0.0065	0.0090	0.0067	29.3	J	1	04/26/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003
		Date Extracted:	04/16/2003

Butyltins

Sample Name:	E-CH3-15	**Units:**	ug/L
Lab Code:	K2302793-007	**Basis:**	NA
Extraction Method:	EPA 3520	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.050	0.0057	0.018	0.017	5.7	J	1	05/14/03
n-Butyltin	0.050	0.0065	0.019	0.011	53.3	JP	1	05/14/03

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Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH3-9	K2302793-001	04/10/2003	04/15/2003
E-CH3-10	K2302793-002	04/10/2003	04/15/2003
E-CH3-11	K2302793-003	04/10/2003	04/15/2003
E-CH3-12	K2302793-004	04/10/2003	04/15/2003
E-CH3-13	K2302793-005	04/10/2003	04/15/2003
E-CH3-14	K2302793-006	04/10/2003	04/15/2003
E-CH3-15	K2302793-007	04/10/2003	04/15/2003
E-CH3-16	K2302793-008	04/10/2003	04/15/2003
E-CH3-17	K2302793-009	04/10/2003	04/15/2003
E-CH3-9MS	KWG0305288-1	04/10/2003	04/15/2003
E-CH3-9DMS	KWG0305288-2	04/10/2003	04/15/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 5/9/03

Title: SVM Supervisor

00150

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-9	**Units:**	ug/L
Lab Code:	K2302793-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.031**		0.020	0.0032	1	04/17/03	04/21/03	KWG0305288	
2-Methylnaphthalene	**0.0035**	J	0.020	0.0027	1	04/17/03	04/21/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/21/03	KWG0305288	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/21/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/21/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/21/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/21/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/21/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/21/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/21/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/21/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/21/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/21/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/21/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/21/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/21/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/21/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/21/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	51	34-115	04/21/03	Acceptable
Fluorene-d10	40	43-96	04/21/03	Outside Control Limits
Fluoranthene-d10	15	20-131	04/21/03	Outside Control Limits
Terphenyl-d14	33	13-146	04/21/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-10	**Units:**	ug/L
Lab Code:	K2302793-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.017**	J	0.020	0.0032	1	04/17/03	04/21/03	KWG0305288	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/21/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/21/03	KWG0305288	
Acenaphthene	**0.0021**	J	0.020	0.0020	1	04/17/03	04/21/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/21/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/21/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/21/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/21/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/21/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/21/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/21/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/21/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/21/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/21/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/21/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/21/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/21/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/21/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	73	34-115	04/21/03	Acceptable
Fluorene-d10	62	43-96	04/21/03	Acceptable
Fluoranthene-d10	34	20-131	04/21/03	Acceptable
Terphenyl-d14	61	13-146	04/21/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-11	**Units:**	ug/L
Lab Code:	K2302793-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.016**	J	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
2-Methylnaphthalene	**0.0029**	J	0.020	0.0027	1	04/17/03	04/22/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/22/03	KWG0305288	
Acenaphthene	**0.0023**	J	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/22/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/22/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/22/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/22/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/22/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/22/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/22/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/22/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/22/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/22/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	67	34-115	04/22/03	Acceptable
Fluorene-d10	65	43-96	04/22/03	Acceptable
Fluoranthene-d10	46	20-131	04/22/03	Acceptable
Terphenyl-d14	68	13-146	04/22/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-12	**Units:**	ug/L
Lab Code:	K2302793-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.016**	J	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
2-Methylnaphthalene	**0.0030**	J	0.020	0.0027	1	04/17/03	04/22/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/22/03	KWG0305288	
Acenaphthene	**0.0037**	J	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/22/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/22/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/22/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/22/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/22/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/22/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/22/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/22/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/22/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/22/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	61	34-115	04/22/03	Acceptable
Fluorene-d10	57	43-96	04/22/03	Acceptable
Fluoranthene-d10	34	20-131	04/22/03	Acceptable
Terphenyl-d14	55	13-146	04/22/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-13	**Units:**	ug/L
Lab Code:	K2302793-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.025**		0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
2-Methylnaphthalene	**0.0041**	J	0.020	0.0027	1	04/17/03	04/22/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/22/03	KWG0305288	
Acenaphthene	**0.0032**	J	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/22/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/22/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/22/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/22/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/22/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/22/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/22/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/22/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/22/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/22/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	04/22/03	Acceptable
Fluorene-d10	66	43-96	04/22/03	Acceptable
Fluoranthene-d10	38	20-131	04/22/03	Acceptable
Terphenyl-d14	62	13-146	04/22/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-14	**Units:**	ug/L
Lab Code:	K2302793-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.016**	J	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
2-Methylnaphthalene	**0.0037**	J	0.020	0.0027	1	04/17/03	04/22/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/22/03	KWG0305288	
Acenaphthene	**0.0027**	J	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/22/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/22/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/22/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/22/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/22/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/22/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/22/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/22/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/22/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/22/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	04/22/03	Acceptable
Fluorene-d10	70	43-96	04/22/03	Acceptable
Fluoranthene-d10	50	20-131	04/22/03	Acceptable
Terphenyl-d14	69	13-146	04/22/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-15	**Units:**	ug/L
Lab Code:	K2302793-007	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.021**		0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
2-Methylnaphthalene	**0.0034**	J	0.020	0.0027	1	04/17/03	04/22/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/22/03	KWG0305288	
Acenaphthene	**0.0026**	J	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/22/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/22/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/22/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/22/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/22/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/22/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/22/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/22/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/22/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/22/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	04/22/03	Acceptable
Fluorene-d10	68	43-96	04/22/03	Acceptable
Fluoranthene-d10	53	20-131	04/22/03	Acceptable
Terphenyl-d14	77	13-146	04/22/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-16	**Units:**	ug/L
Lab Code:	K2302793-008	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.019**	J	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
2-Methylnaphthalene	**0.0034**	J	0.020	0.0027	1	04/17/03	04/22/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/22/03	KWG0305288	
Acenaphthene	**0.0031**	J	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/22/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/22/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/22/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/22/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/22/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/22/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/22/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/22/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/22/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/22/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	04/22/03	Acceptable
Fluorene-d10	70	43-96	04/22/03	Acceptable
Fluoranthene-d10	48	20-131	04/22/03	Acceptable
Terphenyl-d14	66	13-146	04/22/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	04/10/2003
Sample Matrix:	Water	**Date Received:**	04/15/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-17	**Units:**	ug/L
Lab Code:	K2302793-009	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.024**		0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
2-Methylnaphthalene	**0.0050**	J	0.020	0.0027	1	04/17/03	04/22/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/22/03	KWG0305288	
Acenaphthene	**0.0040**	J	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/22/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/22/03	KWG0305288	
Phenanthrene	**0.0036**	J	0.020	0.0032	1	04/17/03	04/22/03	KWG0305288	
Anthracene	**0.0018**	J	0.020	0.0011	1	04/17/03	04/22/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/22/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/22/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/22/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/22/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/22/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/22/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	04/17/03	04/22/03	KWG0305288	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	04/17/03	04/22/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/22/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	71	34-115	04/22/03	Acceptable
Fluorene-d10	61	43-96	04/22/03	Acceptable
Fluoranthene-d10	30	20-131	04/22/03	Acceptable
Terphenyl-d14	43	13-146	04/22/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0305288-4	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	0.020	0.0032	1	04/17/03	04/21/03	KWG0305288	
2-Methylnaphthalene	ND	U	0.020	0.0027	1	04/17/03	04/21/03	KWG0305288	
Acenaphthylene	ND	U	0.020	0.0018	1	04/17/03	04/21/03	KWG0305288	
Acenaphthene	ND	U	0.020	0.0020	1	04/17/03	04/21/03	KWG0305288	
Dibenzofuran	ND	U	0.020	0.0071	1	04/17/03	04/21/03	KWG0305288	
Fluorene	ND	U	0.020	0.0026	1	04/17/03	04/21/03	KWG0305288	
Phenanthrene	ND	U	0.020	0.0032	1	04/17/03	04/21/03	KWG0305288	
Anthracene	ND	U	0.020	0.0011	1	04/17/03	04/21/03	KWG0305288	
Fluoranthene	ND	U	0.020	0.0024	1	04/17/03	04/21/03	KWG0305288	
Pyrene	ND	U	0.020	0.0023	1	04/17/03	04/21/03	KWG0305288	
Benz(a)anthracene	ND	U	0.020	0.0021	1	04/17/03	04/21/03	KWG0305288	
Chrysene	ND	U	0.020	0.0013	1	04/17/03	04/21/03	KWG0305288	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	04/17/03	04/21/03	KWG0305288	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	04/17/03	04/21/03	KWG0305288	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	04/17/03	04/21/03	KWG0305288	
Indeno(1,2,3-cd)pyrene	**0.0024**	J	0.020	0.0021	1	04/17/03	04/21/03	KWG0305288	
Dibenz(a,h)anthracene	**0.0029**	J	0.020	0.0017	1	04/17/03	04/21/03	KWG0305288	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	04/17/03	04/21/03	KWG0305288	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	80	34-115	04/21/03	Acceptable
Fluorene-d10	76	43-96	04/21/03	Acceptable
Fluoranthene-d10	88	20-131	04/21/03	Acceptable
Terphenyl-d14	103	13-146	04/21/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY
Sample Matrix: Water

Service Request: K2302793

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
E-CH3-9	K2302793-001	51	40 *	15 *	33
E-CH3-10	K2302793-002	73	62	34	61
E-CH3-11	K2302793-003	67	65	46	68
E-CH3-12	K2302793-004	61	57	34	55
E-CH3-13	K2302793-005	74	66	38	62
E-CH3-14	K2302793-006	74	70	50	69
E-CH3-15	K2302793-007	74	68	53	77
E-CH3-16	K2302793-008	74	70	48	66
E-CH3-17	K2302793-009	71	61	30	43
Method Blank	KWG0305288-4	80	76	88	103
E-CH3-9MS	KWG0305288-1	78	72	82	83
E-CH3-9DMS	KWG0305288-2	68	63	71	76
Lab Control Sample	KWG0305288-3	64	60	72	69

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Analyzed: 04/21/2003
Time Analyzed: 18:59

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042103\0421F023.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0305697-2
Analysis Lot: KWG0305697

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	297,515	5.22	167,371	7.54	280,436	10.34
	Upper Limit ==>	595,030	5.72	334,742	8.04	560,872	10.84
	Lower Limit ==>	148,758	4.72	83,686	7.04	140,218	9.84
	ICAL Result ==>	378,810	NA	187,969	NA	268,781	NA
Associated Analyses							
Method Blank	KWG0305288-4	261,385	5.22	135,361	7.54	208,208	10.34
E-CH3-9	K2302793-001	272,497	5.22	141,182	7.54	212,989	10.34
E-CH3-10	K2302793-002	263,871	5.22	139,285	7.54	203,723	10.34
E-CH3-11	K2302793-003	286,979	5.22	148,199	7.53	218,454	10.34
E-CH3-12	K2302793-004	258,794	5.22	133,610	7.53	196,627	10.34
E-CH3-13	K2302793-005	266,216	5.22	140,483	7.53	210,464	10.34
E-CH3-14	K2302793-006	275,407	5.22	149,703	7.53	224,928	10.34
E-CH3-15	K2302793-007	282,843	5.22	151,862	7.54	221,592	10.34
E-CH3-16	K2302793-008	259,168	5.22	136,797	7.53	204,788	10.34
E-CH3-17	K2302793-009	265,269	5.22	143,803	7.53	214,571	10.34
Lab Control Sample	KWG0305288-3	287,480	5.22	152,339	7.54	227,954	10.34
E-CH3-9MS	KWG0305288-1	260,800	5.22	138,743	7.53	207,133	10.34
E-CH3-9DMS	KWG0305288-2	250,918	5.22	128,937	7.53	182,268	10.34

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Analyzed:**	04/21/2003
		Time Analyzed:	18:59

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\042103\0421F023.D	**Lab Code:**	KWG0305697-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0305697
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		`Area	RT	Area	RT
	Results ==>	306,603	16.37	183,110	20.11
	Upper Limit ==>	613,206	16.87	366,220	20.61
	Lower Limit ==>	153,302	15.87	91,555	19.61
	ICAL Result ==>	262,121	NA	129,758	NA
Associated Analyses					
Method Blank	KWG0305288-4	189,938	16.37	96,493	20.11
E-CH3-9	K2302793-001	200,798	16.37	108,405	20.11
E-CH3-10	K2302793-002	198,172	16.37	112,062	20.11
E-CH3-11	K2302793-003	210,680	16.37	116,980	20.10
E-CH3-12	K2302793-004	181,590	16.37	96,139	20.11
E-CH3-13	K2302793-005	205,110	16.37	111,950	20.10
E-CH3-14	K2302793-006	209,759	16.37	112,694	20.11
E-CH3-15	K2302793-007	206,724	16.37	115,545	20.10
E-CH3-16	K2302793-008	198,256	16.37	109,321	20.11
E-CH3-17	K2302793-009	217,980	16.37	118,352	20.11
Lab Control Sample	KWG0305288-3	241,636	16.37	132,780	20.11
E-CH3-9MS	KWG0305288-1	219,456	16.37	124,672	20.10
E-CH3-9DMS	KWG0305288-2	181,952	16.37	95,702	20.11

Results flagged with an asterisk (*) indicate values outside control criteria.

00163

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/22/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH3-9	**Units:**	ug/L
Lab Code:	K2302793-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305288

		E-CH3-9MS KWG0305288-1 Matrix Spike			E-CH3-9DMS KWG0305288-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	0.031	8.08	10.0	81	7.52	10.0	75	30-97	7	30
2-Methylnaphthalene	0.0035	8.11	10.0	81	7.26	10.0	73	33-96	11	30
Acenaphthylene	ND	8.68	10.0	87	7.96	10.0	80	39-104	9	30
Acenaphthene	ND	8.47	10.0	85	7.82	10.0	78	34-99	8	30
Dibenzofuran	ND	8.56	10.0	86	7.76	10.0	78	16-110	10	30
Fluorene	ND	8.78	10.0	88	8.02	10.0	80	36-105	9	30
Phenanthrene	ND	8.53	10.0	85	8.02	10.0	80	31-106	6	30
Anthracene	ND	7.70	10.0	77	7.19	10.0	72	24-111	7	30
Fluoranthene	ND	8.75	10.0	88	7.68	10.0	77	16-121	13	30
Pyrene	ND	7.94	10.0	79	7.32	10.0	73	11-125	8	30
Benz(a)anthracene	ND	6.78	10.0	68	5.40	10.0	54	14-125	23	30
Chrysene	ND	7.97	10.0	80	6.48	10.0	65	16-117	21	30
Benzo(b)fluoranthene	ND	7.34	10.0	73	5.86	10.0	59	16-124	22	30
Benzo(k)fluoranthene	ND	7.88	10.0	79	6.75	10.0	67	14-127	16	30
Benzo(a)pyrene	ND	7.59	10.0	76	6.15	10.0	62	19-126	21	30
Indeno(1,2,3-cd)pyrene	ND	7.23	10.0	72	5.25	10.0	53	10-137	32 *	30
Dibenz(a,h)anthracene	ND	7.61	10.0	76	5.56	10.0	56	16-124	31 *	30
Benzo(g,h,i)perylene	ND	8.14	10.0	81	6.30	10.0	63	15-119	26	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00164

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/22/2003

Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3520C	**Units:**	ug/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0305288

	Lab Control Sample KWG0305288-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	3.49	5.00	70	37-95
2-Methylnaphthalene	3.46	5.00	69	26-110
Acenaphthylene	3.67	5.00	73	44-103
Acenaphthene	3.59	5.00	72	41-97
Dibenzofuran	3.68	5.00	74	17-130
Fluorene	3.81	5.00	76	46-102
Phenanthrene	3.78	5.00	76	47-101
Anthracene	3.42	5.00	68	45-104
Fluoranthene	4.10	5.00	82	51-112
Pyrene	3.71	5.00	74	45-111
Benz(a)anthracene	3.45	5.00	69	50-111
Chrysene	3.85	5.00	77	51-108
Benzo(b)fluoranthene	3.49	5.00	70	54-114
Benzo(k)fluoranthene	3.74	5.00	75	51-117
Benzo(a)pyrene	3.65	5.00	73	51-119
Indeno(1,2,3-cd)pyrene	3.44	5.00	69	43-127
Dibenz(a,h)anthracene	3.62	5.00	72	47-119
Benzo(g,h,i)perylene	3.97	5.00	79	44-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

00165

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/21/2003
		Time Analyzed:	20:46

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\042103\0421F026.D
Lab Code:	KWG0305288-4	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305288

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
E-CH3-9	K2302793-001	J:\MS11\DATA\042103\0421F030.D	04/21/03	23:10
E-CH3-10	K2302793-002	J:\MS11\DATA\042103\0421F031.D	04/21/03	23:46
E-CH3-11	K2302793-003	J:\MS11\DATA\042103\0421F032.D	04/22/03	00:22
E-CH3-12	K2302793-004	J:\MS11\DATA\042103\0421F033.D	04/22/03	00:58
E-CH3-13	K2302793-005	J:\MS11\DATA\042103\0421F034.D	04/22/03	01:34
E-CH3-14	K2302793-006	J:\MS11\DATA\042103\0421F035.D	04/22/03	02:10
E-CH3-15	K2302793-007	J:\MS11\DATA\042103\0421F036.D	04/22/03	02:45
E-CH3-16	K2302793-008	J:\MS11\DATA\042103\0421F037.D	04/22/03	03:21
E-CH3-17	K2302793-009	J:\MS11\DATA\042103\0421F038.D	04/22/03	03:57
Lab Control Sample	KWG0305288-3	J:\MS11\DATA\042103\0421F039.D	04/22/03	04:33
E-CH3-9MS	KWG0305288-1	J:\MS11\DATA\042103\0421F040.D	04/22/03	05:09
E-CH3-9DMS	KWG0305288-2	J:\MS11\DATA\042103\0421F041.D	04/22/03	05:45

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2302793
Project:	Canaveral Harbor 103 Evaluation/NAVY	**Date Extracted:**	04/17/2003
Sample Matrix:	Water	**Date Analyzed:**	04/22/2003
		Time Analyzed:	04:33

Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**File ID:**	J:\MS11\DATA\042103\0421F039.D
Lab Code:	KWG0305288-3	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0305288

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0305288-4	J:\MS11\DATA\042103\0421F026.D	04/21/03	20:46
E-CH3-9	K2302793-001	J:\MS11\DATA\042103\0421F030.D	04/21/03	23:10
E-CH3-10	K2302793-002	J:\MS11\DATA\042103\0421F031.D	04/21/03	23:46
E-CH3-11	K2302793-003	J:\MS11\DATA\042103\0421F032.D	04/22/03	00:22
E-CH3-12	K2302793-004	J:\MS11\DATA\042103\0421F033.D	04/22/03	00:58
E-CH3-13	K2302793-005	J:\MS11\DATA\042103\0421F034.D	04/22/03	01:34
E-CH3-14	K2302793-006	J:\MS11\DATA\042103\0421F035.D	04/22/03	02:10
E-CH3-15	K2302793-007	J:\MS11\DATA\042103\0421F036.D	04/22/03	02:45
E-CH3-16	K2302793-008	J:\MS11\DATA\042103\0421F037.D	04/22/03	03:21
E-CH3-17	K2302793-009	J:\MS11\DATA\042103\0421F038.D	04/22/03	03:57
E-CH3-9MS	KWG0305288-1	J:\MS11\DATA\042103\0421F040.D	04/22/03	05:09
E-CH3-9DMS	KWG0305288-2	J:\MS11\DATA\042103\0421F041.D	04/22/03	05:45

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Analyzed: 04/21/2003
Time Analyzed: 18:37

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\042103\0421F022.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0305697

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	27.7	401792	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	32.0	462912	PASS
70	69	0	2	0.5	2400	PASS
127	198	10	80	41.8	605696	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	58.9	1448448	PASS
199	198	5	9	6.8	98216	PASS
275	198	10	60	32.7	473792	PASS
365	442	1	50	2.3	56584	PASS
441	443	0	100	73.8	372672	PASS
442	442	100	100	100.0	2457600	PASS
443	442	15	24	20.5	504704	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0305697-2	J:\MS11\DATA\042103\0421F023.D	04/21/2003	18:59	
Method Blank	KWG0305288-4	J:\MS11\DATA\042103\0421F026.D	04/21/2003	20:46	
E-CH3-9	K2302793-001	J:\MS11\DATA\042103\0421F030.D	04/21/2003	23:10	
E-CH3-10	K2302793-002	J:\MS11\DATA\042103\0421F031.D	04/21/2003	23:46	
E-CH3-11	K2302793-003	J:\MS11\DATA\042103\0421F032.D	04/22/2003	00:22	
E-CH3-12	K2302793-004	J:\MS11\DATA\042103\0421F033.D	04/22/2003	00:58	
E-CH3-13	K2302793-005	J:\MS11\DATA\042103\0421F034.D	04/22/2003	01:34	
E-CH3-14	K2302793-006	J:\MS11\DATA\042103\0421F035.D	04/22/2003	02:10	
E-CH3-15	K2302793-007	J:\MS11\DATA\042103\0421F036.D	04/22/2003	02:45	
E-CH3-16	K2302793-008	J:\MS11\DATA\042103\0421F037.D	04/22/2003	03:21	
E-CH3-17	K2302793-009	J:\MS11\DATA\042103\0421F038.D	04/22/2003	03:57	
Lab Control Sample	KWG0305288-3	J:\MS11\DATA\042103\0421F039.D	04/22/2003	04:33	
E-CH3-9MS	KWG0305288-1	J:\MS11\DATA\042103\0421F040.D	04/22/2003	05:09	
E-CH3-9DMS	KWG0305288-2	J:\MS11\DATA\042103\0421F041.D	04/22/2003	05:45	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\040203\0402F014.D	G	J:\MS11\DATA\040203\0402F020.D
B	J:\MS11\DATA\040203\0402F015.D	H	J:\MS11\DATA\040203\0402F021.D
C	J:\MS11\DATA\040203\0402F016.D	I	J:\MS11\DATA\040203\0402F022.D
D	J:\MS11\DATA\040203\0402F017.D	J	J:\MS11\DATA\040203\0402F023.D
E	J:\MS11\DATA\040203\0402F018.D	K	J:\MS11\DATA\040203\0402F024.D
F	J:\MS11\DATA\040203\0402F019.D	L	J:\MS11\DATA\040203\0402F025.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.18	B	20	1.12	C	40	1.11	D	100	1.10	E	500	1.02
	F	1000	1.03	G	2000	1.03	H	3000	1.03	I	4000	1.02	J	5000	0.991
	K	8000	0.983	L	10000	0.961									
2-Methylnaphthalene	A	10	0.687	B	20	0.659	C	40	0.687	D	100	0.680	E	500	0.638
	F	1000	0.652	G	2000	0.652	H	3000	0.671	I	4000	0.652	J	5000	0.647
	K	8000	0.642	L	10000	0.627									
Acenaphthylene	A	10	1.72	B	20	1.66	C	40	1.67	D	100	1.66	E	500	1.67
	F	1000	1.74	G	2000	1.78	H	3000	1.82	I	4000	1.81	J	5000	1.76
	K	8000	1.78	L	10000	1.77									
Acenaphthene	A	10	1.12	B	20	1.12	C	40	1.13	D	100	1.12	E	500	1.06
	F	1000	1.09	G	2000	1.09	H	3000	1.11	I	4000	1.10	J	5000	1.07
	K	8000	1.07	L	10000	1.05									
Dibenzofuran	A	10	1.52	B	20	1.52	C	40	1.56	D	100	1.55	E	500	1.45
	F	1000	1.48	G	2000	1.50	H	3000	1.53	I	4000	1.50	J	5000	1.48
	K	8000	1.48	L	10000	1.45									
Fluorene	A	10	1.26	B	20	1.16	C	40	1.22	D	100	1.25	E	500	1.19
	F	1000	1.22	G	2000	1.24	H	3000	1.26	I	4000	1.24	J	5000	1.23
	K	8000	1.21	L	10000	1.19									
Phenanthrene	A	10	1.28	B	20	1.26	C	40	1.22	D	100	1.20	E	500	1.13
	F	1000	1.15	G	2000	1.16	H	3000	1.17	I	4000	1.15	J	5000	1.12
	K	8000	1.12	L	10000	1.11									
Anthracene	A	10	1.07	B	20	1.02	C	40	1.02	D	100	1.02	E	500	1.06
	F	1000	1.08	G	2000	1.12	H	3000	1.14	I	4000	1.14	J	5000	1.13
	K	8000	1.12	L	10000	1.11									
Fluoranthene	A	10	1.31	B	20	1.22	C	40	1.16	D	100	1.16	E	500	1.21
	F	1000	1.17	G	2000	1.18	H	3000	1.23	I	4000	1.24	J	5000	1.24
	K	8000	1.18	L	10000	1.15									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00169

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.43	B	20	1.39	C	40	1.28	D	100	1.22	E	500	1.27
	F	1000	1.29	G	2000	1.22	H	3000	1.30	I	4000	1.26	J	5000	1.18
	K	8000	1.24	L	10000	1.24									
Benz(a)anthracene	A	10	1.41	B	20	1.23	C	40	1.04	D	100	1.04	E	500	1.06
	F	1000	1.02	G	2000	0.966	H	3000	1.03	I	4000	1.06	J	5000	1.01
	K	8000	1.03	L	10000	1.02									
Chrysene	A	10	1.29	B	20	1.23	C	40	1.15	D	100	1.13	E	500	1.07
	F	1000	1.09	G	2000	1.02	H	3000	1.09	I	4000	1.08	J	5000	1.03
	K	8000	1.04	L	10000	1.03									
Benzo(b)fluoranthene	A	10	1.85	B	20	1.88	C	40	1.64	D	100	1.59	E	500	1.65
	F	1000	1.68	G	2000	1.65	H	3000	1.81	I	4000	1.81	J	5000	1.69
	K	8000	1.76	L	10000	1.75									
Benzo(k)fluoranthene	A	10	2.11	B	20	2.03	C	40	1.90	D	100	1.97	E	500	1.87
	F	1000	1.99	G	2000	1.91	H	3000	2.05	I	4000	2.05	J	5000	1.92
	K	8000	1.95	L	10000	1.94									
Benzo(a)pyrene	A	10	1.36	B	20	1.24	C	40	1.08	D	100	1.13	E	500	1.26
	F	1000	1.31	G	2000	1.34	H	3000	1.48	I	4000	1.48	J	5000	1.43
	K	8000	1.51	L	10000	1.51									
Indeno(1,2,3-cd)pyrene	A	10	1.01	B	20	0.911	C	40	0.789	D	100	0.792	E	500	0.783
	F	1000	0.822	G	2000	0.869	H	3000	0.942	I	4000	0.883	J	5000	0.918
	K	8000	1.05	L	10000	1.05									
Dibenz(a,h)anthracene	A	10	1.02	B	20	0.984	C	40	0.906	D	100	0.959	E	500	0.814
	F	1000	0.861	G	2000	0.916	H	3000	0.974	I	4000	0.905	J	5000	0.940
	K	8000	1.07	L	10000	1.08									
Benzo(g,h,i)perylene	A	10	1.43	B	20	1.29	C	40	1.13	D	100	1.08	E	500	0.987
	F	1000	1.07	G	2000	1.09	H	3000	1.17	I	4000	1.06	J	5000	1.08
	K	8000	1.22	L	10000	1.22									
Biphenyl-d10	A	10	0.721	B	20	0.721	C	40	0.748	D	100	0.751	E	500	0.685
	F	1000	0.713	G	2000	0.707	H	3000	0.725	I	4000	0.699	J	5000	0.701
	K	8000	0.690	L	10000	0.674									
Fluorene-d10	A	10	1.14	B	20	1.07	C	40	1.07	D	100	1.06	E	500	1.00
	F	1000	1.03	G	2000	1.04	H	3000	1.06	I	4000	1.04	J	5000	1.03
	K	8000	1.02	L	10000	0.997									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00170

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Fluoranthene-d10	A	10	0.954	B	20	0.952	C	40	0.959	D	100	1.01	E	500	1.04
	F	1000	1.01	G	2000	1.00	H	3000	1.05	I	4000	1.06	J	5000	1.08
	K	8000	1.02	L	10000	1.01									
Terphenyl-d14	A	10	1.02	B	20	1.11	C	40	1.04	D	100	0.945	E	500	0.895
	F	1000	0.899	G	2000	0.834	H	3000	0.877	I	4000	0.865	J	5000	0.809
	K	8000	0.848	L	10000	0.834									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00171

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2533
Instrument ID: MS11

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.2		≤ 15	1.05		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.0		≤ 15	0.658		0.01
Acenaphthylene	MS	AverageRF	% RSD	3.5		≤ 15	1.74		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.3		≤ 15	1.50		0.01
Fluorene	MS	AverageRF	% RSD	2.5		≤ 15	1.22		0.01
Phenanthrene	MS	AverageRF	% RSD	4.8		≤ 15	1.17		0.01
Anthracene	MS	AverageRF	% RSD	4.4		≤ 15	1.09		0.01
Fluoranthene	MS	AverageRF	% RSD	4.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	5.6		≤ 15	1.28		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.3		≤ 15	1.08		0.01
Chrysene	MS	AverageRF	% RSD	7.5		≤ 15	1.10		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.4		≤ 15	1.73		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.7		≤ 15	1.98		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.9		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	10.8		≤ 15	0.902		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	8.3		≤ 15	0.952		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.6		≤ 15	1.15		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	3.3		≤ 15	0.711		0.01
Fluorene-d10	SURR	AverageRF	% RSD	3.6		≤ 15	1.05		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.2		≤ 15	1.01		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	10.4		≤ 15	0.915		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00172

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Calibration Date: 04/02/2003
Date Analyzed: 04/03/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2533
Units: ng/ml

File ID: J:\MS11\DATA\040303\0403G003.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.05	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.658	0.629	-4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2000	1.74	1.73	-1	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.09	1.11	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.50	1.51	1	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.22	1.22	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	1.17	1.14	-3	NA	± 20 %	AverageRF
Anthracene	2000	2000	1.09	1.09	0	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.28	1.28	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	1.08	1.01	-6	NA	± 20 %	AverageRF
Chrysene	2000	2000	1.10	1.10	0	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	1.73	1.74	0	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.98	2.09	6	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	1.34	1.39	4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.902	0.845	-6	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	1900	0.952	0.908	-5	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.15	1.09	-5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00173

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793
Date Analyzed: 04/21/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 04/02/2003
Calibration ID: CAL2533
Analysis Lot: KWG0305697
Units: ng/ml

File ID: J:\MS11\DATA\042103\0421F023.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.05	1.09	4	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.658	0.682	4	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.74	1.81	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.09	1.13	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.50	1.58	5	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.22	1.28	5	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.17	1.09	-7	NA	± 20 %	AverageRF
Anthracene	2000	1900	0.01	1.09	1.06	-3	NA	± 20 %	AverageRF
Fluoranthene	2000	2000	0.01	1.20	1.21	1	NA	± 20 %	AverageRF
Pyrene	2000	1700	0.01	1.28	1.10	-14	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.08	0.955	-11	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.10	1.03	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1700	0.01	1.73	1.46	-15	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1800	0.01	1.98	1.78	-10	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.26	-6	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.902	0.868	-4	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.952	0.934	-2	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.14	-1	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2100	0.01	0.711	0.754	6	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.05	1.05	0	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.01	0.981	-3	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	0.915	0.788	-14	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

00174

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY

Service Request: K2302793

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0305697
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0421F022.D	GC/MS Tuning - Decafluorotriphenyl	KWG0305697-1	4/21/2003	18:37		4/21/2003	18:50
0421F023.D	Continuing Calibration Verification	KWG0305697-2	4/21/2003	18:59		4/21/2003	19:25
0421F025.D	Instrument Blank	KWG0305697-3	4/21/2003	20:11		4/21/2003	20:37
0421F026.D	Method Blank	KWG0305288-4	4/21/2003	20:46		4/21/2003	21:12
0421F027.D	ZZZZZZ	ZZZZZZ	4/21/2003	21:22		4/21/2003	21:48
0421F030.D	E-CH3-9	K2302793-001	4/21/2003	23:10		4/21/2003	23:36
0421F031.D	E-CH3-10	K2302793-002	4/21/2003	23:46		4/22/2003	00:12
0421F032.D	E-CH3-11	K2302793-003	4/22/2003	00:22		4/22/2003	00:48
0421F033.D	E-CH3-12	K2302793-004	4/22/2003	00:58		4/22/2003	01:24
0421F034.D	E-CH3-13	K2302793-005	4/22/2003	01:34		4/22/2003	02:00
0421F035.D	E-CH3-14	K2302793-006	4/22/2003	02:10		4/22/2003	02:36
0421F036.D	E-CH3-15	K2302793-007	4/22/2003	02:45		4/22/2003	03:11
0421F037.D	E-CH3-16	K2302793-008	4/22/2003	03:21		4/22/2003	03:47
0421F038.D	E-CH3-17	K2302793-009	4/22/2003	03:57		4/22/2003	04:23
0421F039.D	Lab Control Sample	KWG0305288-3	4/22/2003	04:33		4/22/2003	04:59
0421F040.D	E-CH3-9MS	KWG0305288-1	4/22/2003	05:09		4/22/2003	05:35
0421F041.D	E-CH3-9DMS	KWG0305288-2	4/22/2003	05:45		4/22/2003	06:11
0421F042.D	ZZZZZZ	ZZZZZZ	4/22/2003	06:21		4/22/2003	06:47

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

00175

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation/NAVY
Sample Matrix: Water

Service Request: K2302793
Date Extracted: 04/17/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0305288
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH3-9	K2302793-001	04/10/03	04/15/03	1030ml	1ml	NA	
E-CH3-10	K2302793-002	04/10/03	04/15/03	1050ml	1ml	NA	
E-CH3-11	K2302793-003	04/10/03	04/15/03	1030ml	1ml	NA	
E-CH3-12	K2302793-004	04/10/03	04/15/03	1050ml	1ml	NA	
E-CH3-13	K2302793-005	04/10/03	04/15/03	1040ml	1ml	NA	
E-CH3-14	K2302793-006	04/10/03	04/15/03	1030ml	1ml	NA	
E-CH3-15	K2302793-007	04/10/03	04/15/03	1030ml	1ml	NA	
E-CH3-16	K2302793-008	04/10/03	04/15/03	1040ml	1ml	NA	
E-CH3-17	K2302793-009	04/10/03	04/15/03	1040ml	1ml	NA	
Method Blank	KWG0305288-4	NA	NA	1000ml	1ml	NA	
E-CH3-9MS	KWG0305288-1	04/10/03	04/15/03	500ml	1ml	NA	
E-CH3-9DMS	KWG0305288-2	04/10/03	04/15/03	500ml	1ml	NA	
Lab Control Sample	KWG0305288-3	NA	NA	1000ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH03-19	5/14/03	0910	marine sed	1 Gallon Glass	2	Comp + Elut.		Please composite the 2 Gal.
E-CH03-20	↓	0650	↓	↓	22	↓		Please composite the 22 Gal
E-CH03-21	↓	0725	↓	↓	1	↓		Please composite samples
E-CH03-22	↓	0745	↓	↓	1	↓		E-CH03-21 + E-CH03-22
Basin Water	↓	0955	salt water	↓	14	For Elut.		
								Please produce elutriates
								for Columbia and
								Composite for MACTEC

Samples Relinquished by: CTG Containers via UPS sealed boxes
Date: 03/29/03 Time: Approx 1100
Samples Relinquished by: [signature]
Date: 5/14/03 Time: 1610

Received by: Jeff - (Receptionist)
Date: 03/29/03 Time: Approx 1100
Received by: [signature]
Date: 5/14/03 Time: 1610

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH03-20	5/14/03	0650	marine sed	coolers/lined	2	Per contract		

Samples Relinquished by: [illegible]
Date: 5/16/03 Time: 1250
Samples Relinquished by: [illegible]
Date: 5/16/03 Time: 1300

Received by: [illegible]
Date: 5/16/03 Time: 1250
Received by: [illegible]
Date: 5/16/03 Time: 1300

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 20, 2003 Service Request No: K2303707

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on May 17, 2003. For your reference, these analyses have been assigned our service request number K2303707.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Received:**	5/17/03
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 5/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

Several alternative procedures were used due to difficulties encountered that were primarily related to the associated elutriate samples. Arsenic was analyzed using EPA Method 7062 (Hydride/AAS). Although the Reductive Precipitation/ICP-MS procedure performs very well in typical seawater and other complex salt matrices, an interference was observed in some of the elutriate samples. Therefore, all samples were analyzed by Hydride/AAS.

No other anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of these samples were observed.

Organotin Compounds

Sample Notes and Discussion:
Sample E-CH03-20 was initially analyzed within the recommended holding time, but appeared to have been inadvertently spiked with the CAS/Kelso butyltin matrix spike solution. Upon discovery of the apparent anomaly, a re-extraction was performed on a hydrochloric acid (HCl) preserved portion of the sample. Analysis of butyltins is routinely performed on unpreserved sample. However, the initial step in the extraction of butyltins is to acidify the sample to pH< 2 with HCl. This re-extraction was performed past the recommended holding time. The results confirmed the suspected error associated with the original analysis. The results of the reanalysis for this elutriate are consistent with the results for the bulk sediment from which the elutriate was generated. These results have been reported with qualifying footnotes indicating the holding time violation.

No other anomalies associated with the analysis of these samples were observed.

Approved by T. Clk **Date** 6/20/03

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL2628: Pentachlorophenol, Anthracene, Carbazole, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, and Dibenz(a,h)anthracene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 9.2%. The calibration meets the alternative evaluation criteria.

The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL2672: Indeno(1,2,3-cd)pyrene, and Dibenz(a,h)anthracene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.5%. The calibration meets the alternative evaluation criteria.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 6/20/03

Chain of Custody Documentation

ANAMAR Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody

K2303707

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH03-19	5/14/03	0910	marine sed/silt	various	2/7	Per Contract		Please remember to include sulfides as this parameter was not included in the original contract.
E-CH03-20	↓	0650	↓	↓	↓	↓		
E-CH03-21	↓	0725	↓	↓	↓	↓		
E-CH03-22	↓	0745	↓	↓	↓	↓		

Samples Relinquished by: [signature]
Date: 5/16/03 Time: 1535
Samples Relinquished by: [signature]
Date: ~~1615~~ 5/16 Time: 1605 Fed Ex Sat Delivery

Received by: [signature]
Date: 5/16/03 Time: 1535
Received by: [signature]
Date: 5/17/03 Time: 0900

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client ALAMAR Work Order K23 03707

Cooler received on 5/17/03 and opened on 5/17/03 by FA

1. Were custody seals on outside of cooler? (Y) N
   If yes, how many and where? 1 float
2. Were seals intact and signature & date correct? 791383875638 (Y) N
3. Is the shipper's airbill available and filed? If no, record airbill number: 791383875708 Y (N)
4. COC #
   Temperature of cooler(s) upon receipt: 3.2 3.7
   Temperature Blank: 4.2 3.1
5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present bubble wrap, inserts
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (Y) N
9. Did all bottle labels and tags agree with custody papers? (Y) (N)
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? (Y) N

Explain any discrepancies: Samples E-CH03-21 & 22 are combined as one sample for Sol. HgO

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

CRFREV.DOC3/5/2003

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Water	**Date Received:**	05/17/03

Ammonia as Nitrogen

Prep Method:	NONE	Units:	mg/L (ppm)
Analysis Method:	350.1	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303707-001	0.05	0.03	1	NA	05/19/03	1.36	
E-CH03-20	K2303707-002	0.5	0.3	10	NA	05/19/03	12.2	
E-CH03-21/22	K2303707-003	0.25	0.15	5	NA	05/19/03	7.44	
Method Blank	K2303707-MB	0.05	0.03	1	NA	05/19/03	ND	
Method Blank	K2303707-MB	0.05	0.03	1	NA	05/19/03	ND	

Approved By: _____ Date: 6/3/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Collected: 05/14/03
Date Received: 05/17/03
Date Extracted: NA
Date Analyzed: 05/19/03

Duplicate Summary
Inorganic Parameters

Sample Name: E-CH03-20
Lab Code: K2303707-002DUP
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	NONE	350.1	0.05	12.2	12.2	12.2	< 1	

Approved By: _____ Date: 6/3/03

DUP/020597p

03707WET.BR1 - DUP 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Water	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/19/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH03-20	Units:	mg/L (ppm)
Lab Code:	K2303707-002MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1	0.05	20.0	12.2	31.9	99	75-125	

Approved By: _____ Date: 6/3/03

MS/020597p

03707WET.BR1 - MS 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/19/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2303707-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1	2.29	2.42	106	85-115	
Ammonia as Nitrogen	NONE	350.1	2.29	2.44	107	85-115	

Approved By: _____ Date: 6/3/03

LCS/020597p

03707WET.BR1 - LCS 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Collected: NA
Date Received: NA
Date Analyzed: 05/19/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 8 Result	2.00	1.95	98
CCV 9 Result	2.00	1.94	97
CCV 1 Result	2.00	1.99	100
CCV 2 Result	2.00	2.00	100

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 8 Result	0.05	ND
CCB 9 Result	0.05	ND
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Collected: 05/14/03
Date Received: 05/17/03

Cyanide, Total

Prep Method: NONE
Analysis Method: 335.2
Test Notes:

Units: mg/L (ppm)
Basis: NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303707-001	0.01	0.003	1	NA	05/23/03	ND	
E-CH03-20	K2303707-002	0.01	0.003	1	NA	05/23/03	ND	
E-CH03-21/22	K2303707-003	0.01	0.003	1	NA	05/23/03	ND	
Method Blank	K2303707-MB	0.01	0.003	1	NA	05/23/03	ND	

Approved By: _____ Date: 6/3/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Water	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/23/03

Duplicate Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/L (ppm)
Lab Code:	K2303707-001DUP	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	NONE	335.2	0.01	ND	ND	ND	-	

Approved By: _____ Date: 6/3/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Water	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/23/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/L (ppm)
Lab Code:	K2303707-001MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	335.2	0.01	0.10	ND	0.09	90	75-125	

Approved By: _____ Date: 6/3/03

MS/020597p

03707WET.BR2 - MS 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/23/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2303707-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	335.2	0.75	0.75	100	85-115	

Approved By: _____ Date: 6/3/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/23/03

Cyanide, Total
EPA Method 335.2
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 5 Result	100	102	102
CCV 6 Result	100	90	90

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 5 Result	10	ND
CCB 6 Result	10	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Collected: 05/14/03
Date Received: 05/17/03

Sulfide

Prep Method: NONE
Analysis Method: 376.2
Test Notes:

Units: mg/L (ppm)
Basis: NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303707-001	0.05	0.004	1	NA	05/20/03	ND	
E-CH03-20	K2303707-002	0.05	0.004	1	NA	05/20/03	ND	
E-CH03-21/22	K2303707-003	0.05	0.004	1	NA	05/20/03	ND	
Method Blank	K2303707-MB	0.05	0.004	1	NA	05/20/03	ND	

Approved By: _____ Date: 6/3/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Collected: 05/14/03
Date Received: 05/17/03
Date Extracted: NA
Date Analyzed: 05/20/03

Duplicate Summary
Inorganic Parameters

Sample Name: E-CH03-19
Lab Code: K2303707-001DUP
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide	NONE	376.2	0.05	ND	ND	ND	-	

Approved By: _____ Date: 6/3/03

DUP/020597p

03707WET.BR3 - DUP 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Water	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/20/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/L (ppm)
Lab Code:	K2303707-001MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide	NONE	376.2	0.05	1.19	ND	1.07	90	75-125	

Approved By: _____ Date: 6/3/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/20/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2303707-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide	NONE	376.2	1.19	1.19	100	85-115	

Approved By: _____ Date: 6/3/03

LCS/020597p

03707WET.BR3 - LCS 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/20/03

Sulfide
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	1.19	1.18	99
CCV 3 Result	1.19	1.18	99
CCV 4 Result	1.19	1.17	98

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	0.05	ND
CCB 3 Result	0.05	ND
CCB 4 Result	0.05	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Collected: 05/14/03
Date Received: 05/17/03

Carbon, Total Organic

Prep Method: NONE
Analysis Method: 415.1
Test Notes:

Units: mg/L (ppm)
Basis: NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303707-001	1.0	0.4	2	NA	05/29/03	7.5	
E-CH03-20	K2303707-002	1.0	0.4	2	NA	05/29/03	7.1	
E-CH03-21/22	K2303707-003	1.0	0.4	2	NA	05/29/03	6.5	
Method Blank	K2303707-MB	0.5	0.2	1	NA	05/29/03	ND	

Approved By: _____ Date: 6/3/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Water	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/29/03

Duplicate Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/L (ppm)
Lab Code:	K2303707-001DUP	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	NONE	415.1	1.0	7.5	7.0	7.3	7	

Approved By: MJ Smith Date: 6/3/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Water	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/29/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/L (ppm)
Lab Code:	K2303707-001MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	415.1	1.0	50.0	7.5	59.0	103	85-115	

Approved By: MJ Smith Date: 6/3/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/29/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2303707-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	415.1	27.1	27.1	100	85-115	

Approved By: _____ Date: 6/3/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/29/03

Carbon, Total Organic
EPA Method 415.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	25.0	26.0	104
CCV 2 Result	25.0	25.5	102

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.5	ND
CCB 2 Result	0.5	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

Metals

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Sample No.	Lab Sample ID.
E-CH03-19	K2303707-001
E-CH03-20	K2303707-002
E-CH03-20D	K2303707-002D
E-CH03-20S	K2303707-002S
E-CH03-21/22	K2303707-003
Method Blank	K2303707-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 6/13/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2303707
Project No.: NA
Date Collected: 05/14/03
Project Name: Canaveral Harbor 103 Evaluation
Date Received: 05/17/03
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: E-CH03-19
Lab Code: K2303707-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.60	1	5/29/03	6/5/03	0.60	U	
Arsenic	7062	4.0	2.0	8	5/29/03	6/4/03	47.6		
Cadmium	200.8	0.04	0.01	1	5/29/03	6/12/03	0.42		
Chromium	200.8	0.40	0.01	1	5/29/03	6/12/03	0.31	B	
Copper	200.8	0.20	0.08	1	5/29/03	6/12/03	0.79		
Lead	200.8	0.040	0.004	1	5/29/03	6/12/03	0.060		
Mercury	7470A	0.2	0.1	1	5/27/03	5/28/03	0.1	U	
Nickel	200.8	0.40	0.01	1	5/29/03	6/12/03	2.32		
Silver	200.8	0.040	0.002	1	5/29/03	6/12/03	0.024	B	
Zinc	200.8	1.0	0.1	1	5/29/03	6/12/03	8.4		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: WATER

Service Request: K2303707
Date Collected: 05/14/03
Date Received: 05/17/03
Units: µG/L
Basis: NA

Sample Name: E-CH03-20
Lab Code: K2303707-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.60	1	5/29/03	6/5/03	0.60	U	
Arsenic	7062	5.0	2.5	10	5/29/03	6/4/03	70.1		
Cadmium	200.8	0.04	0.01	1	5/29/03	6/12/03	0.08		
Chromium	200.8	0.40	0.01	1	5/29/03	6/12/03	0.20	B	
Copper	200.8	0.20	0.08	1	5/29/03	6/12/03	0.47		
Lead	200.8	0.040	0.004	1	5/29/03	6/12/03	0.049		
Mercury	7470A	0.2	0.1	1	5/27/03	5/28/03	0.1	U	
Nickel	200.8	0.40	0.01	1	5/29/03	6/12/03	0.70		
Silver	200.8	0.040	0.002	1	5/29/03	6/12/03	0.016	B	
Zinc	200.8	1.0	0.1	1	5/29/03	6/12/03	3.2		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor 103 Evaluation
Matrix: WATER

Service Request: K2303707
Date Collected: 05/14/03
Date Received: 05/17/03
Units: µG/L
Basis: NA

Sample Name: E-CH03-21/22
Lab Code: K2303707-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.60	1	5/29/03	6/5/03	0.60	U	
Arsenic	7062	4.0	2.0	8	5/29/03	6/4/03	63.5		
Cadmium	200.8	0.04	0.01	1	5/29/03	6/12/03	0.23		
Chromium	200.8	0.40	0.01	1	5/29/03	6/12/03	0.15	B	
Copper	200.8	0.20	0.08	1	5/29/03	6/12/03	0.42		
Lead	200.8	0.040	0.004	1	5/29/03	6/12/03	0.042		
Mercury	7470A	0.2	0.1	1	5/27/03	5/28/03	0.1	U	
Nickel	200.8	0.40	0.01	1	5/29/03	6/12/03	0.55		
Silver	200.8	0.040	0.002	1	5/29/03	6/12/03	0.023	B	
Zinc	200.8	1.0	0.1	1	5/29/03	6/12/03	2.5		

% Solids: 0.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2303707
Project No.: NA
Date Collected:
Project Name: Canaveral Harbor 103 Evaluation
Date Received:
Matrix: WATER
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2303707-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Antimony	200.8	1.00	0.60	1	5/29/03	6/5/03	0.60	U	
Arsenic	7062	1.0	0.5	2	5/29/03	6/4/03	0.5	U	
Cadmium	200.8	0.04	0.01	1	5/29/03	6/12/03	0.01	U	
Chromium	200.8	0.40	0.01	1	5/29/03	6/12/03	0.01	U	
Copper	200.8	0.20	0.08	1	5/29/03	6/12/03	0.08	U	
Lead	200.8	0.040	0.004	1	5/29/03	6/12/03	0.004	U	
Mercury	7470A	0.2	0.1	1	5/27/03	5/28/03	0.1	U	
Nickel	200.8	0.40	0.01	1	5/29/03	6/12/03	0.04	B	
Silver	200.8	0.040	0.002	1	5/29/03	6/12/03	0.002	U	
Zinc	200.8	1.0	0.1	1	5/29/03	6/12/03	0.1	U	

% Solids: 0.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony	50.0	53.4	107	25.0	26.8	107	25.7	103	200.8
Arsenic	5.0	5.36	107	5.0	4.94	99	5.27	105	7062
Cadmium	25.0	25.5	102	25.0	24.6	98	24.6	98	200.8
Chromium	20.0	21.5	107	25.0	25.3	101	24.7	98	200.8
Copper	25.0	26.4	106	25.0	26.0	104	25.0	100	200.8
Lead	50.0	51.5	103	25.0	25.4	102	24.8	99	200.8
Mercury	5.0	4.92	98	5.0	4.99	100	4.98	100	7470A
Nickel	50.0	51.3	103	25.0	25.0	100	24.8	99	200.8
Silver	25.0	24.1	96	25.0	24.1	96	24.2	97	200.8
Zinc	50.0	52.0	104	25.0	24.2	97	25.2	101	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	26.1	104	25.9	104	200.8
Arsenic				5.0	4.84	97			7062
Mercury				5.0	5.22	104	5.06	101	7470A

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	5.11	102	5.05	101	7470A

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Antimony				0.05	0.06	123		
Arsenic	0.50	0.5	106					
Cadmium				0.50	0.49	99		
Chromium				2.0	2.33	117		
Copper				1.0	1.20	120		
Lead				0.20	0.23	114		
Mercury	0.20	0.2	99					
Nickel				2.0	2.37	118		
Silver				0.20	0.17	87		
Zinc				5.0	4.99	100		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Antimony	0.04	B	0.03	U	0.03	U	0.03	U					200.8
Arsenic	0.4	B	0.3	U	0.3	U	0.3	U					7062
Cadmium	0.06	B	0.04	U	0.04	U							200.8
Chromium	0.12	B	0.08	B	0.11	B							200.8
Copper	0.40	U	0.40	U	0.40	U							200.8
Lead	0.095	B	0.020	U	0.02	U							200.8
Mercury	0.1	U	0.1	U	0.1	U	0.1	U					7470A
Nickel	0.09	B	0.06	U	0.06	U							200.8
Silver	0.155	B	0.042	B	0.02	B							200.8
Zinc	0.5	U	0.5	U	0.5	U							200.8

METALS
-3-
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Antimony			0.03	U									200.8
Mercury			0.1	U	0.1	U	0.1	U					7470A

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2303707
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: E-CH03-20S
Lab Code: K2303707-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Antimony	70 - 130	417		0.60	U	400	104		200.8
Arsenic		86.4		70.1		16.0	102		7062
Cadmium	51 - 127	3.74		0.08		4.00	91		200.8
Chromium	48 - 136	3.61		0.20	B	4.00	85		200.8
Copper	47 - 113	3.57		0.47		4.00	77		200.8
Lead	61 - 120	3.740		0.049		4.000	92		200.8
Mercury	74 - 120	1.0		0.1	U	1.0	100		7470A
Nickel	1 - 111	1.45		0.70		4.00	19		200.8
Silver	66 - 112	3.250		0.016	B	4.000	81		200.8
Zinc	34 - 143	6.2		3.2		4.0	74		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2303707
Project No.:
Units: µg/L
Project Name: Canaveral Harbor 103 Evaluation
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: E-CH03-20D
Lab Code: K2303707-002D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Antimony		0.60	U	0.60	U			200.8
Arsenic	30	70.1		69.5		1		7062
Cadmium		0.08		0.08		6		200.8
Chromium		0.20	B	0.16	B	24		200.8
Copper		0.47		0.44		7		200.8
Lead		0.049		0.020	B	86		200.8
Mercury		0.1	U	0.1	U			7470A
Nickel		0.70		0.73		4		200.8
Silver		0.016	B	0.003	B	141		200.8
Zinc		3.2		3.1		4		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS

- 7 -

LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Antimony	20.0	19.7	99						
Arsenic	16.0	16.2	101						
Cadmium	4.00	4.02	100						
Chromium	4.00	4.12	103						
Copper	4.00	3.88	97						
Lead	4.00	4.10	103						
Mercury	5.00	4.87	97						
Nickel	4.00	3.66	92						
Silver	4.00	3.80	95						
Zinc	4.00	4.20	105						

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.2	0.1	7470A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.05	0.03	200.8
Cadmium	111		0.20	0.04	200.8
Chromium	52		2.00	0.05	200.8
Copper	65		1.00	0.40	200.8
Lead	208		0.200	0.020	200.8
Nickel	60		2.00	0.06	200.8
Silver	107		0.200	0.008	200.8
Zinc	66		5.0	0.5	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: Varian-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Arsenic	196.00		0.5	0.3	7062

Comments

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	600.0	200.8
Cadmium	15.00	700.0	200.8
Chromium	15.00	500.0	200.8
Copper	15.00	800.0	200.8
Lead	15.00	800.0	200.8
Nickel	15.00	800.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	900.0	200.8

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: AA

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2303707-001	5/29/03	EPA 3010A	50	50
K2303707-002	5/29/03	EPA 3010A	50	50
K2303707-002D	5/29/03	EPA 3010A	50	50
K2303707-002S	5/29/03	EPA 3010A	50	50
K2303707-003	5/29/03	EPA 3010A	50	50
LCSW	5/29/03	EPA 3010A	50	50
K2303707-MB	5/29/03	EPA 3010A	50	50
K2303707-001	5/27/03	METHOD	20	20
K2303707-002	5/27/03	METHOD	20	20
K2303707-002D	5/27/03	METHOD	20	20
K2303707-002S	5/27/03	METHOD	20	20
K2303707-003	5/27/03	METHOD	20	20
LCSW	5/27/03	METHOD	20	20
K2303707-MB	5/27/03	METHOD	20	20

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2303707-001	5/29/03	RED. PPT	500	100
K2303707-002	5/29/03	RED. PPT	500	100
K2303707-002D	5/29/03	RED. PPT	500	100
K2303707-002S	5/29/03	RED. PPT	500	100
K2303707-003	5/29/03	RED. PPT	500	100
LCSW	5/29/03	RED. PPT	500	100
K2303707-MB	5/29/03	RED. PPT	500	100
K2303707-001	5/29/03	EPA 3020A	2.5	50
K2303707-002	5/29/03	EPA 3020A	2.5	50
K2303707-002D	5/29/03	EPA 3020A	2.5	50
K2303707-002S	5/29/03	EPA 3020A	2.5	50
K2303707-003	5/29/03	EPA 3020A	2.5	50
K2303707-MB	5/29/03	EPA 3020A	2.5	50

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 6/4/03 End Date: 6/4/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	15:00				X																					
S0	1.00	15:04				X																					
S0	1.00	15:08				X																					
S0	1.00	15:12				X																					
S0	1.00	15:16				X																					
S0	1.00	15:20				X																					
S0	1.00	15:24				X																					
S0	1.00	15:28				X																					
S0	1.00	15:32				X																					
S0.5	1.00	15:36				X																					
S1	1.00	15:40				X																					
S5	1.00	15:44				X																					
S7.5	1.00	15:48				X																					
S10	1.00	15:52				X																					
ICV	1.00	15:56				X																					
ICB	1.00	16:00				X																					
CCV1	1.00	16:04				X																					
CCB1	1.00	16:08				X																					
CRI	1.00	16:12				X																					
K2303707-MB	2.00	16:16				X																					
LCSW	2.00	16:20				X																					
K2303707-001	8.00	16:24				X																					
ZK2303707-002	8.00	16:28																									
ZK2303707-002D	8.00	16:32																									
ZK2303707-002S	8.00	16:36																									
K2303707-003	8.00	16:40				X																					
CCV2	1.00	16:44				X																					
CCB2	1.00	16:48				X																					
ZZZZZZ	1.00	16:52																									
K2303707-002	10.00	16:56				X																					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: Varian-1 Method: AA

Start Date: 6/4/03 End Date: 6/4/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2303707-002D	10.00	17:00				X																					
K2303707-002S	10.00	17:04				X																					
CCV3	1.00	17:08				X																					
CCB3	1.00	17:12				X																					

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/28/03 End Date: 5/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	13:27																X									
STANDARD #1	1.00	13:28																X									
STANDARD #2	1.00	13:30																X									
STANDARD #3	1.00	13:31																X									
STANDARD #4	1.00	13:33																X									
STANDARD #5	1.00	13:35																X									
ICV	1.00	13:36																X									
ICB	1.00	13:38																X									
CCV1	1.00	13:39																X									
CCB1	1.00	13:41																X									
CRA	1.00	13:43																X									
ZZZZZZ	1.00	13:44																									
ZZZZZZ	1.00	13:46																									
ZZZZZZ	1.00	13:47																									
ZZZZZZ	1.00	13:49																									
ZZZZZZ	1.00	13:51																									
ZZZZZZ	1.00	13:52																									
ZZZZZZ	1.00	13:54																									
K2303707-MB	1.00	13:56																X									
LCSW	1.00	13:57																X									
CCV2	1.00	13:59																X									
CCB2	1.00	14:00																X									
ZZZZZZ	1.00	14:02																									
ZZZZZZ	1.00	14:04																									
ZZZZZZ	1.00	14:05																									
ZZZZZZ	1.00	14:07																									
ZZZZZZ	1.00	14:08																									
ZZZZZZ	1.00	14:10																									
ZZZZZZ	1.00	14:12																									
K2303707-001	1.00	14:13																X									

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/28/03 End Date: 5/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2303707-002	1.00	14:15																X									
K2303707-002D	1.00	14:17																X									
CCV3	1.00	14:18																X									
CCB3	1.00	14:20																X									
K2303707-002S	1.00	14:21																X									
K2303707-003	1.00	14:23																X									
ZZZZZZ	1.00	14:25																									
ZZZZZZ	1.00	14:26																									
ZZZZZZ	1.00	14:28																									
ZZZZZZ	1.00	14:30																									
ZZZZZZ	1.00	14:31																									
ZZZZZZ	1.00	14:33																									
ZZZZZZ	1.00	14:34																									
ZZZZZZ	1.00	14:36																									
CCV4	1.00	14:38																X									
CCB4	1.00	14:39																X									
ZZZZZZ	1.00	14:41																									
ZZZZZZ	1.00	14:42																									
ZZZZZZ	1.00	14:44																									
ZZZZZZ	1.00	14:46																									
ZZZZZZ	1.00	14:47																									
ZZZZZZ	1.00	14:49																									
ZZZZZZ	1.00	14:51																									
ZZZZZZ	1.00	14:52																									
ZZZZZZ	1.00	14:54																									
ZZZZZZ	1.00	14:56																									
CCV5	1.00	14:57																X									
CCB5	1.00	14:59																X									
ZZZZZZ	1.00	15:00																									
ZZZZZZ	1.00	15:02																									

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/28/03 End Date: 5/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	15:04																									
ZZZZZZ	1.00	15:05																									
ZZZZZZ	1.00	15:07																									
ZZZZZZ	1.00	15:09																									
ZZZZZZ	1.00	15:10																									
ZZZZZZ	1.00	15:12																									
CCV6	1.00	15:14																X									
CCB6	1.00	15:15																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/12/03 End Date: 6/12/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	15:13							X		X		X		X				X			X				X	
CALIBRATION STANDARD	1.00	15:15							X		X		X		X				X			X				X	
ICV	1.00	15:17							X		X		X		X				X			X				X	
CCV1	1.00	15:19							X		X		X		X				X			X				X	
ICB	1.00	15:21							X		X		X		X				X			X				X	
CCB1	1.00	15:23							X		X		X		X				X			X				X	
CRA	1.00	15:27							X		X		X		X				X			X				X	
K2303707-MB	1.00	15:29							X		X		X		X				X			X				X	
LCSW	1.00	15:31							X		X		X		X				X			X				X	
K2303707-001	1.00	15:36							X		X		X		X				X			X				X	
K2303707-002	1.00	15:38							X		X		X		X				X			X				X	
K2303707-002D	1.00	15:40							X		X		X		X				X			X				X	
K2303707-002S	1.00	15:41							X		X		X		X				X			X				X	
K2303707-003	1.00	15:43							X		X		X		X				X			X				X	
CCV2	1.00	15:46							X		X		X		X				X			X				X	
CCB2	1.00	15:53							X		X		X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/5/03 End Date: 6/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	09:20			X																						
CALIBRATION STANDARD	1.00	09:21			X																						
ICV	1.00	09:22			X																						
ZZZZZZ	1.00	09:24																									
CCV1	1.00	09:26			X																						
ICB	1.00	09:34			X																						
CCB1	1.00	09:36			X																						
CRA	1.00	09:37			X																						
ICSA	1.00	09:39			X																						
ICSAB	1.00	09:40			X																						
ZZZZZZ	1.00	09:43																									
ZZZZZZ	1.00	09:44																									
ZZZZZZ	1.00	09:46																									
ZZZZZZ	1.00	09:47																									
ZZZZZZ	1.00	09:48																									
ZZZZZZ	1.00	09:49																									
ZZZZZZ	1.00	09:51																									
CCV2	1.00	09:52			X																						
CCB2	1.00	10:04			X																						
ZZZZZZ	1.00	10:06																									
ZZZZZZ	1.00	10:07																									
ZZZZZZ	1.00	10:08																									
ZZZZZZ	1.00	10:09																									
ZZZZZZ	1.00	10:11																									
ZZZZZZ	1.00	10:13																									
ZZZZZZ	1.00	10:14																									
ZZZZZZ	1.00	10:16																									
ZZZZZZ	1.00	10:17																									
ZZZZZZ	1.00	10:18																									
CCV3	1.00	10:19			X																						

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2303707

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/5/03 End Date: 6/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB3	1.00	10:29			X																						
K2303707-MB	1.00	10:33			X																						
K2303707-001	1.00	10:34			X																						
K2303707-003	1.00	10:35			X																						
K2303707-002	1.00	10:37			X																						
K2303707-002D	1.00	10:38			X																						
K2303707-002S	1.00	10:39			X																						
LCSW	1.00	10:40			X																						
CCV4	1.00	10:42			X																						
CCB4	1.00	10:49			X																						

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Oil and Grease
Method 1664

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Water	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-19	Units:	mg/L (ppm)
Lab Code:	K2303707-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	5/30/03	6/2/03	ND	

Approved By: _____ Date: 6/2/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Water	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-20	Units:	mg/L (ppm)
Lab Code:	K2303707-002	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	5/30/03	6/2/03	ND	

Approved By: _____ Date: 6/2/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Water	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-21/22	Units:	mg/L (ppm)
Lab Code:	K2303707-003	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	5/30/03	6/2/03	ND	

Approved By: _____ Date: 6/2/03

1S22/020597p

03707PHC.JW2 - 3 6/2/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	K030530-WB	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1.2	1	5/30/03	6/2/03	ND	

Approved By: _____ Date: 6/2/03

1S22/020597p

03707PHC.JW2 - MB 6/2/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	5/30/03
		Date Analyzed:	6/2/03

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K030530-WL, K030530-WL2	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value LCS	True Value DLCS	Result LCS	Result DLCS	Percent Recovery LCS	Percent Recovery DLCS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	40	40	37	37	92	92	78-114	<1	

Approved By: _____ Date: 6283

DLCS/072898p
03707PHC.JW2 - DLCS 6/2/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 6/2/03

Continuing Calibration Verification (CCV) Summary
EPA Methods 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery	CCV3 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	1.9	95	1.9	95	2.0	100

Approved By: _____ Date: 6/2/03

CCV 1-4/102194

03707PHC.JW2 - ccv 6/2/03

Page No.:

Butyltins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-19	K2303707-001	05/14/2003	05/17/2003
E-CH03-20	K2303707-002	05/14/2003	05/17/2003
E-CH03-21/22	K2303707-003	05/14/2003	05/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:_____ Name:_____

Date:_____ Title:_____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Water	**Date Received:**	05/17/2003

Butyltins

Sample Name:	E-CH03-19	**Units:**	ug/L
Lab Code:	K2303707-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	05/21/03	06/15/03	KWG0307285	
Tri-n-butyltin	ND	U	0.020	0.0056	1	05/21/03	06/15/03	KWG0307285	
Di-n-butyltin	ND	U	0.050	0.0057	1	05/21/03	06/15/03	KWG0307285	
n-Butyltin	ND	U	0.050	0.0065	1	05/21/03	06/15/03	KWG0307285	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	116	41-128	06/15/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Water	**Date Received:**	05/17/2003

Butyltins

Sample Name:	E-CH03-20	**Units:**	ug/L
Lab Code:	K2303707-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	06/18/03	06/19/03	KWG0308907	*
Tri-n-butyltin	ND	U	0.020	0.0056	1	06/18/03	06/19/03	KWG0308907	*
Di-n-butyltin	ND	U	0.050	0.0057	1	06/18/03	06/19/03	KWG0308907	*
n-Butyltin	ND	U	0.050	0.0065	1	06/18/03	06/19/03	KWG0308907	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	55	41-128	06/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Water	**Date Received:**	05/17/2003

Butyltins

Sample Name:	E-CH03-21/22	**Units:**	ug/L
Lab Code:	K2303707-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	05/21/03	06/16/03	KWG0307285	
Tri-n-butyltin	ND	U	0.020	0.0056	1	05/21/03	06/16/03	KWG0307285	
Di-n-butyltin	ND	U	0.050	0.0057	1	05/21/03	06/16/03	KWG0307285	
n-Butyltin	ND	U	0.050	0.0065	1	05/21/03	06/16/03	KWG0307285	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	108	41-128	06/16/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0307285-4	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	05/21/03	06/15/03	KWG0307285	
Tri-n-butyltin	ND	U	0.020	0.0056	1	05/21/03	06/15/03	KWG0307285	
Di-n-butyltin	ND	U	0.050	0.0057	1	05/21/03	06/15/03	KWG0307285	
n-Butyltin	ND	U	0.050	0.0065	1	05/21/03	06/15/03	KWG0307285	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	119	41-128	06/15/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0308907-3	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.050	0.0097	1	06/18/03	06/19/03	KWG0308907	
Tri-n-butyltin	ND	U	0.020	0.0056	1	06/18/03	06/19/03	KWG0308907	
Di-n-butyltin	ND	U	0.050	0.0057	1	06/18/03	06/19/03	KWG0308907	
n-Butyltin	ND	U	0.050	0.0065	1	06/18/03	06/19/03	KWG0308907	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	76	41-128	06/19/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707

Surrogate Recovery Summary
Butyltins

Extraction Method: EPA 3520C
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
E-CH03-19	K2303707-001	116
E-CH03-20	K2303707-002	55
E-CH03-21/22	K2303707-003	108
Method Blank	KWG0307285-4	119
Method Blank	KWG0308907-3	76
Lab Control Sample	KWG0307285-2	108
Duplicate Lab Control Sample	KWG0307285-3	108
Lab Control Sample	KWG0308907-1	63
Duplicate Lab Control Sample	KWG0308907-2	79

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 41-128

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/21/2003
Sample Matrix:	Water	**Date Analyzed:**	06/15/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Butyltins

Extraction Method:	EPA 3520C	**Units:**	ug/L
Analysis Method:	Krone	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0307285

	Lab Control Sample KWG0307285-2 Lab Control Spike			Duplicate Lab Control Sample KWG0307285-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	0.329	0.500	66	0.276	0.500	55	21-115	17	30
Tri-n-butyltin	0.407	0.500	81	0.405	0.500	81	22-157	0	30
Di-n-butyltin	0.303	0.500	61	0.355	0.500	71	19-149	16	30
n-Butyltin	0.591	0.500	118	0.479	0.500	96	23-150	21	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	06/18/2003
Sample Matrix:	Water	**Date Analyzed:**	06/19/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	Krone	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0308907

	Lab Control Sample KWG0308907-1 Lab Control Spike			Duplicate Lab Control Sample KWG0308907-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	0.218	0.500	44	0.251	0.500	50	21-115	14	30
Tri-n-butyltin	0.282	0.500	56	0.332	0.500	66	22-157	16	30
Di-n-butyltin	0.268	0.500	54	0.327	0.500	65	19-149	20	30
n-Butyltin	0.364	0.500	73	0.381	0.500	76	23-150	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/21/2003
Sample Matrix:	Water	**Date Analyzed:**	06/15/2003
		Time Analyzed:	20:51

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\061403\0614F043.D
Lab Code:	KWG0307285-4	**Instrument ID:**	GC11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0307285

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0307285-2	J:\GC11\DATA\061403\0614F044.D	06/15/03	21:08
Duplicate Lab Control Sample	KWG0307285-3	J:\GC11\DATA\061403\0614F045.D	06/15/03	21:26
E-CH03-19	K2303707-001	J:\GC11\DATA\061403\0614F046.D	06/15/03	21:44
E-CH03-21/22	K2303707-003	J:\GC11\DATA\061403\0614F106.D	06/16/03	09:42

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	06/18/2003
Sample Matrix:	Water	**Date Analyzed:**	06/19/2003
		Time Analyzed:	17:47

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\061903\0619F004.D
Lab Code:	KWG0308907-3	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0308907

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0308907-1	J:\GC11\DATA\061903\0619F005.D	06/19/03	18:05
Duplicate Lab Control Sample	KWG0308907-2	J:\GC11\DATA\061903\0619F006.D	06/19/03	18:23
E-CH03-20	K2303707-002	J:\GC11\DATA\061903\0619F007.D	06/19/03	18:40

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2303707
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Lab Control Sample/Duplicate Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0307285-2	**Lab Code:**	KWG0307285-3
File ID:	J:\GC11\DATA\061403\0614F044.D	**File ID:**	J:\GC11\DATA\061403\0614F045.D
Instrument ID:	GC11	**Instrument ID:**	GC11
Date Extracted:	05/21/2003	**Date Extracted:**	05/21/2003
Date Analyzed:	06/15/2003	**Date Analyzed:**	06/15/2003
Time Analyzed:	21:08	**Time Analyzed:**	21:26

Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0307285

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0307285-4	J:\GC11\DATA\061403\0614F043.D	06/15/03	20:51
E-CH03-19	K2303707-001	J:\GC11\DATA\061403\0614F046.D	06/15/03	21:44
E-CH03-21/22	K2303707-003	J:\GC11\DATA\061403\0614F106.D	06/16/03	09:42

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707

Lab Control Sample/Duplicate Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0308907-1	**Lab Code:**	KWG0308907-2
File ID:	J:\GC11\DATA\061903\0619F005.D	**File ID:**	J:\GC11\DATA\061903\0619F006.D
Instrument ID:	GC11	**Instrument ID:**	GC11
Date Extracted:	06/18/2003	**Date Extracted:**	06/18/2003
Date Analyzed:	06/19/2003	**Date Analyzed:**	06/19/2003
Time Analyzed:	18:05	**Time Analyzed:**	18:23

Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0308907

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0308907-3	J:\GC11\DATA\061903\0619F004.D	06/19/03	17:47
E-CH03-20	K2303707-002	J:\GC11\DATA\061903\0619F007.D	06/19/03	18:40

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\061303B\0613FX02.D	D	J:\GC11\DATA\061303B\0613FX05.D
B	J:\GC11\DATA\061303B\0613FX03.D	E	J:\GC11\DATA\061303B\0613FX06.D
C	J:\GC11\DATA\061303B\0613FX04.D	F	J:\GC11\DATA\061303B\0613FX07.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	685	B	50	559	C	100	555	D	500	543	E	1000	535
	F	2000	521												
Tri-n-butyltin	A	10	770	B	50	675	C	100	663	D	500	653	E	1000	633
	F	2000	617												
Di-n-butyltin	A	10	838	B	50	853	C	100	840	D	500	835	E	1000	811
	F	2000	790												
n-Butyltin	A	10	1230	B	50	1100	C	100	1120	D	500	1060	E	1000	1040
	F	2000	1020												
Tri-n-propyltin	A	11	588	B	54	581	C	110	555	D	540	544	E	1100	530
	F	2100	514												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	10.5		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	8.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	2.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	6.9		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	5.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/13/2003
Date Analyzed: 06/13/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2701
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613FX08.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	500	566	609	8	NA	± 30 %	AverageRF
Tri-n-butyltin	480	510	669	716	7	NA	± 30 %	AverageRF
Di-n-butyltin	480	530	828	925	12	NA	± 30 %	AverageRF
n-Butyltin	490	550	1100	1220	11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\061303B\0613FX02.D\0613RX02.D	D	J:\GC11\DATA\061303B\0613FX05.D\0613RX05.D
B	J:\GC11\DATA\061303B\0613FX03.D\0613RX03.D	E	J:\GC11\DATA\061303B\0613FX06.D\0613RX06.D
C	J:\GC11\DATA\061303B\0613FX04.D\0613RX04.D	F	J:\GC11\DATA\061303B\0613FX07.D\0613RX07.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	432	B	50	406	C	100	396	D	500	402	E	1000	391
	F	2000	397												
Tri-n-butyltin	A	10	604	B	50	495	C	100	489	D	500	488	E	1000	471
	F	2000	460												
Di-n-butyltin	A	10	600	B	50	605	C	100	601	D	500	594	E	1000	582
	F	2000	567												
n-Butyltin	A	10	828	B	50	826	C	100	811	D	500	799	E	1000	782
	F	2000	757												
Tri-n-propyltin	A	11	449	B	54	404	C	110	394	D	540	394	E	1100	386
	F	2100	391												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	3.6		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	10.4		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	2.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.4		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	5.8		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/13/2003
Date Analyzed: 06/13/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2701
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613FX08.D\0613RX08.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	520	404	446	10	NA	± 30 %	AverageRF
Tri-n-butyltin	480	490	501	514	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	530	592	656	11	NA	± 30 %	AverageRF
n-Butyltin	490	550	800	886	11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/15/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT4-1-K

File ID: J:\GC11\DATA\061403\0614F003.D

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308707
Units: ng/ml
Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	566	583	3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	530	669	705	6	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	828	889	7	NA	± 25 %	AverageRF
n-Butyltin	500	520	1100	1150	5	NA	± 25 %	AverageRF
Tri-n-propyltin	540	560	552	574	4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/15/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT4-1-K

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308707
Units: ng/ml

File ID: J:\GC11\DATA\061403\0614F003.D\0614R003.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	500	404	407	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	501	488	-3	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	592	597	1	NA	± 25 %	AverageRF
n-Butyltin	500	490	800	781	-2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	530	403	399	-1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	06/15/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	06/13/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2701
CCV Standard ID:	OT4-1-K	**Analysis Lot:**	KWG0308707
		Units:	ng/ml
File ID:	J:\GC11\DATA\061403\0614F024.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	566	528	-7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	669	638	-5	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	828	804	-3	NA	± 25 %	AverageRF
n-Butyltin	500	460	1100	1020	-7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	490	552	509	-8	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/15/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT4-1-K

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308707
Units: ng/ml

File ID: J:\GC11\DATA\061403\0614F024.D\0614R024.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	404	421	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	501	504	1	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	592	617	4	NA	± 25 %	AverageRF
n-Butyltin	500	510	800	812	1	NA	± 25 %	AverageRF
Tri-n-propyltin	540	570	403	427	6	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	06/15/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	06/13/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2701
CCV Standard ID:	PT4-1-K	**Analysis Lot:**	KWG0308707
		Units:	ng/ml
File ID:	J:\GC11\DATA\061403\0614F042.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	460	566	521	-8	NA	± 25 %	AverageRF
Tri-n-butyltin	500	470	669	635	-5	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	828	828	0	NA	± 25 %	AverageRF
n-Butyltin	500	470	1100	1040	-6	NA	± 25 %	AverageRF
Tri-n-propyltin	540	490	552	508	-8	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/15/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: PT4-1-K

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308707
Units: ng/ml

File ID: J:\GC11\DATA\061403\0614F042.D\0614R042.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	530	404	432	7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	520	501	518	3	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	592	633	7	NA	± 25 %	AverageRF
n-Butyltin	500	540	800	859	7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	580	403	435	8	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	06/16/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	06/13/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2701
CCV Standard ID:	OT4-1-K	**Analysis Lot:**	KWG0308707
		Units:	ng/ml
File ID:	J:\GC11\DATA\061403\0614F066.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	500	566	563	-1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	520	669	693	4	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	828	886	7	NA	± 25 %	AverageRF
n-Butyltin	500	510	1100	1110	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	552	567	3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	06/16/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	06/13/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2701
CCV Standard ID:	OT4-1-K	**Analysis Lot:**	KWG0308707
		Units:	ng/ml
File ID:	J:\GC11\DATA\061403\0614F066.D\0614R066.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	530	404	431	7	NA	± 25 %	AverageRF
Tri-n-butyltin	500	520	501	520	4	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	592	641	8	NA	± 25 %	AverageRF
n-Butyltin	500	520	800	840	5	NA	± 25 %	AverageRF
Tri-n-propyltin	540	590	403	442	10	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/16/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308707
Units: ng/ml

File ID: J:\GC11\DATA\061403\0614F104.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	480	566	548	-3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	669	672	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	828	865	4	NA	± 25 %	AverageRF
n-Butyltin	500	500	1100	1110	1	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	552	565	2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/16/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308707
Units: ng/ml

File ID: J:\GC11\DATA\061403\0614F104.D\0614R104.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	510	404	412	2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	501	501	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	592	618	4	NA	± 25 %	AverageRF
n-Butyltin	500	510	800	822	3	NA	± 25 %	AverageRF
Tri-n-propyltin	540	560	403	419	4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/16/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone
CCV Standard ID: OT4-1-K

File ID: J:\GC11\DATA\061403\0614F083.D

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308707
Units: ng/ml
Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	566	551	-3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	669	680	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	828	876	6	NA	± 25 %	AverageRF
n-Butyltin	500	510	1100	1120	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	540	552	559	1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	06/16/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	06/13/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2701
CCV Standard ID:	OT4-1-K	**Analysis Lot:**	KWG0308707
		Units:	ng/ml
File ID:	J:\GC11\DATA\061403\0614F083.D\0614R083.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	404	420	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	501	501	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	530	592	626	6	NA	± 25 %	AverageRF
n-Butyltin	500	520	800	835	4	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	403	414	3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/19/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0309026
Units: ng/ml

File ID: J:\GC11\DATA\061903\0619F003.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	410	566	465	-18	NA	± 25 %	AverageRF
Tri-n-butyltin	500	420	669	564	-16	NA	± 25 %	AverageRF
Di-n-butyltin	500	430	828	717	-13	NA	± 25 %	AverageRF
n-Butyltin	500	430	1100	934	-15	NA	± 25 %	AverageRF
Tri-n-propyltin	540	440	552	455	-18	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/19/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0309026
Units: ng/ml

File ID: J:\GC11\DATA\061903\0619F003.D\0619R003.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	450	404	364	-10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	440	501	439	-12	NA	± 25 %	AverageRF
Di-n-butyltin	500	450	592	538	-9	NA	± 25 %	AverageRF
n-Butyltin	500	450	800	728	-9	NA	± 25 %	AverageRF
Tri-n-propyltin	540	480	403	360	-11	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/19/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0309026
Units: ng/ml

File ID: J:\GC11\DATA\061903\0619F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	400	566	457	-19	NA	± 25 %	AverageRF
Tri-n-butyltin	500	410	669	554	-17	NA	± 25 %	AverageRF
Di-n-butyltin	500	430	828	709	-14	NA	± 25 %	AverageRF
n-Butyltin	500	420	1100	927	-15	NA	± 25 %	AverageRF
Tri-n-propyltin	540	440	552	449	-19	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/19/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0309026
Units: ng/ml

File ID: J:\GC11\DATA\061903\0619F010.D\0619R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	404	380	-6	NA	± 25 %	AverageRF
Tri-n-butyltin	500	450	501	450	-10	NA	± 25 %	AverageRF
Di-n-butyltin	500	470	592	556	-6	NA	± 25 %	AverageRF
n-Butyltin	500	460	800	741	-7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	500	403	376	-7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0308707
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0614F002.D	Instrument Blank	KWG0308707-1	6/15/2003	08:41		6/15/2003	08:53
0614F003.D	Continuing Calibration Verification	KWG0308707-2	6/15/2003	08:58		6/15/2003	09:10
0614F004.D	ZZZZZZ	ZZZZZZ	6/15/2003	09:16		6/15/2003	09:28
0614F005.D	ZZZZZZ	ZZZZZZ	6/15/2003	09:34		6/15/2003	09:46
0614F006.D	ZZZZZZ	ZZZZZZ	6/15/2003	09:51		6/15/2003	10:03
0614F007.D	ZZZZZZ	ZZZZZZ	6/15/2003	10:09		6/15/2003	10:21
0614F008.D	ZZZZZZ	ZZZZZZ	6/15/2003	10:27		6/15/2003	10:39
0614F009.D	ZZZZZZ	ZZZZZZ	6/15/2003	10:44		6/15/2003	10:56
0614F010.D	ZZZZZZ	ZZZZZZ	6/15/2003	11:02		6/15/2003	11:14
0614F011.D	ZZZZZZ	ZZZZZZ	6/15/2003	11:20		6/15/2003	11:32
0614F012.D	ZZZZZZ	ZZZZZZ	6/15/2003	11:37		6/15/2003	11:49
0614F013.D	ZZZZZZ	ZZZZZZ	6/15/2003	11:55		6/15/2003	12:07
0614F014.D	ZZZZZZ	ZZZZZZ	6/15/2003	12:13		6/15/2003	12:25
0614F015.D	ZZZZZZ	ZZZZZZ	6/15/2003	12:30		6/15/2003	12:42
0614F016.D	ZZZZZZ	ZZZZZZ	6/15/2003	12:48		6/15/2003	13:00
0614F017.D	ZZZZZZ	ZZZZZZ	6/15/2003	13:06		6/15/2003	13:18
0614F018.D	ZZZZZZ	ZZZZZZ	6/15/2003	13:24		6/15/2003	13:36
0614F019.D	ZZZZZZ	ZZZZZZ	6/15/2003	13:42		6/15/2003	13:54
0614F020.D	ZZZZZZ	ZZZZZZ	6/15/2003	13:59		6/15/2003	14:11
0614F021.D	ZZZZZZ	ZZZZZZ	6/15/2003	14:17		6/15/2003	14:29
0614F023.D	Instrument Blank	KWG0308707-3	6/15/2003	14:53		6/15/2003	15:05
0614F024.D	Continuing Calibration Verification	KWG0308707-4	6/15/2003	15:10		6/15/2003	15:22
0614F025.D	ZZZZZZ	ZZZZZZ	6/15/2003	15:28		6/15/2003	15:40
0614F026.D	ZZZZZZ	ZZZZZZ	6/15/2003	15:46		6/15/2003	15:58
0614F027.D	ZZZZZZ	ZZZZZZ	6/15/2003	16:04		6/15/2003	16:16
0614F028.D	ZZZZZZ	ZZZZZZ	6/15/2003	16:21		6/15/2003	16:33
0614F029.D	ZZZZZZ	ZZZZZZ	6/15/2003	16:39		6/15/2003	16:51
0614F030.D	ZZZZZZ	ZZZZZZ	6/15/2003	16:57		6/15/2003	17:09
0614F031.D	ZZZZZZ	ZZZZZZ	6/15/2003	17:15		6/15/2003	17:27
0614F035.D	ZZZZZZ	ZZZZZZ	6/15/2003	18:27		6/15/2003	18:39
0614F036.D	ZZZZZZ	ZZZZZZ	6/15/2003	18:45		6/15/2003	18:57
0614F037.D	ZZZZZZ	ZZZZZZ	6/15/2003	19:03		6/15/2003	19:15
0614F038.D	ZZZZZZ	ZZZZZZ	6/15/2003	19:21		6/15/2003	19:33
0614F039.D	ZZZZZZ	ZZZZZZ	6/15/2003	19:39		6/15/2003	19:51

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0308707
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0614F041.D	Instrument Blank	KWG0308707-5	6/15/2003	20:15		6/15/2003	20:27
0614F042.D	Continuing Calibration Verification	KWG0308707-6	6/15/2003	20:33		6/15/2003	20:45
0614F043.D	Method Blank	KWG0307285-4	6/15/2003	20:51		6/15/2003	21:03
0614F044.D	Lab Control Sample	KWG0307285-2	6/15/2003	21:08		6/15/2003	21:20
0614F045.D	Duplicate Lab Control Sample	KWG0307285-3	6/15/2003	21:26		6/15/2003	21:38
0614F046.D	E-CH03-19	K2303707-001	6/15/2003	21:44		6/15/2003	21:56
0614F047.D	ZZZZZZ	ZZZZZZ	6/15/2003	22:02		6/15/2003	22:14
0614F048.D	ZZZZZZ	ZZZZZZ	6/15/2003	22:20		6/15/2003	22:32
0614F049.D	ZZZZZZ	ZZZZZZ	6/15/2003	22:38		6/15/2003	22:50
0614F050.D	ZZZZZZ	ZZZZZZ	6/15/2003	22:56		6/15/2003	23:08
0614F051.D	ZZZZZZ	ZZZZZZ	6/15/2003	23:14		6/15/2003	23:26
0614F052.D	ZZZZZZ	ZZZZZZ	6/15/2003	23:32		6/15/2003	23:44
0614F053.D	ZZZZZZ	ZZZZZZ	6/15/2003	23:50		6/16/2003	00:02
0614F054.D	ZZZZZZ	ZZZZZZ	6/16/2003	00:07		6/16/2003	00:19
0614F055.D	ZZZZZZ	ZZZZZZ	6/16/2003	00:25		6/16/2003	00:37
0614F059.D	ZZZZZZ	ZZZZZZ	6/16/2003	01:37		6/16/2003	01:49
0614F061.D	ZZZZZZ	ZZZZZZ	6/16/2003	02:13		6/16/2003	02:25
0614F062.D	ZZZZZZ	ZZZZZZ	6/16/2003	02:31		6/16/2003	02:43
0614F063.D	ZZZZZZ	ZZZZZZ	6/16/2003	02:49		6/16/2003	03:01
0614F065.D	Instrument Blank	KWG0308707-7	6/16/2003	03:24		6/16/2003	03:36
0614F066.D	Continuing Calibration Verification	KWG0308707-8	6/16/2003	03:42		6/16/2003	03:54
0614F069.D	ZZZZZZ	ZZZZZZ	6/16/2003	04:36		6/16/2003	04:48
0614F071.D	ZZZZZZ	ZZZZZZ	6/16/2003	05:12		6/16/2003	05:24
0614F072.D	ZZZZZZ	ZZZZZZ	6/16/2003	05:30		6/16/2003	05:42
0614F073.D	ZZZZZZ	ZZZZZZ	6/16/2003	05:48		6/16/2003	06:00
0614F074.D	ZZZZZZ	ZZZZZZ	6/16/2003	06:06		6/16/2003	06:18
0614F075.D	ZZZZZZ	ZZZZZZ	6/16/2003	06:24		6/16/2003	06:36
0614F076.D	ZZZZZZ	ZZZZZZ	6/16/2003	06:42		6/16/2003	06:54
0614F103.D	Instrument Blank	KWG0308707-9	6/16/2003	08:48		6/16/2003	09:00
0614F104.D	Continuing Calibration Verification	KWG0308707-10	6/16/2003	09:06		6/16/2003	09:18
0614F105.D	ZZZZZZ	ZZZZZZ	6/16/2003	09:24		6/16/2003	09:36
0614F106.D	E-CH03-21/22	K2303707-003	6/16/2003	09:42		6/16/2003	09:54
0614F082.D	Instrument Blank	KWG0308707-11	6/16/2003	10:18		6/16/2003	10:30
0614F083.D	Continuing Calibration Verification	KWG0308707-12	6/16/2003	10:36		6/16/2003	10:48

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0309026
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0619F002.D	Instrument Blank	KWG0309026-1	6/19/2003	17:12		6/19/2003	17:24
0619F003.D	Continuing Calibration Verification	KWG0309026-2	6/19/2003	17:30		6/19/2003	17:42
0619F004.D	Method Blank	KWG0308907-3	6/19/2003	17:47		6/19/2003	17:59
0619F005.D	Lab Control Sample	KWG0308907-1	6/19/2003	18:05		6/19/2003	18:17
0619F006.D	Duplicate Lab Control Sample	KWG0308907-2	6/19/2003	18:23		6/19/2003	18:35
0619F007.D	E-CH03-20	K2303707-002	6/19/2003	18:40		6/19/2003	18:52
0619F009.D	Instrument Blank	KWG0309026-3	6/19/2003	19:16		6/19/2003	19:28
0619F010.D	Continuing Calibration Verification	KWG0309026-4	6/19/2003	19:34		6/19/2003	19:46

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Extracted: 05/21/2003

Extraction Prep Log
Butyltins

Extraction Method: EPA 3520C
Analysis Method: Krone

Extraction Lot: KWG0307285
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-19	K2303707-001	05/14/03	05/17/03	500ml	0.5ml	NA	
E-CH03-21/22	K2303707-003	05/14/03	05/17/03	500ml	0.5ml	NA	
Method Blank	KWG0307285-4	NA	NA	500ml	0.5ml	NA	
Lab Control Sample	KWG0307285-2	NA	NA	500ml	0.5ml	NA	
Duplicate Lab Control Sample	KWG0307285-3	NA	NA	500ml	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Extracted: 06/18/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0308907
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-20	K2303707-002	05/14/03	05/17/03	500ml	0.5ml	NA	*
Method Blank	KWG0308907-3	NA	NA	500ml	0.5ml	NA	
Lab Control Sample	KWG0308907-1	NA	NA	500ml	0.5ml	NA	
Duplicate Lab Control Sample	KWG0308907-2	NA	NA	500ml	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-19	K2303707-001	05/14/2003	05/17/2003
E-CH03-20	K2303707-002	05/14/2003	05/17/2003
E-CH03-21/22	K2303707-003	05/14/2003	05/17/2003
E-CH03-20MS	KWG0307284-1	05/14/2003	05/17/2003
E-CH03-20DMS	KWG0307284-2	05/14/2003	05/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Carl Dagner

Date: 6/6/03 Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Water	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-19	**Units:**	ug/L
Lab Code:	K2303707-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.039**		0.020	0.0032	1	05/21/03	06/04/03	KWG0307284	
2-Methylnaphthalene	**0.0068**	J	0.020	0.0027	1	05/21/03	06/04/03	KWG0307284	
Acenaphthylene	**0.0019**	J	0.020	0.0018	1	05/21/03	06/04/03	KWG0307284	
Acenaphthene	**0.0051**	J	0.020	0.0020	1	05/21/03	06/04/03	KWG0307284	
Dibenzofuran	ND	U	0.020	0.0071	1	05/21/03	06/04/03	KWG0307284	
Fluorene	ND	U	0.020	0.0026	1	05/21/03	06/04/03	KWG0307284	
Phenanthrene	ND	U	0.020	0.0032	1	05/21/03	06/04/03	KWG0307284	
Anthracene	ND	U	0.020	0.0011	1	05/21/03	06/04/03	KWG0307284	
Fluoranthene	ND	U	0.020	0.0024	1	05/21/03	06/04/03	KWG0307284	
Pyrene	ND	U	0.020	0.0023	1	05/21/03	06/04/03	KWG0307284	
Benz(a)anthracene	ND	U	0.020	0.0021	1	05/21/03	06/04/03	KWG0307284	
Chrysene	ND	U	0.020	0.0013	1	05/21/03	06/04/03	KWG0307284	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	05/21/03	06/04/03	KWG0307284	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	05/21/03	06/04/03	KWG0307284	
Benzo(a)pyrene	**0.0026**	J	0.020	0.0016	1	05/21/03	06/04/03	KWG0307284	
Indeno(1,2,3-cd)pyrene	**0.0068**	J	0.020	0.0021	1	05/21/03	06/04/03	KWG0307284	
Dibenz(a,h)anthracene	**0.0062**	J	0.020	0.0017	1	05/21/03	06/04/03	KWG0307284	
Benzo(g,h,i)perylene	**0.0078**	J	0.020	0.0037	1	05/21/03	06/04/03	KWG0307284	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	74	34-115	06/04/03	Acceptable
Fluorene-d10	76	43-96	06/04/03	Acceptable
Fluoranthene-d10	47	20-131	06/04/03	Acceptable
Terphenyl-d14	76	13-146	06/04/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Water	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-20	**Units:**	ug/L
Lab Code:	K2303707-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.038**		0.020	0.0032	1	05/21/03	06/04/03	KWG0307284	
2-Methylnaphthalene	**0.0059**	J	0.020	0.0027	1	05/21/03	06/04/03	KWG0307284	
Acenaphthylene	ND	U	0.020	0.0018	1	05/21/03	06/04/03	KWG0307284	
Acenaphthene	**0.0042**	J	0.020	0.0020	1	05/21/03	06/04/03	KWG0307284	
Dibenzofuran	ND	U	0.020	0.0071	1	05/21/03	06/04/03	KWG0307284	
Fluorene	ND	U	0.020	0.0026	1	05/21/03	06/04/03	KWG0307284	
Phenanthrene	ND	U	0.020	0.0032	1	05/21/03	06/04/03	KWG0307284	
Anthracene	ND	U	0.020	0.0011	1	05/21/03	06/04/03	KWG0307284	
Fluoranthene	ND	U	0.020	0.0024	1	05/21/03	06/04/03	KWG0307284	
Pyrene	ND	U	0.020	0.0023	1	05/21/03	06/04/03	KWG0307284	
Benz(a)anthracene	ND	U	0.020	0.0021	1	05/21/03	06/04/03	KWG0307284	
Chrysene	**0.0016**	J	0.020	0.0013	1	05/21/03	06/04/03	KWG0307284	
Benzo(b)fluoranthene	**0.0030**	J	0.020	0.0020	1	05/21/03	06/04/03	KWG0307284	
Benzo(k)fluoranthene	**0.0031**	J	0.020	0.0014	1	05/21/03	06/04/03	KWG0307284	
Benzo(a)pyrene	**0.0042**	J	0.020	0.0016	1	05/21/03	06/04/03	KWG0307284	
Indeno(1,2,3-cd)pyrene	**0.0091**	J	0.020	0.0021	1	05/21/03	06/04/03	KWG0307284	
Dibenz(a,h)anthracene	**0.0094**	J	0.020	0.0017	1	05/21/03	06/04/03	KWG0307284	
Benzo(g,h,i)perylene	**0.010**	J	0.020	0.0037	1	05/21/03	06/04/03	KWG0307284	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	76	34-115	06/04/03	Acceptable
Fluorene-d10	80	43-96	06/04/03	Acceptable
Fluoranthene-d10	55	20-131	06/04/03	Acceptable
Terphenyl-d14	84	13-146	06/04/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Water	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-21/22	**Units:**	ug/L
Lab Code:	K2303707-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.027**		0.020	0.0032	1	05/21/03	06/04/03	KWG0307284	
2-Methylnaphthalene	**0.0073**	J	0.020	0.0027	1	05/21/03	06/04/03	KWG0307284	
Acenaphthylene	**0.0020**	J	0.020	0.0018	1	05/21/03	06/04/03	KWG0307284	
Acenaphthene	**0.0050**	J	0.020	0.0020	1	05/21/03	06/04/03	KWG0307284	
Dibenzofuran	ND	U	0.020	0.0071	1	05/21/03	06/04/03	KWG0307284	
Fluorene	ND	U	0.020	0.0026	1	05/21/03	06/04/03	KWG0307284	
Phenanthrene	ND	U	0.020	0.0032	1	05/21/03	06/04/03	KWG0307284	
Anthracene	ND	U	0.020	0.0011	1	05/21/03	06/04/03	KWG0307284	
Fluoranthene	ND	U	0.020	0.0024	1	05/21/03	06/04/03	KWG0307284	
Pyrene	ND	U	0.020	0.0023	1	05/21/03	06/04/03	KWG0307284	
Benz(a)anthracene	ND	U	0.020	0.0021	1	05/21/03	06/04/03	KWG0307284	
Chrysene	ND	U	0.020	0.0013	1	05/21/03	06/04/03	KWG0307284	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	05/21/03	06/04/03	KWG0307284	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	05/21/03	06/04/03	KWG0307284	
Benzo(a)pyrene	**0.0018**	J	0.020	0.0016	1	05/21/03	06/04/03	KWG0307284	
Indeno(1,2,3-cd)pyrene	**0.0031**	J	0.020	0.0021	1	05/21/03	06/04/03	KWG0307284	
Dibenz(a,h)anthracene	**0.0039**	J	0.020	0.0017	1	05/21/03	06/04/03	KWG0307284	
Benzo(g,h,i)perylene	**0.0045**	J	0.020	0.0037	1	05/21/03	06/04/03	KWG0307284	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	73	34-115	06/04/03	Acceptable
Fluorene-d10	78	43-96	06/04/03	Acceptable
Fluoranthene-d10	60	20-131	06/04/03	Acceptable
Terphenyl-d14	89	13-146	06/04/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0307284-4	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.0074**	J	0.020	0.0032	1	05/21/03	05/24/03	KWG0307284	
2-Methylnaphthalene	**0.0031**	J	0.020	0.0027	1	05/21/03	05/24/03	KWG0307284	
Acenaphthylene	ND	U	0.020	0.0018	1	05/21/03	05/24/03	KWG0307284	
Acenaphthene	ND	U	0.020	0.0020	1	05/21/03	05/24/03	KWG0307284	
Dibenzofuran	ND	U	0.020	0.0071	1	05/21/03	05/24/03	KWG0307284	
Fluorene	ND	U	0.020	0.0026	1	05/21/03	05/24/03	KWG0307284	
Phenanthrene	ND	U	0.020	0.0032	1	05/21/03	05/24/03	KWG0307284	
Anthracene	ND	U	0.020	0.0011	1	05/21/03	05/24/03	KWG0307284	
Fluoranthene	ND	U	0.020	0.0024	1	05/21/03	05/24/03	KWG0307284	
Pyrene	ND	U	0.020	0.0023	1	05/21/03	05/24/03	KWG0307284	
Benz(a)anthracene	ND	U	0.020	0.0021	1	05/21/03	05/24/03	KWG0307284	
Chrysene	ND	U	0.020	0.0013	1	05/21/03	05/24/03	KWG0307284	
Benzo(b)fluoranthene	ND	U	0.020	0.0020	1	05/21/03	05/24/03	KWG0307284	
Benzo(k)fluoranthene	ND	U	0.020	0.0014	1	05/21/03	05/24/03	KWG0307284	
Benzo(a)pyrene	ND	U	0.020	0.0016	1	05/21/03	05/24/03	KWG0307284	
Indeno(1,2,3-cd)pyrene	ND	U	0.020	0.0021	1	05/21/03	05/24/03	KWG0307284	
Dibenz(a,h)anthracene	ND	U	0.020	0.0017	1	05/21/03	05/24/03	KWG0307284	
Benzo(g,h,i)perylene	ND	U	0.020	0.0037	1	05/21/03	05/24/03	KWG0307284	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	66	34-115	05/24/03	Acceptable
Fluorene-d10	71	43-96	05/24/03	Acceptable
Fluoranthene-d10	88	20-131	05/24/03	Acceptable
Terphenyl-d14	112	13-146	05/24/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3	Sur4
E-CH03-19	K2303707-001	74	76	47	76
E-CH03-20	K2303707-002	76	80	55	84
E-CH03-21/22	K2303707-003	73	78	60	89
Method Blank	KWG0307284-4	66	71	88	112
E-CH03-20MS	KWG0307284-1	73	74	53	82
E-CH03-20DMS	KWG0307284-2	76	78	77	94
Lab Control Sample	KWG0307284-3	79	78	89	97

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	34-115
Sur2 =	Fluorene-d10	43-96
Sur3 =	Fluoranthene-d10	20-131
Sur4 =	Terphenyl-d14	13-146

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/23/2003
		Time Analyzed:	23:17

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\052303\0523F026.D	**Lab Code:**	KWG0307512-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0307512
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	333,228	4.92	174,603	7.12	286,991	9.86
	Upper Limit ==>	666,456	5.42	349,206	7.62	573,982	10.36
	Lower Limit ==>	166,614	4.42	87,302	6.62	143,496	9.36
	ICAL Result ==>	485,232	NA	249,710	NA	378,938	NA
Associated Analyses							
Method Blank	KWG0307284-4	324,444	4.92	154,009	7.12	214,471	9.86

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/23/2003
		Time Analyzed:	23:17

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\052303\0523F026.D	**Lab Code:**	KWG0307512-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0307512
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT
	Results ==>	261,216	15.82	144,374	19.24
	Upper Limit ==>	522,432	16.32	288,748	19.74
	Lower Limit ==>	130,608	15.32	72,187	18.74
	ICAL Result ==>	419,660	NA	242,016	NA
Associated Analyses					
Method Blank	KWG0307284-4	191,150	15.82	93,536	19.25

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/04/2003
Time Analyzed: 11:21

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\060403\0604F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0308193-2
Analysis Lot: KWG0308193

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	654,096	4.81	356,347	6.22	598,835	7.41
	Upper Limit ==>	1,308,192	5.31	712,694	6.72	1,197,670	7.91
	Lower Limit ==>	327,048	4.31	178,174	5.72	299,418	6.91
	ICAL Result ==>	726,027	NA	396,115	NA	630,972	NA
Associated Analyses							
Lab Control Sample	KWG0307284-3	731,887	4.80	390,974	6.22	610,593	7.41
E-CH03-20MS	KWG0307284-1	719,200	4.81	382,953	6.22	591,439	7.41
E-CH03-20DMS	KWG0307284-2	758,253	4.80	404,380	6.22	627,035	7.41
E-CH03-20	K2303707-002	733,329	4.81	381,084	6.22	596,838	7.41
E-CH03-19	K2303707-001	669,471	4.80	344,739	6.22	532,680	7.41
E-CH03-21/22	K2303707-003	750,958	4.81	388,675	6.22	599,733	7.41

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/04/2003
Time Analyzed: 11:21

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\060403\0604F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0308193-2
Analysis Lot: KWG0308193

		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT
	Results ==>	533,245	9.80	272,475	12.46
	Upper Limit ==>	1,066,490	10.30	544,950	12.96
	Lower Limit ==>	266,623	9.30	136,238	11.96
	ICAL Result ==>	715,157	NA	410,353	NA
Associated Analyses					
Lab Control Sample	KWG0307284-3	624,589	9.79	371,600	12.45
E-CH03-20MS	KWG0307284-1	576,790	9.80	335,320	12.45
E-CH03-20DMS	KWG0307284-2	590,733	9.80	331,215	12.45
E-CH03-20	K2303707-002	549,170	9.79	291,323	12.44
E-CH03-19	K2303707-001	463,123	9.80	242,605	12.44
E-CH03-21/22	K2303707-003	531,642	9.80	274,873	12.45

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/21/2003
Sample Matrix:	Water	**Date Analyzed:**	06/04/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-20	**Units:**	ug/L
Lab Code:	K2303707-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307284

		E-CH03-20MS KWG0307284-1 Matrix Spike			E-CH03-20DMS KWG0307284-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	0.038	7.06	10.0	70	6.41	10.0	64	30-97	10	30
2-Methylnaphthalene	0.0059	6.97	10.0	70	6.28	10.0	63	33-96	10	30
Acenaphthylene	ND	7.54	10.0	75	7.04	10.0	70	39-104	7	30
Acenaphthene	0.0042	7.49	10.0	75	6.92	10.0	69	34-99	8	30
Dibenzofuran	ND	8.01	10.0	80	7.27	10.0	73	16-110	10	30
Fluorene	ND	7.65	10.0	77	7.11	10.0	71	36-105	7	30
Phenanthrene	ND	7.28	10.0	73	6.99	10.0	70	31-106	4	30
Anthracene	ND	6.48	10.0	65	6.21	10.0	62	24-111	4	30
Fluoranthene	ND	6.75	10.0	67	7.38	10.0	74	16-121	9	30
Pyrene	ND	7.22	10.0	72	8.13	10.0	81	11-125	12	30
Benz(a)anthracene	ND	7.00	10.0	70	7.20	10.0	72	14-125	3	30
Chrysene	0.0016	7.77	10.0	78	7.54	10.0	75	16-117	3	30
Benzo(b)fluoranthene	0.0030	8.01	10.0	80	7.89	10.0	79	16-124	2	30
Benzo(k)fluoranthene	0.0031	7.67	10.0	77	7.26	10.0	73	14-127	5	30
Benzo(a)pyrene	0.0042	7.51	10.0	75	7.39	10.0	74	19-126	2	30
Indeno(1,2,3-cd)pyrene	0.0091	9.87	10.0	99	8.61	10.0	86	10-137	14	30
Dibenz(a,h)anthracene	0.0094	9.92	10.0	99	8.53	10.0	85	16-124	15	30
Benzo(g,h,i)perylene	0.010	8.94	10.0	89	7.73	10.0	77	15-119	15	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/21/2003
Sample Matrix:	Water	**Date Analyzed:**	06/04/2003

Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3520C	**Units:**	ug/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0307284

	Lab Control Sample KWG0307284-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Naphthalene	3.67	5.00	73	37-95
2-Methylnaphthalene	3.63	5.00	73	26-110
Acenaphthylene	4.05	5.00	81	44-103
Acenaphthene	3.86	5.00	77	41-97
Dibenzofuran	4.09	5.00	82	17-130
Fluorene	3.94	5.00	79	46-102
Phenanthrene	3.92	5.00	78	47-101
Anthracene	4.08	5.00	82	45-104
Fluoranthene	4.28	5.00	86	51-112
Pyrene	4.33	5.00	87	45-111
Benz(a)anthracene	4.13	5.00	83	50-111
Chrysene	4.17	5.00	83	51-108
Benzo(b)fluoranthene	4.33	5.00	87	54-114
Benzo(k)fluoranthene	3.87	5.00	77	51-117
Benzo(a)pyrene	4.23	5.00	85	51-119
Indeno(1,2,3-cd)pyrene	5.02	5.00	100	43-127
Dibenz(a,h)anthracene	5.03	5.00	101	47-119
Benzo(g,h,i)perylene	4.46	5.00	89	44-115

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/21/2003
Sample Matrix:	Water	**Date Analyzed:**	05/24/2003
		Time Analyzed:	00:28

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\052303\0523F028.D
Lab Code:	KWG0307284-4	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307284

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0307284-3	J:\MS11\DATA\060403\0604F006.D	06/04/03	13:18
E-CH03-20MS	KWG0307284-1	J:\MS11\DATA\060403\0604F007.D	06/04/03	13:46
E-CH03-20DMS	KWG0307284-2	J:\MS11\DATA\060403\0604F008.D	06/04/03	14:15
E-CH03-20	K2303707-002	J:\MS11\DATA\060403\0604F009.D	06/04/03	14:44
E-CH03-19	K2303707-001	J:\MS11\DATA\060403\0604F010.D	06/04/03	15:12
E-CH03-21/22	K2303707-003	J:\MS11\DATA\060403\0604F011.D	06/04/03	15:41

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303707
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/21/2003
Sample Matrix:	Water	**Date Analyzed:**	06/04/2003
		Time Analyzed:	13:18

Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**File ID:**	J:\MS11\DATA\060403\0604F006.D
Lab Code:	KWG0307284-3	**Instrument ID:**	MS11
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307284

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0307284-4	J:\MS11\DATA\052303\0523F028.D	05/24/03	00:28
E-CH03-20MS	KWG0307284-1	J:\MS11\DATA\060403\0604F007.D	06/04/03	13:46
E-CH03-20DMS	KWG0307284-2	J:\MS11\DATA\060403\0604F008.D	06/04/03	14:15
E-CH03-20	K2303707-002	J:\MS11\DATA\060403\0604F009.D	06/04/03	14:44
E-CH03-19	K2303707-001	J:\MS11\DATA\060403\0604F010.D	06/04/03	15:12
E-CH03-21/22	K2303707-003	J:\MS11\DATA\060403\0604F011.D	06/04/03	15:41

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 05/23/2003
Time Analyzed: 22:56

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\052303\0523F025.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0307512

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	34.2	451072	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	38.2	504384	PASS
70	69	0	2	0.5	2568	PASS
127	198	10	80	47.0	619456	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	64.2	1318912	PASS
199	198	5	9	7.0	91896	PASS
275	198	10	60	33.2	437312	PASS
365	442	1	50	2.7	55424	PASS
441	443	0	100	73.9	302912	PASS
442	442	100	100	100.0	2055168	PASS
443	442	15	24	20.0	410048	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0307512-2	J:\MS11\DATA\052303\0523F026.D	05/23/2003	23:17	
Method Blank	KWG0307284-4	J:\MS11\DATA\052303\0523F028.D	05/24/2003	00:28	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/04/2003
Time Analyzed: 10:51

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\060403\0604F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0308193

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	31.7	733184	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	35.5	820672	PASS
70	69	0	2	0.5	4306	PASS
127	198	10	80	44.9	1037248	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	69.0	2310656	PASS
199	198	5	9	7.0	161024	PASS
275	198	10	60	32.0	740288	PASS
365	442	1	50	2.6	87296	PASS
441	443	0	100	74.0	507136	PASS
442	442	100	100	100.0	3347456	PASS
443	442	15	24	20.5	685312	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0308193-2	J:\MS11\DATA\060403\0604F002.D	06/04/2003	11:21	
Lab Control Sample	KWG0307284-3	J:\MS11\DATA\060403\0604F006.D	06/04/2003	13:18	
E-CH03-20MS	KWG0307284-1	J:\MS11\DATA\060403\0604F007.D	06/04/2003	13:46	
E-CH03-20DMS	KWG0307284-2	J:\MS11\DATA\060403\0604F008.D	06/04/2003	14:15	
E-CH03-20	K2303707-002	J:\MS11\DATA\060403\0604F009.D	06/04/2003	14:44	
E-CH03-19	K2303707-001	J:\MS11\DATA\060403\0604F010.D	06/04/2003	15:12	
E-CH03-21/22	K2303707-003	J:\MS11\DATA\060403\0604F011.D	06/04/2003	15:41	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 05/16/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2628
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\051503\0515F019.D	G	J:\MS11\DATA\051503\0515F025.D
B	J:\MS11\DATA\051503\0515F020.D	H	J:\MS11\DATA\051503\0515F027.D
C	J:\MS11\DATA\051503\0515F021.D	I	J:\MS11\DATA\051503\0515F028.D
D	J:\MS11\DATA\051503\0515F022.D	J	J:\MS11\DATA\051503\0515F029.D
E	J:\MS11\DATA\051503\0515F023.D	K	J:\MS11\DATA\051503\0515F030.D
F	J:\MS11\DATA\051503\0515F024.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.11	B	20	1.10	C	40	1.11	D	100	1.11	E	500	1.03
	F	1000	1.05	G	2000	1.05	H	3000	1.05	I	5000	1.01	J	8000	1.00
	K	10000	0.985												
2-Methylnaphthalene	A	10	0.619	B	20	0.628	C	40	0.663	D	100	0.670	E	500	0.655
	F	1000	0.677	G	2000	0.674	H	3000	0.686	I	5000	0.665	J	8000	0.672
	K	10000	0.664												
Acenaphthylene	A	10	1.26	B	20	1.31	C	40	1.36	D	100	1.44	E	500	1.64
	F	1000	1.75	G	2000	1.79	H	3000	1.83	I	5000	1.80	J	8000	1.82
	K	10000	1.81												
Acenaphthene	A	10	1.11	B	20	1.10	C	40	1.12	D	100	1.12	E	500	1.07
	F	1000	1.10	G	2000	1.11	H	3000	1.13	I	5000	1.10	J	8000	1.11
	K	10000	1.09												
Dibenzofuran	A	10	1.51	B	20	1.48	C	40	1.51	D	100	1.56	E	500	1.50
	F	1000	1.54	G	2000	1.54	H	3000	1.56	I	5000	1.54	J	8000	1.51
	K	10000	1.51												
Fluorene	A	10	1.02	B	20	1.08	C	40	1.09	D	100	1.18	E	500	1.23
	F	1000	1.28	G	2000	1.28	H	3000	1.30	I	5000	1.28	J	8000	1.27
	K	10000	1.27												
Phenanthrene	A	10	1.31	B	20	1.22	C	40	1.20	D	100	1.19	E	500	1.12
	F	1000	1.15	G	2000	1.16	H	3000	1.18	I	5000	1.14	J	8000	1.15
	K	10000	1.13												
Anthracene	A	10	0.779	B	20	0.820	C	40	0.792	D	100	0.862	E	500	1.04
	F	1000	1.07	G	2000	1.11	H	3000	1.15	I	5000	1.12	J	8000	1.13
	K	10000	1.12												
Fluoranthene	A	10	0.985	B	20	1.05	C	40	0.950	D	100	1.07	E	500	1.23
	F	1000	1.23	G	2000	1.26	H	3000	1.29	I	5000	1.27	J	8000	1.27
	K	10000	1.25												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 05/16/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2628
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	10	1.05	B	20	1.04	C	40	1.13	D	100	1.06	E	500	1.14
	F	1000	1.17	G	2000	1.15	H	3000	1.19	I	5000	1.14	J	8000	1.15
	K	10000	1.15												
Benz(a)anthracene	A	10	1.10	B	20	1.02	C	40	0.835	D	100	0.901	E	500	1.02
	F	1000	0.964	G	2000	0.925	H	3000	0.970	I	5000	0.982	J	8000	0.998
	K	10000	1.00												
Chrysene	A	10	1.24	B	20	1.20	C	40	1.13	D	100	1.09	E	500	1.04
	F	1000	1.09	G	2000	1.02	H	3000	1.10	I	5000	1.02	J	8000	1.04
	K	10000	1.03												
Benzo(b)fluoranthene	A	10	1.25	B	20	1.30	C	40	1.21	D	100	1.20	E	500	1.33
	F	1000	1.37	G	2000	1.34	H	3000	1.48	I	5000	1.47	J	8000	1.54
	K	10000	1.54												
Benzo(k)fluoranthene	A	10	1.54	B	20	1.78	C	40	1.65	D	100	1.75	E	500	1.78
	F	1000	1.92	G	2000	1.83	H	3000	1.99	I	5000	1.82	J	8000	1.85
	K	10000	1.82												
Benzo(a)pyrene	A	10	0.883	B	20	0.964	C	40	0.898	D	100	0.954	E	500	1.19
	F	1000	1.24	G	2000	1.25	H	3000	1.38	I	5000	1.34	J	8000	1.40
	K	10000	1.40												
Indeno(1,2,3-cd)pyrene	A	10	0.660	B	20	0.665	C	40	0.670	D	100	0.638	E	500	0.851
	F	1000	0.865	G	2000	0.868	H	3000	0.962	I	5000	1.02	J	8000	1.08
	K	10000	1.10												
Dibenz(a,h)anthracene	A	10	0.644	B	20	0.644	C	40	0.756	D	100	0.631	E	500	0.960
	F	1000	0.980	G	2000	0.987	H	3000	1.10	I	5000	1.12	J	8000	1.17
	K	10000	1.21												
Benzo(g,h,i)perylene	A	10	1.05	B	20	1.11	C	40	1.09	D	100	1.05	E	500	1.18
	F	1000	1.24	G	2000	1.21	H	3000	1.33	I	5000	1.31	J	8000	1.34
	K	10000	1.35												
Fluorene-d10	A	10	0.931	B	20	0.936	C	40	0.955	D	100	0.989	E	500	1.03
	F	1000	1.07	G	2000	1.07	H	3000	1.08	I	5000	1.07	J	8000	1.06
	K	10000	1.06												
Fluoranthene-d10	A	10	0.751	B	20	0.799	C	40	0.780	D	100	0.906	E	500	1.07
	F	1000	1.03	G	2000	1.07	H	3000	1.10	I	5000	1.10	J	8000	1.11
	K	10000	1.10												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 05/16/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2628
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Terphenyl-d14	A	10	1.02	B	20	1.02	C	40	1.08	D	100	0.922	E	500	0.847
	F	1000	0.858	G	2000	0.817	H	3000	0.826	I	5000	0.807	J	8000	0.812
	K	10000	0.809												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 05/16/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2628
Instrument ID: MS11

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	4.4		≤ 15	1.06		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	3.1		≤ 15	0.661		0.01
Acenaphthylene	MS	AverageRF	% RSD	14.2		≤ 15	1.62		0.01
Acenaphthene	MS	AverageRF	% RSD	1.4		≤ 15	1.11		0.01
Dibenzofuran	MS	AverageRF	% RSD	1.7		≤ 15	1.52		0.01
Fluorene	MS	AverageRF	% RSD	8.2		≤ 15	1.21		0.01
Phenanthrene	MS	AverageRF	% RSD	4.6		≤ 15	1.18		0.01
Anthracene	MS	AverageRF	% RSD	15.2	*	≤ 15	1.00		0.01
Fluoranthene	MS	AverageRF	% RSD	10.9		≤ 15	1.17		0.01
Pyrene	MS	AverageRF	% RSD	4.5		≤ 15	1.12		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	7.2		≤ 15	0.974		0.01
Chrysene	MS	AverageRF	% RSD	6.7		≤ 15	1.09		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	9.1		≤ 15	1.37		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	6.9		≤ 15	1.79		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	17.8	*	≤ 15	1.17		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	20.4	*	≤ 15	0.852		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	23.9	*	≤ 15	0.927		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	9.8		≤ 15	1.20		0.01
Fluorene-d10	SURR	AverageRF	% RSD	5.7		≤ 15	1.02		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	14.7		≤ 15	0.983		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	11.2		≤ 15	0.892		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 05/16/2003
Date Analyzed: 05/16/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2628
Units: ng/ml

File ID: J:\MS11\DATA\051503\0515G032.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.06	1.04	-1	NA	± 25 %	AverageRF
2-Methylnaphthalene	2000	2000	0.661	0.649	-2	NA	± 25 %	AverageRF
Acenaphthylene	2000	2100	1.62	1.74	7	NA	± 25 %	AverageRF
Acenaphthene	2000	2000	1.11	1.11	0	NA	± 25 %	AverageRF
Dibenzofuran	2000	2000	1.52	1.56	2	NA	± 25 %	AverageRF
Fluorene	2000	2100	1.21	1.26	4	NA	± 25 %	AverageRF
Phenanthrene	2000	1800	1.18	1.05	-10	NA	± 25 %	AverageRF
Anthracene	2000	2000	1.00	0.992	-1	NA	± 25 %	AverageRF
Fluoranthene	2000	1900	1.17	1.13	-3	NA	± 25 %	AverageRF
Pyrene	2000	2100	1.12	1.15	3	NA	± 25 %	AverageRF
Benz(a)anthracene	2000	1800	0.974	0.865	-11	NA	± 25 %	AverageRF
Chrysene	2000	1900	1.09	1.05	-4	NA	± 25 %	AverageRF
Benzo(b)fluoranthene	2000	1900	1.37	1.33	-3	NA	± 25 %	AverageRF
Benzo(k)fluoranthene	2000	2100	1.79	1.84	3	NA	± 25 %	AverageRF
Benzo(a)pyrene	2000	2100	1.17	1.23	5	NA	± 25 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.852	0.871	2	NA	± 25 %	AverageRF
Dibenz(a,h)anthracene	2000	2200	0.927	1.01	9	NA	± 25 %	AverageRF
Benzo(g,h,i)perylene	2000	2100	1.20	1.24	3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2672
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\060203\0602F006.D	F	J:\MS11\DATA\060203\0602F011.D
B	J:\MS11\DATA\060203\0602F007.D	G	J:\MS11\DATA\060203\0602F012.D
C	J:\MS11\DATA\060203\0602F008.D	H	J:\MS11\DATA\060203\0602F013.D
D	J:\MS11\DATA\060203\0602F009.D	I	J:\MS11\DATA\060203\0602F014.D
E	J:\MS11\DATA\060203\0602F010.D	J	J:\MS11\DATA\060203\0602F015.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.20	B	20	1.12	C	40	1.14	D	100	1.12	E	500	1.03
	F	1000	1.04	G	2000	1.03	H	5000	0.966	I	8000	0.919	J	10000	0.895
1-Methylnaphthalene	A	10	0.622	B	20	0.619	C	40	0.639	D	100	0.639	E	500	0.598
	F	1000	0.621	G	2000	0.616	H	5000	0.585	I	8000	0.571	J	10000	0.563
2-Methylnaphthalene	A	10	0.703	B	20	0.683	C	40	0.693	D	100	0.704	E	500	0.664
	F	1000	0.686	G	2000	0.681	H	5000	0.645	I	8000	0.624	J	10000	0.611
Acenaphthylene	A	10	1.67	B	20	1.69	C	40	1.71	D	100	1.73	E	500	1.70
	F	1000	1.80	G	2000	1.78	H	5000	1.70	I	8000	1.61	J	10000	1.57
Acenaphthene	A	10	1.12	B	20	1.11	C	40	1.16	D	100	1.14	E	500	1.08
	F	1000	1.10	G	2000	1.08	H	5000	1.02	I	8000	0.976	J	10000	0.952
Fluorene	A	10	1.23	B	20	1.28	C	40	1.26	D	100	1.30	E	500	1.26
	F	1000	1.31	G	2000	1.28	H	5000	1.20	I	8000	1.16	J	10000	1.14
Phenanthrene	A	10	1.30	B	20	1.26	C	40	1.21	D	100	1.21	E	500	1.10
	F	1000	1.15	G	2000	1.12	H	5000	1.06	I	8000	0.991	J	10000	0.943
Anthracene	A	10	1.09	B	20	1.03	C	40	1.05	D	100	1.04	E	500	1.02
	F	1000	1.10	G	2000	1.10	H	5000	1.04	I	8000	0.985	J	10000	0.954
Fluoranthene	A	10	1.38	B	20	1.31	C	40	1.21	D	100	1.26	E	500	1.19
	F	1000	1.26	G	2000	1.23	H	5000	1.16	I	8000	1.05	J	10000	1.03
Pyrene	A	10	1.45	B	20	1.36	C	40	1.27	D	100	1.25	E	500	1.17
	F	1000	1.21	G	2000	1.11	H	5000	1.09	I	8000	1.11	J	10000	0.981
Benz(a)anthracene	A	10	1.42	B	20	1.27	C	40	1.09	D	100	1.05	E	500	0.982
	F	1000	1.04	G	2000	0.968	H	5000	0.979	I	8000	0.971	J	10000	0.949
Chrysene	A	10	1.33	B	20	1.27	C	40	1.19	D	100	1.13	E	500	1.03
	F	1000	1.07	G	2000	1.00	H	5000	0.987	I	8000	0.974	J	10000	0.944
Benzo(b)fluoranthene	A	10	1.73	B	20	1.61	C	40	1.50	D	100	1.48	E	500	1.41
	F	1000	1.52	G	2000	1.45	H	5000	1.55	I	8000	1.56	J	10000	1.57
Benzo(k)fluoranthene	A	10	2.09	B	20	1.99	C	40	1.92	D	100	1.96	E	500	1.79
	F	1000	1.88	G	2000	1.74	H	5000	1.77	I	8000	1.72	J	10000	1.65

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2672
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Benzo(a)pyrene	A	10	1.44	B	20	1.37	C	40	1.25	D	100	1.26	E	500	1.25
	F	1000	1.36	G	2000	1.32	H	5000	1.38	I	8000	1.41	J	10000	1.39
Indeno(1,2,3-cd)pyrene	A	10	0.797	B	20	0.746	C	40	0.635	D	100	0.674	E	500	0.720
	F	1000	0.841	G	2000	0.881	H	5000	0.922	I	8000	0.993	J	10000	0.968
Dibenz(a,h)anthracene	A	10	0.871	B	20	0.765	C	40	0.681	D	100	0.799	E	500	0.799
	F	1000	0.948	G	2000	0.990	H	5000	1.03	I	8000	1.10	J	10000	1.07
Benzo(g,h,i)perylene	A	10	1.20	B	20	1.05	C	40	0.852	D	100	0.974	E	500	0.883
	F	1000	1.02	G	2000	1.06	H	5000	1.06	I	8000	1.12	J	10000	1.08
Biphenyl-d10	A	10	0.724	B	20	0.745	C	40	0.767	D	100	0.775	E	500	0.728
	F	1000	0.751	G	2000	0.736	H	5000	0.694	I	8000	0.672	J	10000	0.661
Fluorene-d10	A	10	1.15	B	20	1.12	C	40	1.10	D	100	1.10	E	500	1.05
	F	1000	1.10	G	2000	1.07	H	5000	1.00	I	8000	0.965	J	10000	0.955
Fluoranthene-d10	A	10	1.09	B	20	1.05	C	40	1.03	D	100	1.10	E	500	1.05
	F	1000	1.10	G	2000	1.08	H	5000	1.02	I	8000	0.940	J	10000	0.926
Terphenyl-d14	A	10	1.01	B	20	1.08	C	40	1.03	D	100	0.928	E	500	0.877
	F	1000	0.866	G	2000	0.794	H	5000	0.772	I	8000	0.793	J	10000	0.707

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2672
Instrument ID: MS11

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	9.4		≤ 15	1.04		0.01
1-Methylnaphthalene	MS	AverageRF	% RSD	4.5		≤ 15	0.607		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	4.9		≤ 15	0.670		0.01
Acenaphthylene	MS	AverageRF	% RSD	4.1		≤ 15	1.70		0.01
Acenaphthene	MS	AverageRF	% RSD	6.5		≤ 15	1.07		0.01
Fluorene	MS	AverageRF	% RSD	4.7		≤ 15	1.24		0.01
Phenanthrene	MS	AverageRF	% RSD	10.2		≤ 15	1.13		0.01
Anthracene	MS	AverageRF	% RSD	4.5		≤ 15	1.04		0.01
Fluoranthene	MS	AverageRF	% RSD	8.8		≤ 15	1.21		0.01
Pyrene	MS	AverageRF	% RSD	11.4		≤ 15	1.20		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	14.5		≤ 15	1.07		0.01
Chrysene	MS	AverageRF	% RSD	12.2		≤ 15	1.09		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	6.0		≤ 15	1.54		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	7.5		≤ 15	1.85		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	5.2		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	15.1	*	≤ 15	0.818		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	15.8	*	≤ 15	0.905		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.2		≤ 15	1.03		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	5.3		≤ 15	0.726		0.01
Fluorene-d10	SURR	AverageRF	% RSD	6.2		≤ 15	1.06		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	6.0		≤ 15	1.04		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	14.0		≤ 15	0.886		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Calibration Date: 06/02/2003
Date Analyzed: 06/02/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2672
Units: ng/ml

File ID: J:\MS11\DATA\060203\0602G017.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.04	1.03	-1	NA	± 20 %	AverageRF
1-Methylnaphthalene	2000	2100	0.607	0.651	7	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.670	0.656	-2	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	1.70	1.77	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.07	1.09	2	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.24	1.27	2	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	1.13	1.03	-9	NA	± 20 %	AverageRF
Anthracene	2000	1900	1.04	0.990	-5	NA	± 20 %	AverageRF
Fluoranthene	2000	1900	1.21	1.14	-6	NA	± 20 %	AverageRF
Pyrene	2000	1900	1.20	1.14	-5	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	1.07	0.977	-9	NA	± 20 %	AverageRF
Chrysene	2000	1900	1.09	1.03	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1900	1.54	1.45	-6	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	1.85	1.75	-5	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	1.34	1.30	-3	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.818	0.827	1	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.905	0.926	2	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.03	0.993	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 05/23/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 05/16/2003
Calibration ID: CAL2628
Analysis Lot: KWG0307512
Units: ng/ml

File ID: J:\MS11\DATA\052303\0523F026.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.06	1.04	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.01	0.661	0.651	-2	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.62	1.74	7	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.11	1.10	0	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.52	1.57	3	NA	± 20 %	AverageRF
Fluorene	2000	2000	0.01	1.21	1.23	2	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.18	1.05	-11	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	1.00	0.980	-2	NA	± 20 %	AverageRF
Fluoranthene	2000	1900	0.01	1.17	1.12	-5	NA	± 20 %	AverageRF
Pyrene	2000	2100	0.01	1.12	1.19	6	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	0.974	0.895	-8	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.09	1.05	-3	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1900	0.01	1.37	1.30	-4	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.79	1.94	8	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	0.01	1.17	1.23	5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.01	0.852	0.852	0	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2200	0.01	0.927	1.01	9	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.20	1.21	0	NA	± 20 %	AverageRF
Fluorene-d10	2000	2000	0.01	1.02	1.02	0	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	0.983	0.887	-10	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1900	0.01	0.892	0.828	-7	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707
Date Analyzed: 06/04/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 06/02/2003
Calibration ID: CAL2672
Analysis Lot: KWG0308193
Units: ng/ml

File ID: J:\MS11\DATA\060403\0604F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.04	1.09	5	NA	± 20 %	AverageRF
1-Methylnaphthalene	2000	2200	0.01	0.607	0.655	8	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.670	0.719	7	NA	± 20 %	AverageRF
Acenaphthylene	2000	2200	0.01	1.70	1.90	12	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.07	1.15	7	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.24	1.33	7	NA	± 20 %	AverageRF
Phenanthrene	2000	1900	0.01	1.13	1.06	-6	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	1.04	1.05	1	NA	± 20 %	AverageRF
Fluoranthene	2000	1900	0.01	1.21	1.14	-5	NA	± 20 %	AverageRF
Pyrene	2000	2200	0.01	1.20	1.30	9	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	0.01	1.07	1.00	-7	NA	± 20 %	AverageRF
Chrysene	2000	1900	0.01	1.09	1.06	-3	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2000	0.01	1.54	1.52	-1	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2000	0.01	1.85	1.87	1	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2000	0.01	1.34	1.32	-2	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1900	0.01	0.818	0.788	-4	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.905	0.889	-2	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1800	0.01	1.03	0.935	-9	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2000	0.01	0.726	0.732	1	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.06	0.999	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	1.04	0.911	-12	NA	± 20 %	AverageRF
Terphenyl-d14	2000	2000	0.01	0.886	0.877	-1	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0307512
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0523F025.D	GC/MS Tuning - Decafluorotripheny	KWG0307512-1	5/23/2003	22:56		5/23/2003	23:09
0523F026.D	Continuing Calibration Verification	KWG0307512-2	5/23/2003	23:17		5/23/2003	23:43
0523F027.D	Instrument Blank	KWG0307512-3	5/23/2003	23:53		5/24/2003	00:19
0523F028.D	Method Blank	KWG0307284-4	5/24/2003	00:28		5/24/2003	00:54
0523F039.D	ZZZZZZ	ZZZZZZ	5/24/2003	07:00		5/24/2003	07:26

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303707

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0308193
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0604F001.D	GC/MS Tuning - Decafluorotripheny	KWG0308193-1	6/4/2003	10:51		6/4/2003	11:04
0604F002.D	Continuing Calibration Verification	KWG0308193-2	6/4/2003	11:21		6/4/2003	11:41
0604F005.D	ZZZZZZ	ZZZZZZ	6/4/2003	12:49		6/4/2003	13:09
0604F006.D	Lab Control Sample	KWG0307284-3	6/4/2003	13:18		6/4/2003	13:38
0604F007.D	E-CH03-20MS	KWG0307284-1	6/4/2003	13:46		6/4/2003	14:06
0604F008.D	E-CH03-20DMS	KWG0307284-2	6/4/2003	14:15		6/4/2003	14:35
0604F009.D	E-CH03-20	K2303707-002	6/4/2003	14:44		6/4/2003	15:04
0604F010.D	E-CH03-19	K2303707-001	6/4/2003	15:12		6/4/2003	15:32
0604F011.D	E-CH03-21/22	K2303707-003	6/4/2003	15:41		6/4/2003	16:01
0604F012.D	ZZZZZZ	ZZZZZZ	6/4/2003	16:10		6/4/2003	16:30
0604F013.D	ZZZZZZ	ZZZZZZ	6/4/2003	16:39		6/4/2003	16:59
0604F014.D	ZZZZZZ	ZZZZZZ	6/4/2003	17:08		6/4/2003	17:28
0604F015.D	ZZZZZZ	ZZZZZZ	6/4/2003	17:37		6/4/2003	17:57
0604F016.D	ZZZZZZ	ZZZZZZ	6/4/2003	18:05		6/4/2003	18:25
0604F017.D	ZZZZZZ	ZZZZZZ	6/4/2003	18:34		6/4/2003	18:54
0604F018.D	ZZZZZZ	ZZZZZZ	6/4/2003	19:03		6/4/2003	19:23
0604F019.D	ZZZZZZ	ZZZZZZ	6/4/2003	19:31		6/4/2003	19:51
0604F020.D	ZZZZZZ	ZZZZZZ	6/4/2003	20:00		6/4/2003	20:20
0604F021.D	ZZZZZZ	ZZZZZZ	6/4/2003	20:29		6/4/2003	20:49
0604F022.D	ZZZZZZ	ZZZZZZ	6/4/2003	20:58		6/4/2003	21:18
0604F023.D	ZZZZZZ	ZZZZZZ	6/4/2003	21:26		6/4/2003	21:46
0604F024.D	ZZZZZZ	ZZZZZZ	6/4/2003	21:55		6/4/2003	22:15
0604F025.D	ZZZZZZ	ZZZZZZ	6/4/2003	22:24		6/4/2003	22:44

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Water

Service Request: K2303707
Date Extracted: 05/21/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0307284
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-19	K2303707-001	05/14/03	05/17/03	1050ml	1.0ml	NA	
E-CH03-20	K2303707-002	05/14/03	05/17/03	1040ml	1.0ml	NA	
E-CH03-21/22	K2303707-003	05/14/03	05/17/03	1040ml	1.0ml	NA	
Method Blank	KWG0307284-4	NA	NA	1000ml	1.0ml	NA	
E-CH03-20MS	KWG0307284-1	05/14/03	05/17/03	500ml	1.0ml	NA	
E-CH03-20DMS	KWG0307284-2	05/14/03	05/17/03	500ml	1.0ml	NA	
Lab Control Sample	KWG0307284-3	NA	NA	1000ml	1.0ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 20, 2003 Service Request No: K2303706

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor 103 Evaluation

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on May 17, 2003. For your reference, these analyses have been assigned our service request number K2303706.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Received:**	5/17/03
Sample Matrix:	Sediment		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three sediment samples were received for analysis at Columbia Analytical Services on 5/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

The matrix spike recovery of Antimony for sample E-CH03-19 was below the CAS control criterion. Antimony recoveries are generally low for soil and sediment samples when digested using EPA Method 3050. Despite anticipated low recoveries, the method is still generally prescribed because of its versatility for general metals analyses. Antimony results (in conjunction with the matrix spike recovery) from this procedure should only be used as indicators to estimate concentrations. Since low recoveries result from a method defect and can be magnified by certain matrix components, no corrective action is appropriate other than using alternative procedures, which specifically target Antimony. The associated QA/QC results (e.g. control sample, calibration standards, etc.) indicate the analysis was in control.

The MRL for Lead was elevated to 0.1 mg/Kg (0.05 is the typical MRL for Method 200.8) due to baseline drift during the course of the analysis. All of the related samples have lead concentrations greater than 20 times the elevated MRL; therefore no corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of this sample were observed.

Organotin Compounds

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C

Initial Calibration Exceptions:
The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL2657: Isoquinoline, Acridine, Phenanthridine, 3-Methylcholanthrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene. In

Approved by _____ **Date** 6/19/03

accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 7.6%. The calibration meets the alternative evaluation criteria.

The primary evaluation criterion was exceeded for the following analytes in Initial Calibration (ICAL) ID CAL2672: Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 8.5%. The calibration meets the alternative evaluation criteria.

Surrogate Exceptions:
The control criteria were exceeded for a number of surrogates. Since the problem may indicate a potential bias, the samples were re-extracted and reanalyzed. The surrogates met control criteria for the reanalysis. Note the results for the field samples were comparable for both determinations, which indicates the problem with the initial analysis was restricted to the surrogate recovery. Therefore, the results from the original analysis are reported since the re-extractions were performed past the recommended hold time. The data is flagged to indicate the problem.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 6/19/03

Chain of Custody Documentation

K2303706

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH03-19	5/14/03	0910	marine sed/water	various	2/7	Per Contract		Please remember to include sulfides as this parameter was not included in the original contract.
E-CH03-20	↓	0650	↓	↓	↓	↓		
E-CH03-21	↓	0725	↓	↓	↓	↓		
E-CH03-22	↓	0745	↓	↓	↓	↓		

Samples Relinquished by: [signature]
Date: 5/16/03 Time: 1535
Samples Relinquished by: [signature]
Date: 5/16 Time: 1605 Fed Ex Sat Delivery

Received by: [signature]
Date: 5/16/03 Time: 1535
Received by: [signature]
Date: 5/17/03 Time: 0900

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client HAMAR Work Order K23 03206

Cooler received on 5/17/03 and opened on 5/17/03 by FA

1. Were custody seals on outside of cooler? (Y) N
   If yes, how many and where? 1 front
2. Were seals intact and signature & date correct? 79138387 5638 (Y) N
3. Is the shipper's airbill available and filed? If no, record airbill number: 79138387 5708 Y (N)
4. COC #

Temperature of cooler(s) upon receipt:	3.2	3.7		
Temperature Blank:	4.2	3.1		

5. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
6. Type of packing material present bubble wrap, insert
7. Did all bottles arrive in good condition (unbroken)? (Y) N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (Y) N
9. Did all bottle labels and tags agree with custody papers? Y (N)
10. Were the correct types of bottles used for the tests indicated? (Y) N
11. Were all of the preserved bottles received at the lab with the appropriate pH? Y N
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? (Y) N

Explain any discrepancies: Samples ECH03-21 & 22 are combined MS. are sample for Sol. H2O

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103
Sample Matrix: Sediment

Service Request: K2303706

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: WET

Sample Name	Lab Code	Date Collected	Date Received	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	05/14/2003	05/17/2003	05/19/2003	66.0	
E-CH03-20	K2303706-002	05/14/2003	05/17/2003	05/19/2003	47.6	
E-CH03-21/22	K2303706-003	05/14/2003	05/17/2003	05/19/2003	49.8	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003
		Date Analyzed:	05/19/2003

Duplicate Sample Summary

Total Solids

Prep Method:	NONE	**Units:**	PERCENT
Analysis Method:	160.3M	**Basis:**	WET
Test Notes:			

Sample Name	Lab Code	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
E-CH03-19	K2303706-001	66.0	65.8	65.9	<1	

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03

Ammonia as Nitrogen

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	350.1M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	0.6	0.3	1	NA	05/22/03	17.5	
E-CH03-20	K2303706-002	3	1.5	5	NA	05/22/03	64	
E-CH03-21/22	K2303706-003	1.2	0.6	2	NA	05/22/03	43.2	
Method Blank	K2303706-MB	0.6	0.3	1	NA	05/22/03	ND	

* Analysis was performed on a 2M KCl extract.

M Modified for analysis of soil.

Approved By: _____ Date: 6/3/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/22/03

Duplicate Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Ammonia as Nitrogen	NONE	350.1M	0.6	17.5	17.5	17.5	< 1	

Approved By: _____ Date: 6/3/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/22/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1M	0.6	751	17.5	752	98	75-125	

Approved By: _____ Date: 6/3/03

MS/020597p

03706WET.BR1 - MS 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/22/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2303706-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Ammonia as Nitrogen	NONE	350.1M	2.29	2.31	101	85-115	

Approved By: _____ Date: 6/3/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/22/03

Ammonia as Nitrogen
EPA Method 350.1
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	2.00	2.00	100
CCV 2 Result	2.00	2.02	101
CCV 1 Result	2.00	1.99	100
CCV 2 Result	2.00	1.99	100

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03

Carbon, Total Organic

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	ASTM D4129-82M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	0.05	0.02	1	NA	05/27/03	0.37	
E-CH03-20	K2303706-002	0.05	0.02	1	NA	05/27/03	0.91	
E-CH03-21/22	K2303706-003	0.05	0.02	1	NA	05/27/03	0.97	
Method Blank	K2303706-MB	0.05	0.02	1	NA	05/27/03	ND	

M Modified

Approved By: _____ Date: 6/03/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/27/03

Duplicate Summary
Carbon, Total Organic

Sample Name:	E-CH03-20	Units:	PERCENT
Lab Code:	K2303706-002DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.05	0.91	0.80	0.86	13	

M Modified

Approved By: _____ Date: 6/3/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/27/03

Matrix Spike Summary
Carbon, Total Organic

Sample Name:	E-CH03-20	Units:	PERCENT
Lab Code:	K2303706-002MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.05	6.29	0.91	7.67	107	75-125	

M Modified

Approved By: _____ Date: 6/3/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/27/03

Laboratory Control Sample Summary
Carbon, Total Organic

Sample Name:	Lab Control Sample	Units:	PERCENT
Lab Code:	K2303706-LCS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Carbon, Total Organic	NONE	ASTM D4129-82M	0.57	0.65	114	85-115	

M Modified

Approved By: _____ Date: 6/3/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/27/03

Carbon, Total Organic
ASTM D4129-82M
Units: PERCENT
Dry Weight Basis

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	20.0	18.8	94
CCV 2 Result	20.0	19.4	97

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.05	ND
CCB 2 Result	0.05	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03

Sulfide

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9030M	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	25	11	10	NA	05/24/03	157	
E-CH03-20	K2303706-002	63	28	25	NA	05/24/03	628	
E-CH03-21/22	K2303706-003	63	28	25	NA	05/24/03	657	
Method Blank	K2303706-MB	2.5	1.1	1	NA	05/24/03	ND	

M Modified for analysis of soil.

Approved By: _____ Date: 6/3/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/24/03

Duplicate Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001DUP	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide	NONE	9030M	25	157	147	152	7	

Approved By: _____ Date: 6/3/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/24/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide	NONE	9030M	250	902	157	1130	108	60-130	

Approved By: _____ Date: 6/3/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/24/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K2303706-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfide	NONE	9030M	1.18	1.31	111	60-130	

Approved By: _____ Date: 6/3/03

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/24/03

Sulfide
EPA Method 9030M
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	1.18	1.19	101
CCV 2 Result	1.18	1.19	101

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.1	ND
CCB 2 Result	0.1	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03

Cyanide, Total

Prep Method:	NONE	Units:	mg/Kg (ppm)
Analysis Method:	9010B	Basis:	Dry
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-19	K2303706-001	0.3	0.08	1	NA	05/29/03	ND	
E-CH03-20	K2303706-002	0.3	0.08	1	NA	05/29/03	0.14	J
E-CH03-21/22	K2303706-003	0.3	0.08	1	NA	05/29/03	0.11	J
Method Blank	K2303706-MB	0.3	0.08	1	NA	05/29/03	ND	

Approved By: _____ Date: 6/3/03

1A/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/03
Date Received: 05/17/03
Date Extracted: NA
Date Analyzed: 05/29/03

Duplicate Summary
Inorganic Parameters

Sample Name: E-CH03-19
Lab Code: K2303706-001DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Cyanide, Total	NONE	9010B	0.3	ND	ND	ND	-	

Approved By: _____ Date: 6/3/03

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/03
Sample Matrix:	Sediment	**Date Received:**	05/17/03
		Date Extracted:	NA
		Date Analyzed:	05/29/03

Matrix Spike Summary
Inorganic Parameters

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001MS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	9010B	0.3	3.7	ND	3.1	84	75-125	

Approved By: _____ Date: 6/3/03

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	05/29/03

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2303706-LCS	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Cyanide, Total	NONE	9010B	26.6	26.2	98	85-115	

Approved By: _____ Date: 6/3/03

LCS/020597p

03706WET.BR4 - LCS 06/03/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
		Date Received:	NA
		Date Analyzed:	05/29/03

Cyanide, Total
EPA Method 9010B
Units: ug/L (ppb)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 2 Result	100	106	106
CCV 3 Result	100	107	107

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 2 Result	10	ND
CCB 3 Result	10	ND

Approved By: _____ Date: 6/3/03

COMBOQCD/042695

Metals

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Sample No.	Lab Sample ID.
E-CH03-19	K2303706-001
E-CH03-19D	K2303706-001D
E-CH03-19S	K2303706-001S
E-CH03-20	K2303706-002
E-CH03-21/22	K2303706-003
Method Blank	K2303706-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 6/19/03

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2203706
Project No.:	NA	Date Collected:	05/14/03
Project Name:	Canaveral Harbor 103 Evaluation	Date Received:	05/17/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH03-19 Lab Code: K2303706-001

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.8	7.6	2	5/28/03	6/12/03	3400		
Antimony	200.8	0.05	0.01	5	5/28/03	6/18/03	0.04	B	N
Arsenic	200.8	0.5	0.1	5	5/28/03	6/17/03	2.6		
Cadmium	200.8	0.05	0.03	5	5/28/03	6/17/03	0.07		
Chromium	200.8	0.22	0.01	5	5/28/03	6/17/03	7.33		
Copper	200.8	0.11	0.09	5	5/28/03	6/17/03	1.32		
Iron	6010B	4.3	0.4	2	5/28/03	6/12/03	4090		
Lead	200.8	0.11	0.02	5	5/28/03	6/17/03	2.51		
Mercury	7471A	0.01	0.01	1	5/29/03	5/30/03	0.01	U	
Nickel	200.8	0.22	0.08	5	5/28/03	6/17/03	2.37		
Silver	200.8	0.02	0.02	5	5/28/03	6/18/03	0.05		
Zinc	200.8	0.5	0.2	5	5/28/03	6/17/03	7.0		

% Solids: 66.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2203706
Project No.:	NA	Date Collected:	05/14/03
Project Name:	Canaveral Harbor 103 Evaluation	Date Received:	05/17/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH03-20 Lab Code: K2303706-002

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	9.6	6.7	2	5/28/03	6/12/03	12600		
Antimony	200.8	0.05	0.01	5	5/28/03	6/18/03	0.13		N
Arsenic	200.8	0.5	0.1	5	5/28/03	6/17/03	3.7		
Cadmium	200.8	0.05	0.03	5	5/28/03	6/17/03	0.08		
Chromium	200.8	0.19	0.01	5	5/28/03	6/17/03	16.5		
Copper	200.8	0.10	0.08	5	5/28/03	6/17/03	4.53		
Iron	6010B	3.8	0.4	2	5/28/03	6/12/03	10700		
Lead	200.8	0.10	0.02	5	5/28/03	6/17/03	7.55		
Mercury	7471A	0.01	0.01	1	5/29/03	5/30/03	0.01		
Nickel	200.8	0.19	0.07	5	5/28/03	6/17/03	4.81		
Silver	200.8	0.02	0.02	5	5/28/03	6/18/03	0.05		
Zinc	200.8	0.5	0.2	5	5/28/03	6/17/03	20.2		

% Solids: 47.6

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2203706
Project No.:	NA	Date Collected:	05/14/03
Project Name:	Canaveral Harbor 103 Evaluation	Date Received:	05/17/03
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: E-CH03-21/22 Lab Code: K2303706-003

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	9.1	6.4	2	5/28/03	6/12/03	10800		
Antimony	200.8	0.05	0.01	5	5/28/03	6/18/03	0.06		N
Arsenic	200.8	0.5	0.1	5	5/28/03	6/17/03	3.2		
Cadmium	200.8	0.05	0.03	5	5/28/03	6/17/03	0.09		
Chromium	200.8	0.18	0.01	5	5/28/03	6/17/03	14.7		
Copper	200.8	0.09	0.07	5	5/28/03	6/17/03	4.09		
Iron	6010B	3.7	0.4	2	5/28/03	6/12/03	9510		
Lead	200.8	0.09	0.02	5	5/28/03	6/17/03	6.29		
Mercury	7471A	0.01	0.01	1	5/29/03	5/30/03	0.01	B	
Nickel	200.8	0.18	0.06	5	5/28/03	6/17/03	4.27		
Silver	200.8	0.02	0.02	5	5/28/03	6/18/03	0.03		
Zinc	200.8	0.5	0.2	5	5/28/03	6/17/03	17.4		

% Solids: 49.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2203706
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor 103 Evaluation	Date Received:	NA
Matrix:	SEDIMENT	Units:	mg/kg
		Basis:	Dry

Sample Name: Method Blank Lab Code: K2303706-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	10.0	7.0	2	5/28/03	6/12/03	7.0	U	
Antimony	200.8	0.05	0.01	5	5/28/03	6/18/03	0.02	B	N
Arsenic	200.8	0.5	0.1	5	5/28/03	6/17/03	0.1	U	
Cadmium	200.8	0.05	0.03	5	5/28/03	6/17/03	0.03	U	
Chromium	200.8	0.20	0.01	5	5/28/03	6/17/03	0.09	B	
Copper	200.8	0.10	0.08	5	5/28/03	6/17/03	0.08	U	
Iron	6010B	4.0	0.4	2	5/28/03	6/12/03	0.4	U	
Lead	200.8	0.10	0.02	5	5/28/03	6/17/03	0.02	U	
Mercury	7471A	0.02	0.01	1	5/29/03	5/30/03	0.01	U	
Nickel	200.8	0.20	0.07	5	5/28/03	6/17/03	0.07	U	
Silver	200.8	0.02	0.02	5	5/28/03	6/18/03	0.02	U	
Zinc	200.8	0.5	0.2	5	5/28/03	6/17/03	0.2	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4930	99	5000	4970	99	4930	99	6010B
Antimony	25.0	25.7	103	25.0	24.9	100	24.5	98	200.8
Arsenic	50.0	49.3	99	25.0	24.8	99	25.0	100	200.8
Cadmium	25.0	24.8	99	25.0	24.6	98	25.2	101	200.8
Chromium	20.0	20.0	100	25.0	24.5	98	25.4	102	200.8
Copper	25.0	25.3	101	25.0	24.9	100	24.8	99	200.8
Iron	2500	2540	102	500	509	102	505	101	6010B
Iron	25000	25300	101	25000	25100	100	24800	99	6010B
Lead	50.0	49.0	98	25.0	25.2	101	25.9	104	200.8
Mercury	5.0	5.25	105	5.0	4.92	98	5.08	102	7471A
Nickel	50.0	52.3	105	25.0	25.1	100	25.7	103	200.8
Silver	12.5	11.9	95	25.0	25.1	100	25.5	102	200.8
Zinc	50.0	51.4	103	25.0	25.0	100	26.7	107	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5010	100	5000	100	6010B
Antimony				25.0	24.9	100	25.0	100	200.8
Arsenic				25.0	25.5	102	25.9	104	200.8
Cadmium				25.0	25.1	100	25.3	101	200.8
Chromium				25.0	26.6	106	25.0	100	200.8
Copper				25.0	25.3	101	27.3	109	200.8
Iron				500	506	101	503	101	6010B
Iron				25000	24900	100	24800	99	6010B
Lead				25.0	25.6	102	25.6	102	200.8
Mercury				5.0	5.17	103	4.85	97	7471A
Nickel				25.0	25.5	102	27.5	110	200.8
Silver				25.0	25.7	103	24.8	99	200.8
Zinc				25.0	26.6	106	26.8	107	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4940	99	5120	102	6010B
Arsenic				25.0	24.2	97			200.8
Cadmium				25.0	24.4	98			200.8
Chromium				25.0	25.3	101			200.8
Copper				25.0	24.9	99			200.8
Iron				500	497	99	502	100	6010B
Iron				25000	24500	98	25700	103	6010B
Lead				25.0	25.1	100			200.8
Mercury				5.0	4.87	97	4.82	96	7471A
Nickel				25.0	24.9	100			200.8
Zinc				25.0	26.1	104			200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4940	99	4890	98	6010B
Iron				500	494	99	488	98	6010B
Iron				25000	24500	98	24000	96	6010B

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4940	99	4920	98	6010B
Iron				500	495	99	501	100	6010B
Iron				25000	24300	97	24200	97	6010B

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICV Source: Inorganic Ventures CCV Source: CAS Mixed Solutions

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	5.0	5.19	104						7471A

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	45.0	90		
Antimony				0.10	0.12	115		
Arsenic				1.0	1.06	106		
Cadmium				0.10	0.08	84		
Chromium				0.40	0.41	103		
Copper				0.20	0.18	90		
Iron				20	22.7	114		
Lead				0.04	0.04	95		
Mercury	0.20	0.22	109					
Nickel				0.40	0.41	103		
Silver				0.04	0.02	62		
Zinc				1.0	1.10	110		

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.20	0.22	111					

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum	35.0	U	35.0	U	35.0	U	35.0	U					6010B
Antimony	0.04	B	0.03	B	0.06	B	0.03	B					200.8
Arsenic	0.2	U	0.2	U	0.2	U	0.2	U					200.8
Cadmium	0.06	U	0.06	U	0.06	U	0.06	U					200.8
Chromium	0.01	U	-0.03	B	-0.03	B	-0.02	B					200.8
Copper	0.16	U	0.16	U	0.16	U	0.16	U					200.8
Iron	2.0	U	2.0	U	2.5	B	2.0	U					6010B
Lead	0.04	U	0.04	U	0.04	U	0.04	U					200.8
Mercury	0.11	B	0.10	U	0.10	U	0.10	U					7471A
Nickel	0.14	U	0.14	U	0.14	U	0.14	U					200.8
Silver	0.04	U	0.04	U	0.04	U	0.04	U					200.8
Zinc	0.4	U	0.4	U	0.4	U	0.4	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum			35.0	U	-38.1	B	35.0	U					6010B
Antimony			0.02	B									200.8
Arsenic			0.2	U	0.2	U							200.8
Cadmium			0.06	U	0.06	U							200.8
Chromium			0.01	U	0.03	B							200.8
Copper			0.16	U	0.16	U							200.8
Iron			2.0	U	2.0	U	2.0	U					6010B
Lead			0.13	B	0.05	B							200.8
Mercury	0.10	U	0.10	U	0.10	U	0.10	U					7471A
Nickel			0.14	U	0.14	U							200.8
Silver			0.04	U									200.8
Zinc			0.4	U	0.4	U							200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum			35.0	U	35.0	U	35.0	U					6010B
Iron			2.0	U	3.3	B	2.0	U					6010B

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum			35.0	U									6010B
Iron			2.0	U									6010B

METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	488000	487000	97	477000	478000	96
Iron	200000	200000	182000	183000	92	175000	174000	87

METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000				477000	476000	95
Iron	200000	200000				176000	176000	88

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.: Units: mg/kg

Project Name: Canaveral Harbor 103 Evaluation Basis: Dry

Matrix: SEDIMENT % Solids: 66.0

Sample Name: E-CH03-19S Lab Code: K2303706-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		2590		3400		433	-187		6010B
Antimony	70 - 130	60.2		0.04	B	108	56	N	200.8
Arsenic	70 - 130	172		2.6		216	78		200.8
Cadmium	70 - 130	8.38		0.07		10.8	77		200.8
Chromium	70 - 130	40.2		7.33		43.3	76		200.8
Copper	70 - 130	41.4		1.32		54.1	74		200.8
Iron		4060		4090		216	-14		6010B
Lead	70 - 130	85.8		2.51		108	77		200.8
Mercury	71 - 124	0.29		0.01	U	0.28	103		7471A
Nickel	70 - 130	85.9		2.37		108	77		200.8
Silver	70 - 130	9.94		0.05		10.8	92		200.8
Zinc	70 - 130	94.6		7.0		108	81		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2203706
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor 103 Evaluation
Basis: Dry
Matrix: SEDIMENT
% Solids: 66.0

Sample Name: E-CH03-19D
Lab Code: K2303706-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	3400		3160		7		6010B
Antimony		0.04	B	0.04	B	19		200.8
Arsenic		2.6		2.6		1		200.8
Cadmium		0.07		0.05	B	35		200.8
Chromium	20	7.33		7.46		2		200.8
Copper	20	1.32		1.34		2		200.8
Iron	30	4090		4010		2		6010B
Lead	20	2.51		2.60		4		200.8
Mercury		0.01	U	0.01	U			7471A
Nickel	20	2.37		2.39		1		200.8
Silver		0.05		0.02	U	200.0		200.8
Zinc	20	7.0		7.0		0		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

METALS
-7-
LABORATORY CONTROL SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluation

Aqueous LCS Source: Inorganic Ventures Solid LCS Source: ERA Lot #246

Analyte	Aqueous mg/L			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				8270	8670		4200 12300	105
Antimony				32.6	31.8		0.500 68.1	98
Arsenic				187	182		139 235	97
Cadmium				67.9	61.9		52.0 83.6	91
Chromium				144	127		115 173	88
Copper				91.3	80.5		74.8 108	88
Iron				12700	13300		7470 17900	105
Lead				125	119		95.2 155	95
Mercury				1.49	1.57		0.662 2.02	105
Nickel				78.0	69.8		61.1 94.9	89
Silver				90.0	91.8		67.0 113	102
Zinc				283	255		219 347	90

METALS
-9-
ICP SERIAL DILUTIONS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.: Units: ug/L

Project Name: Canaveral Harbor 103 Evaluat:

Sample Name: E-CH03-21/22L Lab Code: K2303706-003L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-	Q	Method
Aluminum	59200		58300		2		6010B
Iron	54200		55000		1		6010B

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.20	0.10	7471A

Comments

METALS

-10-

METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat

ICP/ICP-MS ID #: PQ-S

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	121		0.10	0.02	200.8
Arsenic	75		1.0	0.2	200.8
Cadmium	111		0.10	0.06	200.8
Chromium	52		0.40	0.01	200.8
Copper	65		0.20	0.16	200.8
Lead	208		0.20	0.04	200.8
Nickel	60		0.40	0.14	200.8
Silver	109		0.04	0.04	200.8
Zinc	66		1.0	0.4	200.8

Comments:

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	237.30		50.0	35.0	6010B
Iron	259.90		20.0	2.0	6010B

Comments

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0009000	0.0000000	-0.0035000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0125000
Arsenic	189.0	0.0000000	0.0000000	-0.0001400	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000900	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000230	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003000	0.0000000	0.0000000	0.0000000	-0.0003600
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009500	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000780	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0005000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0001000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	-0.0012000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mo	Ni	Interelement Correction Factors for: Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019000
Antimony	206.8	-0.0280000	0.0000000	0.0002400	0.0000000	0.0004000
Arsenic	189.0	0.0010000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	-0.0004700	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000250	-0.0000120	0.0000600	0.0000000	-0.0000560
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001700	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015000	0.0000000	0.0000000
Copper	324.7	0.0003400	0.0000000	-0.0000070	-0.0017000	0.0000000
Iron	259.9	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.0740000	0.0700000
Lead	220.3	-0.0016000	0.0004600	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0001200
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0006800	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0003000	0.0000000	0.0000000	-0.0001700	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0005500	-0.0060000	-0.0002500	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0016000	0.0017000	0.0037000
Tin	189.9	0.0000000	0.0000000	-0.0019000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002500	0.0000000	-0.0006400	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	-0.0000600	0.0000000	0.0000000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003100	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0004000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0005900	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: PQ-S

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	600.0	200.8
Arsenic	15.00	1000.0	200.8
Cadmium	15.00	1000.0	200.8
Chromium	15.00	150.0	200.8
Copper	15.00	800.0	200.8
Lead	15.00	800.0	200.8
Nickel	15.00	800.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	1000.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Iron	5.00	20000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2303706-001	5/28/03	EPA 3050B	1.40	100
K2303706-001D	5/28/03	EPA 3050B	1.40	100
K2303706-001S	5/28/03	EPA 3050B	1.40	100
K2303706-002	5/28/03	EPA 3050B	2.20	100
K2303706-003	5/28/03	EPA 3050B	2.20	100
LCSS	5/28/03	EPA 3050B	1.00	100
K2303706-MB	5/28/03	EPA 3050B	1.00	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
CALIBRATION ZER	5/29/03	METHOD	100	100
K2303706-001	5/29/03	METHOD	2.94	100
K2303706-001D	5/29/03	METHOD	2.53	100
K2303706-001S	5/29/03	METHOD	2.70	100
K2303706-002	5/29/03	METHOD	3.31	100
K2303706-003	5/29/03	METHOD	3.39	100
ICV	5/29/03	METHOD	100	100
ICV2	5/29/03	METHOD	100	100
LCSS	5/29/03	METHOD	0.505	100
K2303706-MB	5/29/03	METHOD	1.00	100
STANDARD #1	5/29/03	METHOD	100	100
STANDARD #2	5/29/03	METHOD	100	100
STANDARD #3	5/29/03	METHOD	100	100
STANDARD #4	5/29/03	METHOD	100	100
STANDARD #5	5/29/03	METHOD	100	100

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Canaveral Harbor 103 Evaluat:

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2303706-001	5/28/03	EPA 3050B	1.40	100
K2303706-001D	5/28/03	EPA 3050B	1.40	100
K2303706-001S	5/28/03	EPA 3050B	1.40	100
K2303706-002	5/28/03	EPA 3050B	2.20	100
K2303706-003	5/28/03	EPA 3050B	2.20	100
LCSS	5/28/03	EPA 3050B	1.00	100
K2303706-MB	5/28/03	EPA 3050B	1.00	100

K2303706-001	5/28/03	EPA 3050B	1.40	100
K2303706-001D	5/28/03	EPA 3050B	1.40	100
K2303706-001S	5/28/03	EPA 3050B	1.40	100
K2303706-002	5/28/03	EPA 3050B	2.20	100
K2303706-003	5/28/03	EPA 3050B	2.20	100
LCSS	5/28/03	EPA 3050B	1.00	100
K2303706-MB	5/28/03	EPA 3050B	1.00	100

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/30/03 End Date: 5/30/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	11:37																X									
STANDARD #1	1.00	11:39																X									
STANDARD #2	1.00	11:41																X									
STANDARD #3	1.00	11:42																X									
STANDARD #4	1.00	11:44																X									
STANDARD #5	1.00	11:46																X									
ICV	1.00	11:47																X									
ICB	1.00	11:49																X									
CCV1	1.00	11:50																X									
CCB1	1.00	11:52																X									
CRA	1.00	11:53																X									
K2303706-MB	1.00	11:55																X									
LCSS	1.00	11:57																X									
ZZZZZZ	1.00	11:58																									
ZZZZZZ	1.00	12:00																									
ZZZZZZ	1.00	12:02																									
ZZZZZZ	1.00	12:03																									
ZZZZZZ	1.00	12:05																									
ZZZZZZ	1.00	12:06																									
ZZZZZZ	1.00	12:08																									
CCV2	1.00	12:10																X									
CCB2	1.00	12:11																X									
ZZZZZZ	1.00	12:13																									
ZZZZZZ	1.00	12:14																									
ZZZZZZ	1.00	12:16																									
ZZZZZZ	1.00	12:18																									
ZZZZZZ	1.00	12:19																									
ZZZZZZ	1.00	12:22																									
ZZZZZZ	1.00	12:24																									
K2303706-001	1.00	12:25																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/30/03 End Date: 5/30/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2303706-001D	1.00	12:27																X									
K2303706-001S	1.00	12:29																X									
CCV3	1.00	12:30																X									
CCB3	1.00	12:32																X									
ZZZZZZ	1.00	12:33																									
ZZZZZZ	1.00	12:35																									
ZZZZZZ	1.00	12:37																									
ZZZZZZ	1.00	12:40																									
ZZZZZZ	1.00	12:43																									
ZZZZZZ	1.00	12:46																									
ZZZZZZ	1.00	12:49																									
ZZZZZZ	1.00	12:51																									
ZZZZZZ	1.00	12:52																									
ZZZZZZ	1.00	12:54																									
ZZZZZZ	1.00	12:55																									
CALIBRATION ZERO	1.00	13:15																X									
STANDARD #1	1.00	13:17																X									
STANDARD #2	1.00	13:18																X									
STANDARD #3	1.00	13:20																X									
STANDARD #4	1.00	13:22																X									
STANDARD #5	1.00	13:23																X									
ICV2	1.00	13:25																X									
ICB2	1.00	13:26																X									
CCV4	1.00	13:28																X									
CCB4	1.00	13:30																X									
CRA2	1.00	13:31																X									
K2303706-002	1.00	13:33																X									
K2303706-003	1.00	13:34																X									
ZZZZZZ	1.00	13:36																									
ZZZZZZ	1.00	13:39																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: CETAC-1 Method: CV

Start Date: 5/30/03 End Date: 5/30/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	13:41																									
ZZZZZZ	1.00	13:42																									
ZZZZZZ	1.00	13:44																									
ZZZZZZ	1.00	13:46																									
ZZZZZZ	1.00	13:47																									
CCV5	1.00	13:49																X									
CCB5	1.00	13:51																X									
ZZZZZZ	1.00	13:52																									
CCV6	1.00	13:54																X									
CCB6	1.00	13:55																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 6/12/03 End Date: 6/12/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	08:47		X										X													
CAL-STDA	1.00	08:51												X													
CAL-STDB	1.00	08:55		X										X													
ICV	1.00	09:00		X										X													
ICV	1.00	09:03												X													
ZZZZZZ	1.00	09:06																									
ICB	1.00	09:09		X										X													
CCV1	1.00	09:13												X													
CCV1	1.00	09:20		X										X													
CCB1	1.00	09:23		X										X													
CRI	1.00	09:27		X										X													
ZZZZZZ	2.00	09:33																									
ICSA	1.00	09:37		X										X													
ICSAB	1.00	09:39		X										X													
ZZZZZZ	1.00	09:59																									
ZZZZZZ	1.00	10:02																									
ZZZZZZ	1.00	10:05																									
ZZZZZZ	1.00	10:07																									
ZZZZZZ	1.00	10:10																									
ZZZZZZ	1.00	10:12																									
CCV2	1.00	10:15												X													
CCV2	1.00	10:17		X										X													
CCB2	1.00	10:20		X										X													
ZZZZZZ	1.00	10:23																									
ZZZZZZ	1.00	10:25																									
ZZZZZZ	5.00	10:28																									
ZZZZZZ	1.00	10:39																									
ZZZZZZ	1.00	10:41																									
ZZZZZZ	1.00	10:44																									
ZZZZZZ	1.00	10:47																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 6/12/03 End Date: 6/12/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:50																									
ZZZZZZ	1.00	10:52																									
ZZZZZZ	1.00	10:55																									
CCV3	1.00	10:57												X													
CCV3	1.00	11:00		X										X													
CCB3	1.00	11:03		X										X													
ZZZZZZ	1.00	11:21																									
ZZZZZZ	1.00	11:23																									
ZZZZZZ	5.00	11:26																									
ZZZZZZ	1.00	11:31																									
ZZZZZZ	1.00	11:34																									
ZZZZZZ	1.00	11:55																									
ZZZZZZ	1.00	11:57																									
ZZZZZZ	1.00	12:00																									
ZZZZZZ	1.00	12:02																									
ZZZZZZ	1.00	12:05																									
CCV4	1.00	12:13												X													
CCV4	1.00	12:16		X										X													
CCB4	1.00	12:18		X										X													
ZZZZZZ	1.00	12:21																									
ZZZZZZ	1.00	12:31																									
ZZZZZZ	1.00	12:34																									
ZZZZZZ	1.00	12:36																									
ZZZZZZ	1.00	12:39																									
ZZZZZZ	1.00	12:42																									
ZZZZZZ	1.00	12:54																									
ZZZZZZ	1.00	12:57																									
ZZZZZZ	1.00	13:00																									
ZZZZZZ	1.00	13:03																									
CCV5	1.00	13:07												X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 6/12/03 End Date: 6/12/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV5	1.00	13:09		X										X													
CCB5	1.00	13:12		X										X													
CCV6	1.00	14:08												X													
CCV6	1.00	14:10		X										X													
CCB6	1.00	14:13		X										X													
ZZZZZZ	1.00	14:18																									
ZZZZZZ	1.00	14:20																									
ZZZZZZ	1.00	14:23																									
ZZZZZZ	1.00	14:25																									
ZZZZZZ	1.00	14:27																									
ZZZZZZ	1.00	14:30																									
ZZZZZZ	1.00	14:32																									
ZZZZZZ	1.00	14:35																									
ZZZZZZ	1.00	14:37																									
ZZZZZZ	1.00	14:39																									
CCV7	1.00	14:42												X													
CCV7	1.00	14:45		X										X													
CCB7	1.00	14:48		X										X													
ZZZZZZ	1.00	14:52																									
ZZZZZZ	1.00	14:54																									
ZZZZZZ	1.00	14:57																									
ZZZZZZ	1.00	14:59																									
ZZZZZZ	1.00	15:02																									
ZZZZZZ	1.00	15:07																									
ZZZZZZ	1.00	15:09																									
ZZZZZZ	1.00	15:12																									
ZZZZZZ	5.00	15:15																									
CCV8	1.00	15:20												X													
CCV8	1.00	15:23		X										X													
CCB8	1.00	15:26		X										X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 6/12/03 End Date: 6/12/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ICSA	1.00	15:29		X										X													
ICSAB	1.00	15:31		X										X													
CCV9	1.00	15:34												X													
CCV9	1.00	15:37		X										X													
CCB9	1.00	15:39		X										X													
K2303706-MB	2.00	15:50		X										X													
LCSS	2.00	15:52		X										X													
K2303706-001	2.00	15:58		X										X													
K2303706-001D	2.00	16:02		X										X													
K2303706-001S	2.00	16:04		X										X													
K2303706-002	2.00	16:06		X										X													
K2303706-003	2.00	16:09		X										X													
K2303706-003L	10.00	16:11		X										X													
ICSA	1.00	16:18		X										X													
ICSAB	1.00	16:21		X										X													
CCV10	1.00	16:23												X													
CCV10	1.00	16:25		X										X													
CCB10	1.00	16:28		X										X													

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/17/03 End Date: 6/17/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	15:43				X			X		X		X		X				X							X	
CALIBRATION STANDARD	1.00	15:46				X			X		X		X		X				X							X	
ICV	1.00	15:50				X			X		X		X		X				X							X	
CCV1	1.00	15:52				X			X		X		X		X				X							X	
ICB	1.00	15:59				X			X		X		X		X				X							X	
CCB1	1.00	16:03				X			X		X		X		X				X							X	
ZZZZZZ	1.00	16:06																									
K2303706-MB	5.00	16:08				X			X		X		X		X				X							X	
CRA	1.00	16:12				X			X		X		X		X				X							X	
LCSS	20.00	16:14				X			X		X		X		X				X							X	
K2303706-001	5.00	16:17				X			X		X		X		X				X							X	
K2303706-001D	5.00	16:20				X					X		X		X				X							X	
K2303706-001S	25.00	16:23				X			X		X		X		X				X							X	
K2303706-001D	5.00	16:29							X																		
K2303706-002	5.00	16:31				X			X		X		X		X				X							X	
K2303706-003	5.00	16:35				X			X		X		X		X				X							X	
CCV2	1.00	16:38				X			X		X		X		X				X							X	
CCB2	1.00	16:42				X			X		X		X		X				X							X	
ZZZZZZ	5.00	16:46																									
ZZZZZZ	20.00	16:48																									
ZZZZZZ	5.00	16:51																									
ZZZZZZ	5.00	16:54																									
ZZZZZZ	25.00	16:56																									
ZZZZZZ	5.00	17:00																									
ZZZZZZ	5.00	17:02																									
ZZZZZZ	5.00	17:04																									
ZZZZZZ	5.00	17:08																									
ZZZZZZ	5.00	17:10																									
CCV3	1.00	17:13				X			X		X		X		X				X							X	
CCB3	1.00	17:17				X			X		X		X		X				X							X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/17/03 End Date: 6/17/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	25.00	17:20																									
ZZZZZZ	5.00	17:24																									
ZZZZZZ	5.00	17:27																									
ZZZZZZ	5.00	17:29																									
ZZZZZZ	5.00	17:31																									
ZZZZZZ	5.00	17:33																									
ZZZZZZ	5.00	17:36																									
ZZZZZZ	5.00	17:38																									
ZZZZZZ	5.00	17:41																									
ZZZZZZ	5.00	17:43																									
CCV4	1.00	17:45				X			X		X		X		X				X							X	
CCB4	1.00	17:48				X			X		X		X		X				X							X	
ZZZZZZ	50.00	17:51																									
ZZZZZZ	1.00	17:53																									
ZZZZZZ	1.00	17:55																									
ZZZZZZ	1.00	17:58																									
ZZZZZZ	1.00	18:03																									
ZZZZZZ	5.00	18:06																									
ZZZZZZ	5.00	18:08																									
ZZZZZZ	5.00	18:10																									
CCV5	1.00	18:13				X			X		X		X		X				X							X	
CCB5	1.00	18:15				X			X		X		X		X				X							X	

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	12:02			X																	X					
CALIBRATION STANDARD	1.00	12:03			X																	X					
ICV	1.00	12:05			X																	X					
CCV1	1.00	12:06			X																	X					
ICB	1.00	12:11			X																	X					
CCB1	1.00	12:13			X																	X					
ZZZZZZ	1.00	12:17																									
CRA	1.00	12:23			X																	X					
ZZZZZZ	5.00	12:25																									
ZZZZZZ	20.00	12:26																									
ZZZZZZ	5.00	12:28																									
ZZZZZZ	5.00	12:29																									
ZZZZZZ	5.00	12:30																									
ZZZZZZ	5.00	12:32																									
ZZZZZZ	5.00	12:34																									
ZZZZZZ	5.00	12:35																									
CCV2	1.00	12:37			X																	X					
CCB2	1.00	12:46			X																	X					
ZZZZZZ	5.00	12:47																									
ZZZZZZ	5.00	12:49																									
ZZZZZZ	5.00	12:51																									
ZZZZZZ	5.00	12:52																									
ZZZZZZ	5.00	12:55																									
ZZZZZZ	5.00	12:56																									
ZZZZZZ	5.00	12:58																									
ZZZZZZ	5.00	12:59																									
ZZZZZZ	5.00	13:01																									
ZZZZZZ	5.00	13:04																									
CCV3	1.00	13:06			X																	X					
CCB3	1.00	13:12			X																	X					

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Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	13:13																									
ZZZZZZ	5.00	13:15																									
K2303706-MB	5.00	13:18			X																	X					
LCSS	20.00	13:22			X																	X					
K2303706-001	5.00	13:24			X																	X					
K2303706-001D	5.00	13:25			X																	X					
K2303706-001S	5.00	13:26			X																	X					
K2303706-002	5.00	13:29			X																	X					
K2303706-003	5.00	13:30			X																	X					
CCV4	1.00	13:33			X																	X					
CCB4	1.00	13:38			X																	X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2203706

Project No.:

Project Name: Canaveral Harbor 103 Evaluat:

Instrument ID Number: PQ-S Method: MS

Start Date: 6/18/03 End Date: 6/18/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	13:40																									
ZZZZZZ	1.00	13:41																									
ZZZZZZ	1.00	13:43																									
ZZZZZZ	1.00	13:44																									
ZZZZZZ	1.00	13:46																									
ZZZZZZ	1.00	13:51																									
ZZZZZZ	1.00	13:53																									
ZZZZZZ	1.00	14:01																									
ZZZZZZ	1.00	14:02																									
ZZZZZZ	1.00	14:04																									
ZZZZZZ	1.00	14:06																									
ZZZZZZ	1.00	14:12																									
ZZZZZZ	1.00	14:16																									
ZZZZZZ	1.00	14:20																									
ZZZZZZ	1.00	14:23																									
ZZZZZZ	1.00	14:26																									
ZZZZZZ	1.00	14:30																									
ZZZZZZ	1.00	14:32																									
ZZZZZZ	1.00	14:38																									
ZZZZZZ	1.00	14:43																									
ZZZZZZ	1.00	14:47																									
ZZZZZZ	1.00	14:52																									
ZZZZZZ	1.00	14:59																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Oil & Grease

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Sediment	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	100	J

Approved By: M Curler Date: 6/2/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Sediment	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-20	Units:	mg/Kg (ppm)
Lab Code:	K2303706-002	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	150	

Approved By: M Cullen Date: 6/2/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Sediment	**Date Received:**	5/17/03

Oil and Grease

Sample Name:	E-CH03-21/22	Units:	mg/Kg (ppm)
Lab Code:	K2303706-003	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	270	

Approved By: M Curler Date: 6/2/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	K030523-SB	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	50	1	5/23/03	5/27/03	ND	

Approved By: MB Date: 6/2/03

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
LCS Matrix:	Sediment	**Date Received:**	NA
		Date Extracted:	5/23/03
		Date Analyzed:	5/27/03

Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K030523-SL	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	EPA 9071A	1664	2000	1560	78	78-114	

Approved By: MC Curler Date: 6/2/03

LCS/071499p
03706PHC.CQ1 - LCS 6/2/03

Page No.:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	5/14/03
Sample Matrix:	Sediment	**Date Received:**	5/17/03
		Date Extracted:	5/23/03
		Date Analyzed:	5/27/03

Matrix Spike/Duplicate Matrix Spike Summary
Oil and Grease

Sample Name:	E-CH03-19	Units:	mg/Kg (ppm)
Lab Code:	K2303706-001MS, K2303706-001DMS	Basis:	Dry
Test Notes:			

									Percent Recovery			
				Spike Level		Sample	Spike Result				CAS Acceptance	Relative Percent
Analyte	**Prep Method**	**Analysis Method**	**MRL**	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**
Oil and Grease, Total (HEM)	EPA 9071A	1664	100	3960	3960	270	3730	3670	87	86	78-114	2

Approved By: M Curlu Date: 6/2/03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 5/27/03

Continuing Calibration Verification (CCV) Summary
EPA Methods 1664
Units: mg

Analyte	True Value	CCV1 Result	Percent Recovery	CCV2 Result	Percent Recovery
Oil and Grease, Total (HEM)	1000	1000	100	1000	100
Oil and Grease, Total (HEM)	2.0	2.0	100	2.0	100

Approved By: MM Curler Date: 6/2/03

CCV 1-4/102194

03706PHC.CQ1 - ccv 6/2/03

Page No.:

Butyltins

Organic Analysis:
Butyltins

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-19	K2303706-001	05/14/2003	05/17/2003
E-CH03-20	K2303706-002	05/14/2003	05/17/2003
E-CH03-21/22	K2303706-003	05/14/2003	05/17/2003
E-CH03-20MS	KWG0307235-3	05/14/2003	05/17/2003
E-CH03-20DMS	KWG0307235-4	05/14/2003	05/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Todd Byblin

Date: 6/17/03 Title: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Butyltins

Sample Name:	E-CH03-19	**Units:**	ug/Kg
Lab Code:	K2303706-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.5	1.3	1	05/20/03	06/14/03	KWG0307235	
Tri-n-butyltin	**1.5**		1.5	0.55	1	05/20/03	06/14/03	KWG0307235	
Di-n-butyltin	ND	U	1.5	1.2	1	05/20/03	06/14/03	KWG0307235	
n-Butyltin	ND	U	1.5	0.72	1	05/20/03	06/14/03	KWG0307235	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	78	22-113	06/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Butyltins

Sample Name:	E-CH03-20	**Units:**	ug/Kg
Lab Code:	K2303706-002	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.1	1.8	1	05/20/03	06/14/03	KWG0307235	
Tri-n-butyltin	**5.0**		2.1	0.76	1	05/20/03	06/14/03	KWG0307235	
Di-n-butyltin	ND	U	2.1	1.6	1	05/20/03	06/14/03	KWG0307235	
n-Butyltin	ND	U	2.1	0.99	1	05/20/03	06/14/03	KWG0307235	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	85	22-113	06/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Butyltins

Sample Name:	E-CH03-21/22	**Units:**	ug/Kg
Lab Code:	K2303706-003	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	2.0	1.7	1	05/20/03	06/14/03	KWG0307235	
Tri-n-butyltin	**3.4**		2.0	0.73	1	05/20/03	06/14/03	KWG0307235	
Di-n-butyltin	ND	U	2.0	1.5	1	05/20/03	06/14/03	KWG0307235	
n-Butyltin	ND	U	2.0	0.95	1	05/20/03	06/14/03	KWG0307235	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	88	22-113	06/14/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Sediment	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0307235-6	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.97	0.81	1	05/20/03	06/13/03	KWG0307235	
Tri-n-butyltin	ND	U	0.97	0.36	1	05/20/03	06/13/03	KWG0307235	
Di-n-butyltin	ND	U	0.97	0.73	1	05/20/03	06/13/03	KWG0307235	
n-Butyltin	ND	U	0.97	0.47	1	05/20/03	06/13/03	KWG0307235	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	68	22-113	06/13/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
E-CH03-19	K2303706-001	78
E-CH03-20	K2303706-002	85
E-CH03-21/22	K2303706-003	88
Method Blank	KWG0307235-6	68
E-CH03-20MS	KWG0307235-3	82
E-CH03-20DMS	KWG0307235-4	75
Lab Control Sample	KWG0307235-5	89

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 22-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/20/2003
Sample Matrix:	Sediment	**Date Analyzed:**	06/14/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	E-CH03-20	**Units:**	ug/Kg
Lab Code:	K2303706-002	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0307235

		E-CH03-20MS KWG0307235-3 Matrix Spike			E-CH03-20DMS KWG0307235-4 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	75.8	105	72	71.9	105	69	25-125	5	50
Tri-n-butyltin	5.0	80.2	105	72	75.5	105	67	12-138	6	50
Di-n-butyltin	ND	74.9	105	72	75.1	105	72	10-155	0	50
n-Butyltin	ND	21.7	105	21	19.6	105	19	10-99	10	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/20/2003
Sample Matrix:	Sediment	**Date Analyzed:**	06/13/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/Kg
Analysis Method:	Krone	**Basis:**	Dry
		Level:	Low
		Extraction Lot:	KWG0307235

	Lab Control Sample KWG0307235-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	33.0	48.2	69	10-126
Tri-n-butyltin	38.3	48.2	79	30-131
Di-n-butyltin	41.1	48.2	85	23-141
n-Butyltin	36.2	48.2	75	10-127

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/20/2003
Sample Matrix:	Sediment	**Date Analyzed:**	06/13/2003
		Time Analyzed:	16:15

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\061303B\0613F012.D
Lab Code:	KWG0307235-6	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0307235

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0307235-5	J:\GC11\DATA\061303B\0613F013.D	06/13/03	16:40
E-CH03-19	K2303706-001	J:\GC11\DATA\061303B\0613F037.D	06/14/03	17:55
E-CH03-20	K2303706-002	J:\GC11\DATA\061303B\0613F038.D	06/14/03	18:13
E-CH03-20MS	KWG0307235-3	J:\GC11\DATA\061303B\0613F039.D	06/14/03	18:31
E-CH03-20DMS	KWG0307235-4	J:\GC11\DATA\061303B\0613F040.D	06/14/03	18:49
E-CH03-21/22	K2303706-003	J:\GC11\DATA\061303B\0613F041.D	06/14/03	19:07

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/20/2003
Sample Matrix:	Sediment	**Date Analyzed:**	06/13/2003
		Time Analyzed:	16:40

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\061303B\0613F013.D
Lab Code:	KWG0307235-5	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone	**Extraction Lot:**	KWG0307235

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0307235-6	J:\GC11\DATA\061303B\0613F012.D	06/13/03	16:15
E-CH03-19	K2303706-001	J:\GC11\DATA\061303B\0613F037.D	06/14/03	17:55
E-CH03-20	K2303706-002	J:\GC11\DATA\061303B\0613F038.D	06/14/03	18:13
E-CH03-20MS	KWG0307235-3	J:\GC11\DATA\061303B\0613F039.D	06/14/03	18:31
E-CH03-20DMS	KWG0307235-4	J:\GC11\DATA\061303B\0613F040.D	06/14/03	18:49
E-CH03-21/22	K2303706-003	J:\GC11\DATA\061303B\0613F041.D	06/14/03	19:07

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2698
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\061203\0613F003.D	D	J:\GC11\DATA\061203\0613F006.D
B	J:\GC11\DATA\061203\0613F004.D	E	J:\GC11\DATA\061203\0613F007.D
C	J:\GC11\DATA\061203\0613F005.D	F	J:\GC11\DATA\061203\0613F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	510	B	50	473	C	100	474	D	500	458	E	1000	462
	F	2000	458												
Tri-n-butyltin	A	10	626	B	50	580	C	100	572	D	500	563	E	1000	550
	F	2000	533												
Di-n-butyltin	A	10	778	B	50	744	C	100	723	D	500	717	E	1000	704
	F	2000	679												
n-Butyltin	A	10	1010	B	50	986	C	100	934	D	500	915	E	1000	893
	F	2000	854												
Tri-n-propyltin	A	11	471	B	54	460	C	110	464	D	540	450	E	1100	446
	F	2100	439												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2698
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	4.2		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	5.6		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.7		≤ 20
n-Butyltin	MS	AverageRF	% RSD	6.2		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	2.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003
Date Analyzed: 06/13/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2698
Units: ng/ml

File ID: J:\GC11\DATA\061203\0613F009.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	520	472	519	10	NA	± 30 %	AverageRF
Tri-n-butyltin	480	520	571	612	7	NA	± 30 %	AverageRF
Di-n-butyltin	480	520	724	798	10	NA	± 30 %	AverageRF
n-Butyltin	490	550	932	1030	11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2698
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\061203\0613F003.D\0613R003.D	D	J:\GC11\DATA\061203\0613F006.D\0613R006.D
B	J:\GC11\DATA\061203\0613F004.D\0613R004.D	E	J:\GC11\DATA\061203\0613F007.D\0613R007.D
C	J:\GC11\DATA\061203\0613F005.D\0613R005.D	F	J:\GC11\DATA\061203\0613F008.D\0613R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	459	B	50	446	C	100	410	D	500	400	E	1000	392
	F	2000	377												
Tri-n-butyltin	A	10	473	B	50	479	C	100	494	D	500	481	E	1000	467
	F	2000	447												
Di-n-butyltin	A	10	624	B	50	602	C	100	601	D	500	582	E	1000	568
	F	2000	551												
n-Butyltin	A	10	852	B	50	817	C	100	816	D	500	794	E	1000	771
	F	2000	739												
Tri-n-propyltin	A	11	476	B	54	405	C	110	407	D	540	391	E	1100	385
	F	2100	372												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2698
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	7.7		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	3.4		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.5		≤ 20
n-Butyltin	MS	AverageRF	% RSD	5.0		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	9.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003
Date Analyzed: 06/13/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2698
Units: ng/ml

File ID: J:\GC11\DATA\061203\0613F009.D\0613R009.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	470	414	419	1	NA	± 30 %	AverageRF
Tri-n-butyltin	480	500	474	497	5	NA	± 30 %	AverageRF
Di-n-butyltin	480	500	588	616	5	NA	± 30 %	AverageRF
n-Butyltin	490	520	798	845	6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\061303B\0613FX02.D	D	J:\GC11\DATA\061303B\0613FX05.D
B	J:\GC11\DATA\061303B\0613FX03.D	E	J:\GC11\DATA\061303B\0613FX06.D
C	J:\GC11\DATA\061303B\0613FX04.D	F	J:\GC11\DATA\061303B\0613FX07.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	685	B	50	559	C	100	555	D	500	543	E	1000	535
	F	2000	521												
Tri-n-butyltin	A	10	770	B	50	675	C	100	663	D	500	653	E	1000	633
	F	2000	617												
Di-n-butyltin	A	10	838	B	50	853	C	100	840	D	500	835	E	1000	811
	F	2000	790												
n-Butyltin	A	10	1230	B	50	1100	C	100	1120	D	500	1060	E	1000	1040
	F	2000	1020												
Tri-n-propyltin	A	11	588	B	54	581	C	110	555	D	540	544	E	1100	530
	F	2100	514												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	10.5		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	8.1		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	2.8		≤ 20
n-Butyltin	MS	AverageRF	% RSD	6.9		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	5.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003
Date Analyzed: 06/13/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2701
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613FX08.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	500	566	609	8	NA	± 30 %	AverageRF
Tri-n-butyltin	480	510	669	716	7	NA	± 30 %	AverageRF
Di-n-butyltin	480	530	828	925	12	NA	± 30 %	AverageRF
n-Butyltin	490	550	1100	1220	11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\061303B\0613FX02.D\0613RX02.D	D	J:\GC11\DATA\061303B\0613FX05.D\0613RX05.D
B	J:\GC11\DATA\061303B\0613FX03.D\0613RX03.D	E	J:\GC11\DATA\061303B\0613FX06.D\0613RX06.D
C	J:\GC11\DATA\061303B\0613FX04.D\0613RX04.D	F	J:\GC11\DATA\061303B\0613FX07.D\0613RX07.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tetra-n-butyltin	A	10	432	B	50	406	C	100	396	D	500	402	E	1000	391
	F	2000	397												
Tri-n-butyltin	A	10	604	B	50	495	C	100	489	D	500	488	E	1000	471
	F	2000	460												
Di-n-butyltin	A	10	600	B	50	605	C	100	601	D	500	594	E	1000	582
	F	2000	567												
n-Butyltin	A	10	828	B	50	826	C	100	811	D	500	799	E	1000	782
	F	2000	757												
Tri-n-propyltin	A	11	449	B	54	404	C	110	394	D	540	394	E	1100	386
	F	2100	391												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL2701
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tetra-n-butyltin	MS	AverageRF	% RSD	3.6		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	10.4		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	2.4		≤ 20
n-Butyltin	MS	AverageRF	% RSD	3.4		≤ 20
Tri-n-propyltin	SURR	AverageRF	% RSD	5.8		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/13/2003
Date Analyzed: 06/13/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration ID: CAL2701
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613FX08.D\0613RX08.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	520	404	446	10	NA	± 30 %	AverageRF
Tri-n-butyltin	480	490	501	514	3	NA	± 30 %	AverageRF
Di-n-butyltin	480	530	592	656	11	NA	± 30 %	AverageRF
n-Butyltin	490	550	800	886	11	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/13/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2698
Analysis Lot: KWG0308633
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613F002.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	500	472	477	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	571	578	1	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	724	737	2	NA	± 25 %	AverageRF
n-Butyltin	500	510	932	947	2	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	455	466	2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/13/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2698
Analysis Lot: KWG0308633
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613F002.D\0613R002.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	470	414	391	-6	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	474	468	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	480	588	568	-3	NA	± 25 %	AverageRF
n-Butyltin	500	480	798	768	-4	NA	± 25 %	AverageRF
Tri-n-propyltin	540	510	406	388	-5	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/13/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2698
Analysis Lot: KWG0308633
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613F016.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	590	472	557	18	NA	± 25 %	AverageRF
Tri-n-butyltin	500	590	571	669	17	NA	± 25 %	AverageRF
Di-n-butyltin	500	590	724	859	19	NA	± 25 %	AverageRF
n-Butyltin	500	590	932	1090	17	NA	± 25 %	AverageRF
Tri-n-propyltin	540	640	455	544	19	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	06/13/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	06/13/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2698
		Analysis Lot:	KWG0308633
		Units:	ng/ml
File ID:	J:\GC11\DATA\061303B\0613F016.D\0613R016.D	**Column ID:**	RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	414	431	4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	550	474	518	9	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	588	636	8	NA	± 25 %	AverageRF
n-Butyltin	500	540	798	858	8	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	406	421	4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	06/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	06/13/2003
Analysis Method:	Krone	**Calibration ID:**	CAL2701
		Analysis Lot:	KWG0308633
		Units:	ng/ml
File ID:	J:\GC11\DATA\061303B\0613F032.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	490	566	554	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	669	662	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	828	845	2	NA	± 25 %	AverageRF
n-Butyltin	500	500	1100	1100	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	552	566	2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308633
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613F032.D\0613R032.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	510	404	409	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	501	488	-3	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	592	601	2	NA	± 25 %	AverageRF
n-Butyltin	500	500	800	796	0	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	403	414	3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308633
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613F507.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	500	566	563	-1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	520	669	696	4	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	828	900	9	NA	± 25 %	AverageRF
n-Butyltin	500	530	1100	1170	7	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	552	564	2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/14/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: Krone

Calibration Date: 06/13/2003
Calibration ID: CAL2701
Analysis Lot: KWG0308633
Units: ng/ml

File ID: J:\GC11\DATA\061303B\0613F507.D\0613R507.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	500	520	404	417	3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	501	513	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	540	592	639	8	NA	± 25 %	AverageRF
n-Butyltin	500	520	800	838	5	NA	± 25 %	AverageRF
Tri-n-propyltin	540	550	403	417	4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0308633
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0613F001.D	Instrument Blank	KWG0308633-1	06/13/03	12:37		06/13/03	12:49
0613F002.D	Continuing Calibration Verification	KWG0308633-2	06/13/03	12:55		06/13/03	13:07
0613F003.D	ZZZZZZ	ZZZZZZ	06/13/03	13:31		06/13/03	13:43
0613F004.D	ZZZZZZ	ZZZZZZ	06/13/03	13:52		06/13/03	14:04
0613F005.D	ZZZZZZ	ZZZZZZ	06/13/03	14:09		06/13/03	14:21
0613F006.D	ZZZZZZ	ZZZZZZ	06/13/03	14:28		06/13/03	14:40
0613F007.D	ZZZZZZ	ZZZZZZ	06/13/03	14:46		06/13/03	14:58
0613F008.D	ZZZZZZ	ZZZZZZ	06/13/03	15:04		06/13/03	15:16
0613F009.D	ZZZZZZ	ZZZZZZ	06/13/03	15:22		06/13/03	15:34
0613F010.D	ZZZZZZ	ZZZZZZ	06/13/03	15:39		06/13/03	15:51
0613F011.D	ZZZZZZ	ZZZZZZ	06/13/03	15:57		06/13/03	16:09
0613F012.D	Method Blank	KWG0307235-6	06/13/03	16:15		06/13/03	16:27
0613F013.D	Lab Control Sample	KWG0307235-5	06/13/03	16:40		06/13/03	16:52
0613F017.D	ZZZZZZ	ZZZZZZ	06/13/03	16:57		06/13/03	17:09
0613F015.D	Instrument Blank	KWG0308633-3	06/13/03	17:15		06/13/03	17:27
0613F016.D	Continuing Calibration Verification	KWG0308633-4	06/13/03	17:33		06/13/03	17:45
0613F018.D	ZZZZZZ	ZZZZZZ	06/13/03	17:51		06/13/03	18:03
0613F019.D	ZZZZZZ	ZZZZZZ	06/13/03	18:08		06/13/03	18:20
0613F020.D	ZZZZZZ	ZZZZZZ	06/13/03	18:28		06/13/03	18:40
0613F022.D	ZZZZZZ	ZZZZZZ	06/13/03	18:46		06/13/03	18:58
0613F034.D	ZZZZZZ	ZZZZZZ	06/13/03	19:04		06/13/03	19:16
0613F042.D	ZZZZZZ	ZZZZZZ	06/13/03	19:21		06/13/03	19:33
0613F043.D	ZZZZZZ	ZZZZZZ	06/13/03	19:39		06/13/03	19:51
0613F044.D	ZZZZZZ	ZZZZZZ	06/13/03	19:57		06/13/03	20:09
0613F045.D	Instrument Blank	KWG0308633-7	06/13/03	20:15		06/13/03	20:27
0613F046.D	Continuing Calibration Verification	KWG0308633-8	06/13/03	20:33		06/13/03	20:45
0613FX01.D	Instrument Blank	KWG0308633-19	06/13/03	20:51		06/13/03	21:03
0613FX08.D	Continuing Calibration Verification	KWG0308633-20	06/13/03	22:55		06/13/03	23:07
0613F047.D	ZZZZZZ	ZZZZZZ	06/13/03	23:13		06/13/03	23:25
0613F048.D	ZZZZZZ	ZZZZZZ	06/13/03	23:31		06/13/03	23:43
0613F049.D	ZZZZZZ	ZZZZZZ	06/13/03	23:49		06/14/03	00:01
0613F050.D	ZZZZZZ	ZZZZZZ	06/14/03	00:07		06/14/03	00:19
0613F051.D	ZZZZZZ	ZZZZZZ	06/14/03	00:25		06/14/03	00:37
0613F052.D	ZZZZZZ	ZZZZZZ	06/14/03	00:43		06/14/03	00:55

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0308633
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0613F053.D	ZZZZZZ	ZZZZZZ	06/14/03	01:01		06/14/03	01:13
0613F054.D	ZZZZZZ	ZZZZZZ	06/14/03	01:19		06/14/03	01:31
0613F055.D	ZZZZZZ	ZZZZZZ	06/14/03	01:37		06/14/03	01:49
0613F056.D	ZZZZZZ	ZZZZZZ	06/14/03	01:55		06/14/03	02:07
0613F057.D	ZZZZZZ	ZZZZZZ	06/14/03	02:13		06/14/03	02:25
0613F058.D	ZZZZZZ	ZZZZZZ	06/14/03	02:31		06/14/03	02:43
0613F059.D	Instrument Blank	KWG0308633-9	06/14/03	02:49		06/14/03	03:01
0613F060.D	Continuing Calibration Verification	KWG0308633-10	06/14/03	03:08		06/14/03	03:20
0613F061.D	ZZZZZZ	ZZZZZZ	06/14/03	03:25		06/14/03	03:37
0613F062.D	ZZZZZZ	ZZZZZZ	06/14/03	03:43		06/14/03	03:55
0613F063.D	ZZZZZZ	ZZZZZZ	06/14/03	04:01		06/14/03	04:13
0613F064.D	ZZZZZZ	ZZZZZZ	06/14/03	04:19		06/14/03	04:31
0613F065.D	ZZZZZZ	ZZZZZZ	06/14/03	04:37		06/14/03	04:49
0613F066.D	ZZZZZZ	ZZZZZZ	06/14/03	04:55		06/14/03	05:07
0613F067.D	ZZZZZZ	ZZZZZZ	06/14/03	05:13		06/14/03	05:25
0613F068.D	ZZZZZZ	ZZZZZZ	06/14/03	05:31		06/14/03	05:43
0613F069.D	ZZZZZZ	ZZZZZZ	06/14/03	05:49		06/14/03	06:01
0613F070.D	ZZZZZZ	ZZZZZZ	06/14/03	06:07		06/14/03	06:19
0613F071.D	Instrument Blank	KWG0308633-11	06/14/03	06:25		06/14/03	06:37
0613F072.D	Continuing Calibration Verification	KWG0308633-12	06/14/03	06:43		06/14/03	06:55
0613F073.D	ZZZZZZ	ZZZZZZ	06/14/03	07:01		06/14/03	07:13
0613F074.D	ZZZZZZ	ZZZZZZ	06/14/03	07:18		06/14/03	07:30
0613F076.D	ZZZZZZ	ZZZZZZ	06/14/03	07:54		06/14/03	08:06
0613F077.D	ZZZZZZ	ZZZZZZ	06/14/03	08:12		06/14/03	08:24
0613F078.D	ZZZZZZ	ZZZZZZ	06/14/03	08:30		06/14/03	08:42
0613F080.D	ZZZZZZ	ZZZZZZ	06/14/03	08:48		06/14/03	09:00
0613F081.D	ZZZZZZ	ZZZZZZ	06/14/03	09:06		06/14/03	09:18
0613F082.D	ZZZZZZ	ZZZZZZ	06/14/03	09:24		06/14/03	09:36
0613F083.D	ZZZZZZ	ZZZZZZ	06/14/03	09:43		06/14/03	09:55
0613F084.D	ZZZZZZ	ZZZZZZ	06/14/03	10:01		06/14/03	10:13
0613F085.D	Instrument Blank	KWG0308633-13	06/14/03	10:19		06/14/03	10:31
0613F086.D	Continuing Calibration Verification	KWG0308633-14	06/14/03	10:37		06/14/03	10:49
0613F200.D	ZZZZZZ	ZZZZZZ	06/14/03	11:03		06/14/03	11:15
0613F087.D	ZZZZZZ	ZZZZZZ	06/14/03	11:59		06/14/03	12:11

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706

Analysis Run Log
Butyltins

Analysis Method: Krone

Analysis Lot: KWG0308633
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0613F088.D	ZZZZZZ	ZZZZZZ	06/14/03	12:16		06/14/03	12:28
0613F089.D	ZZZZZZ	ZZZZZZ	06/14/03	12:34		06/14/03	12:46
0613F090.D	ZZZZZZ	ZZZZZZ	06/14/03	12:52		06/14/03	13:04
0613F091.D	ZZZZZZ	ZZZZZZ	06/14/03	13:11		06/14/03	13:23
0613F092.D	ZZZZZZ	ZZZZZZ	06/14/03	13:29		06/14/03	13:41
0613F093.D	ZZZZZZ	ZZZZZZ	06/14/03	13:47		06/14/03	13:59
0613F094.D	ZZZZZZ	ZZZZZZ	06/14/03	14:05		06/14/03	14:17
0613F095.D	ZZZZZZ	ZZZZZZ	06/14/03	14:22		06/14/03	14:34
0613F096.D	ZZZZZZ	ZZZZZZ	06/14/03	14:40		06/14/03	14:52
0613F097.D	Instrument Blank	KWG0308633-15	06/14/03	14:58		06/14/03	15:10
0613F098.D	Continuing Calibration Verification	KWG0308633-16	06/14/03	15:16		06/14/03	15:28
0613F099.D	ZZZZZZ	ZZZZZZ	06/14/03	15:34		06/14/03	15:46
0613F100.D	ZZZZZZ	ZZZZZZ	06/14/03	15:51		06/14/03	16:03
0613F499.D	ZZZZZZ	ZZZZZZ	06/14/03	16:09		06/14/03	16:21
0613F500.D	ZZZZZZ	ZZZZZZ	06/14/03	16:27		06/14/03	16:39
0613F501.D	ZZZZZZ	ZZZZZZ	06/14/03	16:44		06/14/03	16:56
0613F031.D	Instrument Blank	KWG0308633-5	06/14/03	17:20		06/14/03	17:32
0613F032.D	Continuing Calibration Verification	KWG0308633-6	06/14/03	17:38		06/14/03	17:50
0613F037.D	E-CH03-19	K2303706-001	06/14/03	17:55		06/14/03	18:07
0613F038.D	E-CH03-20	K2303706-002	06/14/03	18:13		06/14/03	18:25
0613F039.D	E-CH03-20MS	KWG0307235-3	06/14/03	18:31		06/14/03	18:43
0613F040.D	E-CH03-20DMS	KWG0307235-4	06/14/03	18:49		06/14/03	19:01
0613F041.D	E-CH03-21/22	K2303706-003	06/14/03	19:07		06/14/03	19:19
0613F079.D	ZZZZZZ	ZZZZZZ	06/14/03	19:25		06/14/03	19:37
0613F502.D	ZZZZZZ	ZZZZZZ	06/14/03	19:43		06/14/03	19:55
0613F503.D	ZZZZZZ	ZZZZZZ	06/14/03	20:01		06/14/03	20:13
0613F504.D	ZZZZZZ	ZZZZZZ	06/14/03	20:18		06/14/03	20:30
0613F505.D	ZZZZZZ	ZZZZZZ	06/14/03	20:36		06/14/03	20:48
0613F506.D	Instrument Blank	KWG0308633-17	06/14/03	21:10		06/14/03	21:22
0613F507.D	Continuing Calibration Verification	KWG0308633-18	06/14/03	21:29		06/14/03	21:41

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Extracted: 05/20/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: Krone

Extraction Lot: KWG0307235
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-19	K2303706-001	05/14/03	05/17/03	20.29g	1ml	66.0	
E-CH03-20	K2303706-002	05/14/03	05/17/03	20.36g	1ml	47.6	
E-CH03-21/22	K2303706-003	05/14/03	05/17/03	20.38g	1ml	49.8	
Method Blank	KWG0307235-6	NA	NA	20.75g	1ml	NA	
E-CH03-20MS	KWG0307235-3	05/14/03	05/17/03	20.08g	1ml	47.6	
E-CH03-20DMS	KWG0307235-4	05/14/03	05/17/03	20.07g	1ml	47.6	
Lab Control Sample	KWG0307235-5	NA	NA	20.75g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003
		Date Extracted:	05/20/2003

Butyltins

Sample Name:	E-CH03-19	**Units:**	ug/Kg
Lab Code:	K2303706-001	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.5	0.55	1.5	1.2	22.2		1	06/14/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003
		Date Extracted:	05/20/2003

Butyltins

Sample Name:	E-CH03-20	**Units:**	ug/Kg
Lab Code:	K2303706-002	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	Krone		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	2.1	0.76	5.0	4.7	6.2		1	06/14/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Collected: 05/14/2003
Date Received: 05/17/2003
Date Extracted: 05/20/2003

Butyltins

Sample Name: E-CH03-21/22
Lab Code: K2303706-003
Extraction Method: METHOD
Analysis Method: Krone

Units: ug/Kg
Basis: Dry
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	2.0	0.73	3.4	3.0	12.5		1	06/14/03

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-19	K2303706-001	05/14/2003	05/17/2003
E-CH03-20	K2303706-002	05/14/2003	05/17/2003
E-CH03-21/22	K2303706-003	05/14/2003	05/17/2003
E-CH03-19MS	KWG0307438-1	05/14/2003	05/17/2003
E-CH03-19DMS	KWG0307438-2	05/14/2003	05/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 6/16/03

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-19	**Units:**	ug/Kg
Lab Code:	K2303706-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.34**	J	5.0	0.32	1	05/23/03	06/03/03	KWG0307438	
2-Methylnaphthalene	ND	U	5.0	0.32	1	05/23/03	06/03/03	KWG0307438	
Acenaphthylene	ND	U	5.0	0.25	1	05/23/03	06/03/03	KWG0307438	
Acenaphthene	ND	U	5.0	0.32	1	05/23/03	06/03/03	KWG0307438	
Dibenzofuran	ND	U	5.0	0.31	1	05/23/03	06/03/03	KWG0307438	
Fluorene	ND	U	5.0	0.26	1	05/23/03	06/03/03	KWG0307438	
Phenanthrene	**1.2**	J	5.0	0.23	1	05/23/03	06/03/03	KWG0307438	
Anthracene	ND	U	5.0	0.29	1	05/23/03	06/03/03	KWG0307438	
Fluoranthene	**3.0**	J	5.0	0.26	1	05/23/03	06/03/03	KWG0307438	
Pyrene	**2.8**	J	5.0	0.17	1	05/23/03	06/03/03	KWG0307438	
Benz(a)anthracene	**1.1**	J	5.0	0.20	1	05/23/03	06/03/03	KWG0307438	
Chrysene	**1.8**	J	5.0	0.23	1	05/23/03	06/03/03	KWG0307438	
Benzo(b)fluoranthene	**1.3**	J	5.0	0.22	1	05/23/03	06/03/03	KWG0307438	
Benzo(k)fluoranthene	**1.3**	J	5.0	0.23	1	05/23/03	06/03/03	KWG0307438	
Benzo(a)pyrene	**0.89**	J	5.0	0.22	1	05/23/03	06/03/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	**0.94**	J	5.0	0.23	1	05/23/03	06/03/03	KWG0307438	
Dibenz(a,h)anthracene	ND	U	5.0	0.28	1	05/23/03	06/03/03	KWG0307438	
Benzo(g,h,i)perylene	**0.84**	J	5.0	0.16	1	05/23/03	06/03/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	33	39-97	06/03/03	Outside Control Limits
Fluorene-d10	42	43-98	06/03/03	Outside Control Limits
Fluoranthene-d10	43	52-108	06/03/03	Outside Control Limits
Terphenyl-d14	79	61-122	06/03/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-20	**Units:**	ug/Kg
Lab Code:	K2303706-002	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.55**	J	5.0	0.45	1	05/23/03	06/03/03	KWG0307438	
2-Methylnaphthalene	ND	U	5.0	0.45	1	05/23/03	06/03/03	KWG0307438	
Acenaphthylene	ND	U	5.0	0.34	1	05/23/03	06/03/03	KWG0307438	
Acenaphthene	ND	U	5.0	0.45	1	05/23/03	06/03/03	KWG0307438	
Dibenzofuran	ND	U	5.0	0.43	1	05/23/03	06/03/03	KWG0307438	
Fluorene	ND	U	5.0	0.36	1	05/23/03	06/03/03	KWG0307438	
Phenanthrene	**2.2**	J	5.0	0.32	1	05/23/03	06/03/03	KWG0307438	
Anthracene	**0.48**	J	5.0	0.40	1	05/23/03	06/03/03	KWG0307438	
Fluoranthene	**6.8**		5.0	0.36	1	05/23/03	06/03/03	KWG0307438	
Pyrene	**6.1**		5.0	0.24	1	05/23/03	06/03/03	KWG0307438	
Benz(a)anthracene	**2.9**	J	5.0	0.28	1	05/23/03	06/03/03	KWG0307438	
Chrysene	**5.0**	J	5.0	0.32	1	05/23/03	06/03/03	KWG0307438	
Benzo(b)fluoranthene	**3.2**	J	5.0	0.30	1	05/23/03	06/03/03	KWG0307438	
Benzo(k)fluoranthene	**4.2**	J	5.0	0.32	1	05/23/03	06/03/03	KWG0307438	
Benzo(a)pyrene	**2.7**	J	5.0	0.30	1	05/23/03	06/03/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	**2.3**	J	5.0	0.32	1	05/23/03	06/03/03	KWG0307438	
Dibenz(a,h)anthracene	**0.44**	J	5.0	0.38	1	05/23/03	06/03/03	KWG0307438	
Benzo(g,h,i)perylene	**2.3**	J	5.0	0.22	1	05/23/03	06/03/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	29	39-97	06/03/03	Outside Control Limits
Fluorene-d10	36	43-98	06/03/03	Outside Control Limits
Fluoranthene-d10	37	52-108	06/03/03	Outside Control Limits
Terphenyl-d14	74	61-122	06/03/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	05/14/2003
Sample Matrix:	Sediment	**Date Received:**	05/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-21/22	**Units:**	ug/Kg
Lab Code:	K2303706-003	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.46**	J	5.0	0.43	1	05/23/03	06/03/03	KWG0307438	
2-Methylnaphthalene	ND	U	5.0	0.43	1	05/23/03	06/03/03	KWG0307438	
Acenaphthylene	ND	U	5.0	0.33	1	05/23/03	06/03/03	KWG0307438	
Acenaphthene	ND	U	5.0	0.43	1	05/23/03	06/03/03	KWG0307438	
Dibenzofuran	ND	U	5.0	0.41	1	05/23/03	06/03/03	KWG0307438	
Fluorene	ND	U	5.0	0.35	1	05/23/03	06/03/03	KWG0307438	
Phenanthrene	**1.4**	J	5.0	0.31	1	05/23/03	06/03/03	KWG0307438	
Anthracene	ND	U	5.0	0.39	1	05/23/03	06/03/03	KWG0307438	
Fluoranthene	**4.8**	J	5.0	0.35	1	05/23/03	06/03/03	KWG0307438	
Pyrene	**5.3**		5.0	0.23	1	05/23/03	06/03/03	KWG0307438	
Benz(a)anthracene	**1.8**	J	5.0	0.27	1	05/23/03	06/03/03	KWG0307438	
Chrysene	**3.1**	J	5.0	0.31	1	05/23/03	06/03/03	KWG0307438	
Benzo(b)fluoranthene	**2.2**	J	5.0	0.29	1	05/23/03	06/03/03	KWG0307438	
Benzo(k)fluoranthene	**2.7**	J	5.0	0.31	1	05/23/03	06/03/03	KWG0307438	
Benzo(a)pyrene	**1.8**	J	5.0	0.29	1	05/23/03	06/03/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	**1.7**	J	5.0	0.31	1	05/23/03	06/03/03	KWG0307438	
Dibenz(a,h)anthracene	ND	U	5.0	0.37	1	05/23/03	06/03/03	KWG0307438	
Benzo(g,h,i)perylene	**1.9**	J	5.0	0.21	1	05/23/03	06/03/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	22	39-97	06/03/03	Outside Control Limits
Fluorene-d10	33	43-98	06/03/03	Outside Control Limits
Fluoranthene-d10	38	52-108	06/03/03	Outside Control Limits
Terphenyl-d14	71	61-122	06/03/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0307438-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	2.4	0.21	1	05/23/03	05/31/03	KWG0307438	
2-Methylnaphthalene	ND	U	2.4	0.21	1	05/23/03	05/31/03	KWG0307438	
Acenaphthylene	ND	U	2.4	0.16	1	05/23/03	05/31/03	KWG0307438	
Acenaphthene	ND	U	2.4	0.21	1	05/23/03	05/31/03	KWG0307438	
Dibenzofuran	ND	U	2.4	0.20	1	05/23/03	05/31/03	KWG0307438	
Fluorene	ND	U	2.4	0.17	1	05/23/03	05/31/03	KWG0307438	
Phenanthrene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Anthracene	ND	U	2.4	0.19	1	05/23/03	05/31/03	KWG0307438	
Fluoranthene	ND	U	2.4	0.17	1	05/23/03	05/31/03	KWG0307438	
Pyrene	ND	U	2.4	0.11	1	05/23/03	05/31/03	KWG0307438	
Benz(a)anthracene	ND	U	2.4	0.13	1	05/23/03	05/31/03	KWG0307438	
Chrysene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Benzo(b)fluoranthene	ND	U	2.4	0.14	1	05/23/03	05/31/03	KWG0307438	
Benzo(k)fluoranthene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Benzo(a)pyrene	ND	U	2.4	0.14	1	05/23/03	05/31/03	KWG0307438	
Indeno(1,2,3-cd)pyrene	ND	U	2.4	0.15	1	05/23/03	05/31/03	KWG0307438	
Dibenz(a,h)anthracene	ND	U	2.4	0.18	1	05/23/03	05/31/03	KWG0307438	
Benzo(g,h,i)perylene	**0.11**	J	2.4	0.10	1	05/23/03	05/31/03	KWG0307438	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Biphenyl-d10	11	39-97	06/03/03	Outside Control Limits
Fluorene-d10	34	43-98	05/31/03	Outside Control Limits
Fluoranthene-d10	75	52-108	05/31/03	Acceptable
Terphenyl-d14	88	61-122	05/31/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1		Sur2		Sur3		Sur4
E-CH03-19	K2303706-001	33	*	42	*	43	*	79
E-CH03-20	K2303706-002	29	*	36	*	37	*	74
E-CH03-21/22	K2303706-003	22	*	33	*	38	*	71
Method Blank	KWG0307438-5	11	*	34	*	75		88
E-CH03-19MS	KWG0307438-1	28	*	46		54		69
E-CH03-19DMS	KWG0307438-2	31	*	50		59		77
Lab Control Sample	KWG0307438-3	60		62		79		89
Duplicate Lab Control Sample	KWG0307438-4	68		70		81		89

Surrogate Recovery Control Limits (%)

Sur1 =	Biphenyl-d10	39-97
Sur2 =	Fluorene-d10	43-98
Sur3 =	Fluoranthene-d10	52-108
Sur4 =	Terphenyl-d14	61-122

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Analyzed:**	05/31/2003
		Time Analyzed:	20:02

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS11\DATA\053103\0531F030.D	**Lab Code:**	KWG0308021-2
Instrument ID:	MS11	**Analysis Lot:**	KWG0308021
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	592,820	4.82	322,973	6.25	538,415	7.43
	Upper Limit ==>	1,185,640	5.32	645,946	6.75	1,076,830	7.93
	Lower Limit ==>	296,410	4.32	161,487	5.75	269,208	6.93
	ICAL Result ==>	520,194	NA	272,945	NA	422,002	NA
Associated Analyses							
Method Blank	KWG0307438-5	637,017	4.82	316,465	6.25	455,179	7.43
Lab Control Sample	KWG0307438-3	594,378	4.82	307,885	6.25	457,277	7.43
Duplicate Lab Control Sample	KWG0307438-4	608,281	4.82	312,137	6.25	465,242	7.43

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 05/31/2003
Time Analyzed: 20:02

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\053103\0531F030.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0308021-2
Analysis Lot: KWG0308021

		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT
	Results ==>	513,236	9.82	328,088	12.51
	Upper Limit ==>	1,026,472	10.32	656,176	13.01
	Lower Limit ==>	256,618	9.32	164,044	12.01
	ICAL Result ==>	444,500	NA	280,497	NA
Associated Analyses					
Method Blank	KWG0307438-5	409,747	9.83	242,912	12.50
Lab Control Sample	KWG0307438-3	435,837	9.83	263,004	12.50
Duplicate Lab Control Sample	KWG0307438-4	432,334	9.82	253,719	12.50

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/03/2003
Time Analyzed: 13:10

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\060303\0603F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0308138-2
Analysis Lot: KWG0308138

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	525,820	4.81	273,923	6.22	432,142	7.41
	Upper Limit ==>	1,051,640	5.31	547,846	6.72	864,284	7.91
	Lower Limit ==>	262,910	4.31	136,962	5.72	216,071	6.91
	ICAL Result ==>	726,027	NA	396,115	NA	630,972	NA
Associated Analyses							
Method Blank	KWG0307438-5	638,836	4.81	319,218	6.22	493,920	7.41
E-CH03-19	K2303706-001	608,633	4.80	305,867	6.22	470,763	7.41
E-CH03-20	K2303706-002	634,238	4.80	323,136	6.22	496,282	7.41
E-CH03-21/22	K2303706-003	610,144	4.80	305,539	6.22	465,756	7.41
E-CH03-19MS	KWG0307438-1	632,162	4.80	328,324	6.22	507,443	7.41
E-CH03-19DMS	KWG0307438-2	676,327	4.80	354,180	6.22	546,504	7.41
Lab Control Sample	KWG0307438-3	658,359	4.81	342,991	6.22	540,396	7.41
Duplicate Lab Control Sample	KWG0307438-4	672,341	4.80	350,406	6.22	528,388	7.41

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/03/2003
Time Analyzed: 13:10

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\060303\0603F002.D
Instrument ID: MS11
Analysis Method: 8270C SIM

Lab Code: KWG0308138-2
Analysis Lot: KWG0308138

		Chrysene-d12		Perylene-d12	
		Area	RT	Area	RT
	Results ==>	447,884	9.80	239,613	12.46
	Upper Limit ==>	895,768	10.30	479,226	12.96
	Lower Limit ==>	223,942	9.30	119,807	11.96
	ICAL Result ==>	715,157	NA	410,353	NA
Associated Analyses					
Method Blank	KWG0307438-5	444,247	9.80	219,023	12.46
E-CH03-19	K2303706-001	405,034	9.80	205,056	12.45
E-CH03-20	K2303706-002	453,210	9.80	244,717	12.45
E-CH03-21/22	K2303706-003	403,639	9.80	207,579	12.45
E-CH03-19MS	KWG0307438-1	503,596	9.80	272,382	12.45
E-CH03-19DMS	KWG0307438-2	504,467	9.80	269,031	12.45
Lab Control Sample	KWG0307438-3	533,568	9.80	280,641	12.46
Duplicate Lab Control Sample	KWG0307438-4	469,358	9.80	246,493	12.45

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/23/2003
Sample Matrix:	Sediment	**Date Analyzed:**	06/03/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-19	**Units:**	ug/Kg
Lab Code:	K2303706-001	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307438

		E-CH03-19MS KWG0307438-1 Matrix Spike			E-CH03-19DMS KWG0307438-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	0.34	110	250	44	88.6	250	35	19-105	22	40
2-Methylnaphthalene	ND	108	250	43	92.0	250	37	36-95	16	40
Acenaphthylene	ND	133	250	53	119	250	47	40-99	11	40
Acenaphthene	ND	125	250	50	114	250	46	33-102	9	40
Dibenzofuran	ND	136	250	54	124	250	50	38-100	9	40
Fluorene	ND	131	250	53	123	250	49	38-103	7	40
Phenanthrene	1.2	134	250	53	128	250	51	33-113	5	40
Anthracene	ND	146	250	58	136	250	54	40-114	7	40
Fluoranthene	3.0	132	250	52	126	250	49	41-117	5	40
Pyrene	2.8	137	250	54	139	250	54	26-139	1	40
Benz(a)anthracene	1.1	116	250	46	113	250	45	32-134	3	40
Chrysene	1.8	140	250	55	138	250	54	27-135	1	40
Benzo(b)fluoranthene	1.3	101	250	40	98.7	250	39	31-136	2	40
Benzo(k)fluoranthene	1.3	119	250	47	116	250	46	32-131	3	40
Benzo(a)pyrene	0.89	111	250	44	107	250	42	26-146	4	40
Indeno(1,2,3-cd)pyrene	0.94	105	250	42	97.2	250	39	33-133	8	40
Dibenz(a,h)anthracene	ND	116	250	46	106	250	43	42-114	8	40
Benzo(g,h,i)perylene	0.84	113	250	45	102	250	40	31-122	10	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Soil

Service Request: K2303706
Date Extracted: 05/23/2003
Date Analyzed: 06/01/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Dry
Level: Low
Extraction Lot: KWG0307438

	Lab Control Sample KWG0307438-3 Lab Control Spike			Duplicate Lab Control Sample KWG0307438-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	152	250	61	135	250	54	33-98	12	40
2-Methylnaphthalene	155	250	62	139	250	55	36-103	11	40
Acenaphthylene	179	250	72	161	250	64	41-102	11	40
Acenaphthene	165	250	66	151	250	60	41-97	9	40
Dibenzofuran	163	250	65	154	250	62	38-102	6	40
Fluorene	169	250	68	159	250	64	43-101	6	40
Phenanthrene	176	250	70	158	250	63	45-101	11	40
Anthracene	205	250	82	186	250	75	46-109	10	40
Fluoranthene	199	250	80	178	250	71	49-112	11	40
Pyrene	199	250	80	176	250	70	50-112	12	40
Benz(a)anthracene	189	250	75	166	250	66	52-114	13	40
Chrysene	190	250	76	165	250	66	54-109	14	40
Benzo(b)fluoranthene	204	250	82	178	250	71	54-115	14	40
Benzo(k)fluoranthene	180	250	72	157	250	63	54-115	13	40
Benzo(a)pyrene	217	250	87	187	250	75	54-120	15	40
Indeno(1,2,3-cd)pyrene	202	250	81	170	250	68	49-121	17	40
Dibenz(a,h)anthracene	207	250	83	173	250	69	48-114	18	40
Benzo(g,h,i)perylene	189	250	76	159	250	64	45-113	17	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/23/2003
Sample Matrix:	Soil	**Date Analyzed:**	05/31/2003
		Time Analyzed:	20:58

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\053103\0531F032.D
Lab Code:	KWG0307438-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307438

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0307438-3	J:\MS11\DATA\053103\0531F041.D	06/01/03	01:07
Duplicate Lab Control Sample	KWG0307438-4	J:\MS11\DATA\053103\0531F042.D	06/01/03	01:35
E-CH03-19	K2303706-001	J:\MS11\DATA\060303\0603F005.D	06/03/03	14:41
E-CH03-20	K2303706-002	J:\MS11\DATA\060303\0603F006.D	06/03/03	15:10
E-CH03-21/22	K2303706-003	J:\MS11\DATA\060303\0603F007.D	06/03/03	15:38
E-CH03-19MS	KWG0307438-1	J:\MS11\DATA\060303\0603F010.D	06/03/03	17:04
E-CH03-19DMS	KWG0307438-2	J:\MS11\DATA\060303\0603F011.D	06/03/03	17:32
Lab Control Sample	KWG0307438-3	J:\MS11\DATA\060303\0603F012.D	06/03/03	18:01
Duplicate Lab Control Sample	KWG0307438-4	J:\MS11\DATA\060303\0603F013.D	06/03/03	18:30

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2303706
Project:	Canaveral Harbor 103 Evaluation	**Date Extracted:**	05/23/2003
Sample Matrix:	Soil	**Date Analyzed:**	06/03/2003
		Time Analyzed:	14:12

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS11\DATA\060303\0603F004.D
Lab Code:	KWG0307438-5	**Instrument ID:**	MS11
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307438

This Method Blank applies to the following analyses:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2303706
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Soil

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0307438-3	**Lab Code:**	KWG0307438-4
File ID:	J:\MS11\DATA\053103\0531F041.D	**File ID:**	J:\MS11\DATA\053103\0531F042.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	05/23/2003	**Date Extracted:**	05/23/2003
Date Analyzed:	06/01/2003	**Date Analyzed:**	06/01/2003
Time Analyzed:	01:07	**Time Analyzed:**	01:35

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307438

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0307438-5	J:\MS11\DATA\053103\0531F032.D	05/31/03	20:58
Method Blank	KWG0307438-5	J:\MS11\DATA\060303\0603F004.D	06/03/03	14:12
E-CH03-19	K2303706-001	J:\MS11\DATA\060303\0603F005.D	06/03/03	14:41
E-CH03-20	K2303706-002	J:\MS11\DATA\060303\0603F006.D	06/03/03	15:10
E-CH03-21/22	K2303706-003	J:\MS11\DATA\060303\0603F007.D	06/03/03	15:38
E-CH03-19MS	KWG0307438-1	J:\MS11\DATA\060303\0603F010.D	06/03/03	17:04
E-CH03-19DMS	KWG0307438-2	J:\MS11\DATA\060303\0603F011.D	06/03/03	17:32

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2303706
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Soil

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0307438-3	**Lab Code:**	KWG0307438-4
File ID:	J:\MS11\DATA\060303\0603F012.D	**File ID:**	J:\MS11\DATA\053103\0531F042.D
Instrument ID:	MS11	**Instrument ID:**	MS11
Date Extracted:	05/23/2003	**Date Extracted:**	05/23/2003
Date Analyzed:	06/03/2003	**Date Analyzed:**	06/01/2003
Time Analyzed:	18:01	**Time Analyzed:**	01:35

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0307438

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0307438-5	J:\MS11\DATA\060303\0603F004.D	06/03/03	14:12
E-CH03-19	K2303706-001	J:\MS11\DATA\060303\0603F005.D	06/03/03	14:41
E-CH03-20	K2303706-002	J:\MS11\DATA\060303\0603F006.D	06/03/03	15:10
E-CH03-21/22	K2303706-003	J:\MS11\DATA\060303\0603F007.D	06/03/03	15:38
E-CH03-19MS	KWG0307438-1	J:\MS11\DATA\060303\0603F010.D	06/03/03	17:04
E-CH03-19DMS	KWG0307438-2	J:\MS11\DATA\060303\0603F011.D	06/03/03	17:32

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 05/31/2003
Time Analyzed: 19:41

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\053103\0531F029.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0308021

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
275	198	10	60	30.9	595648	PASS
365	442	1	50	2.6	73728	PASS
441	443	0	100	73.7	418496	PASS
442	442	100	100	100.0	2818048	PASS
443	442	15	24	20.1	567808	PASS
51	198	10	80	31.6	608960	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	35.0	674240	PASS
70	69	0	2	0.5	3554	PASS
127	198	10	80	44.3	853824	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	68.3	1925632	PASS
199	198	5	9	7.1	136128	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0308021-2	J:\MS11\DATA\053103\0531F030.D	05/31/2003	20:02	
Method Blank	KWG0307438-5	J:\MS11\DATA\053103\0531F032.D	05/31/2003	20:58	
Lab Control Sample	KWG0307438-3	J:\MS11\DATA\053103\0531F041.D	06/01/2003	01:07	
Duplicate Lab Control Sample	KWG0307438-4	J:\MS11\DATA\053103\0531F042.D	06/01/2003	01:35	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/03/2003
Time Analyzed: 12:47

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS11\DATA\060303\0603F001.D
Instrument ID: MS11
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0308138

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	30.1	620288	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	33.2	684032	PASS
70	69	0	2	0.6	3823	PASS
127	198	10	80	43.6	898496	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	64.0	2060288	PASS
199	198	5	9	6.9	141568	PASS
275	198	10	60	32.8	674944	PASS
365	442	1	50	2.8	89200	PASS
441	443	0	100	74.0	488704	PASS
442	442	100	100	100.0	3217408	PASS
443	442	15	24	20.5	660608	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0308138-2	J:\MS11\DATA\060303\0603F002.D	06/03/2003	13:10	
Method Blank	KWG0307438-5	J:\MS11\DATA\060303\0603F004.D	06/03/2003	14:12	
E-CH03-19	K2303706-001	J:\MS11\DATA\060303\0603F005.D	06/03/2003	14:41	
E-CH03-20	K2303706-002	J:\MS11\DATA\060303\0603F006.D	06/03/2003	15:10	
E-CH03-21/22	K2303706-003	J:\MS11\DATA\060303\0603F007.D	06/03/2003	15:38	
E-CH03-19MS	KWG0307438-1	J:\MS11\DATA\060303\0603F010.D	06/03/2003	17:04	
E-CH03-19DMS	KWG0307438-2	J:\MS11\DATA\060303\0603F011.D	06/03/2003	17:32	
Lab Control Sample	KWG0307438-3	J:\MS11\DATA\060303\0603F012.D	06/03/2003	18:01	
Duplicate Lab Control Sample	KWG0307438-4	J:\MS11\DATA\060303\0603F013.D	06/03/2003	18:30	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 05/28/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2657
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\052803\0528F021.D	G	J:\MS11\DATA\052803\0528F027.D
B	J:\MS11\DATA\052803\0528F022.D	H	J:\MS11\DATA\052803\0528F028.D
C	J:\MS11\DATA\052803\0528F023.D	I	J:\MS11\DATA\052803\0528F030.D
D	J:\MS11\DATA\052803\0528F024.D	J	J:\MS11\DATA\052803\0528F031.D
E	J:\MS11\DATA\052803\0528F025.D	K	J:\MS11\DATA\052803\0528F032.D
F	J:\MS11\DATA\052803\0528F026.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene				B	10	1.17	C	20	1.10	D	40	1.13	E	100	1.11
	F	500	1.03	G	1000	1.05	H	2000	1.04	I	5000	1.00	J	8000	1.01
	K	10000	0.976												
2-Methylnaphthalene				B	10	0.673	C	20	0.665	D	40	0.668	E	100	0.680
	F	500	0.661	G	1000	0.679	H	2000	0.677	I	5000	0.662	J	8000	0.673
	K	10000	0.658												
Acenaphthylene				B	10	1.42	C	20	1.49	D	40	1.50	E	100	1.53
	F	500	1.59	G	1000	1.73	H	2000	1.78	I	5000	1.75	J	8000	1.77
	K	10000	1.74												
Acenaphthene				B	10	1.09	C	20	1.10	D	40	1.11	E	100	1.13
	F	500	1.05	G	1000	1.07	H	2000	1.09	I	5000	1.06	J	8000	1.09
	K	10000	1.06												
Dibenzofuran				B	10	1.63	C	20	1.55	D	40	1.59	E	100	1.58
	F	500	1.51	G	1000	1.50	H	2000	1.53	I	5000	1.48	J	8000	1.50
	K	10000	1.47												
Fluorene				B	10	1.18	C	20	1.18	D	40	1.21	E	100	1.27
	F	500	1.24	G	1000	1.26	H	2000	1.29	I	5000	1.25	J	8000	1.28
	K	10000	1.25												
Phenanthrene				B	10	1.27	C	20	1.22	D	40	1.19	E	100	1.16
	F	500	1.06	G	1000	1.13	H	2000	1.11	I	5000	1.10	J	8000	1.09
	K	10000	1.06												
Anthracene				B	10	0.870	C	20	0.898	D	40	0.844	E	100	0.910
	F	500	0.942	G	1000	1.03	H	2000	1.06	I	5000	1.06	J	8000	1.08
	K	10000	1.05												
Fluoranthene				B	10	1.34	C	20	1.31	D	40	1.22	E	100	1.22
	F	500	1.16	G	1000	1.24	H	2000	1.13	I	5000	1.15	J	8000	1.13
	K	10000	1.08												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2303706
Project: Canaveral Harbor 103 Evaluation **Calibration Date:** 05/28/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2657 **Column:** MS
Instrument ID: MS11

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene				B	10	1.44	C	20	1.35	D	40	1.25	E	100	1.23
	F	500	1.19	G	1000	1.27	H	2000	1.15	I	5000	1.16	J	8000	1.16
	K	10000	1.11												
Benz(a)anthracene				B	10	1.33	C	20	1.22	D	40	1.04	E	100	1.02
	F	500	0.957	G	1000	1.02	H	2000	0.964	I	5000	0.990	J	8000	0.997
	K	10000	0.984												
Chrysene				B	10	1.40	C	20	1.29	D	40	1.22	E	100	1.13
	F	500	1.05	G	1000	1.09	H	2000	1.01	I	5000	1.04	J	8000	1.05
	K	10000	1.02												
Benzo(b)fluoranthene				B	10	1.36	C	20	1.43	D	40	1.22	E	100	1.24
	F	500	1.28	G	1000	1.31	H	2000	1.33	I	5000	1.40	J	8000	1.46
	K	10000	1.49												
Benzo(k)fluoranthene				B	10	1.94	C	20	1.96	D	40	1.86	E	100	1.91
	F	500	1.83	G	1000	1.98	H	2000	1.82	I	5000	1.83	J	8000	1.88
	K	10000	1.82												
Benzo(a)pyrene				B	10	1.23	C	20	1.13	D	40	1.03	E	100	1.07
	F	500	1.13	G	1000	1.25	H	2000	1.25	I	5000	1.34	J	8000	1.39
	K	10000	1.38												
Indeno(1,2,3-cd)pyrene				B	10	0.719	C	20	0.656	D	40	0.668	E	100	0.643
	F	500	0.700	G	1000	0.821	H	2000	0.894	I	5000	1.04	J	8000	1.03
	K	10000	1.03												
Dibenz(a,h)anthracene				B	10	0.667	C	20	0.754	D	40	0.733	E	100	0.761
	F	500	0.806	G	1000	0.937	H	2000	1.02	I	5000	1.17	J	8000	1.14
	K	10000	1.13												
Benzo(g,h,i)perylene				B	10	1.11	C	20	1.05	D	40	1.05	E	100	1.04
	F	500	1.03	G	1000	1.17	H	2000	1.21	I	5000	1.34	J	8000	1.28
	K	10000	1.26												
Fluorene-d10				B	10	1.13	C	20	1.05	D	40	1.05	E	100	1.06
	F	500	1.04	G	1000	1.06	H	2000	1.08	I	5000	1.05	J	8000	1.06
	K	10000	1.04												
Fluoranthene-d10				B	10	1.05	C	20	1.04	D	40	1.03	E	100	1.07
	F	500	1.02	G	1000	1.10	H	2000	0.987	I	5000	0.998	J	8000	1.00
	K	10000	0.958												

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† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 05/28/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2657
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Terphenyl-d14				B	10	0.990	C	20	1.07	D	40	1.02	E	100	0.921
	F	500	0.867	G	1000	0.887	H	2000	0.801	I	5000	0.800	J	8000	0.807
	K	10000	0.786												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 05/28/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2657
Instrument ID: MS11

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	6.0		≤ 15	1.06		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	1.2		≤ 15	0.669		0.01
Acenaphthylene	MS	AverageRF	% RSD	8.5		≤ 15	1.63		0.01
Acenaphthene	MS	AverageRF	% RSD	2.3		≤ 15	1.09		0.01
Dibenzofuran	MS	AverageRF	% RSD	3.3		≤ 15	1.54		0.01
Fluorene	MS	AverageRF	% RSD	3.1		≤ 15	1.24		0.01
Phenanthrene	MS	AverageRF	% RSD	6.1		≤ 15	1.14		0.01
Anthracene	MS	AverageRF	% RSD	9.3		≤ 15	0.975		0.01
Fluoranthene	MS	AverageRF	% RSD	7.0		≤ 15	1.20		0.01
Pyrene	MS	AverageRF	% RSD	8.2		≤ 15	1.23		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	11.6		≤ 15	1.05		0.01
Chrysene	MS	AverageRF	% RSD	11.5		≤ 15	1.13		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	6.6		≤ 15	1.35		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	3.2		≤ 15	1.88		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	10.6		≤ 15	1.22		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	20.1	*	≤ 15	0.819		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	21.0	*	≤ 15	0.912		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	9.8		≤ 15	1.15		0.01
Fluorene-d10	SURR	AverageRF	% RSD	2.5		≤ 15	1.06		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.1		≤ 15	1.03		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	11.4		≤ 15	0.895		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 05/28/2003
Date Analyzed: 05/28/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2657
Units: ng/ml

File ID: J:\MS11\DATA\052803\0528F033.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.06	1.06	0	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.669	0.666	-1	NA	± 20 %	AverageRF
Acenaphthylene	2000	2200	1.63	1.81	11	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	1.09	1.13	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	1.54	1.57	2	NA	± 20 %	AverageRF
Fluorene	2000	2100	1.24	1.31	5	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	1.14	1.13	-1	NA	± 20 %	AverageRF
Anthracene	2000	2200	0.975	1.05	8	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.20	1.24	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.23	1.23	0	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	1.05	0.951	-10	NA	± 20 %	AverageRF
Chrysene	2000	1900	1.13	1.08	-5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1900	1.35	1.27	-6	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	1.88	1.83	-3	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	1.22	1.19	-3	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.819	0.817	0	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2100	0.912	0.936	3	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	1.15	1.13	-2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2672
Instrument ID: MS11

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS11\DATA\060203\0602F006.D	F	J:\MS11\DATA\060203\0602F011.D
B	J:\MS11\DATA\060203\0602F007.D	G	J:\MS11\DATA\060203\0602F012.D
C	J:\MS11\DATA\060203\0602F008.D	H	J:\MS11\DATA\060203\0602F013.D
D	J:\MS11\DATA\060203\0602F009.D	I	J:\MS11\DATA\060203\0602F014.D
E	J:\MS11\DATA\060203\0602F010.D	J	J:\MS11\DATA\060203\0602F015.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	10	1.20	B	20	1.12	C	40	1.14	D	100	1.12	E	500	1.03
	F	1000	1.04	G	2000	1.03	H	5000	0.966	I	8000	0.919	J	10000	0.895
2-Methylnaphthalene	A	10	0.703	B	20	0.683	C	40	0.693	D	100	0.704	E	500	0.664
	F	1000	0.686	G	2000	0.681	H	5000	0.645	I	8000	0.624	J	10000	0.611
Acenaphthylene	A	10	1.67	B	20	1.69	C	40	1.71	D	100	1.73	E	500	1.70
	F	1000	1.80	G	2000	1.78	H	5000	1.70	I	8000	1.61	J	10000	1.57
Acenaphthene	A	10	1.12	B	20	1.11	C	40	1.16	D	100	1.14	E	500	1.08
	F	1000	1.10	G	2000	1.08	H	5000	1.02	I	8000	0.976	J	10000	0.952
Dibenzofuran	A	10	1.57	B	20	2.03	C	40	2.01	D	100	2.06	E	500	1.86
	F	1000	1.93	G	2000	1.90	H	5000	1.77	I	8000	1.65	J	10000	1.70
Fluorene	A	10	1.23	B	20	1.28	C	40	1.26	D	100	1.30	E	500	1.26
	F	1000	1.31	G	2000	1.28	H	5000	1.20	I	8000	1.16	J	10000	1.14
Phenanthrene	A	10	1.30	B	20	1.26	C	40	1.21	D	100	1.21	E	500	1.10
	F	1000	1.15	G	2000	1.12	H	5000	1.06	I	8000	0.991	J	10000	0.943
Anthracene	A	10	1.09	B	20	1.03	C	40	1.05	D	100	1.04	E	500	1.02
	F	1000	1.10	G	2000	1.10	H	5000	1.04	I	8000	0.985	J	10000	0.954
Fluoranthene	A	10	1.38	B	20	1.31	C	40	1.21	D	100	1.26	E	500	1.19
	F	1000	1.26	G	2000	1.23	H	5000	1.16	I	8000	1.05	J	10000	1.03
Pyrene	A	10	1.45	B	20	1.36	C	40	1.27	D	100	1.25	E	500	1.17
	F	1000	1.21	G	2000	1.11	H	5000	1.09	I	8000	1.11	J	10000	0.981
Benz(a)anthracene	A	10	1.42	B	20	1.27	C	40	1.09	D	100	1.05	E	500	0.982
	F	1000	1.04	G	2000	0.968	H	5000	0.979	I	8000	0.971	J	10000	0.949
Chrysene	A	10	1.33	B	20	1.27	C	40	1.19	D	100	1.13	E	500	1.03
	F	1000	1.07	G	2000	1.00	H	5000	0.987	I	8000	0.974	J	10000	0.944
Benzo(b)fluoranthene	A	10	1.73	B	20	1.61	C	40	1.50	D	100	1.48	E	500	1.41
	F	1000	1.52	G	2000	1.45	H	5000	1.55	I	8000	1.56	J	10000	1.57
Benzo(k)fluoranthene	A	10	2.09	B	20	1.99	C	40	1.92	D	100	1.96	E	500	1.79
	F	1000	1.88	G	2000	1.74	H	5000	1.77	I	8000	1.72	J	10000	1.65

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2672
Instrument ID: MS11

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Benzo(a)pyrene	A	10	1.44	B	20	1.37	C	40	1.25	D	100	1.26	E	500	1.25
	F	1000	1.36	G	2000	1.32	H	5000	1.38	I	8000	1.41	J	10000	1.39
Indeno(1,2,3-cd)pyrene	A	10	0.797	B	20	0.746	C	40	0.635	D	100	0.674	E	500	0.720
	F	1000	0.841	G	2000	0.881	H	5000	0.922	I	8000	0.993	J	10000	0.968
Dibenz(a,h)anthracene	A	10	0.871	B	20	0.765	C	40	0.681	D	100	0.799	E	500	0.799
	F	1000	0.948	G	2000	0.990	H	5000	1.03	I	8000	1.10	J	10000	1.07
Benzo(g,h,i)perylene	A	10	1.20	B	20	1.05	C	40	0.852	D	100	0.974	E	500	0.883
	F	1000	1.02	G	2000	1.06	H	5000	1.06	I	8000	1.12	J	10000	1.08
Biphenyl-d10	A	10	0.724	B	20	0.745	C	40	0.767	D	100	0.775	E	500	0.728
	F	1000	0.751	G	2000	0.736	H	5000	0.694	I	8000	0.672	J	10000	0.661
Fluorene-d10	A	10	1.15	B	20	1.12	C	40	1.10	D	100	1.10	E	500	1.05
	F	1000	1.10	G	2000	1.07	H	5000	1.00	I	8000	0.965	J	10000	0.955
Fluoranthene-d10	A	10	1.09	B	20	1.05	C	40	1.03	D	100	1.10	E	500	1.05
	F	1000	1.10	G	2000	1.08	H	5000	1.02	I	8000	0.940	J	10000	0.926
Terphenyl-d14	A	10	1.01	B	20	1.08	C	40	1.03	D	100	0.928	E	500	0.877
	F	1000	0.866	G	2000	0.794	H	5000	0.772	I	8000	0.793	J	10000	0.707

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2303706
Project: Canaveral Harbor 103 Evaluation **Calibration Date:** 06/02/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL2672 **Column:** MS
Instrument ID: MS11

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	9.4		≤ 15	1.04		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	4.9		≤ 15	0.670		0.01
Acenaphthylene	MS	AverageRF	% RSD	4.1		≤ 15	1.70		0.01
Acenaphthene	MS	AverageRF	% RSD	6.5		≤ 15	1.07		0.01
Dibenzofuran	MS	AverageRF	% RSD	9.2		≤ 15	1.85		0.01
Fluorene	MS	AverageRF	% RSD	4.7		≤ 15	1.24		0.01
Phenanthrene	MS	AverageRF	% RSD	10.2		≤ 15	1.13		0.01
Anthracene	MS	AverageRF	% RSD	4.5		≤ 15	1.04		0.01
Fluoranthene	MS	AverageRF	% RSD	8.8		≤ 15	1.21		0.01
Pyrene	MS	AverageRF	% RSD	11.4		≤ 15	1.20		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	14.5		≤ 15	1.07		0.01
Chrysene	MS	AverageRF	% RSD	12.2		≤ 15	1.09		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	6.0		≤ 15	1.54		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	7.5		≤ 15	1.85		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	5.2		≤ 15	1.34		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	15.1	*	≤ 15	0.818		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	15.8	*	≤ 15	0.905		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	10.2		≤ 15	1.03		0.01
Biphenyl-d10	SURR	AverageRF	% RSD	5.3		≤ 15	0.726		0.01
Fluorene-d10	SURR	AverageRF	% RSD	6.2		≤ 15	1.06		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	6.0		≤ 15	1.04		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	14.0		≤ 15	0.886		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Calibration Date: 06/02/2003
Date Analyzed: 06/02/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL2672
Units: ng/ml

File ID: J:\MS11\DATA\060203\0602G017.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	1.04	1.03	-1	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2000	0.670	0.656	-2	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	1.70	1.77	4	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	1.07	1.09	2	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	1.85	1.95	6	NA	± 20 %	AverageRF
Fluorene	2000	2000	1.24	1.27	2	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	1.13	1.03	-9	NA	± 20 %	AverageRF
Anthracene	2000	1900	1.04	0.990	-5	NA	± 20 %	AverageRF
Fluoranthene	2000	1900	1.21	1.14	-6	NA	± 20 %	AverageRF
Pyrene	2000	1900	1.20	1.14	-5	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	1.07	0.977	-9	NA	± 20 %	AverageRF
Chrysene	2000	1900	1.09	1.03	-6	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1900	1.54	1.45	-6	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1900	1.85	1.75	-5	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	1.34	1.30	-3	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2000	0.818	0.827	1	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.905	0.926	2	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	1900	1.03	0.993	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 05/31/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 05/28/2003
Calibration ID: CAL2657
Analysis Lot: KWG0308021
Units: ng/ml

File ID: J:\MS11\DATA\053103\0531F030.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	1900	0.01	1.06	1.03	-3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	1900	0.01	0.669	0.650	-3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2200	0.01	1.63	1.79	10	NA	± 20 %	AverageRF
Acenaphthene	2000	2000	0.01	1.09	1.08	0	NA	± 20 %	AverageRF
Dibenzofuran	2000	2000	0.01	1.54	1.52	-1	NA	± 20 %	AverageRF
Fluorene	2000	2000	0.01	1.24	1.23	-1	NA	± 20 %	AverageRF
Phenanthrene	2000	1800	0.01	1.14	1.02	-11	NA	± 20 %	AverageRF
Anthracene	2000	2000	0.01	0.975	0.987	1	NA	± 20 %	AverageRF
Fluoranthene	2000	1900	0.01	1.20	1.15	-4	NA	± 20 %	AverageRF
Pyrene	2000	1900	0.01	1.23	1.14	-7	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1900	0.01	1.05	0.986	-6	NA	± 20 %	AverageRF
Chrysene	2000	1800	0.01	1.13	1.02	-10	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	0.01	1.35	1.39	3	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	1800	0.01	1.88	1.69	-10	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2100	0.01	1.22	1.29	5	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2400	0.01	0.819	0.972	19	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2400	0.01	0.912	1.07	18	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.15	1.13	-2	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.06	1.01	-5	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.03	0.960	-6	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	0.895	0.817	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706
Date Analyzed: 06/03/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 06/02/2003
Calibration ID: CAL2672
Analysis Lot: KWG0308138
Units: ng/ml

File ID: J:\MS11\DATA\060303\0603F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.04	1.06	2	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.670	0.689	3	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	1.70	1.82	7	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.07	1.13	6	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.85	1.96	6	NA	± 20 %	AverageRF
Fluorene	2000	2100	0.01	1.24	1.33	7	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	0.01	1.13	1.16	2	NA	± 20 %	AverageRF
Anthracene	2000	2100	0.01	1.04	1.09	5	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.21	1.25	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	0.01	1.20	1.23	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1700	0.01	1.07	0.919	-14	NA	± 20 %	AverageRF
Chrysene	2000	2000	0.01	1.09	1.10	1	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	1800	0.01	1.54	1.36	-12	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.85	2.01	9	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	1900	0.01	1.34	1.29	-4	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	1800	0.01	0.818	0.743	-9	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2000	0.01	0.905	0.891	-2	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2000	0.01	1.03	1.03	0	NA	± 20 %	AverageRF
Biphenyl-d10	2000	2000	0.01	0.726	0.709	-2	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.06	0.993	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.04	0.981	-6	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1900	0.01	0.886	0.826	-7	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2303706
Project: Canaveral Harbor 103 Evaluation

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0308021
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0531F029.D	GC/MS Tuning - Decafluorotriphenyl	KWG0308021-1	5/31/2003	19:41		5/31/2003	19:54
0531F030.D	Continuing Calibration Verification	KWG0308021-2	5/31/2003	20:02		5/31/2003	20:21
0531F032.D	Method Blank	KWG0307438-5	5/31/2003	20:58		5/31/2003	21:17
0531F033.D	ZZZZZZ	ZZZZZZ	5/31/2003	21:25		5/31/2003	21:44
0531F034.D	ZZZZZZ	ZZZZZZ	5/31/2003	21:53		5/31/2003	22:12
0531F035.D	ZZZZZZ	ZZZZZZ	5/31/2003	22:21		5/31/2003	22:40
0531F036.D	ZZZZZZ	ZZZZZZ	5/31/2003	22:49		5/31/2003	23:08
0531F037.D	ZZZZZZ	ZZZZZZ	5/31/2003	23:16		5/31/2003	23:35
0531F038.D	ZZZZZZ	ZZZZZZ	5/31/2003	23:44		6/1/2003	00:03
0531F039.D	ZZZZZZ	ZZZZZZ	6/1/2003	00:12		6/1/2003	00:31
0531F040.D	ZZZZZZ	ZZZZZZ	6/1/2003	00:40		6/1/2003	00:59
0531F041.D	Lab Control Sample	KWG0307438-3	6/1/2003	01:07		6/1/2003	01:26
0531F042.D	Duplicate Lab Control Sample	KWG0307438-4	6/1/2003	01:35		6/1/2003	01:54
0531F043.D	ZZZZZZ	ZZZZZZ	6/1/2003	02:03		6/1/2003	02:22
0531F044.D	ZZZZZZ	ZZZZZZ	6/1/2003	02:31		6/1/2003	02:50
0531F045.D	ZZZZZZ	ZZZZZZ	6/1/2003	02:59		6/1/2003	03:18
0531F046.D	ZZZZZZ	ZZZZZZ	6/1/2003	03:27		6/1/2003	03:46
0531F047.D	ZZZZZZ	ZZZZZZ	6/1/2003	03:54		6/1/2003	04:13
0531F048.D	ZZZZZZ	ZZZZZZ	6/1/2003	04:22		6/1/2003	04:41
0531F049.D	ZZZZZZ	ZZZZZZ	6/1/2003	04:50		6/1/2003	05:09
0531F050.D	ZZZZZZ	ZZZZZZ	6/1/2003	05:18		6/1/2003	05:37

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation

Service Request: K2303706

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0308138
Instrument ID: MS11

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0603F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0308138-1	6/3/2003	12:47		6/3/2003	13:00
0603F002.D	Continuing Calibration Verification	KWG0308138-2	6/3/2003	13:10		6/3/2003	13:30
0603F004.D	Method Blank	KWG0307438-5	6/3/2003	14:12		6/3/2003	14:32
0603F005.D	E-CH03-19	K2303706-001	6/3/2003	14:41		6/3/2003	15:01
0603F006.D	E-CH03-20	K2303706-002	6/3/2003	15:10		6/3/2003	15:30
0603F007.D	E-CH03-21/22	K2303706-003	6/3/2003	15:38		6/3/2003	15:58
0603F008.D	ZZZZZZ	ZZZZZZ	6/3/2003	16:07		6/3/2003	16:27
0603F009.D	ZZZZZZ	ZZZZZZ	6/3/2003	16:35		6/3/2003	16:55
0603F010.D	E-CH03-19MS	KWG0307438-1	6/3/2003	17:04		6/3/2003	17:24
0603F011.D	E-CH03-19DMS	KWG0307438-2	6/3/2003	17:32		6/3/2003	17:52
0603F012.D	Lab Control Sample	KWG0307438-3	6/3/2003	18:01		6/3/2003	18:21
0603F013.D	Duplicate Lab Control Sample	KWG0307438-4	6/3/2003	18:30		6/3/2003	18:50
0603F014.D	ZZZZZZ	ZZZZZZ	6/3/2003	18:58		6/3/2003	19:18
0603F015.D	ZZZZZZ	ZZZZZZ	6/3/2003	19:27		6/3/2003	19:47
0603F016.D	ZZZZZZ	ZZZZZZ	6/3/2003	19:56		6/3/2003	20:16
0603F017.D	ZZZZZZ	ZZZZZZ	6/3/2003	20:25		6/3/2003	20:45
0603F018.D	ZZZZZZ	ZZZZZZ	6/3/2003	20:54		6/3/2003	21:14
0603F019.D	ZZZZZZ	ZZZZZZ	6/3/2003	21:22		6/3/2003	21:42
0603F020.D	ZZZZZZ	ZZZZZZ	6/3/2003	21:51		6/3/2003	22:11
0603F021.D	ZZZZZZ	ZZZZZZ	6/3/2003	22:20		6/3/2003	22:40

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor 103 Evaluation
Sample Matrix: Sediment

Service Request: K2303706
Date Extracted: 05/23/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0307438
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-19	K2303706-001	05/14/03	05/17/03	30.32g	2.0ml	66.0	
E-CH03-20	K2303706-002	05/14/03	05/17/03	42.03g	2.0ml	47.6	
E-CH03-21/22	K2303706-003	05/14/03	05/17/03	40.17g	2.0ml	49.8	
Method Blank	KWG0307438-5	NA	NA	42.03g	2.0ml	NA	
E-CH03-19MS	KWG0307438-1	05/14/03	05/17/03	30.30g	2.0ml	66.0	
E-CH03-19DMS	KWG0307438-2	05/14/03	05/17/03	30.31g	2.0ml	66.0	
Lab Control Sample	KWG0307438-3	NA	NA	20.00g	2.0ml	NA	
Duplicate Lab Control Sample	KWG0307438-4	NA	NA	20.00g	2.0ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

C 2

Tissue Chemistry Data

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

November 17, 2003 Service Request No: K2307754

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor/M.Natusa

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on September 17, 2003. For your reference, these analyses have been assigned our service request number K2307754.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Received:**	9/17/03
Sample Matrix:	Tissue		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Tissue samples and one were received for analysis at Columbia Analytical Services on 9/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored frozen at -20°C upon receipt at the laboratory.

The samples were placed on hold after receipt at the laboratory until compositing and analysis instructions were received. Refer to the Chain of Custody section of the report for a summary of the compositing and revised nomenclature received from ANAMAR.

Metals by EPA Method 200.8/6000/7000

The control criteria for matrix spike recovery of Aluminum for samples E-CH03-12,15-T-D (comp) and E-CH03-13,16-T-A (comp) are not applicable. The analyte concentration in the samples was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

Butyltins by GC-FPD (M.O. Stallard, et al.)

Sample Confirmation Notes:
The confirmation criterion of 40% difference for Tri-n-butyltin was exceeded in samples E-CH03-9,10,11,20-T-A (comp), E-CH03-12,15-T-A (comp), and E-CH03-12,15-T-B (comp). The lower of the two values was reported because of apparent matrix interference on the alternate column that produced the higher value.

Elevated Method Reporting Limit:
The reporting limit was elevated for Tri-n-butyltin in sample E-CH03-9,10,11,20-T-D (comp) due to the presence of non-target background components that prevented accurate quantitation at the normal reporting limit. Although the samples were all similar, this one showed more background than the others did. The result is flagged to indicate the problem.

No other anomalies associated with the analysis of these samples were observed.

Approved by_____ **Date**_____

Chain of Custody Documentation

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES K23071167

Facility: MACTEC Engineering and consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-9	M. nasuta		A-E	K23071167
CH03-10	M. nasuta		A-E	
CH03-11	M. nasuta		A-E	
CH03-12	M. nasuta		A-E	
CH03-13	M. nasuta		A-E	
CH03-14	M. nasuta		A-E	
CH03-15	M. nasuta		A-E	
CH03-16	M. nasuta		A-E	
CH03-17	M. nasuta		A-E	
Total Number of Samples:	9			

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Aransas / Corpus Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	1577
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

000007

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

	Sample Identification	Organism Genus species		Replicate Bags	Observations
A	C1to3 - 20	M. nasuta		A-E	
B	Pre-test	M. nasuta			
C	E-CHO3-CTRL	M. nasuta		A-F	*CTRL for sample CHO3-20

Total Number of Samples: 3

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Arsenic) (Cancer) Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	1517
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

K2307167

Project/Client Anamar Work Order K23 ~~0717~~ TB

Cooler received on 9-17-03 and opened on 9-17-03 by KM.

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: FX - Attach. Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.0 1.1 0.5
   Temperature Blank:
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Water, ice, plastic
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

000009

CRFREV.DOC3/5/2003

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-9A		7167-001					
CH03-10A		7167-006					
CH03-11A		7167-011					
CH03-20A		7174-006					
	E-CH03-9,10,11,20-T-A (comp)			X	X	X	X
CH03-9B		7167-002					
CH03-10B		7167-007					
CH03-11B		7167-012					
CH03-20B		7174-007					
	E-CH03-9,10,11,20-T-B (comp)			X	X	X	X
CH03-9C		7167-003					
CH03-10C		7167-008					
CH03-11C		7167-013					
CH03-20C		7174-008					
	E-CH03-9,10,11,20-T-C (comp)			X	X	X	X
CH03-9D		7167-004					
CH03-10D		7167-009					
CH03-11D		7167-014					
CH03-20D		7174-009					
	E-CH03-9,10,11,20-T-D (comp)			X	X	X	X
CH03-9E		7167-005					
CH03-10E		7167-010					
CH03-11E		7167-015					
CH03-20E		7174-010					
	E-CH03-9,10,11,20-T-E (comp)			X	X	X	X
CH03-12A	E-CH03-12-T-A	7167-016	X				
CH03-12B	E-CH03-12-T-B	7167-017	X				
CH03-12C	E-CH03-12-T-C	7167-018	X				
CH03-12D	E-CH03-12-T-D	7167-019	X				
CH03-12E	E-CH03-12-T-E	7167-020	X				

000010

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-12A		7167-016					
CH03-15A		7172-011					
	E-CH03-12,15-T-A (comp)			X	X	X	X
CH03-12B		7167-017					
CH03-15B		7172-012					
	E-CH03-12,15-T-B (comp)			X	X	X	X
CH03-12C		7167-018					
CH03-15C		7172-013					
	E-CH03-12,15-T-C (comp)			X	X	X	X
CH03-12D		7167-019					
CH03-15D		7172-014					
	E-CH03-12,15-T-D (comp)			X	X	X	X
CH03-12E		7167-020					
CH03-15E		7172-015					
	E-CH03-12,15-T-E (comp)			X	X	X	X
CH03-13A		7172-001					
CH03-16A		7172-016					
	E-CH03-13,16-T-A (comp)			X	X	X	X
CH03-13B		7172-002					
CH03-16B		7172-017					
	E-CH03-13,16-T-B (comp)			X	X	X	X
CH03-13C		7172-003					
CH03-16C		7172-018					
	E-CH03-13,16-T-C (comp)			X	X	X	X
CH03-13D		7172-004					
CH03-16D		7172-019					
	E-CH03-13,16-T-D (comp)			X	X	X	X
CH03-13E		7172-005					
CH03-16E		7172-020					
	E-CH03-13,16-T-E (comp)			X	X	X	X

000011

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
E-CH03-CTRL-A	RS-CH03-T-A	7174-012	X	X	X	X	X
E-CH03-CTRL-B	RS-CH03-T-B	7174-013	X	X	X	X	X
E-CH03-CTRL-C	RS-CH03-T-C	7174-014	X	X	X	X	X
E-CH03-CTRL-D	RS-CH03-T-D	7174-015	X	X	X	X	X
E-CH03-CTRL-E	RS-CH03-T-E	7174-016	X	X	X	X	X
M.nasuta Pre-Tissue	M.nasuta CH03 Pre	7174-011	X	X	X	X	X

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	9/17/03

Solids, Total

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	Freeze Dry	Basis:	Wet
Test Notes:			

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
E-CH03-9,10,11,20-T-A (comp)	K2307754-005	10/15/03	13.4	
E-CH03-9,10,11,20-T-B (comp)	K2307754-010	10/15/03	13.8	
E-CH03-9,10,11,20-T-C (comp)	K2307754-015	10/15/03	13.9	
E-CH03-9,10,11,20-T-D (comp)	K2307754-020	10/15/03	12.9	
ECH03-9,10,11,20-T-E (comp)	K2307754-025	10/15/03	13.1	
E-CH03-12,15-T-A (comp)	K2307754-028	10/15/03	13.4	
E-CH03-12,15-T-B (comp)	K2307754-031	10/15/03	13.2	
E-CH03-12,15-T-C (comp)	K2307754-034	10/15/03	9.5	
E-CH03-12,15-T-D (comp)	K2307754-037	10/15/03	14.7	
E-CH03-12,15-T-E (comp)	K2307754-040	10/15/03	18.2	
E-CH03-13,16-T-A (comp)	K2307754-043	10/15/03	9.8	
E-CH03-13,16-T-B (comp)	K2307754-046	10/15/03	9.1	
E-CH03-13,16-T-C (comp)	K2307754-049	10/15/03	8.3	
E-CH03-13,16-T-D (comp)	K2307754-052	10/15/03	8.9	
E-CH03-13,16-T-E (comp)	K2307754-055	10/15/03	9.4	

Approved By: _____ Date: 11/11/03

1A/052595

000014

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa
Sample Matrix: Tissue

Service Request: K2307754
Date Collected: NA
Date Received: 9/17/03
Date Extracted: NA
Date Analyzed: 10/15/03

Duplicate Summary
Total Metals

Sample Name: E-CH03-13,16-T-A (comp)
Lab Code: K2307754-043D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	9.8	9.8	9.8	<1	

Approved By: _____ Date: 11/6/03

DUP/052595

000015

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Sample No.	Lab Sample ID.
E-CH03-9,10,11,20-T-A (comp)	K2307754-005
E-CH03-9,10,11,20-T-A (comp)D	K2307754-005D
E-CH03-9,10,11,20-T-A (comp)S	K2307754-005S
E-CH03-9,10,11,20-T-B (comp)	K2307754-010
E-CH03-9,10,11,20-T-B (comp)D	K2307754-010D
E-CH03-9,10,11,20-T-B (comp)S	K2307754-010S
E-CH03-9,10,11,20-T-C (comp)	K2307754-015
E-CH03-9,10,11,20-T-D (comp)	K2307754-020
ECH03-9,10,11,20-T-E (comp)	K2307754-025
E-CH03-12,15-T-A (comp)	K2307754-028
E-CH03-12,15-T-B (comp)	K2307754-031
E-CH03-12,15-T-C (comp)	K2307754-034
E-CH03-12,15-T-D (comp)	K2307754-037
E-CH03-12,15-T-D (comp)S	K2307754-037S
E-CH03-12,15-T-E (comp)	K2307754-040
E-CH03-12,15-T-E (comp)D	K2307754-040D
E-CH03-13,16-T-A (comp)	K2307754-043
E-CH03-13,16-T-A (comp)D	K2307754-043D
E-CH03-13,16-T-A (comp)S	K2307754-043S
E-CH03-13,16-T-B (comp)	K2307754-046

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 11/12/03

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Sample No.	Lab Sample ID.
E-CH03-13,16-T-C (comp)	K2307754-049
E-CH03-13,16-T-D (comp)	K2307754-052
E-CH03-13,16-T-E (comp)	K2307754-055
Method Blank	K2307754-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 11/12/03

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METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-A (comp) Lab Code: K2307754-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1230		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.063		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	15.9		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.13		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	23.9		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	12.0		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.490		
Mercury	7471A	0.03	0.01	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	13.5		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.133		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	69.8		

% Solids: 13.4

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-B (comp) Lab Code: K2307754-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1700		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.054		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	16.2		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.14		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	20.2		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	12.2		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.660		
Mercury	7471A	0.03	0.01	1	10/24/03	10/28/03	0.06		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	11.1		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.189		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	78.6		

% Solids: 13.8

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-C (comp) Lab Code: K2307754-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1100		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.075		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	18.5		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.14		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	19.6		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	11.5		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.440		
Mercury	7471A	0.03	0.01	1	10/24/03	10/28/03	0.06		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	11.7		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.163		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	69.9		

% Solids: 13.9

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-D (comp) Lab Code: K2307754-020

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1580		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.055		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	17.9		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.14		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	23.9		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	11.0		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.660		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.06		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	14.4		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.161		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	75.8		

% Solids: 12.9

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: ECH03-9,10,11,20-T-E (comp) Lab Code: K2307754-025

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1410		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.060		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	18.2		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	18.6		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	11.0		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.640		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.07		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	11.0		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.123		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	83.7		

% Solids: 13.1

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-A (comp)
Lab Code: K2307754-028

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1140		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.059		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	18.8		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	7.1		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	14.2		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.440		
Mercury	7471A	0.03	0.01	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	5.54		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.148		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	87.3		

% Solids: 13.4

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-B (comp)
Lab Code: K2307754-031

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1300		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.055		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	16.1		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.19		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	14.0		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	14.8		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.780		
Mercury	7471A	0.03	0.01	1	10/24/03	10/28/03	0.06		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	8.99		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.178		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	95.1		

% Solids: 13.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-C (comp)
Lab Code: K2307754-034

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	2110		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.056		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	15.7		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	11.9		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	16.3		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.780		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.07		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	9.46		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.119		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	88.3		

% Solids: 9.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-D (comp)
Lab Code: K2307754-037

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1650		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.057		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	19.9		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	23.2		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	13.0		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.840		
Mercury	7471A	0.03	0.01	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	12.7		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.182		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	101		

% Solids: 14.7

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-E (comp)
Lab Code: K2307754-040

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1050		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.057		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	20.3		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	5.2		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	13.8		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.730		
Mercury	7471A	0.02	0.01	1	10/24/03	10/28/03	0.03		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	5.10		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.221		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	71.2		

% Solids: 18.2

Comments:

000028

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-A (comp)
Lab Code: K2307754-043

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1260		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.053		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	21.3		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.13		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	5.0		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	14.7		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.410		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	6.46		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.137		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	66.9		

% Solids: 9.8

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-B (comp)
Lab Code: K2307754-046

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1440		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.052		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	17.0		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	4.3		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	17.1		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.520		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	4.29		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.102		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	75.6		

% Solids: 9.1

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-C (comp)
Lab Code: K2307754-049

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1700		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.054		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	19.3		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.12		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	4.5		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	13.5		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.490		
Mercury	7471A	0.05	0.02	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	3.76		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.206		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	62.0		

% Solids: 8.3

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-D (comp)
Lab Code: K2307754-052

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1530		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.062		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	22.1		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.14		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	2.3		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	15.3		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.530		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	3.37		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.151		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	63.0		

% Solids: 8.9

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-E (comp)
Lab Code: K2307754-055

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	1740		
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.058		
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	21.2		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.14		
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	2.4		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	19.6		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	1.780		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.05		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	3.31		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.189		
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	59.4		

% Solids: 9.4

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307754
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.natusa	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: Method Blank Lab Code: K2307754-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/17/03	10/29/03	5.0	U	
Antimony	200.8	0.050	0.006	5	10/17/03	10/28/03	0.006	U	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	0.09	B	
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.01	U	
Chromium	6010B	0.5	0.3	1	10/17/03	10/29/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	0.11		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.004	B	
Mercury	7471A	0.02	0.01	1	10/24/03	10/28/03	0.01	U	
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.02	U	
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.003	U	
Zinc	200.8	0.5	0.2	5	10/31/03	11/5/03	0.2	U	

% Solids: 100.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-A (comp) Lab Code: K2307754-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/17/03	10/29/03	164		
Antimony	200.8	0.007	0.001	5	10/17/03	10/28/03	0.009		
Arsenic	200.8	0.067	0.007	5	10/17/03	10/28/03	2.130		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.017		
Chromium	6010B	0.07	0.04	1	10/17/03	10/29/03	3.20		
Copper	200.8	0.013	0.008	5	10/17/03	10/28/03	1.610		
Lead	200.8	0.0027	0.0004	5	10/17/03	10/28/03	0.1990		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.007		
Nickel	200.8	0.053	0.003	5	10/17/03	10/28/03	1.810		
Silver	200.8	0.0027	0.0004	5	10/17/03	10/28/03	0.0179		
Zinc	200.8	0.07	0.03	5	10/31/03	11/5/03	9.35		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-B (comp) Lab Code: K2307754-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/17/03	10/29/03	235		
Antimony	200.8	0.007	0.001	5	10/17/03	10/28/03	0.007		
Arsenic	200.8	0.069	0.007	5	10/17/03	10/28/03	2.240		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.019		
Chromium	6010B	0.07	0.04	1	10/17/03	10/29/03	2.79		
Copper	200.8	0.014	0.008	5	10/17/03	10/28/03	1.690		
Lead	200.8	0.0028	0.0004	5	10/17/03	10/28/03	0.2290		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.008		
Nickel	200.8	0.055	0.003	5	10/17/03	10/28/03	1.540		
Silver	200.8	0.0028	0.0004	5	10/17/03	10/28/03	0.0261		
Zinc	200.8	0.07	0.03	5	10/31/03	11/5/03	10.9		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-C (comp) Lab Code: K2307754-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/17/03	10/29/03	153		
Antimony	200.8	0.007	0.001	5	10/17/03	10/28/03	0.010		
Arsenic	200.8	0.069	0.007	5	10/17/03	10/28/03	2.570		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.019		
Chromium	6010B	0.07	0.04	1	10/17/03	10/29/03	2.72		
Copper	200.8	0.014	0.008	5	10/17/03	10/28/03	1.600		
Lead	200.8	0.0028	0.0004	5	10/17/03	10/28/03	0.2000		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.008		
Nickel	200.8	0.055	0.003	5	10/17/03	10/28/03	1.630		
Silver	200.8	0.0028	0.0004	5	10/17/03	10/28/03	0.0227		
Zinc	200.8	0.07	0.03	5	10/31/03	11/5/03	9.71		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-D (comp) Lab Code: K2307754-020

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.6	0.6	1	10/17/03	10/29/03	204		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.007		
Arsenic	200.8	0.065	0.006	5	10/17/03	10/28/03	2.310		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.018		
Chromium	6010B	0.06	0.04	1	10/17/03	10/29/03	3.09		
Copper	200.8	0.013	0.008	5	10/17/03	10/28/03	1.420		
Lead	200.8	0.0026	0.0004	5	10/17/03	10/28/03	0.2140		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.008		
Nickel	200.8	0.052	0.003	5	10/17/03	10/28/03	1.850		
Silver	200.8	0.0026	0.0004	5	10/17/03	10/28/03	0.0208		
Zinc	200.8	0.06	0.03	5	10/31/03	11/5/03	9.77		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: ECH03-9,10,11,20-T-E (comp) Lab Code: K2307754-025

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/17/03	10/29/03	184		
Antimony	200.8	0.007	0.001	5	10/17/03	10/28/03	0.008		
Arsenic	200.8	0.066	0.007	5	10/17/03	10/28/03	2.390		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.020		
Chromium	6010B	0.07	0.04	1	10/17/03	10/29/03	2.43		
Copper	200.8	0.013	0.008	5	10/17/03	10/28/03	1.440		
Lead	200.8	0.0026	0.0004	5	10/17/03	10/28/03	0.2150		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.009		
Nickel	200.8	0.052	0.003	5	10/17/03	10/28/03	1.440		
Silver	200.8	0.0026	0.0004	5	10/17/03	10/28/03	0.0161		
Zinc	200.8	0.07	0.03	5	10/31/03	11/5/03	11.0		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-A (comp)
Lab Code: K2307754-028

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/17/03	10/29/03	153		
Antimony	200.8	0.007	0.001	5	10/17/03	10/28/03	0.008		
Arsenic	200.8	0.067	0.007	5	10/17/03	10/28/03	2.520		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.020		
Chromium	6010B	0.07	0.04	1	10/17/03	10/29/03	0.95		
Copper	200.8	0.013	0.008	5	10/17/03	10/28/03	1.910		
Lead	200.8	0.0027	0.0004	5	10/17/03	10/28/03	0.1930		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.007		
Nickel	200.8	0.053	0.003	5	10/17/03	10/28/03	0.743		
Silver	200.8	0.0027	0.0004	5	10/17/03	10/28/03	0.0199		
Zinc	200.8	0.07	0.03	5	10/31/03	11/5/03	11.7		

% Solids: NA

Comments:

000040

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-B (comp)
Lab Code: K2307754-031

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/17/03	10/29/03	172		
Antimony	200.8	0.007	0.001	5	10/17/03	10/28/03	0.007		
Arsenic	200.8	0.066	0.007	5	10/17/03	10/28/03	2.130		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.024		
Chromium	6010B	0.07	0.04	1	10/17/03	10/29/03	1.85		
Copper	200.8	0.013	0.008	5	10/17/03	10/28/03	1.960		
Lead	200.8	0.0026	0.0004	5	10/17/03	10/28/03	0.2340		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.008		
Nickel	200.8	0.053	0.003	5	10/17/03	10/28/03	1.190		
Silver	200.8	0.0026	0.0004	5	10/17/03	10/28/03	0.0235		
Zinc	200.8	0.07	0.03	5	10/31/03	11/5/03	12.6		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-C (comp)
Lab Code: K2307754-034

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.5	0.5	1	10/17/03	10/29/03	200		
Antimony	200.8	0.005	0.001	5	10/17/03	10/28/03	0.005		
Arsenic	200.8	0.048	0.005	5	10/17/03	10/28/03	1.490		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.014		
Chromium	6010B	0.05	0.03	1	10/17/03	10/29/03	1.13		
Copper	200.8	0.010	0.006	5	10/17/03	10/28/03	1.540		
Lead	200.8	0.0019	0.0003	5	10/17/03	10/28/03	0.1690		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.007		
Nickel	200.8	0.038	0.002	5	10/17/03	10/28/03	0.898		
Silver	200.8	0.0019	0.0003	5	10/17/03	10/28/03	0.0113		
Zinc	200.8	0.05	0.02	5	10/31/03	11/5/03	8.39		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-D (comp)
Lab Code: K2307754-037

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/17/03	10/29/03	243		
Antimony	200.8	0.007	0.001	5	10/17/03	10/28/03	0.008		
Arsenic	200.8	0.073	0.007	5	10/17/03	10/28/03	2.930		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.022		
Chromium	6010B	0.07	0.04	1	10/17/03	10/29/03	3.41		
Copper	200.8	0.015	0.009	5	10/17/03	10/28/03	1.900		
Lead	200.8	0.0029	0.0004	5	10/17/03	10/28/03	0.2700		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.007		
Nickel	200.8	0.058	0.003	5	10/17/03	10/28/03	1.870		
Silver	200.8	0.0029	0.0004	5	10/17/03	10/28/03	0.0267		
Zinc	200.8	0.07	0.03	5	10/31/03	11/5/03	14.8		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-E (comp)
Lab Code: K2307754-040

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.9	0.9	1	10/17/03	10/29/03	192		
Antimony	200.8	0.009	0.001	5	10/17/03	10/28/03	0.010		
Arsenic	200.8	0.091	0.009	5	10/17/03	10/28/03	3.690		
Cadmium	200.8	0.004	0.002	5	10/17/03	10/28/03	0.027		
Chromium	6010B	0.09	0.05	1	10/17/03	10/29/03	0.95		
Copper	200.8	0.018	0.011	5	10/17/03	10/28/03	2.520		
Lead	200.8	0.0037	0.0005	5	10/17/03	10/28/03	0.3150		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.006		
Nickel	200.8	0.073	0.004	5	10/17/03	10/28/03	0.928		
Silver	200.8	0.0037	0.0005	5	10/17/03	10/28/03	0.0402		
Zinc	200.8	0.09	0.04	5	10/31/03	11/5/03	13.0		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-A (comp)
Lab Code: K2307754-043

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.5	0.5	1	10/17/03	10/29/03	124		
Antimony	200.8	0.005	0.001	5	10/17/03	10/28/03	0.005		
Arsenic	200.8	0.049	0.005	5	10/17/03	10/28/03	2.080		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.013		
Chromium	6010B	0.05	0.03	1	10/17/03	10/29/03	0.49		
Copper	200.8	0.010	0.006	5	10/17/03	10/28/03	1.440		
Lead	200.8	0.0020	0.0003	5	10/17/03	10/28/03	0.1380		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.005		
Nickel	200.8	0.039	0.002	5	10/17/03	10/28/03	0.633		
Silver	200.8	0.0020	0.0003	5	10/17/03	10/28/03	0.0134		
Zinc	200.8	0.05	0.02	5	10/31/03	11/5/03	6.56		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-B (comp)
Lab Code: K2307754-046

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.5	0.5	1	10/17/03	10/29/03	131		
Antimony	200.8	0.005	0.001	5	10/17/03	10/28/03	0.005		
Arsenic	200.8	0.045	0.005	5	10/17/03	10/28/03	1.550		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.013		
Chromium	6010B	0.05	0.03	1	10/17/03	10/29/03	0.39		
Copper	200.8	0.009	0.005	5	10/17/03	10/28/03	1.560		
Lead	200.8	0.0018	0.0003	5	10/17/03	10/28/03	0.1380		
Mercury	7471A	0.003	0.002	1	10/24/03	10/28/03	0.004		
Nickel	200.8	0.036	0.002	5	10/17/03	10/28/03	0.390		
Silver	200.8	0.0018	0.0003	5	10/17/03	10/28/03	0.0093		
Zinc	200.8	0.05	0.02	5	10/31/03	11/5/03	6.88		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-C (comp)
Lab Code: K2307754-049

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.4	0.4	1	10/17/03	10/29/03	141		
Antimony	200.8	0.004	0.000	5	10/17/03	10/28/03	0.004		
Arsenic	200.8	0.042	0.004	5	10/17/03	10/28/03	1.600		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.010		
Chromium	6010B	0.04	0.02	1	10/17/03	10/29/03	0.37		
Copper	200.8	0.008	0.005	5	10/17/03	10/28/03	1.120		
Lead	200.8	0.0017	0.0002	5	10/17/03	10/28/03	0.1240		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.004		
Nickel	200.8	0.033	0.002	5	10/17/03	10/28/03	0.312		
Silver	200.8	0.0017	0.0002	5	10/17/03	10/28/03	0.0171		
Zinc	200.8	0.04	0.02	5	10/31/03	11/5/03	5.15		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-D (comp)
Lab Code: K2307754-052

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.4	0.4	1	10/17/03	10/29/03	136		
Antimony	200.8	0.004	0.001	5	10/17/03	10/28/03	0.006		
Arsenic	200.8	0.044	0.004	5	10/17/03	10/28/03	1.970		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.013		
Chromium	6010B	0.04	0.03	1	10/17/03	10/29/03	0.21		
Copper	200.8	0.009	0.005	5	10/17/03	10/28/03	1.360		
Lead	200.8	0.0018	0.0003	5	10/17/03	10/28/03	0.1360		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.005		
Nickel	200.8	0.036	0.002	5	10/17/03	10/28/03	0.300		
Silver	200.8	0.0018	0.0003	5	10/17/03	10/28/03	0.0134		
Zinc	200.8	0.04	0.02	5	10/31/03	11/5/03	5.60		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-E (comp)
Lab Code: K2307754-055

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.5	0.5	1	10/17/03	10/29/03	164		
Antimony	200.8	0.005	0.001	5	10/17/03	10/28/03	0.005		
Arsenic	200.8	0.047	0.005	5	10/17/03	10/28/03	1.990		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.013		
Chromium	6010B	0.05	0.03	1	10/17/03	10/29/03	0.23		
Copper	200.8	0.009	0.006	5	10/17/03	10/28/03	1.840		
Lead	200.8	0.0019	0.0003	5	10/17/03	10/28/03	0.1670		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.005		
Nickel	200.8	0.037	0.002	5	10/17/03	10/28/03	0.311		
Silver	200.8	0.0019	0.0003	5	10/17/03	10/28/03	0.0178		
Zinc	200.8	0.05	0.02	5	10/31/03	11/5/03	5.58		

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/M.natusa
Matrix: TISSUE

Service Request: K2307754
Date Collected:
Date Received:
Units: MG/KG
Basis: Wet

Sample Name: Method Blank
Lab Code: K2307754-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.8	0.8	1	10/17/03	10/29/03	0.8	U	
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	U	
Arsenic	200.8	0.060	0.006	5	10/17/03	10/28/03	0.010	B	
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.001	U	
Chromium	6010B	0.08	0.05	1	10/17/03	10/29/03	0.05	U	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	0.013		
Lead	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0005	B	
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.002	U	
Nickel	200.8	0.048	0.002	5	10/17/03	10/28/03	0.002	U	
Silver	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0004	U	
Zinc	200.8	0.08	0.03	5	10/31/03	11/5/03	0.03	U	

% Solids: NA

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4880	98	5000	5040	101	4950	99	6010B
Antimony	25.0	25.3	101	25.0	25.0	100	24.8	99	200.8
Arsenic	25.0	24.6	98	25.0	24.3	97	24.8	99	200.8
Cadmium	12.5	12.7	102	25.0	24.8	99	24.7	99	200.8
Chromium	500	496	99	500	501	100	496	99	6010B
Copper	12.5	12.5	100	25.0	24.4	98	24.8	99	200.8
Lead	25.0	25.0	100	25.0	25.0	100	24.8	99	200.8
Mercury	5.0	4.96	99	5.0	5.05	101	5.23	105	7471A
Nickel	25.0	25.4	102	25.0	25.0	100	25.3	101	200.8
Silver	12.5	12.3	98	25.0	24.7	99	24.7	99	200.8
Zinc	25.0	25.5	102	25.0	25.3	101	25.2	101	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5100	102	5090	102	6010B
Antimony				25.0	24.5	98	24.9	100	200.8
Arsenic				25.0	24.4	98	24.3	97	200.8
Cadmium				25.0	24.9	100	24.8	99	200.8
Chromium				500	485	97	485	97	6010B
Copper				25.0	24.4	98	24.5	98	200.8
Lead				25.0	23.7	95	23.6	94	200.8
Mercury				5.0	5.35	107			7471A
Nickel				25.0	24.9	100	25.0	100	200.8
Silver				25.0	24.8	99	24.6	98	200.8
Zinc				25.0	25.5	102	25.1	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				25.0	24.8	99	24.8	99	200.8
Arsenic				25.0	24.4	98	24.3	97	200.8
Cadmium				25.0	24.7	99	24.6	98	200.8
Copper				25.0	24.5	98	24.4	98	200.8
Lead				25.0	24.2	97	24.4	98	200.8
Nickel				25.0	24.8	99	24.9	100	200.8
Silver				25.0	24.5	98	24.5	98	200.8
Zinc				25.0	25.4	102	24.9	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4900	98	5000	4910	98	4980	100	6010B

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Concentration Units: ug/I

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	49.1	98		
Antimony				0.10	0.11	105		
Arsenic				1.0	1.09	109		
Cadmium				0.10	0.10	103		
Chromium				5.0	6.24	125		
Copper				0.20	0.20	100		
Lead				0.04	0.0415	104		
Mercury	0.20	0.184	92					
Nickel				0.40	0.46	115		
Silver				0.04	0.0433	108		
Zinc				1.0	1.00	100		

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Concentration Units: ug/I

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50	49.2	98		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U						6010B
Antimony	0.029	B	0.012	U	0.02	B	0.021	B						200.8
Arsenic	0.10	U	0.10	U	0.10	U	0.12	B						200.8
Cadmium	0.020	U	0.020	U	0.02	U	0.020	U						200.8
Chromium	3.00	U	3.00	U	3.00	U	3.00	U						6010B
Copper	0.120	U	0.120	U	0.120	U	0.120	U						200.8
Lead	0.0060	U	0.0060	U	0.0060	U	0.0060	U						200.8
Mercury	0.100	U	0.100	U	0.100	U	0.100	U						7471A
Nickel	0.060	B	0.045	B	0.04	U	0.040	U						200.8
Silver	0.0060	U	0.0060	U	0.0060	U	0.0060	U						200.8
Zinc	0.40	U	0.40	U	0.40	U	0.40	U						200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum			50.0	U										6010B
Antimony			0.020	B	0.02	B	0.024	B						200.8
Arsenic			0.10	U	0.19	B	0.16	B						200.8
Cadmium			0.020	U	0.02	U	0.020	U						200.8
Chromium			3.00	U										6010B
Copper			0.120	U	0.120	U	0.120	U						200.8
Lead			0.0060	U	0.0060	U	0.0060	U						200.8
Nickel			0.040	U	0.05	B	0.040	U						200.8
Silver			0.0060	U	0.0060	U	0.0060	U						200.8
Zinc			0.40	U	0.40	U	0.40	U						200.8

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METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	50.0	U	50.0	U	50.0	U							6010B

000059

METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	493000	504000	101			
Chromium		500	-1.03	448	90			

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: E-CH03-9,10,11,20-T-A (comp)S
Lab Code: K2307754-005S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Zinc	70 - 130	16.8		9.35		6.70	111		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

000061

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: E-CH03-9,10,11,20-T-B (comp)S
Lab Code: K2307754-010S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Zinc	70 - 130	17.3		10.9		6.90	94		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: E-CH03-12,15-T-D (comp)S
Lab Code: K2307754-037S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		296		243		29.4	180		6010B
Antimony	60 - 130	5.300		0.008		7.340	72		200.8
Arsenic	60 - 130	5.31		2.93		2.94	81		200.8
Cadmium	70 - 130	0.736		0.022		0.734	97		200.8
Chromium	60 - 130	6.62		3.41		2.94	109		6010B
Copper	60 - 130	5.560		1.900		3.670	100		200.8
Lead	70 - 130	7.1400		0.2700		7.3400	94		200.8
Nickel	60 - 130	9.100		1.870		7.340	99		200.8
Silver	60 - 130	0.5460		0.0267		0.7340	71		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: E-CH03-13,16-T-A (comp)S
Lab Code: K2307754-043S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		166		124		19.5	215		6010B
Antimony	60 - 130	3.800		0.005		4.880	78		200.8
Arsenic	60 - 130	3.88		2.08		1.95	92		200.8
Cadmium	70 - 130	0.501		0.013		0.488	100		200.8
Chromium	60 - 130	2.42		0.49		1.95	99		6010B
Copper	60 - 130	3.960		1.440		2.440	103		200.8
Lead	70 - 130	4.5300		0.1380		4.8800	90		200.8
Mercury	60 - 130	0.088		0.005		0.100	84		7471A
Nickel	60 - 130	5.380		0.633		4.880	97		200.8
Silver	60 - 130	0.4170		0.0134		0.4880	83		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name:E-CH03-9,10,11,20-T-A (comp)D Lab Code: K2307754-005D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Zinc	30	9.35		9.48		1		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Form VI - IN

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name:E-CH03-9,10,11,20-T-B (comp)D Lab Code: K2307754-010D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Zinc	30	10.9		9.63		12		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Form VI - IN

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name:E-CH03-12,15-T-E (comp)D
Lab Code: K2307754-040D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	192		221		14		6010B
Antimony		0.010		0.011		2		200.8
Arsenic	30	3.69		3.33		10		200.8
Cadmium	30	0.027		0.025		10		200.8
Chromium	30	0.95		1.13		18		6010B
Copper	30	2.520		2.390		5		200.8
Lead	30	0.3150		0.2900		8		200.8
Nickel	30	0.928		0.879		5		200.8
Silver	30	0.0402		0.0342		16		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Form VI - IN

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307754
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M.natusa
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name:E-CH03-13,16-T-A (comp)D
Lab Code: K2307754-043D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	124		126		2		6010B
Antimony		0.005		0.005		2		200.8
Arsenic	30	2.08		1.99		4		200.8
Cadmium	30	0.013		0.012		10		200.8
Chromium	30	0.49		0.49		1		6010B
Copper	30	1.440		1.410		2		200.8
Lead	30	0.1380		0.1360		1		200.8
Mercury		0.005		0.006		14		7471A
Nickel	30	0.633		0.605		5		200.8
Silver	30	0.0134		0.0137		2		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Form VI - IN

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmantal Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/17-31/03
		Date Analyzed:	10/28-11/5/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307754-LCS	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dorm-2

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Arsenic	PSEP Tissue	200.8	18.0	20.5	114	13.5-22.9	
Chromium	PSEP Tissue	6010B	34.7	35.8	103	23.4-48.2	
Copper	PSEP Tissue	200.8	2.34	2.27	97	1.74-3.0	
Lead	PSEP Tissue	200.8	0.065	0.051	78	0.020-0.091	
Nickel	PSEP Tissue	200.8	19.4	19.6	101	13.0-27.0	
Zinc	PSEP Tissue	200.8	25.6	27.2	106	20.3-31.0	

Approved By: _____ Date: 11/12/03

LCS/032295

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmantal Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/17-31/03
		Date Analyzed:	10/28-11/12/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307754-LCS	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dolt-3

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Aluminum	PSEP Tissue	6010B	24.7	31.1	126	18.2-31.9	
Arsenic	PSEP Tissue	200.8	10.2	10.0	98	7.76-12.8	
Cadmium	PSEP Tissue	200.8	19.4	19.7	102	15.0-24.0	
Copper	PSEP Tissue	200.8	31.2	31.2	100	24.2-38.6	
Lead	PSEP Tissue	200.8	0.319	0.303	95	0.219-0.437	
Mercury	PSEP Tissue	7471A	3.37	3.2	95	2.58-4.21	
Nickel	PSEP Tissue	200.8	2.72	3.66	135	1.90-3.68	
Silver	PSEP Tissue	200.8	1.2	1.21	101	0.90-1.52	
Zinc	PSEP Tissue	200.8	86.6	97.1	112	67.4-107	

Approved By: _____ Date: 11/12/03

LCS/032295

METALS
-9-
ICP SERIAL DILUTIONS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.: Units: ug/L

Project Name: Canaveral Harbor/M.natusa

Sample Name: E-CH03-9,10,11,20-T-A (con Lab Code: K2307754-005L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-	Q	Method
Aluminum	12400		11300		9		6010B
Chromium	241		225		7		6010B

000071

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.200	0.100	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.100	0.012	200.8
Arsenic	75		1.00	0.10	200.8
Cadmium	111		0.040	0.020	200.8
Copper	65		0.200	0.120	200.8
Lead	208		0.0400	0.0060	200.8
Nickel	60		0.800	0.040	200.8
Silver	107		0.0400	0.0060	200.8
Zinc	66		1.00	0.40	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	237.30		50.0	50.0	6010B
Chromium	267.72		5.00	3.00	6010B

Comments

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0009000	0.0000000	-0.0035000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0125000
Arsenic	189.0	0.0000000	0.0000000	-0.0001400	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000900	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000230	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003000	0.0000000	0.0000000	0.0000000	-0.0003600
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009500	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000780	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0005000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0001000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	-0.0012000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Mo	Ni	Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019000
Antimony	206.8	-0.0280000	0.0000000	0.0002400	0.0000000	0.0004000
Arsenic	189.0	0.0010000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	-0.0004700	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000250	-0.0000120	0.0000600	0.0000000	-0.0000560
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001700	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015000	0.0000000	0.0000000
Copper	324.7	0.0003400	0.0000000	-0.0000070	-0.0017000	0.0000000
Iron	259.9	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.0740000	0.0700000
Lead	220.3	-0.0016000	0.0004600	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0001200
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0006800	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0003000	0.0000000	0.0000000	-0.0001700	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0005500	-0.0060000	-0.0002500	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0016000	0.0017000	0.0037000
Tin	189.9	0.0000000	0.0000000	-0.0019000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002500	0.0000000	-0.0006400	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	-0.0000600	0.0000000	0.0000000

Columbia Analytical Services, Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003100	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0004000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0005900	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	200.8
Arsenic	15.00	800.0	200.8
Cadmium	15.00	1000.0	200.8
Copper	15.00	1000.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	1000.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	1000.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Chromium	5.00	200000.0	6010B

Comments:

000073

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2307754-028	10/17/03	METHOD	2.26	30
K2307754-031	10/17/03	METHOD	2.28	30
K2307754-034	10/17/03	METHOD	3.15	30
K2307754-037	10/17/03	METHOD	2.06	30
K2307754-037S	10/17/03	METHOD	2.04	30
K2307754-040	10/17/03	METHOD	1.64	30
K2307754-040D	10/17/03	METHOD	1.65	30
K2307754-043	10/17/03	METHOD	3.06	30
K2307754-043D	10/17/03	METHOD	3.08	30
K2307754-043S	10/17/03	METHOD	3.07	30
K2307754-046	10/17/03	METHOD	3.31	30
K2307754-049	10/17/03	METHOD	3.62	30
K2307754-052	10/17/03	METHOD	3.38	30
K2307754-055	10/17/03	METHOD	3.21	30
K2307754-005	10/17/03	METHOD	2.26	30
K2307754-010	10/17/03	METHOD	2.17	30
K2307754-015	10/17/03	METHOD	2.17	30
K2307754-020	10/17/03	METHOD	2.32	30
K2307754-025	10/17/03	METHOD	2.29	30
LCSS DORM	10/17/03	METHOD	0.302	30
LCSS DOLT	10/17/03	METHOD	0.300	30
K2307754-MB	10/17/03	METHOD	2.00	30

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2307754-028	10/24/03	METHOD	2.55	50
K2307754-031	10/24/03	METHOD	2.54	50
K2307754-034	10/24/03	METHOD	2.56	50
K2307754-037	10/24/03	METHOD	2.56	50
K2307754-040	10/24/03	METHOD	2.51	50
K2307754-043	10/24/03	METHOD	2.63	50
K2307754-043D	10/24/03	METHOD	2.76	50
K2307754-043S	10/24/03	METHOD	2.51	50
K2307754-046	10/24/03	METHOD	3.00	50
K2307754-049	10/24/03	METHOD	2.62	50
K2307754-052	10/24/03	METHOD	2.52	50
K2307754-055	10/24/03	METHOD	2.55	50
K2307754-005	10/24/03	METHOD	2.63	50
K2307754-010	10/24/03	METHOD	2.54	50
K2307754-015	10/24/03	METHOD	2.57	50
K2307754-020	10/24/03	METHOD	2.53	50
K2307754-025	10/24/03	METHOD	2.53	50
LCSS DOLT	10/24/03	METHOD	0.532	100
K2307754-MB	10/24/03	METHOD	2.50	50

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2307754-028	10/17/03	PSEP TISSUE	2.26	30
K2307754-031	10/17/03	PSEP TISSUE	2.28	30
K2307754-034	10/17/03	PSEP TISSUE	3.15	30
K2307754-037	10/17/03	PSEP TISSUE	2.06	30
K2307754-037S	10/17/03	PSEP TISSUE	2.04	30
K2307754-040	10/17/03	PSEP TISSUE	1.64	30
K2307754-040D	10/17/03	PSEP TISSUE	1.65	30
K2307754-043	10/17/03	PSEP TISSUE	3.06	30
K2307754-043D	10/17/03	PSEP TISSUE	3.08	30
K2307754-043S	10/17/03	PSEP TISSUE	3.07	30
K2307754-046	10/17/03	PSEP TISSUE	3.31	30
K2307754-049	10/17/03	PSEP TISSUE	3.62	30
K2307754-052	10/17/03	PSEP TISSUE	3.38	30
K2307754-055	10/17/03	PSEP TISSUE	3.21	30
K2307754-005	10/17/03	PSEP TISSUE	2.26	30
K2307754-010	10/17/03	PSEP TISSUE	2.17	30
K2307754-015	10/17/03	PSEP TISSUE	2.17	30
K2307754-020	10/17/03	PSEP TISSUE	2.32	30
K2307754-025	10/17/03	PSEP TISSUE	2.29	30
LCS DORM	10/17/03	PSEP TISSUE	0.302	30
LCS DOLT	10/17/03	PSEP TISSUE	0.300	30
K2307754-MB	10/17/03	PSEP TISSUE	2.50	30

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2307754-028	10/31/03	PSEP TISSUE	2.24	30
K2307754-031	10/31/03	PSEP TISSUE	2.27	30
K2307754-034	10/31/03	PSEP TISSUE	3.16	30
K2307754-037	10/31/03	PSEP TISSUE	2.04	30
K2307754-040	10/31/03	PSEP TISSUE	1.65	30
K2307754-043	10/31/03	PSEP TISSUE	3.08	30
K2307754-046	10/31/03	PSEP TISSUE	2.21	20
K2307754-049	10/31/03	PSEP TISSUE	2.37	20
K2307754-052	10/31/03	PSEP TISSUE	2.23	20
K2307754-055	10/31/03	PSEP TISSUE	2.11	20
K2307754-005	10/31/03	PSEP TISSUE	1.50	20
K2307754-005D	10/31/03	PSEP TISSUE	1.49	20
K2307754-005S	10/31/03	PSEP TISSUE	1.49	20
K2307754-010	10/31/03	PSEP TISSUE	1.45	20
K2307754-010D	10/31/03	PSEP TISSUE	1.45	20
K2307754-010S	10/31/03	PSEP TISSUE	1.45	20
K2307754-015	10/31/03	PSEP TISSUE	2.15	30
K2307754-020	10/31/03	PSEP TISSUE	2.31	30
K2307754-025	10/31/03	PSEP TISSUE	2.29	30
LCS DORM	10/31/03	PSEP TISSUE	1.00	30
LCS DOLT	10/31/03	PSEP TISSUE	1.00	30
K2307754-MB	10/31/03	PSEP TISSUE	2.00	30

Columbia Analytical Services

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	10:35																X									
STANDARD #1	1.00	10:37																X									
STANDARD #2	1.00	10:39																X									
STANDARD #3	1.00	10:40																X									
STANDARD #4	1.00	10:42																X									
STANDARD #5	1.00	10:43																X									
ICV	1.00	10:45																X									
ICB	1.00	10:47																X									
CCV1	1.00	10:48																X									
CCB1	1.00	10:50																X									
CRA	1.00	10:51																X									
K2307754-MB	1.00	10:53																X									
LCSS DOLT	2.00	10:55																X									
K2307754-005	1.00	10:56																X									
K2307754-010	1.00	10:58																X									
K2307754-015	1.00	10:59																X									
K2307754-020	1.00	11:01																X									
K2307754-025	1.00	11:03																X									
K2307754-028	1.00	11:04																X									
K2307754-031	1.00	11:06																X									
CCV2	1.00	11:08																X									
CCB2	1.00	11:09																X									
K2307754-034	1.00	11:11																X									
K2307754-037	1.00	11:12																X									
K2307754-040	1.00	11:14																X									
K2307754-043	1.00	11:16																X									
K2307754-043D	1.00	11:17																X									
K2307754-043S	1.00	11:19																X									
K2307754-046	1.00	11:20																X									
K2307754-049	1.00	11:22																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2307754-052	1.00	11:24																X									
K2307754-055	1.00	11:25																X									
CCV3	1.00	11:27																X									
CCB3	1.00	11:29																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form

Form XIV - IN

Columbia Analytical Services

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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/29/03 End Date: 10/29/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	09:44		X							X																
CAL-STDA	1.00	09:53									X																
CAL-STDB	1.00	09:56		X																							
ICV	1.00	09:59		X							X																
ZZZZZZ	1.00	10:06																									
ICB	1.00	10:13		X							X																
CCV1	1.00	10:15									X																
CCV1	1.00	10:17		X																							
CCB1	1.00	10:20		X							X																
ZZZZZZ	1.00	10:24																									
ICSA	1.00	10:27		X							X																
ICSAB	1.00	10:30		X							X																
ZZZZZZ	1.00	10:33																									
ZZZZZZ	1.00	10:37																									
ZZZZZZ	1.00	10:43																									
K2307754-MB	1.00	10:46		X							X																
LCSS DORM	1.00	10:49		X							X																
LCSS DOLT	1.00	10:51									X																
K2307754-005	1.00	10:54		X							X																
CCV2	1.00	10:57									X																
CCV2	1.00	11:00		X																							
CCB2	1.00	11:03		X							X																
K2307754-005L	5.00	11:05		X							X																
K2307754-010	1.00	11:09		X							X																
K2307754-015	1.00	11:12		X							X																
K2307754-020	1.00	11:14		X							X																
CRI	1.00	11:24		X							X																
K2307754-025	1.00	11:26		X							X																
K2307754-031	1.00	11:32		X							X																
K2307754-028	1.00	11:42		X							X																

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/29/03 End Date: 10/29/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2307754-034	1.00	11:54		X							X																
K2307754-037	1.00	11:57		X							X																
CCV3	1.00	12:00									X																
CCV3	1.00	12:02		X																							
CCB3	1.00	12:05		X							X																
K2307754-037S	1.00	12:11		X							X																
K2307754-040	1.00	12:17		X							X																
K2307754-040D	1.00	12:19		X							X																
K2307754-043	1.00	12:23		X							X																
K2307754-043D	1.00	12:26		X							X																
K2307754-043S	1.00	12:29		X							X																
K2307754-046	1.00	12:31		X							X																
K2307754-049	1.00	12:33		X							X																
K2307754-052	1.00	12:37		X							X																
K2307754-055	1.00	12:42		X							X																
CCV4	1.00	12:45									X																
CCV4	1.00	12:49		X																							
CCB4	1.00	12:51		X							X																

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 11/12/03 End Date: 11/12/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-Blank	1.00	08:37		X																							
CAL-STDA	1.00	08:41																									
CAL-STDB	1.00	08:44		X																							
ICV2	1.00	08:47		X																							
ZZZZZZ	1.00	08:50																									
ICB2	1.00	08:54		X																							
ZZZZZZ	1.00	08:56																									
CCV1	1.00	09:00		X																							
CCB1	1.00	09:02		X																							
CRI2	1.00	09:12		X																							
ICSA	1.00	09:15		X																							
ICSAB	1.00	09:18		X																							
LCSS DOLT	1.00	09:29		X																							
ZZZZZZ	1.00	09:44																									
ZZZZZZ	1.00	09:51																									
CCV2	1.00	09:53		X																							
CCB2	1.00	09:56		X																							

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	14:47			X	X			X				X		X				X			X					
25 PPB STD. MS4-9-C	1.00	14:52			X	X			X				X		X				X			X					
ICV	1.00	14:58			X	X			X				X		X				X			X					
CCV1	1.00	15:02			X	X			X				X		X				X			X					
ICB	1.00	15:08			X	X			X				X		X				X			X					
CCB1	1.00	15:12			X	X			X				X		X				X			X					
CRA	1.00	15:17			X	X			X				X		X				X			X					
ZZZZZZ	5.00	15:21																									
ZZZZZZ	5.00	15:25																									
ZZZZZZ	5.00	15:29																									
ZZZZZZ	5.00	15:33																									
ZZZZZZ	5.00	15:38																									
ZZZZZZ	5.00	15:42																									
ZZZZZZ	25.00	15:46																									
ZZZZZZ	5.00	15:52																									
ZZZZZZ	5.00	15:56																									
CCV2	1.00	16:00			X	X			X				X		X				X			X					
CCB2	1.00	16:06			X	X			X				X		X				X			X					
ZZZZZZ	5.00	16:10																									
ZZZZZZ	5.00	16:15																									
ZZZZZZ	5.00	16:19																									
ZZZZZZ	5.00	16:23																									
ZZZZZZ	5.00	16:27																									
ZZZZZZ	5.00	16:32																									
ZZZZZZ	25.00	16:36																									
ZZZZZZ	5.00	16:41																									
ZZZZZZ	5.00	16:46																									
ZZZZZZ	5.00	16:50																									
CCV3	1.00	16:54			X	X			X				X		X				X			X					
CCB3	1.00	17:00			X	X			X				X		X				X			X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

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Columbia Analytical Services

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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	17:04																									
ZZZZZZ	5.00	17:09																									
ZZZZZZ	5.00	17:13																									
K2307754-MB	5.00	17:17			X	X			X				X		X				X			X					
LCS DORM	5.00	17:21			X	X			X				X		X				X			X				X	
LCS DOLT	5.00	17:26			X	X			X				X		X				X			X				X	
K2307754-040	5.00	17:30			X	X			X				X		X				X			X					
K2307754-040D	5.00	17:35			X	X			X				X		X				X			X					
K2307754-037	5.00	17:39			X	X			X				X		X				X			X					
K2307754-037S	25.00	17:43			X	X			X				X		X				X			X					
CCV4	1.00	17:49			X	X			X				X		X				X			X					
CCB4	1.00	17:55			X	X			X				X		X				X			X					
K2307754-005	5.00	17:59			X	X			X				X		X				X			X					
K2307754-010	5.00	18:05			X	X			X				X		X				X			X					
K2307754-015	5.00	18:09			X	X			X				X		X				X			X					
K2307754-020	5.00	18:14			X	X			X				X		X				X			X					
K2307754-025	5.00	18:18			X	X			X				X		X				X			X					
K2307754-028	5.00	18:23			X	X			X				X		X				X			X					
K2307754-031	5.00	18:27			X	X			X				X		X				X			X					
K2307754-034	5.00	18:31			X	X			X				X		X				X			X					
K2307754-043	5.00	18:36			X	X			X				X		X				X			X					
K2307754-043D	5.00	18:40			X	X			X				X		X				X			X					
CCV5	1.00	18:44			X	X			X				X		X				X			X					
CCB5	1.00	18:50			X	X			X				X		X				X			X					
K2307754-043S	25.00	18:54			X	X			X				X		X				X			X					
K2307754-046	5.00	19:00			X	X			X				X		X				X			X					
K2307754-049	5.00	19:05			X	X			X				X		X				X			X					
K2307754-052	5.00	19:09			X	X			X				X		X				X			X					
K2307754-055	5.00	19:13			X	X			X				X		X				X			X					
CCV6	1.00	19:18			X	X			X				X		X				X			X					

* - Denotes additional elements (other than the standard elements) are represented on another Form XIV

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB6	1.00	19:23			X	X			X				X		X				X			X					

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

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Columbia Analytical Services

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 11/5/03 End Date: 11/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	09:44																								X	
25 PPB STD. MS4-12-E	1.00	09:46																								X	
ICV	1.00	09:48																								X	
CCV1	1.00	09:49																								X	
ICB	1.00	09:51																								X	
CCB1	1.00	09:52																								X	
CRA	1.00	09:54																								X	
ZZZZZZ	5.00	09:56																									
ZZZZZZ	5.00	09:58																									
ZZZZZZ	5.00	10:01																									
ZZZZZZ	1.00	10:26																									
ZZZZZZ	1.00	10:28																									
ZZZZZZ	5.00	10:29																									
ZZZZZZ	1.00	10:30																									
ZZZZZZ	1.00	10:32																									
ZZZZZZ	1.00	10:33																									
CCV2	1.00	10:34																								X	
CCB2	1.00	10:38																								X	
ZZZZZZ	5.00	10:40																									
ZZZZZZ	5.00	10:46																									
ZZZZZZ	1.00	10:47																									
ZZZZZZ	1.00	10:48																									
ZZZZZZ	5.00	10:50																									
ZZZZZZ	5.00	10:53																									
ZZZZZZ	5.00	11:07																									
ZZZZZZ	5.00	11:08																									
ZZZZZZ	5.00	11:12																									
ZZZZZZ	5.00	11:14																									
CCV3	1.00	11:17																								X	
CCB3	1.00	11:20																								X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 000092

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 11/5/03 End Date: 11/5/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	11:23																									
ZZZZZZ	5.00	11:24																									
ZZZZZZ	5.00	11:26																									
K2307754-MB	5.00	11:28																								X	
LCS DORM	5.00	11:30																								X	
LCS DOLT	5.00	11:31																								X	
K2307754-005	5.00	11:33																								X	
K2307754-005D	5.00	11:34																								X	
K2307754-005S	25.00	11:40																								X	
K2307754-010	5.00	11:43																								X	
CCV4	1.00	11:45																								X	
CCB4	1.00	11:47																								X	
K2307754-010D	5.00	12:31																								X	
K2307754-010S	25.00	12:34																								X	
K2307754-015	5.00	12:37																								X	
K2307754-020	5.00	12:38																								X	
K2307754-025	5.00	12:39																								X	
K2307754-028	5.00	12:41																								X	
K2307754-031	5.00	12:42																								X	
K2307754-034	5.00	12:44																								X	
K2307754-037	5.00	12:45																								X	
K2307754-040	5.00	12:46																								X	
CCV5	1.00	12:49																								X	
CCB5	1.00	12:53																								X	
K2307754-043	5.00	12:54																								X	
K2307754-046	5.00	12:56																								X	
K2307754-049	5.00	12:57																								X	
K2307754-052	5.00	12:58																								X	
K2307754-055	5.00	13:00																								X	
CCV6	1.00	13:01																								X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307754

Project No.:

Project Name: Canaveral Harbor/M.natusa

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 11/5/03 End Date: 11/5/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB6	1.00	13:05																								X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Lipids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa
Sample Matrix: Tissue

Service Request: K2307754
Date Collected:
Date Received: 9/17/2003

Lipids, Total

Prep Method: TISSUEMIZER
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-9,10,11,20-T-A (comp)	K2307754-005	0.25	10/28/2003	10/28/2003	0.44	
E-CH03-9,10,11,20-T-B (comp)	K2307754-010	0.25	10/28/2003	10/28/2003	0.45	
E-CH03-9,10,11,20-T-C (comp)	K2307754-015	0.25	10/28/2003	10/28/2003	0.45	
E-CH03-9,10,11,20-T-D (comp)	K2307754-020	0.24	10/28/2003	10/28/2003	0.39	
ECH03-9,10,11,20-T-E (comp)	K2307754-025	0.24	10/28/2003	10/28/2003	0.37	
E-CH03-12,15-T-A (comp)	K2307754-028	0.25	10/28/2003	10/28/2003	0.27	
E-CH03-12,15-T-B (comp)	K2307754-031	0.24	10/28/2003	10/28/2003	0.41	
E-CH03-12,15-T-C (comp)	K2307754-034	0.25	10/28/2003	10/28/2003	ND	
E-CH03-12,15-T-D (comp)	K2307754-037	0.25	10/28/2003	10/28/2003	0.37	
E-CH03-12,15-T-E (comp)	K2307754-040	0.25	10/28/2003	10/28/2003	0.32	
E-CH03-13,16-T-A (comp)	K2307754-043	0.25	10/28/2003	10/28/2003	ND	
E-CH03-13,16-T-B (comp)	K2307754-046	0.24	10/28/2003	10/28/2003	0.24	
E-CH03-13,16-T-C (comp)	K2307754-049	0.24	10/28/2003	10/28/2003	0.24	
E-CH03-13,16-T-D (comp)	K2307754-052	0.24	10/28/2003	10/28/2003	0.24	
E-CH03-13,16-T-E (comp)	K2307754-055	0.25	10/28/2003	10/28/2003	0.25	

Approved By: _____ Date: 10/30/03

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa
Sample Matrix: Tissue

Service Request: K2307754
Date Collected:
Date Received: 9/17/2003
Date Extracted: 10/28/2003
Date Analyzed: 10/28/2003

Triplicate Summary
Lipids, Total

Sample Name: E-CH03-13,16-T-E (comp)
Lab Code: K2307754-055
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Lab Code	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Percent Relative Standard Deviation	Result Notes
K2307754-055	TISSUEMIZER	PSEP	0.25	0.25	0.24	0.27	0.25	6	

Approved By: _____ Date: 10/30/03

DUP/091599p

Butyltins

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307754
Project: Canaveral Harbor/M.natusa

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-9,10,11,20-T-A (comp)	K2307754-005		09/17/2003
E-CH03-9,10,11,20-T-B (comp)	K2307754-010		09/17/2003
E-CH03-9,10,11,20-T-C (comp)	K2307754-015		09/17/2003
E-CH03-9,10,11,20-T-D (comp)	K2307754-020		09/17/2003
ECH03-9,10,11,20-T-E (comp)	K2307754-025		09/17/2003
E-CH03-12,15-T-A (comp)	K2307754-028		09/17/2003
E-CH03-12,15-T-B (comp)	K2307754-031		09/17/2003
E-CH03-12,15-T-C (comp)	K2307754-034		09/17/2003
E-CH03-12,15-T-D (comp)	K2307754-037		09/17/2003
E-CH03-12,15-T-E (comp)	K2307754-040		09/17/2003
E-CH03-13,16-T-A (comp)	K2307754-043		09/17/2003
E-CH03-13,16-T-B (comp)	K2307754-046		09/17/2003
E-CH03-13,16-T-C (comp)	K2307754-049		09/17/2003
E-CH03-13,16-T-D (comp)	K2307754-052		09/17/2003
E-CH03-13,16-T-E (comp)	K2307754-055		09/17/2003
E-CH03-9,10,11,20-T-B (comp)	KWG0317131-1		09/17/2003
E-CH03-9,10,11,20-T-B (comp)	KWG0317131-2		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Christina Quinn Name: CHRISTINA QUINN

Date: 11/13/03 Title: SCIENTIST

000099

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-005	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**2.8**	P	1.0	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**7.1**		1.0	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.74**	J	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-010	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**2.5**		0.99	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**5.3**		0.99	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.56**	J	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	97	26-169	11/07/03	Acceptable

Comments:

000101

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-015	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**2.7**		0.99	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**7.0**		0.99	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.67**	J	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	26-169	11/07/03	Acceptable

Comments:

000102

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-020	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	ND	Ui	2.3	2.3	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**6.8**		0.98	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.75**	J	0.98	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/07/03	Acceptable

Comments:

000103

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	ECH03-9,10,11,20-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-025	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**2.0**		0.99	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**5.3**		0.99	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	100	26-169	11/07/03	Acceptable

Comments:

000104

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-028	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**3.1**	P	1.0	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**5.1**		1.0	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

000105

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-031	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**3.3**	P	0.99	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**5.7**		0.99	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.83**	J	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/07/03	Acceptable

Comments:

000106

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-034	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**3.0**		1.0	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**4.2**		1.0	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.58**	J	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/07/03	Acceptable

Comments:

000107

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-037	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**3.3**		0.99	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**7.0**		0.99	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.74**	J	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	118	26-169	11/07/03	Acceptable

Comments: 000108

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-040	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**3.6**		0.98	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**8.0**		0.98	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.70**	J	0.98	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/07/03	Acceptable

Comments:

0001084

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-043	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**1.7**		0.99	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**4.8**		0.99	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.48**	J	0.99	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/07/03	Acceptable

Comments:

000109

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-046	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**1.7**		1.0	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**6.5**		1.0	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.63**	J	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	107	26-169	11/07/03	Acceptable

Comments: 000110

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-049	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**1.7**		0.98	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**6.0**		0.98	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.56**	J	0.98	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	108	26-169	11/07/03	Acceptable

Comments:

000111

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-052	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**1.8**		1.0	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**2.3**		1.0	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	113	26-169	11/07/03	Acceptable

Comments:

000112

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-055	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**2.5**		1.0	0.33	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**4.4**		1.0	0.35	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**0.62**	J	1.0	0.38	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	116	26-169	11/07/03	Acceptable

Comments:

000113

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317131-4	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317131	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317131	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/06/03	KWG0317131	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	97	26-169	11/06/03	Acceptable

Comments:

000114

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-005	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.5	2.9	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**21**	P	7.5	2.5	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**53**		7.5	2.7	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**5.5**	J	7.5	2.9	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/07/03	Acceptable

Comments:

000115

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-010	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.2	2.8	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**18**		7.2	2.4	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**38**		7.2	2.6	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**4.1**	J	7.2	2.8	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	97	26-169	11/07/03	Acceptable

Comments:

000116

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-015	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.1	2.8	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**19**		7.1	2.4	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**50**		7.1	2.6	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**4.8**	J	7.1	2.8	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	26-169	11/07/03	Acceptable

Comments:

000117

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-020	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.6	3.0	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	ND	Ui	18	18	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**53**		7.6	2.8	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**5.8**	J	7.6	3.0	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/07/03	Acceptable

Comments:

000118

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	ECH03-9,10,11,20-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-025	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.6	3.0	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**15**		7.6	2.6	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**41**		7.6	2.7	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	ND	U	7.6	3.0	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	100	26-169	11/07/03	Acceptable

Comments:

000119

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-028	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.4	2.9	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**23**	P	7.4	2.5	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**38**		7.4	2.7	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	ND	U	7.4	2.9	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

000120

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-031	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.5	2.9	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**25**	P	7.5	2.5	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**43**		7.5	2.7	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**6.3**	J	7.5	2.9	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/07/03	Acceptable

Comments:

000121

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-034	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	11	4.0	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**31**		11	3.5	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**45**		11	3.7	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**6.1**	J	11	4.0	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/07/03	Acceptable

Comments:

000122

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-037	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	6.7	2.6	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**22**		6.7	2.3	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**48**		6.7	2.4	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**5.1**	J	6.7	2.6	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	118	26-169	11/07/03	Acceptable

Comments:

000123

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-040	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	5.4	2.1	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**20**		5.4	1.9	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**44**		5.4	2.0	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**3.8**	J	5.4	2.1	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/07/03	Acceptable

Comments:

000124

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-043	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	11	3.9	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**18**		11	3.4	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**49**		11	3.6	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**4.9**	J	11	3.9	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/07/03	Acceptable

Comments:

000125

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-046	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	11	4.2	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**19**		11	3.7	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**71**		11	3.9	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**7.0**	J	11	4.2	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	107	26-169	11/07/03	Acceptable

Comments:

000126

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-049	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	12	4.6	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**21**		12	4.0	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**73**		12	4.3	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**6.7**	J	12	4.6	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	108	26-169	11/07/03	Acceptable

Comments:

000127

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-052	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	12	4.3	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**20**		12	3.8	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**26**		12	4.0	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	ND	U	12	4.3	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	113	26-169	11/07/03	Acceptable

Comments:

000128

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-055	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	11	4.1	1	10/27/03	11/07/03	KWG0317131	
Tri-n-butyltin	**27**		11	3.6	1	10/27/03	11/07/03	KWG0317131	
Di-n-butyltin	**47**		11	3.8	1	10/27/03	11/07/03	KWG0317131	
n-Butyltin	**6.6**	J	11	4.1	1	10/27/03	11/07/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	116	26-169	11/07/03	Acceptable

Comments:

000129

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317131-4	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317131	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317131	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/06/03	KWG0317131	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317131	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	97	26-169	11/06/03	Acceptable

Comments:

000130

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa
Sample Matrix: Tissue

Service Request: K2307754

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
E-CH03-9,10,11,20-T-A (comp)	K2307754-005	104
E-CH03-9,10,11,20-T-B (comp)	K2307754-010	97
E-CH03-9,10,11,20-T-C (comp)	K2307754-015	94
E-CH03-9,10,11,20-T-D (comp)	K2307754-020	105
ECH03-9,10,11,20-T-E (comp)	K2307754-025	100
E-CH03-12,15-T-A (comp)	K2307754-028	102
E-CH03-12,15-T-B (comp)	K2307754-031	112
E-CH03-12,15-T-C (comp)	K2307754-034	105
E-CH03-12,15-T-D (comp)	K2307754-037	118
E-CH03-12,15-T-E (comp)	K2307754-040	110
E-CH03-13,16-T-A (comp)	K2307754-043	105
E-CH03-13,16-T-B (comp)	K2307754-046	107
E-CH03-13,16-T-C (comp)	K2307754-049	108
E-CH03-13,16-T-D (comp)	K2307754-052	113
E-CH03-13,16-T-E (comp)	K2307754-055	116
Method Blank	KWG0317131-4	97
E-CH03-9,10,11,20-T-B (comp)	KWG0317131-1	105
E-CH03-9,10,11,20-T-B (comp)	KWG0317131-2	98
Lab Control Sample	KWG0317131-3	87

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 26-169

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

000131

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	E-CH03-9,10,11,20-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-010	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317131

		E-CH03-9,10,11,20-T-B (comp)MS KWG0317131-1 Matrix Spike			E-CH03-9,10,11,20-T-B (comp)DMS KWG0317131-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	17.4	24.8	70	19.7	24.9	79	29-120	12	50
Tri-n-butyltin	2.5	24.4	24.8	88	23.5	24.9	84	10-155	4	50
Di-n-butyltin	5.3	26.8	24.8	87	27.0	24.9	87	30-131	1	50
n-Butyltin	0.56	17.2	24.8	67	17.1	24.9	66	10-178	1	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000132

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/Kg
Analysis Method:	GC-FPD	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	KWG0317131

	Lab Control Sample KWG0317131-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	19.9	25.0	80	32-134
Tri-n-butyltin	18.1	25.0	73	39-146
Di-n-butyltin	18.6	25.0	74	42-142
n-Butyltin	11.9	25.0	48	28-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000133

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/06/2003
		Time Analyzed:	23:57

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\110603\1106F026.D
Lab Code:	KWG0317131-4	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317131

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317131-3	J:\GC11\DATA\110603\1106F027.D	11/07/03	00:14
E-CH03-9,10,11,20-T-A (comp)	K2307754-005	J:\GC11\DATA\110603\1106F028.D	11/07/03	00:32
E-CH03-9,10,11,20-T-B (comp)	K2307754-010	J:\GC11\DATA\110603\1106F029.D	11/07/03	00:50
E-CH03-9,10,11,20-T-B (comp)MS	KWG0317131-1	J:\GC11\DATA\110603\1106F030.D	11/07/03	01:07
E-CH03-9,10,11,20-T-B (comp)DMS	KWG0317131-2	J:\GC11\DATA\110603\1106F031.D	11/07/03	01:25
E-CH03-9,10,11,20-T-C (comp)	K2307754-015	J:\GC11\DATA\110603\1106F032.D	11/07/03	01:43
E-CH03-9,10,11,20-T-D (comp)	K2307754-020	J:\GC11\DATA\110603\1106F033.D	11/07/03	02:01
ECH03-9,10,11,20-T-E (comp)	K2307754-025	J:\GC11\DATA\110603\1106F034.D	11/07/03	02:19
E-CH03-12,15-T-A (comp)	K2307754-028	J:\GC11\DATA\110603\1106F035.D	11/07/03	02:37
E-CH03-12,15-T-B (comp)	K2307754-031	J:\GC11\DATA\110603\1106F039.D	11/07/03	03:49
E-CH03-12,15-T-C (comp)	K2307754-034	J:\GC11\DATA\110603\1106F040.D	11/07/03	04:06
E-CH03-12,15-T-D (comp)	K2307754-037	J:\GC11\DATA\110603\1106F041.D	11/07/03	04:25
E-CH03-12,15-T-E (comp)	K2307754-040	J:\GC11\DATA\110603\1106F042.D	11/07/03	04:42
E-CH03-13,16-T-A (comp)	K2307754-043	J:\GC11\DATA\110603\1106F043.D	11/07/03	05:00
E-CH03-13,16-T-B (comp)	K2307754-046	J:\GC11\DATA\110603\1106F044.D	11/07/03	05:18
E-CH03-13,16-T-C (comp)	K2307754-049	J:\GC11\DATA\110603\1106F045.D	11/07/03	05:36
E-CH03-13,16-T-D (comp)	K2307754-052	J:\GC11\DATA\110603\1106F046.D	11/07/03	05:54
E-CH03-13,16-T-E (comp)	K2307754-055	J:\GC11\DATA\110603\1106F047.D	11/07/03	06:13

000134

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003
		Time Analyzed:	00:14

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\110603\1106F027.D
Lab Code:	KWG0317131-3	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317131

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317131-4	J:\GC11\DATA\110603\1106F026.D	11/06/03	23:57
E-CH03-9,10,11,20-T-A (comp)	K2307754-005	J:\GC11\DATA\110603\1106F028.D	11/07/03	00:32
E-CH03-9,10,11,20-T-B (comp)	K2307754-010	J:\GC11\DATA\110603\1106F029.D	11/07/03	00:50
E-CH03-9,10,11,20-T-B (comp)MS	KWG0317131-1	J:\GC11\DATA\110603\1106F030.D	11/07/03	01:07
E-CH03-9,10,11,20-T-B (comp)DMS	KWG0317131-2	J:\GC11\DATA\110603\1106F031.D	11/07/03	01:25
E-CH03-9,10,11,20-T-C (comp)	K2307754-015	J:\GC11\DATA\110603\1106F032.D	11/07/03	01:43
E-CH03-9,10,11,20-T-D (comp)	K2307754-020	J:\GC11\DATA\110603\1106F033.D	11/07/03	02:01
ECH03-9,10,11,20-T-E (comp)	K2307754-025	J:\GC11\DATA\110603\1106F034.D	11/07/03	02:19
E-CH03-12,15-T-A (comp)	K2307754-028	J:\GC11\DATA\110603\1106F035.D	11/07/03	02:37
E-CH03-12,15-T-B (comp)	K2307754-031	J:\GC11\DATA\110603\1106F039.D	11/07/03	03:49
E-CH03-12,15-T-C (comp)	K2307754-034	J:\GC11\DATA\110603\1106F040.D	11/07/03	04:06
E-CH03-12,15-T-D (comp)	K2307754-037	J:\GC11\DATA\110603\1106F041.D	11/07/03	04:25
E-CH03-12,15-T-E (comp)	K2307754-040	J:\GC11\DATA\110603\1106F042.D	11/07/03	04:42
E-CH03-13,16-T-A (comp)	K2307754-043	J:\GC11\DATA\110603\1106F043.D	11/07/03	05:00
E-CH03-13,16-T-B (comp)	K2307754-046	J:\GC11\DATA\110603\1106F044.D	11/07/03	05:18
E-CH03-13,16-T-C (comp)	K2307754-049	J:\GC11\DATA\110603\1106F045.D	11/07/03	05:36
E-CH03-13,16-T-D (comp)	K2307754-052	J:\GC11\DATA\110603\1106F046.D	11/07/03	05:54
E-CH03-13,16-T-E (comp)	K2307754-055	J:\GC11\DATA\110603\1106F047.D	11/07/03	06:13

000135

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D	D	J:\GC11\DATA\110403B\1104F006.D
B	J:\GC11\DATA\110403B\1104F004.D	E	J:\GC11\DATA\110403B\1104F007.D
C	J:\GC11\DATA\110403B\1104F005.D	F	J:\GC11\DATA\110403B\1104F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	618	B	54	552	C	110	576	D	540	539	E	1100	555
	F	2100	512												
Tetra-n-butyltin	A	10	626	B	50	562	C	100	561	D	500	539	E	1000	580
	F	2000	514												
Tri-n-butyltin	A	10	835	B	50	689	C	100	711	D	500	635	E	1000	653
	F	2000	603												
Di-n-butyltin	A	10	905	B	50	846	C	100	887	D	500	838	E	1000	856
	F	2000	793												
n-Butyltin	A	10	1320	B	50	1180	C	100	1160	D	500	1050	E	1000	1100
	F	2000	1010												

Results flagged with an asterisk (*) indicate values outside control criteria.

000136

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	6.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	11.9		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	9.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

000137

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	410	564	493	-13	NA	± 30 %	AverageRF
Tri-n-butyltin	480	420	688	599	-13	NA	± 30 %	AverageRF
Di-n-butyltin	480	400	854	722	-16	NA	± 30 %	AverageRF
n-Butyltin	490	410	1140	947	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

000138

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D\1104R003.D	D	J:\GC11\DATA\110403B\1104F006.D\1104R006.D
B	J:\GC11\DATA\110403B\1104F004.D\1104R004.D	E	J:\GC11\DATA\110403B\1104F007.D\1104R007.D
C	J:\GC11\DATA\110403B\1104F005.D\1104R005.D	F	J:\GC11\DATA\110403B\1104F008.D\1104R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	186	B	54	191	C	110	178	D	540	183	E	1100	202
	F	2100	192												
Tetra-n-butyltin	A	10	219	B	50	196	C	100	195	D	500	193	E	1000	206
	F	2000	203												
Tri-n-butyltin	A	10	263	B	50	225	C	100	238	D	500	231	E	1000	246
	F	2000	238												
Di-n-butyltin	A	10	330	B	50	275	C	100	285	D	500	299	E	1000	316
	F	2000	307												
n-Butyltin	A	10	507	B	50	365	C	100	392	D	500	391	E	1000	421
	F	2000	403												

Results flagged with an asterisk (*) indicate values outside control criteria.

000139

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	4.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	5.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	6.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	11.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

000140

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D\1104R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	400	202	174	-14	NA	± 30 %	AverageRF
Tri-n-butyltin	480	400	240	200	-17	NA	± 30 %	AverageRF
Di-n-butyltin	480	410	302	262	-13	NA	± 30 %	AverageRF
n-Butyltin	490	410	413	345	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000141

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F025.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	570	559	593	6	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	550	564	620	10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	688	687	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	878	3	NA	± 25 %	AverageRF
n-Butyltin	500	490	1140	1100	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000142

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F025.D\1105R025.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	192	2	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	490	202	197	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	240	236	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	302	307	2	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	402	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000143

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F038.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	588	5	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	500	564	564	0	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	688	684	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	854	853	0	NA	± 25 %	AverageRF
n-Butyltin	500	460	1140	1050	-7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000144

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F038.D\1106R038.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	192	2	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	490	202	198	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	240	237	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	490	302	296	-2	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	408	-1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000145

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Analyzed:**	11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type:	External Standard	**Calibration Date:**	11/04/2003
Analysis Method:	GC-FPD	**Calibration ID:**	CAL3064
		Analysis Lot:	KWG0318147
		Units:	ng/ml
File ID:	J:\GC11\DATA\110603\1106F050.D	**Column ID:**	RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	585	5	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	510	564	571	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	688	676	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	854	893	5	NA	± 25 %	AverageRF
n-Butyltin	500	480	1140	1100	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000146

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F050.D\1106R050.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	189	0	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	480	202	194	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	240	232	-3	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	302	299	-1	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	403	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000147

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307754
Project: Canaveral Harbor/M.natusa

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1105F080.D	Instrument Blank	KWG0318147-1	11/6/2003	14:46		11/6/2003	14:58
1105F081.D	Continuing Calibration Verification	KWG0318147-8	11/6/2003	15:03		11/6/2003	15:15
1106F001.D	ZZZZZZ	ZZZZZZ	11/6/2003	16:33		11/6/2003	16:45
1106F002.D	ZZZZZZ	ZZZZZZ	11/6/2003	16:51		11/6/2003	17:03
1106F003.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:08		11/6/2003	17:20
1106F004.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:26		11/6/2003	17:38
1106F005.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:44		11/6/2003	17:56
1106F006.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:02		11/6/2003	18:14
1106F007.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:20		11/6/2003	18:32
1106F008.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:37		11/6/2003	18:49
1106F009.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:55		11/6/2003	19:07
1106F010.D	ZZZZZZ	ZZZZZZ	11/6/2003	19:13		11/6/2003	19:25
1105F012.D	Instrument Blank	KWG0318147-2	11/6/2003	19:48		11/6/2003	20:00
1105F013.D	Continuing Calibration Verification	KWG0318147-9	11/6/2003	20:06		11/6/2003	20:18
1106F014.D	ZZZZZZ	ZZZZZZ	11/6/2003	20:24		11/6/2003	20:36
1106F015.D	ZZZZZZ	ZZZZZZ	11/6/2003	20:42		11/6/2003	20:54
1106F016.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:00		11/6/2003	21:12
1106F017.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:18		11/6/2003	21:30
1106F018.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:35		11/6/2003	21:47
1106F019.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:53		11/6/2003	22:05
1106F020.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:11		11/6/2003	22:23
1106F021.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:28		11/6/2003	22:40
1106F022.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:46		11/6/2003	22:58
1105F024.D	Instrument Blank	KWG0318147-3	11/6/2003	23:21		11/6/2003	23:33
1105F025.D	Continuing Calibration Verification	KWG0318147-10	11/6/2003	23:39		11/6/2003	23:51
1106F026.D	Method Blank	KWG0317131-4	11/6/2003	23:57		11/7/2003	00:09
1106F027.D	Lab Control Sample	KWG0317131-3	11/7/2003	00:14		11/7/2003	00:26
1106F028.D	E-CH03-9,10,11,20-T-A (comp)	K2307754-005	11/7/2003	00:32		11/7/2003	00:44
1106F029.D	E-CH03-9,10,11,20-T-B (comp)	K2307754-010	11/7/2003	00:50		11/7/2003	01:02
1106F030.D	E-CH03-9,10,11,20-T-B (comp)MS	KWG0317131-1	11/7/2003	01:07		11/7/2003	01:19
1106F031.D	E-CH03-9,10,11,20-T-B (comp)DMS	KWG0317131-2	11/7/2003	01:25		11/7/2003	01:37
1106F032.D	E-CH03-9,10,11,20-T-C (comp)	K2307754-015	11/7/2003	01:43		11/7/2003	01:55
1106F033.D	E-CH03-9,10,11,20-T-D (comp)	K2307754-020	11/7/2003	02:01		11/7/2003	02:13
1106F034.D	ECH03-9,10,11,20-T-E (comp)	K2307754-025	11/7/2003	02:19		11/7/2003	02:31

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000148

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307754
Project: Canaveral Harbor/M.natusa

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1106F035.D	E-CH03-12,15-T-A (comp)	K2307754-028	11/7/2003	02:37		11/7/2003	02:49
1106F037.D	Instrument Blank	KWG0318147-4	11/7/2003	03:13		11/7/2003	03:25
1106F038.D	Continuing Calibration Verification	KWG0318147-11	11/7/2003	03:31		11/7/2003	03:43
1106F039.D	E-CH03-12,15-T-B (comp)	K2307754-031	11/7/2003	03:49		11/7/2003	04:01
1106F040.D	E-CH03-12,15-T-C (comp)	K2307754-034	11/7/2003	04:06		11/7/2003	04:18
1106F041.D	E-CH03-12,15-T-D (comp)	K2307754-037	11/7/2003	04:25		11/7/2003	04:37
1106F042.D	E-CH03-12,15-T-E (comp)	K2307754-040	11/7/2003	04:42		11/7/2003	04:54
1106F043.D	E-CH03-13,16-T-A (comp)	K2307754-043	11/7/2003	05:00		11/7/2003	05:12
1106F044.D	E-CH03-13,16-T-B (comp)	K2307754-046	11/7/2003	05:18		11/7/2003	05:30
1106F045.D	E-CH03-13,16-T-C (comp)	K2307754-049	11/7/2003	05:36		11/7/2003	05:48
1106F046.D	E-CH03-13,16-T-D (comp)	K2307754-052	11/7/2003	05:54		11/7/2003	06:06
1106F047.D	E-CH03-13,16-T-E (comp)	K2307754-055	11/7/2003	06:13		11/7/2003	06:25
1106F049.D	Instrument Blank	KWG0318147-5	11/7/2003	06:49		11/7/2003	07:01
1106F050.D	Continuing Calibration Verification	KWG0318147-12	11/7/2003	07:06		11/7/2003	07:18
1106F051.D	ZZZZZZ	ZZZZZZ	11/7/2003	07:24		11/7/2003	07:36
1106F052.D	ZZZZZZ	ZZZZZZ	11/7/2003	07:42		11/7/2003	07:54
1106F053.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:00		11/7/2003	08:12
1106F054.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:18		11/7/2003	08:30
1106F055.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:36		11/7/2003	08:48
1106F056.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:54		11/7/2003	09:06
1106F057.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:12		11/7/2003	09:24
1106F058.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:31		11/7/2003	09:43
1106F059.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:48		11/7/2003	10:00
1106F060.D	ZZZZZZ	ZZZZZZ	11/7/2003	10:06		11/7/2003	10:18
1106F062.D	Instrument Blank	KWG0318147-6	11/7/2003	10:43		11/7/2003	10:55
1106F063.D	Continuing Calibration Verification	KWG0318147-13	11/7/2003	11:00		11/7/2003	11:12
1106F064.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:18		11/7/2003	11:30
1106F065.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:36		11/7/2003	11:48
1106F066.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:54		11/7/2003	12:06
1106F067.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:12		11/7/2003	12:24
1106F068.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:30		11/7/2003	12:42
1106F069.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:48		11/7/2003	13:00
1106F070.D	ZZZZZZ	ZZZZZZ	11/7/2003	13:06		11/7/2003	13:18
1106F071.D	ZZZZZZ	ZZZZZZ	11/7/2003	13:24		11/7/2003	13:36

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000149

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa

Service Request: K2307754

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1106F073.D	Instrument Blank	KWG0318147-7	11/7/2003	14:00		11/7/2003	14:12
1106F074.D	Continuing Calibration Verification	KWG0318147-14	11/7/2003	14:18		11/7/2003	14:30

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000150

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa
Sample Matrix: Tissue

Service Request: K2307754
Date Extracted: 10/27/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0317131
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-9,10,11,20-T-A (co	K2307754-005		09/17/03	10.00g	0.5ml	NA	
E-CH03-9,10,11,20-T-B (com	K2307754-010		09/17/03	10.15g	0.5ml	NA	
E-CH03-9,10,11,20-T-C (com	K2307754-015		09/17/03	10.18g	0.5ml	NA	
E-CH03-9,10,11,20-T-D (co	K2307754-020		09/17/03	10.29g	0.5ml	NA	
ECH03-9,10,11,20-T-E (com	K2307754-025		09/17/03	10.12g	0.5ml	NA	
E-CH03-12,15-T-A (comp)	K2307754-028		09/17/03	10.09g	0.5ml	NA	
E-CH03-12,15-T-B (comp)	K2307754-031		09/17/03	10.15g	0.5ml	NA	
E-CH03-12,15-T-C (comp)	K2307754-034		09/17/03	10.00g	0.5ml	NA	
E-CH03-12,15-T-D (comp)	K2307754-037		09/17/03	10.18g	0.5ml	NA	
E-CH03-12,15-T-E (comp)	K2307754-040		09/17/03	10.27g	0.5ml	NA	
E-CH03-13,16-T-A (comp)	K2307754-043		09/17/03	10.11g	0.5ml	NA	
E-CH03-13,16-T-B (comp)	K2307754-046		09/17/03	10.06g	0.5ml	NA	
E-CH03-13,16-T-C (comp)	K2307754-049		09/17/03	10.27g	0.5ml	NA	
E-CH03-13,16-T-D (comp)	K2307754-052		09/17/03	10.03g	0.5ml	NA	
E-CH03-13,16-T-E (comp)	K2307754-055		09/17/03	10.02g	0.5ml	NA	
Method Blank	KWG0317131-4	NA	NA	10.00g	0.5ml	NA	
E-CH03-9,10,11,20-T-B (com	KWG0317131-1		09/17/03	10.09g	0.5ml	NA	
E-CH03-9,10,11,20-T-B (com	KWG0317131-2		09/17/03	10.04g	0.5ml	NA	
Lab Control Sample	KWG0317131-3	NA	NA	10.00g	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000151

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-005	**Basis:**	Wet
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	2.8	4.5	46.6	P	1	11/07/03
Di-n-butyltin	1.0	0.35	7.1	5.7	21.9		1	11/07/03
n-Butyltin	1.0	0.38	0.74	0.67	9.9	J	1	11/07/03

000152

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-010	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	2.5	2.2	12.8		1	11/07/03
Di-n-butyltin	0.99	0.35	5.3	4.4	18.6		1	11/07/03
n-Butyltin	0.99	0.38	0.56	0.46	19.6	J	1	11/07/03

000153

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-015	**Basis:**	Wet
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	2.7	2.2	20.4		1	11/07/03
Di-n-butyltin	0.99	0.35	7.0	5.3	27.6		1	11/07/03
n-Butyltin	0.99	0.38	0.67	0.61	9.4	J	1	11/07/03

000154

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-020	**Basis:**	Wet
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.98	0.35	6.8	5.1	28.6		1	11/07/03
n-Butyltin	0.98	0.38	0.75	0.66	12.8	J	1	11/07/03

000155

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	ECH03-9,10,11,20-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-025	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	2.0	1.8	10.5		1	11/07/03
Di-n-butyltin	0.99	0.35	5.3	4.1	25.5		1	11/07/03

000156

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-028	**Basis:**	Wet
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	3.1	4.7	41.0	P	1	11/07/03
Di-n-butyltin	1.0	0.35	5.1	4.2	19.4		1	11/07/03

000157

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-031	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	3.3	5.2	44.7	P	1	11/07/03
Di-n-butyltin	0.99	0.35	5.7	4.4	25.7		1	11/07/03
n-Butyltin	0.99	0.38	0.83	0.73	12.8	J	1	11/07/03

000158

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-034	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	3.0	2.3	26.4		1	11/07/03
Di-n-butyltin	1.0	0.35	4.2	3.2	27.0		1	11/07/03
n-Butyltin	1.0	0.38	0.58	0.51	12.8	J	1	11/07/03

000159

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-037	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	3.3	2.7	20.0		1	11/07/03
Di-n-butyltin	0.99	0.35	7.0	5.6	22.2		1	11/07/03
n-Butyltin	0.99	0.38	0.74	0.68	8.5	J	1	11/07/03

000160

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-040	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.98	0.33	3.6	2.9	21.5		1	11/07/03
Di-n-butyltin	0.98	0.35	8.0	6.8	16.2		1	11/07/03
n-Butyltin	0.98	0.38	0.70	0.61	13.7	J	1	11/07/03

000161

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-043	**Basis:**	Wet
		Level:	Low
Extraction Method:	METHOD		
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	1.7	1.6	6.1		1	11/07/03
Di-n-butyltin	0.99	0.35	4.8	3.5	31.3		1	11/07/03
n-Butyltin	0.99	0.38	0.48	0.45	6.5	J	1	11/07/03

000162

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa
Sample Matrix: Tissue

Service Request: K2307754
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: E-CH03-13,16-T-B (comp)
Lab Code: K2307754-046
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	1.7	1.4	19.4		1	11/07/03
Di-n-butyltin	1.0	0.35	6.5	4.7	32.1		1	11/07/03
n-Butyltin	1.0	0.38	0.63	0.52	19.1	J	1	11/07/03

000163

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-049	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.98	0.33	1.7	1.3	26.7		1	11/07/03
Di-n-butyltin	0.98	0.35	6.0	4.8	22.2		1	11/07/03
n-Butyltin	0.98	0.38	0.56	0.45	21.8	J	1	11/07/03

000164

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307754
Project:	Canaveral Harbor/M.natusa	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307754-052	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	1.8	1.5	18.2		1	11/07/03
Di-n-butyltin	1.0	0.35	2.3	1.7	30.0		1	11/07/03

000165

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.natusa
Sample Matrix: Tissue

Service Request: K2307754
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: E-CH03-13,16-T-E (comp)
Lab Code: K2307754-055

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	2.5	1.9	27.3		1	11/07/03
Di-n-butyltin	1.0	0.35	4.4	3.3	28.6		1	11/07/03
n-Butyltin	1.0	0.38	0.62	0.52	17.5	J	1	11/07/03

000166

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

November 18, 2003 Service Request No: K2307167

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on September 17, 2003. For your reference, these analyses have been assigned our service request number K2307167.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/dj

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2307167
Project:	Canaveral Harbor/M.nasuta	**Date Received:**	9/17/03
Sample Matrix:	Tissue		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Tissue samples were received for analysis at Columbia Analytical Services on 9/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored frozen at -20°C upon receipt at the laboratory.

The samples were placed on hold after receipt at the laboratory until compositing and analysis instructions were received. Refer to the Chain of Custody section of the report for a summary of the compositing and revised nomenclature received from ANAMAR.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C/SIM

Note Regarding "Dry Weight" Values:
Insufficient sample was available to perform a Freeze-dry Solids on these samples. The "Dry Weight" results were calculated using the Total Solids from the associated composites E-CH03-12,15-T-A through E-CH03-12,15-T-E (refer to K2307754). Thus, the "Dry Weight" concentrations should be considered as estimated values.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 11/17/03

Chain of Custody Documentation

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES K23071167

Facility: MACTEC Engineering and consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-9	M. nasuta		A-E	K23071167
CH03-10	M. nasuta		A-E	
CH03-11	M. nasuta		A-E	
CH03-12	M. nasuta		A-E	
CH03-13	M. nasuta		A-E	
CH03-14	M. nasuta		A-E	
CH03-15	M. nasuta		A-E	
CH03-16	M. nasuta		A-E	
CH03-17	M. nasuta		A-E	

Total Number of Samples: 9

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Aramar / Coronado Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[signature]	[signature]	9/16/03	1577
[signature]	FedEx	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species	Replicate Bags	Observations
C1403 - 20	M. nasuta	A-E	
Pre-test	M. nasuta		
E-C1403-CTRL	M. nasuta	A-F	*ctrl for sample C1403-20

Total Number of Samples: 3

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Arsenic (Cancora) Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	1517
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

K2307167

Project/Client Anamar Work Order K23 ~~0747~~ TB

Cooler received on 9-17-03 and opened on 9-17-03 by KM.

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: FX - Attach. Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.0 1.1 0.5
   Temperature Blank:
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Water, ice, plastic
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-9A		7167-001					
CH03-10A		7167-006					
CH03-11A		7167-011					
CH03-20A		7174-006					
	E-CH03-9,10,11,20-T-A (comp)			X	X	X	X
CH03-9B		7167-002					
CH03-10B		7167-007					
CH03-11B		7167-012					
CH03-20B		7174-007					
	E-CH03-9,10,11,20-T-B (comp)			X	X	X	X
CH03-9C		7167-003					
CH03-10C		7167-008					
CH03-11C		7167-013					
CH03-20C		7174-008					
	E-CH03-9,10,11,20-T-C (comp)			X	X	X	X
CH03-9D		7167-004					
CH03-10D		7167-009					
CH03-11D		7167-014					
CH03-20D		7174-009					
	E-CH03-9,10,11,20-T-D (comp)			X	X	X	X
CH03-9E		7167-005					
CH03-10E		7167-010					
CH03-11E		7167-015					
CH03-20E		7174-010					
	E-CH03-9,10,11,20-T-E (comp)			X	X	X	X
CH03-12A	E-CH03-12-T-A	7167-016	X				
CH03-12B	E-CH03-12-T-B	7167-017	X				
CH03-12C	E-CH03-12-T-C	7167-018	X				
CH03-12D	E-CH03-12-T-D	7167-019	X				
CH03-12E	E-CH03-12-T-E	7167-020	X				

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K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-12A		7167-016					
CH03-15A		7172-011					
	E-CH03-12,15-T-A (comp)			X	X	X	X
CH03-12B		7167-017					
CH03-15B		7172-012					
	E-CH03-12,15-T-B (comp)			X	X	X	X
CH03-12C		7167-018					
CH03-15C		7172-013					
	E-CH03-12,15-T-C (comp)			X	X	X	X
CH03-12D		7167-019					
CH03-15D		7172-014					
	E-CH03-12,15-T-D (comp)			X	X	X	X
CH03-12E		7167-020					
CH03-15E		7172-015					
	E-CH03-12,15-T-E (comp)			X	X	X	X
CH03-13A		7172-001					
CH03-16A		7172-016					
	E-CH03-13,16-T-A (comp)			X	X	X	X
CH03-13B		7172-002					
CH03-16B		7172-017					
	E-CH03-13,16-T-B (comp)			X	X	X	X
CH03-13C		7172-003					
CH03-16C		7172-018					
	E-CH03-13,16-T-C (comp)			X	X	X	X
CH03-13D		7172-004					
CH03-16D		7172-019					
	E-CH03-13,16-T-D (comp)			X	X	X	X
CH03-13E		7172-005					
CH03-16E		7172-020					
	E-CH03-13,16-T-E (comp)			X	X	X	X

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
E-CH03-CTRL-A	RS-CH03-T-A	7174-012	X	X	X	X	X
E-CH03-CTRL-B	RS-CH03-T-B	7174-013	X	X	X	X	X
E-CH03-CTRL-C	RS-CH03-T-C	7174-014	X	X	X	X	X
E-CH03-CTRL-D	RS-CH03-T-D	7174-015	X	X	X	X	X
E-CH03-CTRL-E	RS-CH03-T-E	7174-016	X	X	X	X	X
M.nasuta Pre-Tissue	M.nasuta CH03 Pre	7174-011	X	X	X	X	X

Polynuclear Aromatic Hydrocarbons
Method 8270

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-12-T-A	K2307167-016		09/17/2003
E-CH03-12-T-B	K2307167-017		09/17/2003
E-CH03-12-T-C	K2307167-018		09/17/2003
E-CH03-12-T-D	K2307167-019		09/17/2003
E-CH03-12-T-E	K2307167-020		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 11/12/03

Title: SVM Supervisor

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307167
Project:	Canaveral Harbor/M. Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-A	**Units:**	ug/Kg
Lab Code:	K2307167-016	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**3.5**	J	5.0	0.26	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**2.2**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	**0.41**	J	5.0	0.050	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**0.41**	J	5.0	0.074	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**1.5**	J	5.0	0.052	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**1.3**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**3.0**	J	5.0	0.066	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**1.6**	J	5.0	0.055	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**6.2**		5.0	0.053	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**4.9**	J	5.0	0.070	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**0.80**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**1.4**	J	5.0	0.080	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**0.71**	J	5.0	0.045	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**0.51**	J	5.0	0.081	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**0.28**	J	5.0	0.076	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.19**	J	5.0	0.073	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	**0.19**	J	5.0	0.079	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**0.23**	J	5.0	0.097	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	80	54-102	11/12/03	Acceptable
Fluoranthene-d10	89	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

000015

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307167
Project:	Canaveral Harbor/M. Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-B	**Units:**	ug/Kg
Lab Code:	K2307167-017	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.5**	J	5.0	0.26	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**1.2**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	5.0	0.050	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**0.18**	J	5.0	0.074	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**0.29**	J	5.0	0.052	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**0.41**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**1.8**	J	5.0	0.066	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**0.29**	J	5.0	0.055	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**6.6**		5.0	0.053	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**4.4**	J	5.0	0.070	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**1.0**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**1.9**	J	5.0	0.080	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**0.87**	J	5.0	0.045	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**0.64**	J	5.0	0.081	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**0.32**	J	5.0	0.076	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.25**	J	5.0	0.073	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	5.0	0.079	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**0.27**	J	5.0	0.097	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	84	54-102	11/12/03	Acceptable
Fluoranthene-d10	92	57-107	11/12/03	Acceptable
Terphenyl-d14	103	53-116	11/12/03	Acceptable

Comments:

000016

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Collected:
Date Received: 09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH03-12-T-C
Lab Code: K2307167-018

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.5**	J	5.0	0.26	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**1.3**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	**0.26**	J	5.0	0.050	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**0.15**	J	5.0	0.074	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**0.22**	J	5.0	0.052	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**0.30**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**1.1**	J	5.0	0.066	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**0.26**	J	5.0	0.055	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**3.5**	J	5.0	0.053	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**2.8**	J	5.0	0.070	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**0.86**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**1.1**	J	5.0	0.080	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**0.73**	J	5.0	0.045	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**0.62**	J	5.0	0.081	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**0.27**	J	5.0	0.076	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.28**	J	5.0	0.073	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	**0.18**	J	5.0	0.079	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**0.28**	J	5.0	0.097	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	75	54-102	11/12/03	Acceptable
Fluoranthene-d10	86	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

000017

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Collected:
Date Received: 09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH03-12-T-D
Lab Code: K2307167-019

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**2.2**	J	5.0	0.26	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**1.8**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	**0.32**	J	5.0	0.050	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**0.35**	J	5.0	0.074	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**0.27**	J	5.0	0.052	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**0.40**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**1.4**	J	5.0	0.066	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**0.37**	J	5.0	0.055	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**3.2**	J	5.0	0.053	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**2.6**	J	5.0	0.070	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**1.5**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**2.1**	J	5.0	0.080	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**1.5**	J	5.0	0.045	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**1.4**	J	5.0	0.081	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**1.6**	J	5.0	0.076	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**1.3**	J	5.0	0.073	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	**0.32**	J	5.0	0.079	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**1.2**	J	5.0	0.097	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

000018

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Collected:
Date Received: 09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH03-12-T-E
Lab Code: K2307167-020

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.6**	J	5.0	0.26	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**1.3**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	5.0	0.050	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**0.15**	J	5.0	0.074	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**0.20**	J	5.0	0.052	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**0.31**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**1.2**	J	5.0	0.066	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**0.23**	J	5.0	0.055	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**4.1**	J	5.0	0.053	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**3.0**	J	5.0	0.070	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**0.79**	J	5.0	0.054	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**1.2**	J	5.0	0.080	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**0.64**	J	5.0	0.045	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**0.55**	J	5.0	0.081	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**0.32**	J	5.0	0.076	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.26**	J	5.0	0.073	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	5.0	0.079	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**0.26**	J	5.0	0.097	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

000019

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307167
Project:	Canaveral Harbor/M. Nasuta	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317779-5	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.32**	J	4.9	0.26	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**0.16**	J	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	**0.073**	J	4.9	0.050	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	ND	U	4.9	0.074	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	ND	U	4.9	0.052	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	4.9	0.054	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	ND	U	4.9	0.066	1	11/05/03	11/11/03	KWG0317779	
Anthracene	ND	U	4.9	0.055	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	ND	U	4.9	0.053	1	11/05/03	11/11/03	KWG0317779	
Pyrene	ND	U	4.9	0.070	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	ND	U	4.9	0.054	1	11/05/03	11/11/03	KWG0317779	
Chrysene	ND	U	4.9	0.080	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	ND	U	4.9	0.045	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	ND	U	4.9	0.081	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	ND	U	4.9	0.076	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	4.9	0.073	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	4.9	0.079	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	4.9	0.097	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/11/03	Acceptable
Fluoranthene-d10	80	57-107	11/11/03	Acceptable
Terphenyl-d14	113	53-116	11/11/03	Acceptable

Comments:

000020

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307167
Project:	Canaveral Harbor/M. Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-A	**Units:**	ug/Kg
Lab Code:	K2307167-016	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**26**	J	37	2.0	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**17**	J	37	1.2	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	**3.0**	J	37	0.38	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**3.1**	J	37	0.56	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**11**	J	37	0.39	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**9.5**	J	37	0.41	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**22**	J	37	0.50	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**12**	J	37	0.42	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**47**		37	0.40	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**36**	J	37	0.53	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**6.0**	J	37	0.41	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**11**	J	37	0.60	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**5.3**	J	37	0.34	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**3.8**	J	37	0.61	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**2.1**	J	37	0.57	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**1.4**	J	37	0.55	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	**1.4**	J	37	0.59	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**1.7**	J	37	0.73	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	80	54-102	11/12/03	Acceptable
Fluoranthene-d10	89	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

000021

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307167
Project:	Canaveral Harbor/M. Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-B	**Units:**	ug/Kg
Lab Code:	K2307167-017	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**11**	J	38	2.0	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**9.3**	J	38	1.2	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	38	0.38	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**1.3**	J	38	0.57	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**2.2**	J	38	0.40	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**3.1**	J	38	0.41	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**14**	J	38	0.50	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**2.2**	J	38	0.42	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**50**		38	0.41	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**33**	J	38	0.54	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**7.6**	J	38	0.41	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**15**	J	38	0.61	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**6.6**	J	38	0.35	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**4.9**	J	38	0.62	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**2.4**	J	38	0.58	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**1.9**	J	38	0.56	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	38	0.60	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**2.1**	J	38	0.74	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	84	54-102	11/12/03	Acceptable
Fluoranthene-d10	92	57-107	11/12/03	Acceptable
Terphenyl-d14	103	53-116	11/12/03	Acceptable

Comments:

000022

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Collected:
Date Received: 09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH03-12-T-C
Lab Code: K2307167-018

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	16	J	52	2.8	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	14	J	52	1.6	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	2.8	J	52	0.53	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	1.6	J	52	0.78	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	2.3	J	52	0.55	1	11/05/03	11/12/03	KWG0317779	
Fluorene	3.1	J	52	0.57	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	11	J	52	0.70	1	11/05/03	11/12/03	KWG0317779	
Anthracene	2.7	J	52	0.58	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	37	J	52	0.56	1	11/05/03	11/12/03	KWG0317779	
Pyrene	29	J	52	0.74	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	9.1	J	52	0.57	1	11/05/03	11/12/03	KWG0317779	
Chrysene	12	J	52	0.85	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	7.7	J	52	0.48	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	6.5	J	52	0.86	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	2.8	J	52	0.80	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	3.0	J	52	0.77	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	1.9	J	52	0.84	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	3.0	J	52	1.1	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	75	54-102	11/12/03	Acceptable
Fluoranthene-d10	86	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Collected:
Date Received: 09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH03-12-T-D
Lab Code: K2307167-019

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	15	J	34	1.8	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	12	J	34	1.1	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	2.2	J	34	0.35	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	2.4	J	34	0.51	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	1.8	J	34	0.36	1	11/05/03	11/12/03	KWG0317779	
Fluorene	2.7	J	34	0.37	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	9.8	J	34	0.45	1	11/05/03	11/12/03	KWG0317779	
Anthracene	2.5	J	34	0.38	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	22	J	34	0.37	1	11/05/03	11/12/03	KWG0317779	
Pyrene	17	J	34	0.48	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	10	J	34	0.37	1	11/05/03	11/12/03	KWG0317779	
Chrysene	14	J	34	0.55	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	10	J	34	0.31	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	9.8	J	34	0.56	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	11	J	34	0.52	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	8.6	J	34	0.50	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	2.2	J	34	0.54	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	8.2	J	34	0.66	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	82	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

000024

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Collected:
Date Received: 09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: E-CH03-12-T-E
Lab Code: K2307167-020

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**8.5**	J	28	1.5	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**7.4**	J	28	0.83	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	28	0.28	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	**0.83**	J	28	0.41	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	**1.1**	J	28	0.29	1	11/05/03	11/12/03	KWG0317779	
Fluorene	**1.7**	J	28	0.30	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**6.6**	J	28	0.37	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**1.3**	J	28	0.31	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**22**	J	28	0.30	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**17**	J	28	0.39	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**4.3**	J	28	0.30	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**6.3**	J	28	0.44	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**3.5**	J	28	0.25	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**3.0**	J	28	0.45	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**1.8**	J	28	0.42	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**1.4**	J	28	0.41	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	28	0.44	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	**1.5**	J	28	0.54	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

000025

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
Lab Code: KWG0317779-5

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**0.32**	J	4.9	0.26	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**0.16**	J	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	**0.073**	J	4.9	0.050	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	ND	U	4.9	0.074	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	ND	U	4.9	0.052	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	4.9	0.054	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	ND	U	4.9	0.066	1	11/05/03	11/11/03	KWG0317779	
Anthracene	ND	U	4.9	0.055	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	ND	U	4.9	0.053	1	11/05/03	11/11/03	KWG0317779	
Pyrene	ND	U	4.9	0.070	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	ND	U	4.9	0.054	1	11/05/03	11/11/03	KWG0317779	
Chrysene	ND	U	4.9	0.080	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	ND	U	4.9	0.045	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	ND	U	4.9	0.081	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	ND	U	4.9	0.076	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	4.9	0.073	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	4.9	0.079	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	4.9	0.097	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/11/03	Acceptable
Fluoranthene-d10	80	57-107	11/11/03	Acceptable
Terphenyl-d14	113	53-116	11/11/03	Acceptable

Comments:

000026

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
E-CH03-12-T-A	K2307167-016	80	89	100
E-CH03-12-T-B	K2307167-017	84	92	103
E-CH03-12-T-C	K2307167-018	75	86	98
E-CH03-12-T-D	K2307167-019	82	90	100
E-CH03-12-T-E	K2307167-020	79	88	100
Method Blank	KWG0317779-5	74	80	113
Batch QC	K2307174-011	80	88	103
Batch QCMS	KWG0317779-1	77	87	88
Batch QCDMS	KWG0317779-2	83	90	91
Lab Control Sample	KWG0317779-3	68	76	81
Duplicate Lab Control Sample	KWG0317779-4	81	90	96

Surrogate Recovery Control Limits (%)

Sur1 =	Fluorene-d10	54-102
Sur2 =	Fluoranthene-d10	57-107
Sur3 =	Terphenyl-d14	53-116

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

000027

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/11/2003
Time Analyzed: 07:18

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111003\1110F017.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318218-2
Analysis Lot: KWG0318218

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	156,998	5.17	85,222	6.61	150,582	7.83
	Upper Limit ==>	313,996	5.67	170,444	7.11	301,164	8.33
	Lower Limit ==>	78,499	4.67	42,611	6.11	75,291	7.33
	ICAL Result ==>	204,882	5.17	110,040	6.61	188,958	7.82
Associated Analyses							
Method Blank	KWG0317779-5	147,452	5.16	79,173	6.61	131,655	7.82
Lab Control Sample	KWG0317779-3	168,892	5.15	92,601	6.60	156,031	7.82
Duplicate Lab Control Sample	KWG0317779-4	143,663	5.15	78,410	6.60	130,144	7.82
Batch QCMS	KWG0317779-1	147,669	5.15	79,348	6.60	134,322	7.82
Batch QCDMS	KWG0317779-2	143,755	5.15	77,924	6.60	132,807	7.82
Batch QC	K2307174-011	142,499	5.15	77,592	6.60	129,827	7.82

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/11/2003
Time Analyzed: 07:18

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111003\1110F017.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318218-2
Analysis Lot: KWG0318218

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	136,815	10.78	77,567	14.77
	Upper Limit ==>	273,630	11.28	155,134	15.27
	Lower Limit ==>	68,408	10.28	38,784	14.27
	ICAL Result ==>	189,206	10.78	118,509	14.75
Associated Analyses					
Method Blank	KWG0317779-5	97,028	10.78	56,285	14.76
Lab Control Sample	KWG0317779-3	152,384	10.77	93,521	14.73
Duplicate Lab Control Sample	KWG0317779-4	124,388	10.77	75,022	14.73
Batch QCMS	KWG0317779-1	140,694	10.77	98,349	14.73
Batch QCDMS	KWG0317779-2	137,324	10.76	95,754	14.73
Batch QC	K2307174-011	116,567	10.76	74,728	14.72

Results flagged with an asterisk (*) indicate values outside control criteria.

000029

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/12/2003
Time Analyzed: 07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F002.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318310-2
Analysis Lot: KWG0318310

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	157,294	5.16	86,722	6.60	154,481	7.82
	Upper Limit ==>	314,588	5.66	173,444	7.10	308,962	8.32
	Lower Limit ==>	78,647	4.66	43,361	6.10	77,241	7.32
	ICAL Result ==>	204,882	5.17	110,040	6.61	188,958	7.82
Associated Analyses							
E-CH03-12-T-A	K2307167-016	148,370	5.16	80,602	6.61	135,203	7.82
E-CH03-12-T-B	K2307167-017	142,862	5.16	78,027	6.61	129,756	7.82
E-CH03-12-T-C	K2307167-018	144,713	5.16	79,360	6.61	133,499	7.82
E-CH03-12-T-D	K2307167-019	143,085	5.16	78,162	6.61	130,790	7.82
E-CH03-12-T-E	K2307167-020	148,851	5.16	82,103	6.61	136,931	7.82

Results flagged with an asterisk (*) indicate values outside control criteria.

000030

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/12/2003
Time Analyzed: 07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F002.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318310-2
Analysis Lot: KWG0318310

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	151,499	10.77	94,668	14.73
	Upper Limit ==>	302,998	11.27	189,336	15.23
	Lower Limit ==>	75,750	10.27	47,334	14.23
	ICAL Result ==>	189,206	10.78	118,509	14.75
Associated Analyses					
E-CH03-12-T-A	K2307167-016	123,564	10.77	80,648	14.74
E-CH03-12-T-B	K2307167-017	122,383	10.77	82,920	14.74
E-CH03-12-T-C	K2307167-018	127,821	10.77	86,867	14.75
E-CH03-12-T-D	K2307167-019	124,631	10.77	85,064	14.75
E-CH03-12-T-E	K2307167-020	126,554	10.77	84,507	14.75

Results flagged with an asterisk (*) indicate values outside control criteria.

000031

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Extracted: 11/05/2003
Date Analyzed: 11/11/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name: Batch QC
Lab Code: K2307174-011

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low
Extraction Lot: KWG0317779

Analyte Name	Sample Result	Batch QCMS KWG0317779-1 Matrix Spike			Batch QCDMS KWG0317779-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Naphthalene	1.9	187	250	74	199	250	79	46-109	7	40
2-Methylnaphthalene	1.6	208	250	83	223	250	88	44-118	7	40
Acenaphthylene	0.24	230	250	92	242	250	97	63-114	5	40
Acenaphthene	0.19	228	250	91	238	250	95	59-117	5	40
Dibenzofuran	0.31	231	250	92	241	250	96	64-102	4	40
Fluorene	0.40	244	250	98	254	250	101	67-115	4	40
Phenanthrene	1.5	244	250	97	246	250	98	67-109	1	40
Anthracene	0.32	249	250	99	255	250	102	71-114	3	40
Fluoranthene	5.5	265	250	104	265	250	104	66-120	0	40
Pyrene	2.8	230	250	91	233	250	92	59-110	1	40
Benz(a)anthracene	0.85	244	250	98	243	250	97	55-108	0	40
Chrysene	2.1	256	250	102	255	250	101	61-110	0	40
Benzo(b)fluoranthene	1.1	253	250	101	250	250	99	64-119	1	40
Benzo(k)fluoranthene	0.79	256	250	102	259	250	103	68-117	1	40
Benzo(a)pyrene	0.55	258	250	103	258	250	103	67-117	0	40
Indeno(1,2,3-cd)pyrene	0.48	276	250	110	272	250	108	47-137	1	40
Dibenz(a,h)anthracene	0.45	278	250	111	276	250	110	51-133	1	40
Benzo(g,h,i)perylene	0.49	260	250	104	259	250	104	58-114	0	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000032

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307167
Project:	Canaveral Harbor/M. Nasuta	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/11/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	KWG0317779

	Lab Control Sample KWG0317779-3 Lab Control Spike			Duplicate Lab Control Sample KWG0317779-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	173	250	69	207	250	83	51-102	18	40
2-Methylnaphthalene	181	250	72	217	250	87	43-109	18	40
Acenaphthylene	182	250	73	220	250	88	45-115	19	40
Acenaphthene	180	250	72	219	250	88	54-106	19	40
Dibenzofuran	180	250	72	220	250	88	44-117	20	40
Fluorene	188	250	75	229	250	91	55-112	20	40
Phenanthrene	186	250	74	230	250	92	55-108	21	40
Anthracene	193	250	77	238	250	95	59-113	21	40
Fluoranthene	201	250	81	246	250	98	57-123	20	40
Pyrene	188	250	75	234	250	94	51-110	22	40
Benz(a)anthracene	187	250	75	227	250	91	45-114	19	40
Chrysene	200	250	80	245	250	98	53-115	20	40
Benzo(b)fluoranthene	204	250	81	251	250	100	49-133	21	40
Benzo(k)fluoranthene	208	250	83	261	250	104	51-132	23	40
Benzo(a)pyrene	203	250	81	252	250	101	54-131	22	40
Indeno(1,2,3-cd)pyrene	214	250	85	262	250	105	38-143	20	40
Dibenz(a,h)anthracene	213	250	85	262	250	105	38-143	20	40
Benzo(g,h,i)perylene	204	250	82	252	250	101	43-129	21	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000033

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
SRM Matrix: Tissue

Service Request: K2307167
Date Collected: NA
Date Received: NA
Date Extracted: 11/5/2003
Date Analyzed: 11/11/2003

Standard Reference Material
Polynuclear Aromatic Hydrocarbons

Sample Name: Standard Reference Material
Lab Code: KWG0317779-6
Test Notes:

Units: ug/Kg (ppb)
Basis: Dry

Analyte	Prep Method	Analysis Method	True Value	Result	CAS Advisory Limits	Result Notes
Phenanthrene	EPA 3541	SIM	2.5	2.6	1.1-5.6	
Fluoranthene	EPA 3541	SIM	19	18	8.8-39	
Pyrene	EPA 3541	SIM	18	16	8.3-36	
Benz(a)anthracene	EPA 3541	SIM	3.7	3.0	1.6-8.5	
Chrysene	EPA 3541	SIM	11	9.8	4.9-23	
Benzo(b)fluoranthene	EPA 3541	SIM	5.3	4.2	2.4-11	
Benzo(k)fluoranthene	EPA 3541	SIM	4.6	3.3	2.2-9.9	
Benzo(a)pyrene	EPA 3541	SIM	1.8	1.8	0.85-3.7	
Indeno(1,2,3-cd)pyrene	EPA 3541	SIM	1.6	1.8	0.65-3.9	
Benzo(g,h,i)perylene	EPA 3541	SIM	2.5	3.0	1.1-5.5	

Approved By: _____ Date: 11/12/03

LCS (44)/091898p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307167
Project:	Canaveral Harbor/M. Nasuta	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/11/2003
		Time Analyzed:	14:33

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\111003\1110F030.D
Lab Code:	KWG0317779-5	**Instrument ID:**	MS14
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317779

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317779-3	J:\MS14\DATA\111003\1110F031.D	11/11/03	15:00
Duplicate Lab Control Sample	KWG0317779-4	J:\MS14\DATA\111003\1110F032.D	11/11/03	15:28
Batch QCMS	KWG0317779-1	J:\MS14\DATA\111003\1110F034.D	11/11/03	16:22
Batch QCDMS	KWG0317779-2	J:\MS14\DATA\111003\1110F035.D	11/11/03	16:49
Batch QC	K2307174-011	J:\MS14\DATA\111003\1110F036.D	11/11/03	17:16
E-CH03-12-T-A	K2307167-016	J:\MS14\DATA\111203\1112F022.D	11/12/03	16:36
E-CH03-12-T-B	K2307167-017	J:\MS14\DATA\111203\1112F023.D	11/12/03	17:03
E-CH03-12-T-C	K2307167-018	J:\MS14\DATA\111203\1112F024.D	11/12/03	17:30
E-CH03-12-T-D	K2307167-019	J:\MS14\DATA\111203\1112F025.D	11/12/03	17:57
E-CH03-12-T-E	K2307167-020	J:\MS14\DATA\111203\1112F026.D	11/12/03	18:24

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0317779-3	**Lab Code:**	KWG0317779-4
File ID:	J:\MS14\DATA\111003\1110F031.D	**File ID:**	J:\MS14\DATA\111003\1110F032.D
Instrument ID:	MS14	**Instrument ID:**	MS14
Date Extracted:	11/05/2003	**Date Extracted:**	11/05/2003
Date Analyzed:	11/11/2003	**Date Analyzed:**	11/11/2003
Time Analyzed:	15:00	**Time Analyzed:**	15:28

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317779

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317779-5	J:\MS14\DATA\111003\1110F030.D	11/11/03	14:33
Batch QCMS	KWG0317779-1	J:\MS14\DATA\111003\1110F034.D	11/11/03	16:22
Batch QCDMS	KWG0317779-2	J:\MS14\DATA\111003\1110F035.D	11/11/03	16:49
Batch QC	K2307174-011	J:\MS14\DATA\111003\1110F036.D	11/11/03	17:16
E-CH03-12-T-A	K2307167-016	J:\MS14\DATA\111203\1112F022.D	11/12/03	16:36
E-CH03-12-T-B	K2307167-017	J:\MS14\DATA\111203\1112F023.D	11/12/03	17:03
E-CH03-12-T-C	K2307167-018	J:\MS14\DATA\111203\1112F024.D	11/12/03	17:30
E-CH03-12-T-D	K2307167-019	J:\MS14\DATA\111203\1112F025.D	11/12/03	17:57
E-CH03-12-T-E	K2307167-020	J:\MS14\DATA\111203\1112F026.D	11/12/03	18:24

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/11/2003
Time Analyzed: 06:49

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111003\1110F016.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0318218

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	17.3	126248	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	19.8	144512	PASS
70	69	0	2	0.7	1057	PASS
127	198	10	80	34.3	250688	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	35.2	731008	PASS
199	198	5	9	6.5	47232	PASS
275	198	10	60	37.1	271360	PASS
365	442	1	50	1.9	40256	PASS
441	443	0	100	74.2	283456	PASS
442	442	100	100	100.0	2078208	PASS
443	442	15	24	18.4	381760	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0318218-2	J:\MS14\DATA\111003\1110F017.D	11/11/2003	07:18	
Method Blank	KWG0317779-5	J:\MS14\DATA\111003\1110F030.D	11/11/2003	14:33	
Lab Control Sample	KWG0317779-3	J:\MS14\DATA\111003\1110F031.D	11/11/2003	15:00	
Duplicate Lab Control Sample	KWG0317779-4	J:\MS14\DATA\111003\1110F032.D	11/11/2003	15:28	
Batch QCMS	KWG0317779-1	J:\MS14\DATA\111003\1110F034.D	11/11/2003	16:22	
Batch QCDMS	KWG0317779-2	J:\MS14\DATA\111003\1110F035.D	11/11/2003	16:49	
Batch QC	K2307174-011	J:\MS14\DATA\111003\1110F036.D	11/11/2003	17:16	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/12/2003
Time Analyzed: 07:16

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0318310

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	18.1	157184	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	20.6	178900	PASS
70	69	0	2	0.5	854	PASS
127	198	10	80	36.1	314048	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	47.0	870080	PASS
199	198	5	9	6.7	58032	PASS
275	198	10	60	33.4	290176	PASS
365	442	1	50	2.1	39208	PASS
441	443	0	100	72.4	250240	PASS
442	442	100	100	100.0	1849856	PASS
443	442	15	24	18.7	345664	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0318310-2	J:\MS14\DATA\111203\1112F002.D	11/12/2003	07:34	
E-CH03-12-T-A	K2307167-016	J:\MS14\DATA\111203\1112F022.D	11/12/2003	16:36	
E-CH03-12-T-B	K2307167-017	J:\MS14\DATA\111203\1112F023.D	11/12/2003	17:03	
E-CH03-12-T-C	K2307167-018	J:\MS14\DATA\111203\1112F024.D	11/12/2003	17:30	
E-CH03-12-T-D	K2307167-019	J:\MS14\DATA\111203\1112F025.D	11/12/2003	17:57	
E-CH03-12-T-E	K2307167-020	J:\MS14\DATA\111203\1112F026.D	11/12/2003	18:24	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

000038

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\111003\1110F003.D	G	J:\MS14\DATA\111003\1110F009.D
B	J:\MS14\DATA\111003\1110F004.D	H	J:\MS14\DATA\111003\1110F010.D
C	J:\MS14\DATA\111003\1110F005.D	I	J:\MS14\DATA\111003\1110F011.D
D	J:\MS14\DATA\111003\1110F006.D	J	J:\MS14\DATA\111003\1110F012.D
E	J:\MS14\DATA\111003\1110F007.D	K	J:\MS14\DATA\111003\1110F013.D
F	J:\MS14\DATA\111003\1110F008.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	5.0	1.25	B	10	1.18	C	20	1.13	D	40	1.13	E	100	1.14
	F	500	1.10	G	1000	1.08	H	2000	1.13	I	5000	1.12	J	8000	1.13
	K	10000	1.11												
2-Methylnaphthalene	A	5.0	0.753	B	10	0.740	C	20	0.714	D	40	0.724	E	100	0.738
	F	500	0.710	G	1000	0.697	H	2000	0.736	I	5000	0.722	J	8000	0.731
	K	10000	0.718												
Acenaphthylene	A	5.0	2.14	B	10	1.98	C	20	1.93	D	40	1.97	E	100	2.00
	F	500	1.98	G	1000	2.01	H	2000	2.13	I	5000	2.13	J	8000	2.15
	K	10000	2.13												
Acenaphthene	A	5.0	1.27	B	10	1.20	C	20	1.17	D	40	1.19	E	100	1.26
	F	500	1.19	G	1000	1.18	H	2000	1.24	I	5000	1.20	J	8000	1.20
	K	10000	1.17												
Dibenzofuran	A	5.0	1.86	B	10	1.80	C	20	1.74	D	40	1.77	E	100	1.82
	F	500	1.75	G	1000	1.75	H	2000	1.85	I	5000	1.83	J	8000	1.86
	K	10000	1.85												
Fluorene	A	5.0	1.46	B	10	1.39	C	20	1.35	D	40	1.40	E	100	1.45
	F	500	1.43	G	1000	1.43	H	2000	1.52	I	5000	1.49	J	8000	1.48
	K	10000	1.45												
Phenanthrene	A	5.0	1.37	B	10	1.26	C	20	1.25	D	40	1.25	E	100	1.27
	F	500	1.20	G	1000	1.20	H	2000	1.25	I	5000	1.23	J	8000	1.24
	K	10000	1.21												
Anthracene	A	5.0	1.24	B	10	1.15	C	20	1.13	D	40	1.16	E	100	1.21
	F	500	1.18	G	1000	1.20	H	2000	1.27	I	5000	1.25	J	8000	1.25
	K	10000	1.24												
Fluoranthene	A	5.0	1.37	B	10	1.22	C	20	1.23	D	40	1.27	E	100	1.36
	F	500	1.30	G	1000	1.31	H	2000	1.40	I	5000	1.39	J	8000	1.40
	K	10000	1.38												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000039

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	5.0	1.73	B	10	1.60	C	20	1.66	D	40	1.64	E	100	1.68
	F	500	1.50	G	1000	1.45	H	2000	1.46	I	5000	1.34	J	8000	1.31
	K	10000	1.27												
Benz(a)anthracene	A	5.0	1.71	B	10	1.38	C	20	1.21	D	40	1.16	E	100	1.17
	F	500	1.09	G	1000	1.11	H	2000	1.20	I	5000	1.19	J	8000	1.21
	K	10000	1.19												
Chrysene	A	5.0	1.17	B	10	1.05	C	20	1.08	D	40	1.10	E	100	1.14
	F	500	1.11	G	1000	1.11	H	2000	1.17	I	5000	1.15	J	8000	1.16
	K	10000	1.15												
Benzo(b)fluoranthene	A	5.0	1.73	B	10	1.62	C	20	1.54	D	40	1.56	E	100	1.63
	F	500	1.59	G	1000	1.66	H	2000	1.76	I	5000	1.76	J	8000	1.81
	K	10000	1.79												
Benzo(k)fluoranthene	A	5.0	1.54	B	10	1.43	C	20	1.50	D	40	1.51	E	100	1.60
	F	500	1.58	G	1000	1.61	H	2000	1.78	I	5000	1.76	J	8000	1.75
	K	10000	1.74												
Benzo(a)pyrene	A	5.0	1.45	B	10	1.29	C	20	1.27	D	40	1.25	E	100	1.34
	F	500	1.34	G	1000	1.40	H	2000	1.52	I	5000	1.55	J	8000	1.58
	K	10000	1.58												
Indeno(1,2,3-cd)pyrene	A	5.0	1.17	B	10	0.998	C	20	1.01	D	40	1.05	E	100	1.12
	F	500	1.14	G	1000	1.19	H	2000	1.27	I	5000	1.30	J	8000	1.36
	K	10000	1.35												
Dibenz(a,h)anthracene	A	5.0	1.01	B	10	0.890	C	20	0.929	D	40	0.999	E	100	1.09
	F	500	1.16	G	1000	1.19	H	2000	1.27	I	5000	1.28	J	8000	1.34
	K	10000	1.38												
Benzo(g,h,i)perylene	A	5.0	1.43	B	10	1.24	C	20	1.27	D	40	1.29	E	100	1.34
	F	500	1.34	G	1000	1.34	H	2000	1.42	I	5000	1.41	J	8000	1.45
	K	10000	1.44												
Fluorene-d10	A	5.0	1.31	B	10	1.17	C	20	1.14	D	40	1.18	E	100	1.20
	F	500	1.17	G	1000	1.17	H	2000	1.24	I	5000	1.20	J	8000	1.18
	K	10000	1.15												
Fluoranthene-d10	A	5.0	1.18	B	10	1.07	C	20	1.07	D	40	1.11	E	100	1.18
	F	500	1.11	G	1000	1.12	H	2000	1.21	I	5000	1.19	J	8000	1.19
	K	10000	1.16												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

000040

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Terphenyl-d14	A	5.0	1.20	B	10	1.06	C	20	1.07	D	40	1.08	E	100	1.11
	F	500	1.02	G	1000	0.988	H	2000	1.01	I	5000	0.925	J	8000	0.901
	K	10000	0.874												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000041

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	4.0		≤ 15	1.14		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	2.2		≤ 15	0.726		0.01
Acenaphthylene	MS	AverageRF	% RSD	4.1		≤ 15	2.05		0.01
Acenaphthene	MS	AverageRF	% RSD	2.9		≤ 15	1.21		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.6		≤ 15	1.81		0.01
Fluorene	MS	AverageRF	% RSD	3.4		≤ 15	1.44		0.01
Phenanthrene	MS	AverageRF	% RSD	3.8		≤ 15	1.25		0.01
Anthracene	MS	AverageRF	% RSD	3.9		≤ 15	1.21		0.01
Fluoranthene	MS	AverageRF	% RSD	5.1		≤ 15	1.33		0.01
Pyrene	MS	AverageRF	% RSD	10.4		≤ 15	1.51		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	14.0		≤ 15	1.24		0.01
Chrysene	MS	AverageRF	% RSD	3.5		≤ 15	1.13		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.6		≤ 15	1.68		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	7.5		≤ 15	1.62		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	9.0		≤ 15	1.42		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	11.0		≤ 15	1.18		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	14.7		≤ 15	1.14		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	5.4		≤ 15	1.36		0.01
Fluorene-d10	SURR	AverageRF	% RSD	4.0		≤ 15	1.19		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.3		≤ 15	1.14		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	9.4		≤ 15	1.02		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

000042

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Calibration Date: 11/10/2003
Date Analyzed: 11/11/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL3084
Units: ng/ml

File ID: J:\MS14\DATA\111003\1110F017.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	1.14	1.17	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.726	0.760	5	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	2.05	2.17	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	1.21	1.27	5	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	1.81	1.91	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	1.44	1.57	9	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	1.21	1.24	3	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.33	1.37	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.51	1.55	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	1.24	1.15	-8	NA	± 20 %	AverageRF
Chrysene	2000	2100	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	1.68	1.80	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2300	1.62	1.87	16	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	1.42	1.56	10	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2100	1.18	1.26	7	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	1.14	1.29	13	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	1.36	1.48	9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000043

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/11/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/10/2003
Calibration ID: CAL3084
Analysis Lot: KWG0318218
Units: ng/ml

File ID: J:\MS14\DATA\111003\1110F017.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.14	1.17	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.726	0.760	5	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	2.05	2.17	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.21	1.27	5	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.81	1.91	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	0.01	1.44	1.57	9	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	0.01	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	0.01	1.21	1.24	3	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.33	1.37	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	0.01	1.51	1.55	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.24	1.15	-8	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	0.01	1.68	1.80	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2300	0.01	1.62	1.87	16	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	0.01	1.42	1.56	10	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2100	0.01	1.18	1.26	7	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	0.01	1.14	1.29	13	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.36	1.48	9	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.19	1.13	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	1.14	1.05	-8	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	1.02	0.917	-10	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167
Date Analyzed: 11/12/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/10/2003
Calibration ID: CAL3084
Analysis Lot: KWG0318310
Units: ng/ml

File ID: J:\MS14\DATA\111203\1112F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.14	1.16	2	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.726	0.769	6	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	2.05	2.18	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.81	1.89	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	0.01	1.44	1.55	8	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	0.01	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.33	1.38	4	NA	± 20 %	AverageRF
Pyrene	2000	1900	0.01	1.51	1.45	-4	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	2000	0.01	1.24	1.21	-2	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	0.01	1.68	1.79	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.62	1.76	9	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	0.01	1.42	1.53	8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2300	0.01	1.18	1.34	14	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	0.01	1.14	1.33	17	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.36	1.49	9	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.19	1.12	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.14	1.08	-5	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	1.02	0.891	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0318218
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1110E016.D	GC/MS Tuning - Decafluorotripheny	KWG0318218-1	11/11/2003	06:49		11/11/2003	07:01
1110F017.D	Continuing Calibration Verification	KWG0318218-2	11/11/2003	07:18		11/11/2003	07:38
1110F030.D	Method Blank	KWG0317779-5	11/11/2003	14:33		11/11/2003	14:52
1110F031.D	Lab Control Sample	KWG0317779-3	11/11/2003	15:00		11/11/2003	15:19
1110F032.D	Duplicate Lab Control Sample	KWG0317779-4	11/11/2003	15:28		11/11/2003	15:47
1110F033.D	ZZZZZZ	ZZZZZZ	11/11/2003	15:55		11/11/2003	16:14
1110F034.D	Batch QCMS	KWG0317779-1	11/11/2003	16:22		11/11/2003	16:41
1110F035.D	Batch QCDMS	KWG0317779-2	11/11/2003	16:49		11/11/2003	17:08
1110F036.D	Batch QC	K2307174-011	11/11/2003	17:16		11/11/2003	17:35
1110F037.D	ZZZZZZ	ZZZZZZ	11/11/2003	17:43		11/11/2003	18:02
1110F038.D	ZZZZZZ	ZZZZZZ	11/11/2003	18:10		11/11/2003	18:29
1110F039.D	ZZZZZZ	ZZZZZZ	11/11/2003	18:37		11/11/2003	18:57

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta

Service Request: K2307167

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0318310
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1112F001.D	GC/MS Tuning - Decafluorotripheny	KWG0318310-1	11/12/2003	07:16		11/12/2003	07:28
1112F002.D	Continuing Calibration Verification	KWG0318310-2	11/12/2003	07:34		11/12/2003	07:53
1112F003.D	ZZZZZZ	ZZZZZZ	11/12/2003	08:03		11/12/2003	08:22
1112F004.D	ZZZZZZ	ZZZZZZ	11/12/2003	08:30		11/12/2003	08:49
1112F005.D	ZZZZZZ	ZZZZZZ	11/12/2003	08:57		11/12/2003	09:16
1112F006.D	ZZZZZZ	ZZZZZZ	11/12/2003	09:24		11/12/2003	09:43
1112F007.D	ZZZZZZ	ZZZZZZ	11/12/2003	09:51		11/12/2003	10:10
1112F008.D	ZZZZZZ	ZZZZZZ	11/12/2003	10:18		11/12/2003	10:37
1112F009.D	ZZZZZZ	ZZZZZZ	11/12/2003	10:45		11/12/2003	11:04
1112F010.D	ZZZZZZ	ZZZZZZ	11/12/2003	11:12		11/12/2003	11:32
1112F011.D	ZZZZZZ	ZZZZZZ	11/12/2003	11:39		11/12/2003	11:58
1112F012.D	ZZZZZZ	ZZZZZZ	11/12/2003	12:06		11/12/2003	12:25
1112F013.D	ZZZZZZ	ZZZZZZ	11/12/2003	12:33		11/12/2003	12:53
1112F014.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:00		11/12/2003	13:19
1112F015.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:27		11/12/2003	13:46
1112F016.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:54		11/12/2003	14:13
1112F017.D	ZZZZZZ	ZZZZZZ	11/12/2003	14:21		11/12/2003	14:40
1112F018.D	ZZZZZZ	ZZZZZZ	11/12/2003	14:48		11/12/2003	15:07
1112F019.D	ZZZZZZ	ZZZZZZ	11/12/2003	15:15		11/12/2003	15:34
1112F020.D	ZZZZZZ	ZZZZZZ	11/12/2003	15:42		11/12/2003	16:01
1112F021.D	ZZZZZZ	ZZZZZZ	11/12/2003	16:09		11/12/2003	16:28
1112F022.D	E-CH03-12-T-A	K2307167-016	11/12/2003	16:36		11/12/2003	16:55
1112F023.D	E-CH03-12-T-B	K2307167-017	11/12/2003	17:03		11/12/2003	17:22
1112F024.D	E-CH03-12-T-C	K2307167-018	11/12/2003	17:30		11/12/2003	17:50
1112F025.D	E-CH03-12-T-D	K2307167-019	11/12/2003	17:57		11/12/2003	18:16
1112F026.D	E-CH03-12-T-E	K2307167-020	11/12/2003	18:24		11/12/2003	18:43

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M. Nasuta
Sample Matrix: Tissue

Service Request: K2307167
Date Extracted: 11/05/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0317779
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-12-T-A	K2307167-016		09/17/03	10.10g	1ml	NA	
E-CH03-12-T-B	K2307167-017		09/17/03	10.14g	1ml	NA	
E-CH03-12-T-C	K2307167-018		09/17/03	10.13g	1ml	NA	
E-CH03-12-T-D	K2307167-019		09/17/03	10.13g	1ml	NA	
E-CH03-12-T-E	K2307167-020		09/17/03	10.11g	1ml	NA	
Method Blank	KWG0317779-5	NA	NA	10.25g	1ml	NA	
Batch QC	K2307174-011	NA	NA	10.25g	1ml	NA	
Batch QCMS	KWG0317779-1	NA	NA	10.02g	1ml	NA	
Batch QCDMS	KWG0317779-2	NA	NA	10.00g	1ml	NA	
Lab Control Sample	KWG0317779-3	NA	NA	10.00g	1ml	NA	
Duplicate Lab Control Sample	KWG0317779-4	NA	NA	10.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

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1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

November 18, 2003 Service Request No: K2307174

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on September 17, 2003. For your reference, these analyses have been assigned our service request number K2307174.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/dj

NELAP Accredited ACIL Seal of Excellence Award

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2307174
Project:	Canaveral Harbor/M.nasuta	**Date Received:**	9/17/03
Sample Matrix:	Tissue		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Tissue samples were received for analysis at Columbia Analytical Services on 9/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored frozen at -20°C upon receipt at the laboratory.

The samples were placed on hold after receipt at the laboratory until compositing and analysis instructions were received. Refer to the Chain of Custody section of the report for a summary of the compositing and revised nomenclature received from ANAMAR.

Metals by EPA Method 200.8/6000/7000

The matrix spike recovery for Aluminum in sample M.nasuta CH03 Pre was outside the normal CAS/Kelso control criteria. Two factors apparently contributed to the outlier. The concentration of Aluminum in the native sample was significantly high relative to the amount spiked, which reduces the accuracy of the recovery. In addition, the sample contained small amounts of sediment that probably contributed to non-homogeneous distribution of Aluminum in the sample. This was also apparent from the replicate analyses. No further corrective action was feasible.

No other anomalies associated with the analysis of these samples were observed.

Butyltins by GC-FPD (M.O. Stallard, et al.)

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C/SIM

No anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 11/17/03

Chain of Custody Documentation

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES K2307167

Facility: MACTEC Engineering and consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-9	M. nasuta		A-E	K2307167
CH03-10	M. nasuta		A-E	
CH03-11	M. nasuta		A-E	
CH03-12	M. nasuta		A-E	
CH03-13	M. nasuta		A-E	
CH03-14	M. nasuta		A-E	
CH03-15	M. nasuta		A-E	
CH03-16	M. nasuta		A-E	
CH03-17	M. nasuta		A-E	
Total Number of Samples:	9			

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Aramar / Coronado Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	1577
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

	Sample Identification	Organism Genus species		Replicate Bags	Observations
A	CH03 - 20	M. nasuta		A-E	
B	Pre-test	M. nasuta			
C	E-CH03-CTRL	M. nasuta		A-F	*CTRL for sample CH03-20

Total Number of Samples:	3	

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Arsenic / Commercial Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	1517
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

K2307167

Project/Client Anamar Work Order K23 ~~0747~~ RB

Cooler received on 9-17-03 and opened on 9-17-03 by KM.

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: FX - Attach. Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.0 1.1 0.5
   Temperature Blank:
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Water, ice, plastic
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-9A		7167-001					
CH03-10A		7167-006					
CH03-11A		7167-011					
CH03-20A		7174-006					
	E-CH03-9,10,11,20-T-A (comp)			X	X	X	X
CH03-9B		7167-002					
CH03-10B		7167-007					
CH03-11B		7167-012					
CH03-20B		7174-007					
	E-CH03-9,10,11,20-T-B (comp)			X	X	X	X
CH03-9C		7167-003					
CH03-10C		7167-008					
CH03-11C		7167-013					
CH03-20C		7174-008					
	E-CH03-9,10,11,20-T-C (comp)			X	X	X	X
CH03-9D		7167-004					
CH03-10D		7167-009					
CH03-11D		7167-014					
CH03-20D		7174-009					
	E-CH03-9,10,11,20-T-D (comp)			X	X	X	X
CH03-9E		7167-005					
CH03-10E		7167-010					
CH03-11E		7167-015					
CH03-20E		7174-010					
	E-CH03-9,10,11,20-T-E (comp)			X	X	X	X
CH03-12A	E-CH03-12-T-A	7167-016	X				
CH03-12B	E-CH03-12-T-B	7167-017	X				
CH03-12C	E-CH03-12-T-C	7167-018	X				
CH03-12D	E-CH03-12-T-D	7167-019	X				
CH03-12E	E-CH03-12-T-E	7167-020	X				

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-12A		7167-016					
CH03-15A		7172-011					
	E-CH03-12,15-T-A (comp)			X	X	X	X
CH03-12B		7167-017					
CH03-15B		7172-012					
	E-CH03-12,15-T-B (comp)			X	X	X	X
CH03-12C		7167-018					
CH03-15C		7172-013					
	E-CH03-12,15-T-C (comp)			X	X	X	X
CH03-12D		7167-019					
CH03-15D		7172-014					
	E-CH03-12,15-T-D (comp)			X	X	X	X
CH03-12E		7167-020					
CH03-15E		7172-015					
	E-CH03-12,15-T-E (comp)			X	X	X	X
CH03-13A		7172-001					
CH03-16A		7172-016					
	E-CH03-13,16-T-A (comp)			X	X	X	X
CH03-13B		7172-002					
CH03-16B		7172-017					
	E-CH03-13,16-T-B (comp)			X	X	X	X
CH03-13C		7172-003					
CH03-16C		7172-018					
	E-CH03-13,16-T-C (comp)			X	X	X	X
CH03-13D		7172-004					
CH03-16D		7172-019					
	E-CH03-13,16-T-D (comp)			X	X	X	X
CH03-13E		7172-005					
CH03-16E		7172-020					
	E-CH03-13,16-T-E (comp)			X	X	X	X

K2307167, 7172, and 7174 (M.natusa - "clams")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
E-CH03-CTRL-A	RS-CH03-T-A	7174-012	X	X	X	X	X
E-CH03-CTRL-B	RS-CH03-T-B	7174-013	X	X	X	X	X
E-CH03-CTRL-C	RS-CH03-T-C	7174-014	X	X	X	X	X
E-CH03-CTRL-D	RS-CH03-T-D	7174-015	X	X	X	X	X
E-CH03-CTRL-E	RS-CH03-T-E	7174-016	X	X	X	X	X
M.nasuta Pre-Tissue	M.nasuta CH03 Pre	7174-011	X	X	X	X	X

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected: NA
Date Received: 9/17/03

Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
M.nasuta CH03 Pre	K2307174-011	10/15/03	14.2	
RS-CH03-T-A	K2307174-012	10/15/03	13.8	
RS-CH03-T-B	K2307174-013	10/15/03	15.2	
RS-CH03-T-C	K2307174-014	10/15/03	15.8	
RS-CH03-T-D	K2307174-015	10/15/03	10.3	
RS-CH03-T-E	K2307174-016	10/15/03	8.63	

Approved By: _____ Date: 10/31/03

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected: NA
Date Received: 9/17/03
Date Extracted: NA
Date Analyzed: 10/15/03

Duplicate Summary
Total Metals

Sample Name: M.nasuta CH03 Pre
Lab Code: K2307174-011D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	14.2	14.1	14.2	<1	

Approved By: _____ Date: 10/31/03

DUP/052595

07174ICP.EA1 - DUP 10/31/03

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Sample No.	Lab Sample ID.
M.nasuta CH03 Pre	K2307174-011
M.nasuta CH03 PreD	K2307174-011D
M.nasuta CH03 PreS	K2307174-011S
RS-CH03-T-A	K2307174-012
RS-CH03-T-B	K2307174-013
RS-CH03-T-C	K2307174-014
RS-CH03-T-D	K2307174-015
RS-CH03-T-E	K2307174-016
Method Blank	K2307174-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 10/31/03

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M. Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: M.nasuta CH03 Pre Lab Code: K2307174-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/18/03	10/28/03	33.5		*N
Antimony	200.8	0.007	0.001	5	10/18/03	10/28/03	0.013		
Arsenic	200.8	0.07	0.01	5	10/18/03	10/28/03	2.87		
Cadmium	200.8	0.003	0.001	5	10/18/03	10/28/03	0.028		
Chromium	6010B	0.07	0.04	1	10/18/03	10/28/03	0.44		
Copper	200.8	0.014	0.008	5	10/18/03	10/28/03	1.430		
Lead	200.8	0.0028	0.0004	5	10/18/03	10/28/03	0.0995		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.011		
Nickel	200.8	0.056	0.003	5	10/18/03	10/28/03	0.640		
Silver	200.8	0.0028	0.0004	5	10/18/03	10/28/03	0.0219		
Zinc	200.8	0.1	0.0	5	10/18/03	10/28/03	11.9		

% Solids: NA

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M. Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-A Lab Code: K2307174-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.8	0.8	1	10/18/03	10/28/03	54.0		*N
Antimony	200.8	0.008	0.001	5	10/18/03	10/28/03	0.011		
Arsenic	200.8	0.08	0.01	5	10/18/03	10/28/03	1.90		
Cadmium	200.8	0.003	0.002	5	10/18/03	10/28/03	0.017		
Chromium	6010B	0.08	0.05	1	10/18/03	10/28/03	4.97		
Copper	200.8	0.015	0.009	5	10/18/03	10/28/03	1.700		
Lead	200.8	0.0030	0.0005	5	10/18/03	10/28/03	0.1500		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.009		
Nickel	200.8	0.061	0.003	5	10/18/03	10/28/03	2.690		
Silver	200.8	0.0030	0.0005	5	10/18/03	10/28/03	0.0092		
Zinc	200.8	0.1	0.0	5	10/18/03	10/28/03	17.2		

% Solids: NA

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M. Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-B Lab Code: K2307174-013

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.8	0.8	1	10/18/03	10/28/03	114		*N
Antimony	200.8	0.008	0.001	5	10/18/03	10/28/03	0.011		
Arsenic	200.8	0.08	0.01	5	10/18/03	10/28/03	2.08		
Cadmium	200.8	0.003	0.002	5	10/18/03	10/28/03	0.022		
Chromium	6010B	0.08	0.05	1	10/18/03	10/28/03	3.39		
Copper	200.8	0.015	0.009	5	10/18/03	10/28/03	1.930		
Lead	200.8	0.0030	0.0005	5	10/18/03	10/28/03	0.2200		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.011		
Nickel	200.8	0.061	0.003	5	10/18/03	10/28/03	2.140		
Silver	200.8	0.0030	0.0005	5	10/18/03	10/28/03	0.0152		
Zinc	200.8	0.1	0.0	5	10/18/03	10/28/03	12.4		

% Solids: NA

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M. Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-C Lab Code: K2307174-014

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.8	0.8	1	10/18/03	10/28/03	119		*N
Antimony	200.8	0.008	0.001	5	10/18/03	10/28/03	0.010		
Arsenic	200.8	0.08	0.01	5	10/18/03	10/28/03	2.12		
Cadmium	200.8	0.003	0.002	5	10/18/03	10/28/03	0.024		
Chromium	6010B	0.08	0.05	1	10/18/03	10/28/03	7.34		
Copper	200.8	0.016	0.009	5	10/18/03	10/28/03	1.790		
Lead	200.8	0.0032	0.0005	5	10/18/03	10/28/03	0.2180		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.011		
Nickel	200.8	0.063	0.003	5	10/18/03	10/28/03	4.280		
Silver	200.8	0.0032	0.0005	5	10/18/03	10/28/03	0.0196		
Zinc	200.8	0.1	0.0	5	10/18/03	10/28/03	14.1		

% Solids: NA

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M. Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-D Lab Code: K2307174-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.5	0.5	1	10/18/03	10/28/03	43.1		*N
Antimony	200.8	0.005	0.001	5	10/18/03	10/28/03	0.013		
Arsenic	200.8	0.05	0.01	5	10/18/03	10/28/03	2.09		
Cadmium	200.8	0.002	0.001	5	10/18/03	10/28/03	0.012		
Chromium	6010B	0.05	0.03	1	10/18/03	10/28/03	5.86		
Copper	200.8	0.010	0.006	5	10/18/03	10/28/03	1.410		
Lead	200.8	0.0021	0.0003	5	10/18/03	10/28/03	0.1140		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.011		
Nickel	200.8	0.041	0.002	5	10/18/03	10/28/03	3.110		
Silver	200.8	0.0021	0.0003	5	10/18/03	10/28/03	0.0119		
Zinc	200.8	0.1	0.0	5	10/18/03	10/28/03	9.0		

% Solids: NA

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M. Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-E Lab Code: K2307174-016

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.4	0.4	1	10/18/03	10/28/03	57.9		*N
Antimony	200.8	0.004	0.001	5	10/18/03	10/28/03	0.008		
Arsenic	200.8	0.04	0.00	5	10/18/03	10/28/03	1.51		
Cadmium	200.8	0.002	0.001	5	10/18/03	10/28/03	0.011		
Chromium	6010B	0.04	0.03	1	10/18/03	10/28/03	2.79		
Copper	200.8	0.009	0.005	5	10/18/03	10/28/03	1.180		
Lead	200.8	0.0017	0.0003	5	10/18/03	10/28/03	0.0975		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.007		
Nickel	200.8	0.035	0.002	5	10/18/03	10/28/03	1.520		
Silver	200.8	0.0017	0.0003	5	10/18/03	10/28/03	0.0103		
Zinc	200.8	0.0	0.0	5	10/18/03	10/28/03	9.6		

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M. Nasuta	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: Method Blank Lab Code: K2307174-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	5.0	U	*N
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.006	U	
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	0.05	U	
Cadmium	200.8	0.020	0.010	5	10/18/03	10/28/03	0.010	U	
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	0.30	U	
Copper	200.8	0.100	0.060	5	10/18/03	10/28/03	0.166		
Lead	200.8	0.0200	0.0030	5	10/18/03	10/28/03	0.0057	B	
Mercury	7471A	0.005	0.003	1	10/21/03	10/22/03	0.003	U	
Nickel	200.8	0.400	0.020	5	10/18/03	10/28/03	0.020	U	
Silver	200.8	0.0200	0.0030	5	10/18/03	10/28/03	0.0030	U	
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	0.2	U	

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: M.nasuta CH03 Pre Lab Code: K2307174-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	236		*N
Antimony	200.8	0.05	0.01	5	10/18/03	10/28/03	0.09		
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	20.2		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.20		
Chromium	6010B	0.5	0.3	1	10/18/03	10/28/03	3.1		
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	10.1		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.701		
Mercury	7471A	0.03	0.01	1	10/21/03	10/22/03	0.08		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	4.51		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.154		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	83.6		

% Solids: 14.2

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-A Lab Code: K2307174-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.5	5.5	1	10/18/03	10/28/03	391		*N
Antimony	200.8	0.06	0.01	5	10/18/03	10/28/03	0.08		
Arsenic	200.8	0.55	0.06	5	10/18/03	10/28/03	13.8		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.12		
Chromium	6010B	0.6	0.3	1	10/18/03	10/28/03	36.0		
Copper	200.8	0.11	0.07	5	10/18/03	10/28/03	12.3		
Lead	200.8	0.022	0.003	5	10/18/03	10/28/03	1.090		
Mercury	7471A	0.03	0.02	1	10/21/03	10/22/03	0.07		
Nickel	200.8	0.44	0.02	5	10/18/03	10/28/03	19.5		
Silver	200.8	0.022	0.003	5	10/18/03	10/28/03	0.066		
Zinc	200.8	0.6	0.2	5	10/18/03	10/28/03	125		

% Solids: 13.8

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-B Lab Code: K2307174-013

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	750		*N
Antimony	200.8	0.05	0.01	5	10/18/03	10/28/03	0.07		
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	13.7		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/18/03	10/28/03	22.3		
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	12.7		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	1.450		
Mercury	7471A	0.03	0.01	1	10/21/03	10/22/03	0.07		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	14.0		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.100		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	81.8		

% Solids: 15.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-C Lab Code: K2307174-014

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	751		*N
Antimony	200.8	0.05	0.01	5	10/18/03	10/28/03	0.07		
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	13.4		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.15		
Chromium	6010B	0.5	0.3	1	10/18/03	10/28/03	46.5		
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	11.4		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	1.380		
Mercury	7471A	0.02	0.01	1	10/21/03	10/22/03	0.07		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	27.1		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.124		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	89.1		

% Solids: 15.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-D Lab Code: K2307174-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	419		*N
Antimony	200.8	0.05	0.01	5	10/18/03	10/28/03	0.13		
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	20.3		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.12		
Chromium	6010B	0.5	0.3	1	10/18/03	10/28/03	56.9		
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	13.7		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	1.110		
Mercury	7471A	0.04	0.02	1	10/21/03	10/22/03	0.11		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	30.2		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.116		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	87.5		

% Solids: 10.3

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.Nasuta	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-E Lab Code: K2307174-016

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	673		*N
Antimony	200.8	0.05	0.01	5	10/18/03	10/28/03	0.09		
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	17.5		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.13		
Chromium	6010B	0.5	0.3	1	10/18/03	10/28/03	32.5		
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	13.7		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	1.130		
Mercury	7471A	0.04	0.02	1	10/21/03	10/22/03	0.08		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	17.7		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.120		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	112		

% Solids: 8.6

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307174
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/M.Nasuta	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: Method Blank Lab Code: K2307174-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	5.0	U	*N
Antimony	200.8	0.05	0.01	5	10/18/03	10/28/03	0.01	U	
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	0.05	U	
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.01	U	
Chromium	6010B	0.5	0.3	1	10/18/03	10/28/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	0.17		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.006	B	
Mercury	7471A	0.02	0.01	1	10/21/03	10/22/03	0.01	U	
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	0.02	U	
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.003	U	
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	0.2	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4910	98	5000	5000	100	5050	101	6010B
Antimony	25.0	25.2	101	25.0	24.9	100	24.3	97	200.8
Arsenic	25.0	25.4	102	25.0	24.9	100	24.8	99	200.8
Cadmium	12.5	13.0	104	25.0	25.2	101	25.1	100	200.8
Chromium	500	491	98	500	499	100	494	99	6010B
Copper	12.5	12.6	101	25.0	24.7	99	24.5	98	200.8
Lead	25.0	24.9	100	25.0	24.8	99	24.6	98	200.8
Mercury	5.0	4.92	98	5.0	5.01	100	5.30	106	7471A
Nickel	25.0	25.3	101	25.0	24.9	100	24.6	98	200.8
Silver	12.5	12.7	102	25.0	25.0	100	25.0	100	200.8
Zinc	25.0	25.6	102	25.0	24.7	99	24.5	98	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICV Source: CCV Source: Various

Concentration Units: ug/l

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5110	102	4940	99	6010B
Antimony				25.0	24.8	99			200.8
Arsenic				25.0	24.4	98			200.8
Cadmium				25.0	24.8	99			200.8
Chromium				500	495	99	504	101	6010B
Copper				25.0	24.0	96			200.8
Lead				25.0	24.6	98			200.8
Mercury				5.0	5.26	105	5.24	105	7471A
Nickel				25.0	24.1	96			200.8
Silver				25.0	24.3	97			200.8
Zinc				25.0	24.0	96			200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4940	99			6010B
Chromium				500	501	100			6010B

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Concentration Units: ug/I

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				100	116	116		
Antimony				0.10	0.11	112		
Arsenic				1.0	1.05	105		
Cadmium				0.10	0.11	107		
Chromium				5.0	4.69	94		
Copper				0.20	0.28	139		
Lead				0.04	0.0526	132		
Mercury	0.20	0.216	108					
Nickel				0.40	0.46	114		
Silver				0.04	0.0559	140		
Zinc				1.0	1.24	124		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U						6010B
Antimony	0.021	B	0.012	U	0.01	B	0.012	U						200.8
Arsenic	0.10	U	0.10	U	0.10	U	0.10	U						200.8
Cadmium	0.020	U	0.020	U	0.02	U	0.020	U						200.8
Chromium	3.00	U	3.00	U	3.00	U	3.00	U						6010B
Copper	0.12	U	0.12	U	0.12	U	0.12	U						200.8
Lead	0.0060	U	0.0060	U	0.0060	U	0.0060	U						200.8
Mercury	0.100	U	0.100	U	0.100	U	0.100	U						7471A
Nickel	0.040	U	0.040	U	-0.080	B	-0.140	B						200.8
Silver	0.0060	U	0.0060	U	0.0060	U	0.0060	U						200.8
Zinc	0.4	U	0.4	U	0.4	U	0.4	U						200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum			50.0	U	50.0	U								6010B
Chromium			3.00	U	3.00	U								6010B
Mercury			0.100	U										7471A

METALS
-4-
ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	482000	491000	98			
Chromium		500	-0.08	443	89			

000038

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307174
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M. Nasuta
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: M.nasuta CH03 PreS
Lab Code: K2307174-011S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	60 - 130	79.9		33.5		28.3	165	N	6010B
Antimony	70 - 130	6.990		0.013		7.060	99		200.8
Arsenic	70 - 130	5.54		2.87		2.83	95		200.8
Cadmium	70 - 130	0.809		0.028		0.706	110		200.8
Chromium	60 - 130	3.35		0.44		2.83	103		6010B
Copper	70 - 130	5.300		1.430		3.530	110		200.8
Lead	70 - 130	7.2700		0.0995		7.0600	102		200.8
Mercury	60 - 130	0.093		0.011		0.098	84		7471A
Nickel	70 - 130	8.080		0.640		7.060	105		200.8
Silver	70 - 130	0.5650		0.0219		0.7060	77		200.8
Zinc	70 - 130	20.8		11.9		7.1	126		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307174
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/M. Nasuta
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: M.nasuta CH03 PreD
Lab Code: K2307174-011D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	33.5		46.8		33	*	6010B
Antimony		0.013		0.015		14		200.8
Arsenic	30	2.87		3.05		6		200.8
Cadmium	30	0.028		0.029		5		200.8
Chromium	30	0.44		0.53		18		6010B
Copper	30	1.430		1.610		12		200.8
Lead	30	0.0995		0.1080		8		200.8
Mercury		0.011		0.011		2		7471A
Nickel	30	0.640		0.752		16		200.8
Silver	30	0.0219		0.0238		8		200.8
Zinc	30	11.9		12.8		7		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Caneveral Harbor/M.Nasuta	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/18,21/03
		Date Analyzed:	10/22-28/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307174-LCS	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dorm-2

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Arsenic	PSEP Tissue	200.8	18.0	20.5	114	13.5-22.9	
Chromium	PSEP Tissue	6010B	34.7	34.6	100	23.4-48.2	
Copper	PSEP Tissue	200.8	2.34	2.28	97	1.74-3.00	
Lead	PSEP Tissue	200.8	0.065	0.062	95	0.020-0.091	
Nickel	PSEP Tissue	200.8	19.4	18.9	97	13.0-27.0	
Zinc	PSEP Tissue	200.8	25.6	26.5	104	20.3-31.0	

Approved By: JC Date: 10/31/03

LCS/032295

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Caneveral Harbor/M.Nasuta	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/18,21/03
		Date Analyzed:	10/22-28/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307174-LCS	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dolt-3

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Aluminum	PSEP Tissue	6010B	24.7	30.9	125	18.2-31.9	
Arsenic	PSEP Tissue	200.8	10.2	10.7	105	7.76-12.8	
Cadmium	PSEP Tissue	200.8	19.4	20.7	107	15.0-24.0	
Copper	PSEP Tissue	200.8	31.2	33.2	106	24.2-38.6	
Lead	PSEP Tissue	200.8	0.319	0.359	113	0.219-0.437	
Mercury	PSEP Tissue	7471A	3.37	3.19	95	2.58-4.21	
Nickel	PSEP Tissue	200.8	2.72	3.30	121	1.90-3.68	
Silver	PSEP Tissue	200.8	1.2	1.27	106	0.90-1.52	
Zinc	PSEP Tissue	200.8	86.6	101	117	67.4-107	

Approved By: JC Date: 10/31/03

LCS/032295

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Caneveral Harbor/M.Nasuta	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/18,21/03
		Date Analyzed:	10/22-28/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307174-LCS	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dolt-3

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Mercury	PSEP Tissue	7471A	3.37	3.08	91	2.58-4.21	

Approved By: _____ Date: 10/31/03

LCS/032295

METALS
-9-
ICP SERIAL DILUTIONS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.: Units: ug/L

Project Name: Canaveral Harbor/M. Nasuta

Sample Name: M.nasuta CH03 PreL Lab Code: K2307174-011L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-	Q	Method
Aluminum	2380		2210		7		6010B
Chromium	31.4		30.9		2		6010B

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.200	0.100	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.100	0.012	200.8
Arsenic	75		1.00	0.10	200.8
Cadmium	111		0.040	0.020	200.8
Copper	65		0.20	0.12	200.8
Lead	208		0.0400	0.0060	200.8
Nickel	60		0.800	0.040	200.8
Silver	107		0.0400	0.0060	200.8
Zinc	66		1.0	0.4	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	237.30		50.0	50.0	6010B
Chromium	267.72		5.00	3.00	6010B

Comments

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0009000	0.0000000	-0.0035000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0125000
Arsenic	189.0	0.0000000	0.0000000	-0.0001400	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000900	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000230	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003000	0.0000000	0.0000000	0.0000000	-0.0003600
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009500	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000780	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0005000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0001000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	-0.0012000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Mo	Ni	Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019000
Antimony	206.8	-0.0280000	0.0000000	0.0002400	0.0000000	0.0004000
Arsenic	189.0	0.0010000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	-0.0004700	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000250	-0.0000120	0.0000600	0.0000000	-0.0000560
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001700	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015000	0.0000000	0.0000000
Copper	324.7	0.0003400	0.0000000	-0.0000070	-0.0017000	0.0000000
Iron	259.9	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.0740000	0.0700000
Lead	220.3	-0.0016000	0.0004600	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0001200
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0006800	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0003000	0.0000000	0.0000000	-0.0001700	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0005500	-0.0060000	-0.0002500	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0016000	0.0017000	0.0037000
Tin	189.9	0.0000000	0.0000000	-0.0019000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002500	0.0000000	-0.0006400	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	-0.0000600	0.0000000	0.0000000

Columbia Analytical Services, Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003100	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0004000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0005900	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	200.8
Arsenic	15.00	800.0	200.8
Cadmium	15.00	1000.0	200.8
Copper	15.00	1000.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	1000.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	1000.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Chromium	5.00	200000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Canaveral Harbor/M. Nasuta

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCS DORM	10/18/03	PSEP TISSUE	0.301	30
LCS DOLT	10/18/03	PSEP TISSUE	0.302	30
K2307174-011	10/18/03	PSEP TISSUE	2.13	30
K2307174-011D	10/18/03	PSEP TISSUE	2.11	30
K2307174-011S	10/18/03	PSEP TISSUE	2.12	30
K2307174-MB	10/18/03	PSEP TISSUE	0.300	30
K2307174-012	10/18/03	PSEP TISSUE	1.45	22
K2307174-013	10/18/03	PSEP TISSUE	1.97	30
K2307174-014	10/18/03	PSEP TISSUE	1.90	30
K2307174-015	10/18/03	PSEP TISSUE	2.92	30
K2307174-016	10/18/03	PSEP TISSUE	3.48	30

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Canaveral Harbor/M. Nasuta

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCS DOLT	10/21/03	PSEP TISSUE	0.538	100
K2307174-011	10/21/03	PSEP TISSUE	2.59	50
K2307174-011D	10/21/03	PSEP TISSUE	2.53	50
K2307174-011S	10/21/03	PSEP TISSUE	2.56	50
K2307174-MB	10/21/03	PSEP TISSUE	2.00	50
K2307174-012	10/21/03	PSEP TISSUE	1.17	50
K2307174-013	10/21/03	PSEP TISSUE	2.52	50
K2307174-014	10/21/03	PSEP TISSUE	2.63	50
K2307174-015	10/21/03	PSEP TISSUE	2.53	50
K2307174-016	10/21/03	PSEP TISSUE	2.68	50

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Canaveral Harbor/M. Nasuta

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCS DORM	10/18/03	PSEP TISSUE	0.301	30
LCS DOLT	10/18/03	PSEP TISSUE	0.302	30
K2307174-011	10/18/03	PSEP TISSUE	2.13	30
K2307174-011D	10/18/03	PSEP TISSUE	2.11	30
K2307174-011S	10/18/03	PSEP TISSUE	2.12	30
K2307174-MB	10/18/03	PSEP TISSUE	0.300	30
K2307174-012	10/18/03	PSEP TISSUE	1.45	22
K2307174-013	10/18/03	PSEP TISSUE	1.97	30
K2307174-014	10/18/03	PSEP TISSUE	1.90	30
K2307174-015	10/18/03	PSEP TISSUE	2.92	30
K2307174-016	10/18/03	PSEP TISSUE	3.48	30

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/22/03 End Date: 10/22/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	10:04																X									
STANDARD #1	1.00	10:06																X									
STANDARD #2	1.00	10:07																X									
STANDARD #3	1.00	10:09																X									
STANDARD #4	1.00	10:10																X									
STANDARD #5	1.00	10:12																X									
ICV	1.00	10:14																X									
ICB	1.00	10:15																X									
CCV1	1.00	10:17																X									
CCB1	1.00	10:18																X									
CRA	1.00	10:20																X									
K2307174-MB	1.00	10:22																X									
LCS DOLT	2.00	10:23																X									
K2307174-011	1.00	10:25																X									
K2307174-011D	1.00	10:26																X									
K2307174-011S	1.00	10:28																X									
K2307174-012	1.00	10:30																X									
K2307174-013	1.00	10:31																X									
K2307174-014	1.00	10:33																X									
K2307174-015	1.00	10:35																X									
CCV2	1.00	10:36																X									
CCB2	1.00	10:38																X									
K2307174-016	1.00	10:39																X									
CCV3	1.00	10:41																X									
CCB3	1.00	10:43																X									
ZZZZZZ	1.00	10:45																									
ZZZZZZ	2.00	10:47																									
ZZZZZZ	1.00	10:49																									
ZZZZZZ	1.00	10:50																									
ZZZZZZ	1.00	10:52																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/22/03 End Date: 10/22/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:53																									
ZZZZZZ	1.00	10:55																									
ZZZZZZ	1.00	10:57																									
ZZZZZZ	1.00	10:58																									
CCV4	1.00	11:00																X									
CCB4	1.00	11:01																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	08:29		X							X																
CAL-STDA	1.00	08:32									X																
CAL-STDB	1.00	08:35		X																							
ICV	1.00	08:40		X							X																
ZZZZZZ	1.00	08:44																									
ICB	1.00	08:50		X							X																
CCV1	1.00	08:54									X																
ZZZZZZ	1.00	08:59																									
CCB1	1.00	09:04		X							X																
CRI	1.00	09:11		X							X																
ICSA	1.00	09:13		X							X																
ICSAB	1.00	09:17		X							X																
K2307174-MB	1.00	09:21		X							X																
LCS DORM	1.00	09:24		X							X																
LCS DOLT	1.00	09:26		X							X																
K2307174-011	1.00	09:30		X							X																
K2307174-011L	5.00	09:34		X							X																
K2307174-011D	1.00	09:38		X							X																
K2307174-011S	1.00	09:40		X							X																
CCV2	1.00	09:43									X																
ZZZZZZ	1.00	09:46																									
CCB2	1.00	09:48		X							X																
K2307174-012	1.00	10:10		X							X																
K2307174-013	1.00	10:13		X							X																
K2307174-014	1.00	10:15		X							X																
K2307174-015	1.00	10:17		X							X																
K2307174-016	1.00	10:20		X							X																
ZZZZZZ	1.00	10:24																									
ZZZZZZ	1.00	10:27																									
ZZZZZZ	1.00	10:29																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:32																									
ZZZZZZ	1.00	10:35																									
CCV3	1.00	10:38									X																
ZZZZZZ	1.00	10:41																									
CCB3	1.00	10:44		X							X																
CCV4	1.00	10:47									X																
ZZZZZZ	1.00	10:50																									
CCB4	1.00	10:52		X							X																
ZZZZZZ	1.00	10:55																									
ZZZZZZ	1.00	10:57																									
ZZZZZZ	1.00	11:00																									
ZZZZZZ	1.00	11:02																									
ZZZZZZ	1.00	11:10																									
ZZZZZZ	1.00	11:13																									
ZZZZZZ	1.00	11:16																									
ZZZZZZ	1.00	11:18																									
ZZZZZZ	1.00	11:21																									
ZZZZZZ	1.00	11:23																									
CCV5	1.00	11:26									X																
ZZZZZZ	1.00	11:28																									
CCB5	1.00	11:31		X							X																

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307174

Project No.:

Project Name: Canaveral Harbor/M. Nasuta

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:27			X	X			X				X		X				X			X				X	
25 PPB STD. MS4-9-C	1.00	11:32			X	X			X				X		X				X			X				X	
ICV	1.00	11:37			X	X			X				X		X				X			X				X	
CCV1	1.00	11:40			X	X			X				X		X				X			X				X	
ICB	1.00	11:47			X	X			X				X		X				X			X				X	
CCB1	1.00	11:49			X	X			X				X		X				X			X				X	
CRA	1.00	11:53			X	X			X				X		X				X			X				X	
K2307174-MB	5.00	12:15			X	X			X				X		X				X			X				X	
LCS DORM	5.00	12:19			X	X			X				X		X				X			X				X	
LCS DOLT	5.00	12:22			X	X			X				X		X				X			X				X	
K2307174-011	5.00	12:25			X	X			X				X		X				X			X				X	
K2307174-011D	5.00	12:29			X	X			X				X		X				X			X				X	
K2307174-011S	25.00	12:36			X	X			X				X		X				X			X				X	
K2307174-012	5.00	12:42			X	X			X				X		X				X			X				X	
K2307174-013	5.00	12:45			X	X			X				X		X				X			X				X	
K2307174-014	5.00	12:48			X	X			X				X		X				X			X				X	
CCV2	1.00	12:53			X	X			X				X		X				X			X				X	
CCB2	1.00	13:00			X	X			X				X		X				X			X				X	
K2307174-015	5.00	13:04			X	X			X				X		X				X			X				X	
K2307174-016	5.00	13:07			X	X			X				X		X				X			X				X	
ZZZZZZ	5.00	13:14																									
ZZZZZZ	5.00	13:18																									
ZZZZZZ	25.00	13:21																									
ZZZZZZ	5.00	13:29																									
ZZZZZZ	5.00	13:33																									
ZZZZZZ	5.00	13:36																									
ZZZZZZ	5.00	13:40																									
ZZZZZZ	5.00	13:43																									
CCV3	1.00	13:47			X	X			X				X		X				X			X				X	
CCB3	1.00	13:56			X	X			X				X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Lipids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 9/17/2003

Lipids, Total

Prep Method: TISSUEMIZER
Analysis Method: PSEP
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
M.nasuta CH03 Pre	K2307174-011	0.25	10/24/2003	10/28/2003	0.57	
RS-CH03-T-A	K2307174-012	0.24	10/24/2003	10/28/2003	0.46	
RS-CH03-T-B	K2307174-013	0.24	10/24/2003	10/28/2003	0.43	
RS-CH03-T-C	K2307174-014	0.24	10/24/2003	10/28/2003	0.49	
RS-CH03-T-D	K2307174-015	0.25	10/24/2003	10/28/2003	0.34	
RS-CH03-T-E	K2307174-016	0.24	10/24/2003	10/28/2003	ND	

Approved By: _____ Date: 10/29/03

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 9/17/2003
Date Extracted: 10/24/2003
Date Analyzed: 10/28/2003

Triplicate Summary
Lipids, Total

Sample Name: M.nasuta CH03 Pre
Lab Code: K2307174-011
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Lab Code	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Percent Relative Standard Deviation	Result Notes
K2307174-011	TISSUEMIZER	PSEP	0.25	0.57	0.51	0.52	0.53	6	

Approved By: _____ Date: 10/30/03

DUP/091599p

07174SVG.ab1 - TRP 10/30/2003

Butyltins

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
M.nasuta CH03 Pre	K2307174-011		09/17/2003
RS-CH03-T-A	K2307174-012		09/17/2003
RS-CH03-T-B	K2307174-013		09/17/2003
RS-CH03-T-C	K2307174-014		09/17/2003
RS-CH03-T-D	K2307174-015		09/17/2003
RS-CH03-T-E	K2307174-016		09/17/2003
M.nasuta CH03 PreMS	KWG0317203-1		09/17/2003
M.nasuta CH03 PreDMS	KWG0317203-2		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Christina Quinn

Name: CHRISTINA QUINN

Date: 11/13/03

Title: SCIENTIST

000065

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	M.nasuta CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307174-011	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**0.78**	J	1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307174-012	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.78	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	1.2	1.2	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**3.1**		0.78	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	0.78	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307174-013	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**1.1**		0.99	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**4.5**		0.99	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307174-014	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	1.2	1.2	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**6.6**		1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**0.51**	J	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	111	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307174-015	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	1.0	1.0	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**5.6**		1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**0.64**	J	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	111	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307174-016	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	1.0	1.0	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**3.7**		1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317203-6	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	M.nasuta CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307174-011	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.0	2.7	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	7.0	2.4	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**5.5**	J	7.0	2.5	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	7.0	2.7	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	94	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307174-012	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	5.7	2.8	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	8.5	8.5	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**22**		5.7	2.6	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	5.7	2.8	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307174-013	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	6.5	2.5	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**7.5**		6.5	2.2	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**29**		6.5	2.4	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	6.5	2.5	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307174-014	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	6.4	2.5	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	7.6	7.6	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**42**		6.4	2.3	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**3.2**	J	6.4	2.5	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	111	26-169	11/07/03	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307174-015	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	9.7	3.7	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	9.7	9.7	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**54**		9.7	3.4	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**6.2**	J	9.7	3.7	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	111	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307174-016	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	12	4.5	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	Ui	12	12	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**43**		12	4.1	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	12	4.5	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317203-6	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
M.nasuta CH03 Pre	K2307174-011	94
RS-CH03-T-A	K2307174-012	102
RS-CH03-T-B	K2307174-013	112
RS-CH03-T-C	K2307174-014	111
RS-CH03-T-D	K2307174-015	111
RS-CH03-T-E	K2307174-016	110
Method Blank	KWG0317203-6	102
M.nasuta CH03 PreMS	KWG0317203-1	97
M.nasuta CH03 PreDMS	KWG0317203-2	106
Lab Control Sample	KWG0317203-5	107

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 26-169

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Extracted: 10/27/2003
Date Analyzed: 11/07/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name: M.nasuta CH03 Pre
Lab Code: K2307174-011

Units: ug/Kg
Basis: Wet

Extraction Method: METHOD
Analysis Method: GC-FPD

Level: Low
Extraction Lot: KWG0317203

Analyte Name	Sample Result	M.nasuta CH03 PreMS KWG0317203-1 Matrix Spike			M.nasuta CH03 PreDMS KWG0317203-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Tetra-n-butyltin	ND	14.9	25.0	60	16.9	24.5	69	29-120	12	50
Tri-n-butyltin	ND	19.2	25.0	77	28.5	24.5	116	10-155	39	50
Di-n-butyltin	0.78	22.0	25.0	85	21.8	24.5	86	30-131	1	50
n-Butyltin	ND	14.3	25.0	57	20.0	24.5	82	10-178	34	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Extracted: 10/27/2003
Date Analyzed: 11/07/2003

Lab Control Spike Summary
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0317203

	Lab Control Sample KWG0317203-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	18.4	25.0	74	32-134
Tri-n-butyltin	21.9	25.0	87	39-146
Di-n-butyltin	21.8	25.0	87	42-142
n-Butyltin	16.1	25.0	65	28-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003
		Time Analyzed:	07:24

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\110603\1106F051.D
Lab Code:	KWG0317203-6	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317203

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317203-5	J:\GC11\DATA\110603\1106F052.D	11/07/03	07:42
M.nasuta CH03 Pre	K2307174-011	J:\GC11\DATA\110603\1106F053.D	11/07/03	08:00
M.nasuta CH03 PreMS	KWG0317203-1	J:\GC11\DATA\110603\1106F054.D	11/07/03	08:18
M.nasuta CH03 PreDMS	KWG0317203-2	J:\GC11\DATA\110603\1106F055.D	11/07/03	08:36
RS-CH03-T-A	K2307174-012	J:\GC11\DATA\110603\1106F056.D	11/07/03	08:54
RS-CH03-T-B	K2307174-013	J:\GC11\DATA\110603\1106F057.D	11/07/03	09:12
RS-CH03-T-C	K2307174-014	J:\GC11\DATA\110603\1106F058.D	11/07/03	09:31
RS-CH03-T-D	K2307174-015	J:\GC11\DATA\110603\1106F059.D	11/07/03	09:48
RS-CH03-T-E	K2307174-016	J:\GC11\DATA\110603\1106F060.D	11/07/03	10:06

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003
		Time Analyzed:	07:42

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\110603\1106F052.D
Lab Code:	KWG0317203-5	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317203

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317203-6	J:\GC11\DATA\110603\1106F051.D	11/07/03	07:24
M.nasuta CH03 Pre	K2307174-011	J:\GC11\DATA\110603\1106F053.D	11/07/03	08:00
M.nasuta CH03 PreMS	KWG0317203-1	J:\GC11\DATA\110603\1106F054.D	11/07/03	08:18
M.nasuta CH03 PreDMS	KWG0317203-2	J:\GC11\DATA\110603\1106F055.D	11/07/03	08:36
RS-CH03-T-A	K2307174-012	J:\GC11\DATA\110603\1106F056.D	11/07/03	08:54
RS-CH03-T-B	K2307174-013	J:\GC11\DATA\110603\1106F057.D	11/07/03	09:12
RS-CH03-T-C	K2307174-014	J:\GC11\DATA\110603\1106F058.D	11/07/03	09:31
RS-CH03-T-D	K2307174-015	J:\GC11\DATA\110603\1106F059.D	11/07/03	09:48
RS-CH03-T-E	K2307174-016	J:\GC11\DATA\110603\1106F060.D	11/07/03	10:06

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D	D	J:\GC11\DATA\110403B\1104F006.D
B	J:\GC11\DATA\110403B\1104F004.D	E	J:\GC11\DATA\110403B\1104F007.D
C	J:\GC11\DATA\110403B\1104F005.D	F	J:\GC11\DATA\110403B\1104F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	618	B	54	552	C	110	576	D	540	539	E	1100	555
	F	2100	512												
Tetra-n-butyltin	A	10	626	B	50	562	C	100	561	D	500	539	E	1000	580
	F	2000	514												
Tri-n-butyltin	A	10	835	B	50	689	C	100	711	D	500	635	E	1000	653
	F	2000	603												
Di-n-butyltin	A	10	905	B	50	846	C	100	887	D	500	838	E	1000	856
	F	2000	793												
n-Butyltin	A	10	1320	B	50	1180	C	100	1160	D	500	1050	E	1000	1100
	F	2000	1010												

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	6.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	11.9		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	9.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	410	564	493	-13	NA	± 30 %	AverageRF
Tri-n-butyltin	480	420	688	599	-13	NA	± 30 %	AverageRF
Di-n-butyltin	480	400	854	722	-16	NA	± 30 %	AverageRF
n-Butyltin	490	410	1140	947	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000087

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D\1104R003.D	D	J:\GC11\DATA\110403B\1104F006.D\1104R006.D
B	J:\GC11\DATA\110403B\1104F004.D\1104R004.D	E	J:\GC11\DATA\110403B\1104F007.D\1104R007.D
C	J:\GC11\DATA\110403B\1104F005.D\1104R005.D	F	J:\GC11\DATA\110403B\1104F008.D\1104R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	186	B	54	191	C	110	178	D	540	183	E	1100	202
	F	2100	192												
Tetra-n-butyltin	A	10	219	B	50	196	C	100	195	D	500	193	E	1000	206
	F	2000	203												
Tri-n-butyltin	A	10	263	B	50	225	C	100	238	D	500	231	E	1000	246
	F	2000	238												
Di-n-butyltin	A	10	330	B	50	275	C	100	285	D	500	299	E	1000	316
	F	2000	307												
n-Butyltin	A	10	507	B	50	365	C	100	392	D	500	391	E	1000	421
	F	2000	403												

Results flagged with an asterisk (*) indicate values outside control criteria.

000088

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	4.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	5.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	6.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	11.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

000089

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D\1104R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	400	202	174	-14	NA	± 30 %	AverageRF
Tri-n-butyltin	480	400	240	200	-17	NA	± 30 %	AverageRF
Di-n-butyltin	480	410	302	262	-13	NA	± 30 %	AverageRF
n-Butyltin	490	410	413	345	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000090

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F050.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	585	5	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	510	564	571	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	688	676	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	854	893	5	NA	± 25 %	AverageRF
n-Butyltin	500	480	1140	1100	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F050.D\1106R050.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	189	0	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	480	202	194	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	240	232	-3	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	302	299	-1	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	403	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F063.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	583	4	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	500	564	567	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	688	672	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	873	2	NA	± 25 %	AverageRF
n-Butyltin	500	490	1140	1100	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F063.D\1106R063.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	189	0	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	460	202	184	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	240	231	-4	NA	± 25 %	AverageRF
Di-n-butyltin	500	480	302	292	-3	NA	± 25 %	AverageRF
n-Butyltin	500	480	413	395	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000094

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1105F080.D	Instrument Blank	KWG0318147-1	11/6/2003	14:46		11/6/2003	14:58
1105F081.D	Continuing Calibration Verification	KWG0318147-8	11/6/2003	15:03		11/6/2003	15:15
1106F001.D	ZZZZZZ	ZZZZZZ	11/6/2003	16:33		11/6/2003	16:45
1106F002.D	ZZZZZZ	ZZZZZZ	11/6/2003	16:51		11/6/2003	17:03
1106F003.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:08		11/6/2003	17:20
1106F004.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:26		11/6/2003	17:38
1106F005.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:44		11/6/2003	17:56
1106F006.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:02		11/6/2003	18:14
1106F007.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:20		11/6/2003	18:32
1106F008.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:37		11/6/2003	18:49
1106F009.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:55		11/6/2003	19:07
1106F010.D	ZZZZZZ	ZZZZZZ	11/6/2003	19:13		11/6/2003	19:25
1105F012.D	Instrument Blank	KWG0318147-2	11/6/2003	19:48		11/6/2003	20:00
1105F013.D	Continuing Calibration Verification	KWG0318147-9	11/6/2003	20:06		11/6/2003	20:18
1106F014.D	ZZZZZZ	ZZZZZZ	11/6/2003	20:24		11/6/2003	20:36
1106F015.D	ZZZZZZ	ZZZZZZ	11/6/2003	20:42		11/6/2003	20:54
1106F016.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:00		11/6/2003	21:12
1106F017.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:18		11/6/2003	21:30
1106F018.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:35		11/6/2003	21:47
1106F019.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:53		11/6/2003	22:05
1106F020.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:11		11/6/2003	22:23
1106F021.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:28		11/6/2003	22:40
1106F022.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:46		11/6/2003	22:58
1105F024.D	Instrument Blank	KWG0318147-3	11/6/2003	23:21		11/6/2003	23:33
1105F025.D	Continuing Calibration Verification	KWG0318147-10	11/6/2003	23:39		11/6/2003	23:51
1106F026.D	ZZZZZZ	ZZZZZZ	11/6/2003	23:57		11/7/2003	00:09
1106F027.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:14		11/7/2003	00:26
1106F028.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:32		11/7/2003	00:44
1106F029.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:50		11/7/2003	01:02
1106F030.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:07		11/7/2003	01:19
1106F031.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:25		11/7/2003	01:37
1106F032.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:43		11/7/2003	01:55
1106F033.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:01		11/7/2003	02:13
1106F034.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:19		11/7/2003	02:31
1106F035.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:37		11/7/2003	02:49

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1106F037.D	Instrument Blank	KWG0318147-4	11/7/2003	03:13		11/7/2003	03:25
1106F038.D	Continuing Calibration Verification	KWG0318147-11	11/7/2003	03:31		11/7/2003	03:43
1106F039.D	ZZZZZZ	ZZZZZZ	11/7/2003	03:49		11/7/2003	04:01
1106F040.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:06		11/7/2003	04:18
1106F041.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:25		11/7/2003	04:37
1106F042.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:42		11/7/2003	04:54
1106F043.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:00		11/7/2003	05:12
1106F044.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:18		11/7/2003	05:30
1106F045.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:36		11/7/2003	05:48
1106F046.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:54		11/7/2003	06:06
1106F047.D	ZZZZZZ	ZZZZZZ	11/7/2003	06:13		11/7/2003	06:25
1106F049.D	Instrument Blank	KWG0318147-5	11/7/2003	06:49		11/7/2003	07:01
1106F050.D	Continuing Calibration Verification	KWG0318147-12	11/7/2003	07:06		11/7/2003	07:18
1106F051.D	Method Blank	KWG0317203-6	11/7/2003	07:24		11/7/2003	07:36
1106F052.D	Lab Control Sample	KWG0317203-5	11/7/2003	07:42		11/7/2003	07:54
1106F053.D	M.nasuta CH03 Pre	K2307174-011	11/7/2003	08:00		11/7/2003	08:12
1106F054.D	M.nasuta CH03 PreMS	KWG0317203-1	11/7/2003	08:18		11/7/2003	08:30
1106F055.D	M.nasuta CH03 PreDMS	KWG0317203-2	11/7/2003	08:36		11/7/2003	08:48
1106F056.D	RS-CH03-T-A	K2307174-012	11/7/2003	08:54		11/7/2003	09:06
1106F057.D	RS-CH03-T-B	K2307174-013	11/7/2003	09:12		11/7/2003	09:24
1106F058.D	RS-CH03-T-C	K2307174-014	11/7/2003	09:31		11/7/2003	09:43
1106F059.D	RS-CH03-T-D	K2307174-015	11/7/2003	09:48		11/7/2003	10:00
1106F060.D	RS-CH03-T-E	K2307174-016	11/7/2003	10:06		11/7/2003	10:18
1106F062.D	Instrument Blank	KWG0318147-6	11/7/2003	10:43		11/7/2003	10:55
1106F063.D	Continuing Calibration Verification	KWG0318147-13	11/7/2003	11:00		11/7/2003	11:12
1106F064.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:18		11/7/2003	11:30
1106F065.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:36		11/7/2003	11:48
1106F066.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:54		11/7/2003	12:06
1106F067.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:12		11/7/2003	12:24
1106F068.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:30		11/7/2003	12:42
1106F069.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:48		11/7/2003	13:00
1106F070.D	ZZZZZZ	ZZZZZZ	11/7/2003	13:06		11/7/2003	13:18
1106F071.D	ZZZZZZ	ZZZZZZ	11/7/2003	13:24		11/7/2003	13:36
1106F073.D	Instrument Blank	KWG0318147-7	11/7/2003	14:00		11/7/2003	14:12
1106F074.D	Continuing Calibration Verification	KWG0318147-14	11/7/2003	14:18		11/7/2003	14:30

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Extracted: 10/27/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0317203
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
M.nasuta CH03 Pre	K2307174-011		09/17/03	10.08g	0.5ml	NA	
RS-CH03-T-A	K2307174-012		09/17/03	3.86g	0.15ml	NA	
RS-CH03-T-B	K2307174-013		09/17/03	10.13g	0.5ml	NA	
RS-CH03-T-C	K2307174-014		09/17/03	10.04g	0.5ml	NA	
RS-CH03-T-D	K2307174-015		09/17/03	10.08g	0.5ml	NA	
RS-CH03-T-E	K2307174-016		09/17/03	10.06g	0.5ml	NA	
Method Blank	KWG0317203-6	NA	NA	10.00g	0.5ml	NA	
M.nasuta CH03 PreMS	KWG0317203-1		09/17/03	10.00g	0.5ml	NA	
M.nasuta CH03 PreDMS	KWG0317203-2		09/17/03	10.19g	0.5ml	NA	
Lab Control Sample	KWG0317203-5	NA	NA	10.00g	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: M.nasuta CH03 Pre
Lab Code: K2307174-011

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	0.78	0.68	13.7	J	1	11/07/03

000098

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: RS-CH03-T-A
Lab Code: K2307174-012
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.78	0.35	3.1	2.7	13.8		1	11/07/03

000099

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: RS-CH03-T-B
Lab Code: K2307174-013

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	1.1	1.0	9.5		1	11/07/03
Di-n-butyltin	0.99	0.35	4.5	3.1	36.8		1	11/07/03

000100

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: RS-CH03-T-C
Lab Code: K2307174-014

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	6.6	5.5	18.2		1	11/07/03
n-Butyltin	1.0	0.38	0.51	0.45	12.5	J	1	11/07/03

000101

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: RS-CH03-T-D
Lab Code: K2307174-015
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	5.6	4.8	15.4		1	11/07/03
n-Butyltin	1.0	0.38	0.64	0.49	26.5	J	1	11/07/03

000102

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: RS-CH03-T-E
Lab Code: K2307174-016
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	3.7	2.8	27.7		1	11/07/03

000103

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307174
Project: Canaveral Harbor/M.Nasuta

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
M.nasuta CH03 Pre	K2307174-011		09/17/2003
RS-CH03-T-A	K2307174-012		09/17/2003
RS-CH03-T-B	K2307174-013		09/17/2003
RS-CH03-T-C	K2307174-014		09/17/2003
RS-CH03-T-D	K2307174-015		09/17/2003
RS-CH03-T-E	K2307174-016		09/17/2003
M.nasuta CH03 PreMS	KWG0317779-1		09/17/2003
M.nasuta CH03 PreDMS	KWG0317779-2		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Carl Degner

Date: 11/12/03 Title: SVM Supervisor

000106

U:\Stealth\Crystal.rpt\FormSSum.rpt SuperSet Reference: RR32377

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	M.nasuta CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307174-011	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.9**	J	4.9	0.55	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**1.6**	J	4.9	0.56	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	**0.24**	J	4.9	0.12	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**0.19**	J	4.9	0.083	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	**0.31**	J	4.9	0.19	1	11/05/03	11/11/03	KWG0317779	
Fluorene	**0.40**	J	4.9	0.37	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**1.5**	J	4.9	0.19	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**0.32**	J	4.9	0.12	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**5.5**		4.9	0.37	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**2.8**	J	4.9	0.39	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**0.85**	J	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**2.1**	J	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**1.1**	J	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**0.79**	J	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**0.55**	J	4.9	0.10	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.48**	J	4.9	0.18	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**0.45**	J	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**0.49**	J	4.9	0.20	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	80	54-102	11/11/03	Acceptable
Fluoranthene-d10	88	57-107	11/11/03	Acceptable
Terphenyl-d14	103	53-116	11/11/03	Acceptable

Comments:

000107

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307174-012	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**3.5**	J	5.0	0.55	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**3.8**	J	5.0	0.56	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**0.12**	J	5.0	0.083	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**1.2**	J	5.0	0.19	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**0.18**	J	5.0	0.12	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**2.5**	J	5.0	0.37	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**3.5**	J	5.0	0.39	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**0.94**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**1.3**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**0.60**	J	5.0	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**0.46**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**0.29**	J	5.0	0.10	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.25**	J	5.0	0.18	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**0.23**	J	5.0	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**0.29**	J	5.0	0.20	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	54-102	11/11/03	Acceptable
Fluoranthene-d10	87	57-107	11/11/03	Acceptable
Terphenyl-d14	95	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307174-013	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**2.2**	J	5.0	0.55	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**1.9**	J	5.0	0.56	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	**0.36**	J	5.0	0.12	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**0.14**	J	5.0	0.083	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	**0.21**	J	5.0	0.19	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**1.9**	J	5.0	0.19	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**0.23**	J	5.0	0.12	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**3.8**	J	5.0	0.37	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**5.1**		5.0	0.39	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**0.91**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**1.8**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**0.81**	J	5.0	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**0.82**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**0.72**	J	5.0	0.10	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.56**	J	5.0	0.18	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**0.34**	J	5.0	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**0.67**	J	5.0	0.20	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	54-102	11/11/03	Acceptable
Fluoranthene-d10	90	57-107	11/11/03	Acceptable
Terphenyl-d14	97	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307174-014	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**2.0**	J	5.0	0.55	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**2.0**	J	5.0	0.56	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**0.16**	J	5.0	0.083	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	**0.28**	J	5.0	0.19	1	11/05/03	11/11/03	KWG0317779	
Fluorene	**0.38**	J	5.0	0.37	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**1.7**	J	5.0	0.19	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**0.25**	J	5.0	0.12	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**2.8**	J	5.0	0.37	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**3.8**	J	5.0	0.39	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**0.93**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**1.1**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**0.67**	J	5.0	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**0.62**	J	5.0	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**0.33**	J	5.0	0.10	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**0.32**	J	5.0	0.18	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**0.23**	J	5.0	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**0.38**	J	5.0	0.20	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	54-102	11/11/03	Acceptable
Fluoranthene-d10	88	57-107	11/11/03	Acceptable
Terphenyl-d14	96	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307174-015	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.3**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**0.97**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	ND	U	5.0	0.083	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317779	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**0.97**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**0.16**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**1.9**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**2.5**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**0.69**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**0.79**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**0.38**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**0.33**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**0.15**	J	5.0	0.10	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307174-016	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.3**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**0.96**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	ND	U	5.0	0.083	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317779	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**0.94**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317779	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**1.3**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**1.8**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**0.47**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**0.54**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**0.24**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/12/03	Acceptable
Fluoranthene-d10	84	57-107	11/12/03	Acceptable
Terphenyl-d14	93	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
Lab Code: KWG0317779-5

Units: ug/Kg
Basis: Wet

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.9	0.55	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	ND	U	4.9	0.56	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	ND	U	4.9	0.12	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	ND	U	4.9	0.083	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	ND	U	4.9	0.19	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	4.9	0.37	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	ND	U	4.9	0.19	1	11/05/03	11/11/03	KWG0317779	
Anthracene	ND	U	4.9	0.12	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	ND	U	4.9	0.37	1	11/05/03	11/11/03	KWG0317779	
Pyrene	ND	U	4.9	0.39	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	ND	U	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Chrysene	ND	U	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	ND	U	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	ND	U	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	ND	U	4.9	0.10	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	4.9	0.18	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	4.9	0.20	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/11/03	Acceptable
Fluoranthene-d10	80	57-107	11/11/03	Acceptable
Terphenyl-d14	113	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Collected:
Date Received: 09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name: M.nasuta CH03 Pre
Lab Code: K2307174-011

Units: ug/Kg
Basis: Dry

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**14**	J	35	3.9	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**11**	J	35	4.0	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	**1.7**	J	35	0.85	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**1.3**	J	35	0.59	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	**2.2**	J	35	1.4	1	11/05/03	11/11/03	KWG0317779	
Fluorene	**2.8**	J	35	2.7	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**11**	J	35	1.4	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**2.3**	J	35	0.85	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**38**		35	2.7	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**20**	J	35	2.8	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**6.0**	J	35	1.2	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**14**	J	35	1.2	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**7.8**	J	35	1.1	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**5.6**	J	35	1.2	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**3.8**	J	35	0.71	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**3.4**	J	35	1.3	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**3.1**	J	35	1.1	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**3.5**	J	35	1.5	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	80	54-102	11/11/03	Acceptable
Fluoranthene-d10	88	57-107	11/11/03	Acceptable
Terphenyl-d14	103	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307174-012	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**25**	J	36	4.0	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**27**	J	36	4.1	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	ND	U	36	0.87	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**0.86**	J	36	0.61	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	ND	U	36	1.4	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	36	2.7	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**8.4**	J	36	1.4	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**1.3**	J	36	0.87	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**18**	J	36	2.7	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**26**	J	36	2.9	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**6.8**	J	36	1.3	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**9.4**	J	36	1.3	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**4.3**	J	36	1.1	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**3.4**	J	36	1.3	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**2.1**	J	36	0.73	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**1.8**	J	36	1.4	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**1.7**	J	36	1.1	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**2.1**	J	36	1.5	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	76	54-102	11/11/03	Acceptable
Fluoranthene-d10	87	57-107	11/11/03	Acceptable
Terphenyl-d14	95	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307174-013	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**15**	J	33	3.7	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**13**	J	33	3.7	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	**2.4**	J	33	0.79	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**0.91**	J	33	0.55	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	**1.4**	J	33	1.3	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	33	2.5	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**12**	J	33	1.3	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**1.5**	J	33	0.79	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**25**	J	33	2.5	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**33**		33	2.6	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**6.0**	J	33	1.2	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**12**	J	33	1.2	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**5.4**	J	33	0.99	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**5.4**	J	33	1.2	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**4.7**	J	33	0.66	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**3.7**	J	33	1.2	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**2.2**	J	33	0.99	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**4.4**	J	33	1.4	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	54-102	11/11/03	Acceptable
Fluoranthene-d10	90	57-107	11/11/03	Acceptable
Terphenyl-d14	97	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307174-014	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**13**	J	32	3.5	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	**13**	J	32	3.6	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	ND	U	32	0.76	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	**1.0**	J	32	0.53	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	**1.8**	J	32	1.3	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	32	2.4	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	**11**	J	32	1.3	1	11/05/03	11/11/03	KWG0317779	
Anthracene	**1.6**	J	32	0.76	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	**18**	J	32	2.4	1	11/05/03	11/11/03	KWG0317779	
Pyrene	**24**	J	32	2.5	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	**5.9**	J	32	1.1	1	11/05/03	11/11/03	KWG0317779	
Chrysene	**7.0**	J	32	1.1	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	**4.2**	J	32	0.95	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	**3.9**	J	32	1.1	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	**2.1**	J	32	0.64	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	**2.0**	J	32	1.2	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	**1.5**	J	32	0.95	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	**2.4**	J	32	1.3	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	54-102	11/11/03	Acceptable
Fluoranthene-d10	88	57-107	11/11/03	Acceptable
Terphenyl-d14	96	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307174-015	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**12**	J	49	5.4	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**9.4**	J	49	5.5	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	49	1.2	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	ND	U	49	0.81	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	ND	U	49	1.9	1	11/05/03	11/12/03	KWG0317779	
Fluorene	ND	U	49	3.6	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**9.4**	J	49	1.9	1	11/05/03	11/12/03	KWG0317779	
Anthracene	**1.6**	J	49	1.2	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**18**	J	49	3.6	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**24**	J	49	3.8	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**6.7**	J	49	1.7	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**7.7**	J	49	1.7	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**3.7**	J	49	1.5	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	**3.2**	J	49	1.7	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	**1.5**	J	49	0.98	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	49	1.8	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	49	1.5	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	49	2.0	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307174-016	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**15**	J	58	6.4	1	11/05/03	11/12/03	KWG0317779	
2-Methylnaphthalene	**11**	J	58	6.5	1	11/05/03	11/12/03	KWG0317779	
Acenaphthylene	ND	U	58	1.4	1	11/05/03	11/12/03	KWG0317779	
Acenaphthene	ND	U	58	0.97	1	11/05/03	11/12/03	KWG0317779	
Dibenzofuran	ND	U	58	2.3	1	11/05/03	11/12/03	KWG0317779	
Fluorene	ND	U	58	4.3	1	11/05/03	11/12/03	KWG0317779	
Phenanthrene	**11**	J	58	2.3	1	11/05/03	11/12/03	KWG0317779	
Anthracene	ND	U	58	1.4	1	11/05/03	11/12/03	KWG0317779	
Fluoranthene	**16**	J	58	4.3	1	11/05/03	11/12/03	KWG0317779	
Pyrene	**21**	J	58	4.6	1	11/05/03	11/12/03	KWG0317779	
Benz(a)anthracene	**5.4**	J	58	2.0	1	11/05/03	11/12/03	KWG0317779	
Chrysene	**6.2**	J	58	2.0	1	11/05/03	11/12/03	KWG0317779	
Benzo(b)fluoranthene	**2.8**	J	58	1.8	1	11/05/03	11/12/03	KWG0317779	
Benzo(k)fluoranthene	ND	U	58	2.0	1	11/05/03	11/12/03	KWG0317779	
Benzo(a)pyrene	ND	U	58	1.2	1	11/05/03	11/12/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	58	2.1	1	11/05/03	11/12/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	58	1.8	1	11/05/03	11/12/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	58	2.4	1	11/05/03	11/12/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/12/03	Acceptable
Fluoranthene-d10	84	57-107	11/12/03	Acceptable
Terphenyl-d14	93	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317779-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	4.9	0.55	1	11/05/03	11/11/03	KWG0317779	
2-Methylnaphthalene	ND	U	4.9	0.56	1	11/05/03	11/11/03	KWG0317779	
Acenaphthylene	ND	U	4.9	0.12	1	11/05/03	11/11/03	KWG0317779	
Acenaphthene	ND	U	4.9	0.083	1	11/05/03	11/11/03	KWG0317779	
Dibenzofuran	ND	U	4.9	0.19	1	11/05/03	11/11/03	KWG0317779	
Fluorene	ND	U	4.9	0.37	1	11/05/03	11/11/03	KWG0317779	
Phenanthrene	ND	U	4.9	0.19	1	11/05/03	11/11/03	KWG0317779	
Anthracene	ND	U	4.9	0.12	1	11/05/03	11/11/03	KWG0317779	
Fluoranthene	ND	U	4.9	0.37	1	11/05/03	11/11/03	KWG0317779	
Pyrene	ND	U	4.9	0.39	1	11/05/03	11/11/03	KWG0317779	
Benz(a)anthracene	ND	U	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Chrysene	ND	U	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(b)fluoranthene	ND	U	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(k)fluoranthene	ND	U	4.9	0.17	1	11/05/03	11/11/03	KWG0317779	
Benzo(a)pyrene	ND	U	4.9	0.10	1	11/05/03	11/11/03	KWG0317779	
Indeno(1,2,3-cd)pyrene	ND	U	4.9	0.18	1	11/05/03	11/11/03	KWG0317779	
Dibenz(a,h)anthracene	ND	U	4.9	0.15	1	11/05/03	11/11/03	KWG0317779	
Benzo(g,h,i)perylene	ND	U	4.9	0.20	1	11/05/03	11/11/03	KWG0317779	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/11/03	Acceptable
Fluoranthene-d10	80	57-107	11/11/03	Acceptable
Terphenyl-d14	113	53-116	11/11/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
M.nasuta CH03 Pre	K2307174-011	80	88	103
RS-CH03-T-A	K2307174-012	76	87	95
RS-CH03-T-B	K2307174-013	83	90	97
RS-CH03-T-C	K2307174-014	77	88	96
RS-CH03-T-D	K2307174-015	78	88	98
RS-CH03-T-E	K2307174-016	74	84	93
Method Blank	KWG0317779-5	74	80	113
M.nasuta CH03 PreMS	KWG0317779-1	77	87	88
M.nasuta CH03 PreDMS	KWG0317779-2	83	90	91
Lab Control Sample	KWG0317779-3	68	76	81
Duplicate Lab Control Sample	KWG0317779-4	81	90	96

Surrogate Recovery Control Limits (%)

Sur1 =	Fluorene-d10	54-102
Sur2 =	Fluoranthene-d10	57-107
Sur3 =	Terphenyl-d14	53-116

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Analyzed:**	11/11/2003
		Time Analyzed:	07:18

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS14\DATA\111003\1110F017.D	**Lab Code:**	KWG0318218-2
Instrument ID:	MS14	**Analysis Lot:**	KWG0318218
Analysis Method:	8270C SIM		

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	156,998	5.17	85,222	6.61	150,582	7.83
	Upper Limit ==>	313,996	5.67	170,444	7.11	301,164	8.33
	Lower Limit ==>	78,499	4.67	42,611	6.11	75,291	7.33
	ICAL Result ==>	204,882	5.17	110,040	6.61	188,958	7.82
Associated Analyses							
Method Blank	KWG0317779-5	147,452	5.16	79,173	6.61	131,655	7.82
Lab Control Sample	KWG0317779-3	168,892	5.15	92,601	6.60	156,031	7.82
Duplicate Lab Control Sample	KWG0317779-4	143,663	5.15	78,410	6.60	130,144	7.82
M.nasuta CH03 PreMS	KWG0317779-1	147,669	5.15	79,348	6.60	134,322	7.82
M.nasuta CH03 PreDMS	KWG0317779-2	143,755	5.15	77,924	6.60	132,807	7.82
M.nasuta CH03 Pre	K2307174-011	142,499	5.15	77,592	6.60	129,827	7.82
RS-CH03-T-A	K2307174-012	145,213	5.15	78,854	6.60	132,114	7.82
RS-CH03-T-B	K2307174-013	145,904	5.15	79,650	6.60	135,010	7.82
RS-CH03-T-C	K2307174-014	139,335	5.15	76,054	6.60	127,655	7.82

Results flagged with an asterisk (*) indicate values outside control criteria.

000122

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Analyzed:**	11/11/2003
		Time Analyzed:	07:18

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS14\DATA\111003\1110F017.D	**Lab Code:**	KWG0318218-2
Instrument ID:	MS14	**Analysis Lot:**	KWG0318218
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	136,815	10.78	77,567	14.77
	Upper Limit ==>	273,630	11.28	155,134	15.27
	Lower Limit ==>	68,408	10.28	38,784	14.27
	ICAL Result ==>	189,206	10.78	118,509	14.75
Associated Analyses					
Method Blank	KWG0317779-5	97,028	10.78	56,285	14.76
Lab Control Sample	KWG0317779-3	152,384	10.77	93,521	14.73
Duplicate Lab Control Sample	KWG0317779-4	124,388	10.77	75,022	14.73
M.nasuta CH03 PreMS	KWG0317779-1	140,694	10.77	98,349	14.73
M.nasuta CH03 PreDMS	KWG0317779-2	137,324	10.76	95,754	14.73
M.nasuta CH03 Pre	K2307174-011	116,567	10.76	74,728	14.72
RS-CH03-T-A	K2307174-012	126,506	10.76	85,369	14.72
RS-CH03-T-B	K2307174-013	132,569	10.76	90,120	14.73
RS-CH03-T-C	K2307174-014	123,707	10.76	84,646	14.73

Results flagged with an asterisk (*) indicate values outside control criteria.

000123

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/12/2003
Time Analyzed: 07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F002.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318310-2
Analysis Lot: KWG0318310

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	**RT**	**Area**	**RT**	**Area**	**RT**
	Results ==>	157,294	5.16	86,722	6.60	154,481	7.82
	Upper Limit ==>	314,588	5.66	173,444	7.10	308,962	8.32
	Lower Limit ==>	78,647	4.66	43,361	6.10	77,241	7.32
	ICAL Result ==>	204,882	5.17	110,040	6.61	188,958	7.82
Associated Analyses							
RS-CH03-T-D	K2307174-015	140,787	5.16	77,096	6.61	131,048	7.82
RS-CH03-T-E	K2307174-016	141,014	5.16	76,836	6.61	128,900	7.82

Results flagged with an asterisk (*) indicate values outside control criteria.

000124

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Analyzed:**	11/12/2003
		Time Analyzed:	07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID:	J:\MS14\DATA\111203\1112F002.D	**Lab Code:**	KWG0318310-2
Instrument ID:	MS14	**Analysis Lot:**	KWG0318310
Analysis Method:	8270C SIM		

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	151,499	10.77	94,668	14.73
	Upper Limit ==>	302,998	11.27	189,336	15.23
	Lower Limit ==>	75,750	10.27	47,334	14.23
	ICAL Result ==>	189,206	10.78	118,509	14.75
Associated Analyses					
RS-CH03-T-D	K2307174-015	124,553	10.77	83,045	14.74
RS-CH03-T-E	K2307174-016	121,832	10.77	81,595	14.74

Results flagged with an asterisk (*) indicate values outside control criteria.

000125

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/11/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	M.nasuta CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307174-011	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317779

		M.nasuta CH03 PreMS KWG0317779-1 Matrix Spike			M.nasuta CH03 PreDMS KWG0317779-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	1.9	187	250	74	199	250	79	46-109	7	40
2-Methylnaphthalene	1.6	208	250	83	223	250	88	44-118	7	40
Acenaphthylene	0.24	230	250	92	242	250	97	63-114	5	40
Acenaphthene	0.19	228	250	91	238	250	95	59-117	5	40
Dibenzofuran	0.31	231	250	92	241	250	96	64-102	4	40
Fluorene	0.40	244	250	98	254	250	101	67-115	4	40
Phenanthrene	1.5	244	250	97	246	250	98	67-109	1	40
Anthracene	0.32	249	250	99	255	250	102	71-114	3	40
Fluoranthene	5.5	265	250	104	265	250	104	66-120	0	40
Pyrene	2.8	230	250	91	233	250	92	59-110	1	40
Benz(a)anthracene	0.85	244	250	98	243	250	97	55-108	0	40
Chrysene	2.1	256	250	102	255	250	101	61-110	0	40
Benzo(b)fluoranthene	1.1	253	250	101	250	250	99	64-119	1	40
Benzo(k)fluoranthene	0.79	256	250	102	259	250	103	68-117	1	40
Benzo(a)pyrene	0.55	258	250	103	258	250	103	67-117	0	40
Indeno(1,2,3-cd)pyrene	0.48	276	250	110	272	250	108	47-137	1	40
Dibenz(a,h)anthracene	0.45	278	250	111	276	250	110	51-133	1	40
Benzo(g,h,i)perylene	0.49	260	250	104	259	250	104	58-114	0	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000126

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/11/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	KWG0317779

	Lab Control Sample KWG0317779-3 Lab Control Spike			Duplicate Lab Control Sample KWG0317779-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	173	250	69	207	250	83	51-102	18	40
2-Methylnaphthalene	181	250	72	217	250	87	43-109	18	40
Acenaphthylene	182	250	73	220	250	88	45-115	19	40
Acenaphthene	180	250	72	219	250	88	54-106	19	40
Dibenzofuran	180	250	72	220	250	88	44-117	20	40
Fluorene	188	250	75	229	250	91	55-112	20	40
Phenanthrene	186	250	74	230	250	92	55-108	21	40
Anthracene	193	250	77	238	250	95	59-113	21	40
Fluoranthene	201	250	81	246	250	98	57-123	20	40
Pyrene	188	250	75	234	250	94	51-110	22	40
Benz(a)anthracene	187	250	75	227	250	91	45-114	19	40
Chrysene	200	250	80	245	250	98	53-115	20	40
Benzo(b)fluoranthene	204	250	81	251	250	100	49-133	21	40
Benzo(k)fluoranthene	208	250	83	261	250	104	51-132	23	40
Benzo(a)pyrene	203	250	81	252	250	101	54-131	22	40
Indeno(1,2,3-cd)pyrene	214	250	85	262	250	105	38-143	20	40
Dibenz(a,h)anthracene	213	250	85	262	250	105	38-143	20	40
Benzo(g,h,i)perylene	204	250	82	252	250	101	43-129	21	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000127

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307174
Project:	Canaveral Harbor/M.Nasuta	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/11/2003
		Time Analyzed:	14:33

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\111003\1110F030.D
Lab Code:	KWG0317779-5	**Instrument ID:**	MS14
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317779

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317779-3	J:\MS14\DATA\111003\1110F031.D	11/11/03	15:00
Duplicate Lab Control Sample	KWG0317779-4	J:\MS14\DATA\111003\1110F032.D	11/11/03	15:28
M.nasuta CH03 PreMS	KWG0317779-1	J:\MS14\DATA\111003\1110F034.D	11/11/03	16:22
M.nasuta CH03 PreDMS	KWG0317779-2	J:\MS14\DATA\111003\1110F035.D	11/11/03	16:49
M.nasuta CH03 Pre	K2307174-011	J:\MS14\DATA\111003\1110F036.D	11/11/03	17:16
RS-CH03-T-A	K2307174-012	J:\MS14\DATA\111003\1110F037.D	11/11/03	17:43
RS-CH03-T-B	K2307174-013	J:\MS14\DATA\111003\1110F038.D	11/11/03	18:10
RS-CH03-T-C	K2307174-014	J:\MS14\DATA\111003\1110F039.D	11/11/03	18:37
RS-CH03-T-D	K2307174-015	J:\MS14\DATA\111203\1112F020.D	11/12/03	15:42
RS-CH03-T-E	K2307174-016	J:\MS14\DATA\111203\1112F021.D	11/12/03	16:09

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0317779-3	**Lab Code:**	KWG0317779-4
File ID:	J:\MS14\DATA\111003\1110F031.D	**File ID:**	J:\MS14\DATA\111003\1110F032.D
Instrument ID:	MS14	**Instrument ID:**	MS14
Date Extracted:	11/05/2003	**Date Extracted:**	11/05/2003
Date Analyzed:	11/11/2003	**Date Analyzed:**	11/11/2003
Time Analyzed:	15:00	**Time Analyzed:**	15:28

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317779

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317779-5	J:\MS14\DATA\111003\1110F030.D	11/11/03	14:33
M.nasuta CH03 PreMS	KWG0317779-1	J:\MS14\DATA\111003\1110F034.D	11/11/03	16:22
M.nasuta CH03 PreDMS	KWG0317779-2	J:\MS14\DATA\111003\1110F035.D	11/11/03	16:49
M.nasuta CH03 Pre	K2307174-011	J:\MS14\DATA\111003\1110F036.D	11/11/03	17:16
RS-CH03-T-A	K2307174-012	J:\MS14\DATA\111003\1110F037.D	11/11/03	17:43
RS-CH03-T-B	K2307174-013	J:\MS14\DATA\111003\1110F038.D	11/11/03	18:10
RS-CH03-T-C	K2307174-014	J:\MS14\DATA\111003\1110F039.D	11/11/03	18:37
RS-CH03-T-D	K2307174-015	J:\MS14\DATA\111203\1112F020.D	11/12/03	15:42
RS-CH03-T-E	K2307174-016	J:\MS14\DATA\111203\1112F021.D	11/12/03	16:09

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/11/2003
Time Analyzed: 06:49

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111003\1110F016.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0318218

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	17.3	126248	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	19.8	144512	PASS
70	69	0	2	0.7	1057	PASS
127	198	10	80	34.3	250688	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	35.2	731008	PASS
199	198	5	9	6.5	47232	PASS
275	198	10	60	37.1	271360	PASS
365	442	1	50	1.9	40256	PASS
441	443	0	100	74.2	283456	PASS
442	442	100	100	100.0	2078208	PASS
443	442	15	24	18.4	381760	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0318218-2	J:\MS14\DATA\111003\1110F017.D	11/11/2003	07:18	
Method Blank	KWG0317779-5	J:\MS14\DATA\111003\1110F030.D	11/11/2003	14:33	
Lab Control Sample	KWG0317779-3	J:\MS14\DATA\111003\1110F031.D	11/11/2003	15:00	
Duplicate Lab Control Sample	KWG0317779-4	J:\MS14\DATA\111003\1110F032.D	11/11/2003	15:28	
M.nasuta CH03 PreMS	KWG0317779-1	J:\MS14\DATA\111003\1110F034.D	11/11/2003	16:22	
M.nasuta CH03 PreDMS	KWG0317779-2	J:\MS14\DATA\111003\1110F035.D	11/11/2003	16:49	
M.nasuta CH03 Pre	K2307174-011	J:\MS14\DATA\111003\1110F036.D	11/11/2003	17:16	
RS-CH03-T-A	K2307174-012	J:\MS14\DATA\111003\1110F037.D	11/11/2003	17:43	
RS-CH03-T-B	K2307174-013	J:\MS14\DATA\111003\1110F038.D	11/11/2003	18:10	
RS-CH03-T-C	K2307174-014	J:\MS14\DATA\111003\1110F039.D	11/11/2003	18:37	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

000130

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/12/2003
Time Analyzed: 07:16

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0318310

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	18.1	157184	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	20.6	178900	PASS
70	69	0	2	0.5	854	PASS
127	198	10	80	36.1	314048	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	47.0	870080	PASS
199	198	5	9	6.7	58032	PASS
275	198	10	60	33.4	290176	PASS
365	442	1	50	2.1	39208	PASS
441	443	0	100	72.4	250240	PASS
442	442	100	100	100.0	1849856	PASS
443	442	15	24	18.7	345664	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0318310-2	J:\MS14\DATA\111203\1112F002.D	11/12/2003	07:34	
RS-CH03-T-D	K2307174-015	J:\MS14\DATA\111203\1112F020.D	11/12/2003	15:42	
RS-CH03-T-E	K2307174-016	J:\MS14\DATA\111203\1112F021.D	11/12/2003	16:09	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

000131

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\111003\1110F003.D	G	J:\MS14\DATA\111003\1110F009.D
B	J:\MS14\DATA\111003\1110F004.D	H	J:\MS14\DATA\111003\1110F010.D
C	J:\MS14\DATA\111003\1110F005.D	I	J:\MS14\DATA\111003\1110F011.D
D	J:\MS14\DATA\111003\1110F006.D	J	J:\MS14\DATA\111003\1110F012.D
E	J:\MS14\DATA\111003\1110F007.D	K	J:\MS14\DATA\111003\1110F013.D
F	J:\MS14\DATA\111003\1110F008.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	5.0	1.25	B	10	1.18	C	20	1.13	D	40	1.13	E	100	1.14
	F	500	1.10	G	1000	1.08	H	2000	1.13	I	5000	1.12	J	8000	1.13
	K	10000	1.11												
2-Methylnaphthalene	A	5.0	0.753	B	10	0.740	C	20	0.714	D	40	0.724	E	100	0.738
	F	500	0.710	G	1000	0.697	H	2000	0.736	I	5000	0.722	J	8000	0.731
	K	10000	0.718												
Acenaphthylene	A	5.0	2.14	B	10	1.98	C	20	1.93	D	40	1.97	E	100	2.00
	F	500	1.98	G	1000	2.01	H	2000	2.13	I	5000	2.13	J	8000	2.15
	K	10000	2.13												
Acenaphthene	A	5.0	1.27	B	10	1.20	C	20	1.17	D	40	1.19	E	100	1.26
	F	500	1.19	G	1000	1.18	H	2000	1.24	I	5000	1.20	J	8000	1.20
	K	10000	1.17												
Dibenzofuran	A	5.0	1.86	B	10	1.80	C	20	1.74	D	40	1.77	E	100	1.82
	F	500	1.75	G	1000	1.75	H	2000	1.85	I	5000	1.83	J	8000	1.86
	K	10000	1.85												
Fluorene	A	5.0	1.46	B	10	1.39	C	20	1.35	D	40	1.40	E	100	1.45
	F	500	1.43	G	1000	1.43	H	2000	1.52	I	5000	1.49	J	8000	1.48
	K	10000	1.45												
Phenanthrene	A	5.0	1.37	B	10	1.26	C	20	1.25	D	40	1.25	E	100	1.27
	F	500	1.20	G	1000	1.20	H	2000	1.25	I	5000	1.23	J	8000	1.24
	K	10000	1.21												
Anthracene	A	5.0	1.24	B	10	1.15	C	20	1.13	D	40	1.16	E	100	1.21
	F	500	1.18	G	1000	1.20	H	2000	1.27	I	5000	1.25	J	8000	1.25
	K	10000	1.24												
Fluoranthene	A	5.0	1.37	B	10	1.22	C	20	1.23	D	40	1.27	E	100	1.36
	F	500	1.30	G	1000	1.31	H	2000	1.40	I	5000	1.39	J	8000	1.40
	K	10000	1.38												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000132

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	5.0	1.73	B	10	1.60	C	20	1.66	D	40	1.64	E	100	1.68
	F	500	1.50	G	1000	1.45	H	2000	1.46	I	5000	1.34	J	8000	1.31
	K	10000	1.27												
Benz(a)anthracene	A	5.0	1.71	B	10	1.38	C	20	1.21	D	40	1.16	E	100	1.17
	F	500	1.09	G	1000	1.11	H	2000	1.20	I	5000	1.19	J	8000	1.21
	K	10000	1.19												
Chrysene	A	5.0	1.17	B	10	1.05	C	20	1.08	D	40	1.10	E	100	1.14
	F	500	1.11	G	1000	1.11	H	2000	1.17	I	5000	1.15	J	8000	1.16
	K	10000	1.15												
Benzo(b)fluoranthene	A	5.0	1.73	B	10	1.62	C	20	1.54	D	40	1.56	E	100	1.63
	F	500	1.59	G	1000	1.66	H	2000	1.76	I	5000	1.76	J	8000	1.81
	K	10000	1.79												
Benzo(k)fluoranthene	A	5.0	1.54	B	10	1.43	C	20	1.50	D	40	1.51	E	100	1.60
	F	500	1.58	G	1000	1.61	H	2000	1.78	I	5000	1.76	J	8000	1.75
	K	10000	1.74												
Benzo(a)pyrene	A	5.0	1.45	B	10	1.29	C	20	1.27	D	40	1.25	E	100	1.34
	F	500	1.34	G	1000	1.40	H	2000	1.52	I	5000	1.55	J	8000	1.58
	K	10000	1.58												
Indeno(1,2,3-cd)pyrene	A	5.0	1.17	B	10	0.998	C	20	1.01	D	40	1.05	E	100	1.12
	F	500	1.14	G	1000	1.19	H	2000	1.27	I	5000	1.30	J	8000	1.36
	K	10000	1.35												
Dibenz(a,h)anthracene	A	5.0	1.01	B	10	0.890	C	20	0.929	D	40	0.999	E	100	1.09
	F	500	1.16	G	1000	1.19	H	2000	1.27	I	5000	1.28	J	8000	1.34
	K	10000	1.38												
Benzo(g,h,i)perylene	A	5.0	1.43	B	10	1.24	C	20	1.27	D	40	1.29	E	100	1.34
	F	500	1.34	G	1000	1.34	H	2000	1.42	I	5000	1.41	J	8000	1.45
	K	10000	1.44												
Fluorene-d10	A	5.0	1.31	B	10	1.17	C	20	1.14	D	40	1.18	E	100	1.20
	F	500	1.17	G	1000	1.17	H	2000	1.24	I	5000	1.20	J	8000	1.18
	K	10000	1.15												
Fluoranthene-d10	A	5.0	1.18	B	10	1.07	C	20	1.07	D	40	1.11	E	100	1.18
	F	500	1.11	G	1000	1.12	H	2000	1.21	I	5000	1.19	J	8000	1.19
	K	10000	1.16												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000133

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Terphenyl-d14	A	5.0	1.20	B	10	1.06	C	20	1.07	D	40	1.08	E	100	1.11
	F	500	1.02	G	1000	0.988	H	2000	1.01	I	5000	0.925	J	8000	0.901
	K	10000	0.874												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000134

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	4.0		≤ 15	1.14		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	2.2		≤ 15	0.726		0.01
Acenaphthylene	MS	AverageRF	% RSD	4.1		≤ 15	2.05		0.01
Acenaphthene	MS	AverageRF	% RSD	2.9		≤ 15	1.21		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.6		≤ 15	1.81		0.01
Fluorene	MS	AverageRF	% RSD	3.4		≤ 15	1.44		0.01
Phenanthrene	MS	AverageRF	% RSD	3.8		≤ 15	1.25		0.01
Anthracene	MS	AverageRF	% RSD	3.9		≤ 15	1.21		0.01
Fluoranthene	MS	AverageRF	% RSD	5.1		≤ 15	1.33		0.01
Pyrene	MS	AverageRF	% RSD	10.4		≤ 15	1.51		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	14.0		≤ 15	1.24		0.01
Chrysene	MS	AverageRF	% RSD	3.5		≤ 15	1.13		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.6		≤ 15	1.68		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	7.5		≤ 15	1.62		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	9.0		≤ 15	1.42		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	11.0		≤ 15	1.18		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	14.7		≤ 15	1.14		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	5.4		≤ 15	1.36		0.01
Fluorene-d10	SURR	AverageRF	% RSD	4.0		≤ 15	1.19		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.3		≤ 15	1.14		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	9.4		≤ 15	1.02		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

000135

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Calibration Date: 11/10/2003
Date Analyzed: 11/11/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL3084
Units: ng/ml

File ID: J:\MS14\DATA\111003\1110F017.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	1.14	1.17	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.726	0.760	5	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	2.05	2.17	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	1.21	1.27	5	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	1.81	1.91	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	1.44	1.57	9	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	1.21	1.24	3	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.33	1.37	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.51	1.55	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	1.24	1.15	-8	NA	± 20 %	AverageRF
Chrysene	2000	2100	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	1.68	1.80	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2300	1.62	1.87	16	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	1.42	1.56	10	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2100	1.18	1.26	7	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	1.14	1.29	13	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	1.36	1.48	9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/11/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/10/2003
Calibration ID: CAL3084
Analysis Lot: KWG0318218
Units: ng/ml

File ID: J:\MS14\DATA\111003\1110F017.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	0.01	1.14	1.17	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.726	0.760	5	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	2.05	2.17	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.21	1.27	5	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.81	1.91	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	0.01	1.44	1.57	9	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	0.01	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	0.01	1.21	1.24	3	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.33	1.37	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	0.01	1.51	1.55	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	0.01	1.24	1.15	-8	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	0.01	1.68	1.80	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2300	0.01	1.62	1.87	16	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	0.01	1.42	1.56	10	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2100	0.01	1.18	1.26	7	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	0.01	1.14	1.29	13	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.36	1.48	9	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.19	1.13	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1800	0.01	1.14	1.05	-8	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1800	0.01	1.02	0.917	-10	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000137

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta

Service Request: K2307174
Date Analyzed: 11/12/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/10/2003
Calibration ID: CAL3084
Analysis Lot: KWG0318310
Units: ng/ml

File ID: J:\MS14\DATA\111203\1112F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.14	1.16	2	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.726	0.769	6	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	2.05	2.18	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.81	1.89	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	0.01	1.44	1.55	8	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	0.01	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.33	1.38	4	NA	± 20 %	AverageRF
Pyrene	2000	1900	0.01	1.51	1.45	-4	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	2000	0.01	1.24	1.21	-2	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	0.01	1.68	1.79	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.62	1.76	9	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	0.01	1.42	1.53	8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2300	0.01	1.18	1.34	14	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	0.01	1.14	1.33	17	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.36	1.49	9	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.19	1.12	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.14	1.08	-5	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	1.02	0.891	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000138

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307174
Project: Canaveral Harbor/M.Nasuta

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0318218
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1110E016.D	GC/MS Tuning - Decafluorotriphenyl	KWG0318218-1	11/11/2003	06:49		11/11/2003	07:01
1110F017.D	Continuing Calibration Verification	KWG0318218-2	11/11/2003	07:18		11/11/2003	07:38
1110F030.D	Method Blank	KWG0317779-5	11/11/2003	14:33		11/11/2003	14:52
1110F031.D	Lab Control Sample	KWG0317779-3	11/11/2003	15:00		11/11/2003	15:19
1110F032.D	Duplicate Lab Control Sample	KWG0317779-4	11/11/2003	15:28		11/11/2003	15:47
1110F033.D	ZZZZZZ	ZZZZZZ	11/11/2003	15:55		11/11/2003	16:14
1110F034.D	M.nasuta CH03 PreMS	KWG0317779-1	11/11/2003	16:22		11/11/2003	16:41
1110F035.D	M.nasuta CH03 PreDMS	KWG0317779-2	11/11/2003	16:49		11/11/2003	17:08
1110F036.D	M.nasuta CH03 Pre	K2307174-011	11/11/2003	17:16		11/11/2003	17:35
1110F037.D	RS-CH03-T-A	K2307174-012	11/11/2003	17:43		11/11/2003	18:02
1110F038.D	RS-CH03-T-B	K2307174-013	11/11/2003	18:10		11/11/2003	18:29
1110F039.D	RS-CH03-T-C	K2307174-014	11/11/2003	18:37		11/11/2003	18:57

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000139

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307174
Project: Canaveral Harbor/M.Nasuta

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0318310
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1112F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0318310-1	11/12/2003	07:16		11/12/2003	07:28
1112F002.D	Continuing Calibration Verification	KWG0318310-2	11/12/2003	07:34		11/12/2003	07:53
1112F003.D	ZZZZZZ	ZZZZZZ	11/12/2003	08:03		11/12/2003	08:22
1112F004.D	ZZZZZZ	ZZZZZZ	11/12/2003	08:30		11/12/2003	08:49
1112F005.D	ZZZZZZ	ZZZZZZ	11/12/2003	08:57		11/12/2003	09:16
1112F006.D	ZZZZZZ	ZZZZZZ	11/12/2003	09:24		11/12/2003	09:43
1112F007.D	ZZZZZZ	ZZZZZZ	11/12/2003	09:51		11/12/2003	10:10
1112F008.D	ZZZZZZ	ZZZZZZ	11/12/2003	10:18		11/12/2003	10:37
1112F009.D	ZZZZZZ	ZZZZZZ	11/12/2003	10:45		11/12/2003	11:04
1112F010.D	ZZZZZZ	ZZZZZZ	11/12/2003	11:12		11/12/2003	11:32
1112F011.D	ZZZZZZ	ZZZZZZ	11/12/2003	11:39		11/12/2003	11:58
1112F012.D	ZZZZZZ	ZZZZZZ	11/12/2003	12:06		11/12/2003	12:25
1112F013.D	ZZZZZZ	ZZZZZZ	11/12/2003	12:33		11/12/2003	12:53
1112F014.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:00		11/12/2003	13:19
1112F015.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:27		11/12/2003	13:46
1112F016.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:54		11/12/2003	14:13
1112F017.D	ZZZZZZ	ZZZZZZ	11/12/2003	14:21		11/12/2003	14:40
1112F018.D	ZZZZZZ	ZZZZZZ	11/12/2003	14:48		11/12/2003	15:07
1112F019.D	ZZZZZZ	ZZZZZZ	11/12/2003	15:15		11/12/2003	15:34
1112F020.D	RS-CH03-T-D	K2307174-015	11/12/2003	15:42		11/12/2003	16:01
1112F021.D	RS-CH03-T-E	K2307174-016	11/12/2003	16:09		11/12/2003	16:28
1112F022.D	ZZZZZZ	ZZZZZZ	11/12/2003	16:36		11/12/2003	16:55
1112F023.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:03		11/12/2003	17:22
1112F024.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:30		11/12/2003	17:50
1112F025.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:57		11/12/2003	18:16
1112F026.D	ZZZZZZ	ZZZZZZ	11/12/2003	18:24		11/12/2003	18:43

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000140

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/M.Nasuta
Sample Matrix: Tissue

Service Request: K2307174
Date Extracted: 11/05/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0317779
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
M.nasuta CH03 Pre	K2307174-011		09/17/03	10.25g	1ml	NA	
RS-CH03-T-A	K2307174-012		09/17/03	10.13g	1ml	NA	
RS-CH03-T-B	K2307174-013		09/17/03	10.13g	1ml	NA	
RS-CH03-T-C	K2307174-014		09/17/03	10.05g	1ml	NA	
RS-CH03-T-D	K2307174-015		09/17/03	10.09g	1ml	NA	
RS-CH03-T-E	K2307174-016		09/17/03	10.11g	1ml	NA	
Method Blank	KWG0317779-5	NA	NA	10.25g	1ml	NA	
M.nasuta CH03 PreMS	KWG0317779-1		09/17/03	10.02g	1ml	NA	
M.nasuta CH03 PreDMS	KWG0317779-2		09/17/03	10.00g	1ml	NA	
Lab Control Sample	KWG0317779-3	NA	NA	10.00g	1ml	NA	
Duplicate Lab Control Sample	KWG0317779-4	NA	NA	10.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000141

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

November 17, 2003 Service Request No: K2307751

Nadia Lombardero
City of Puyallup
1602 18th St. NW
Puyallup, WA 98371

RE: Canaveral Harbor/N.virens

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on September 17, 2003. For your reference, these analyses have been assigned our service request number K2307751.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/srw

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2307751
Project:	Canaveral Harbor/N. Virens	**Date Received:**	9/17/03
Sample Matrix:	Tissue		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Tissue samples and one were received for analysis at Columbia Analytical Services on 9/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored frozen at -20°C upon receipt at the laboratory.

The samples were placed on hold after receipt at the laboratory until compositing and analysis instructions were received. Refer to the Chain of Custody section of the report for a summary of the compositing and revised nomenclature received from ANAMAR.

Metals by EPA Method 200.8/6000/7000

The matrix spike recoveries for Zinc in samples E-CH03-9,10,11,20-T-B (comp) and E-CH03-13,15,-T-D (comp) were outside the normal CAS/Kelso control criteria. The matrix spikes were re-digested and reanalyzed, but produced similar results. Two factors apparently contributed to the outliers. The concentration of Zinc in the native samples was significantly high relative to the amount spiked, which reduces the accuracy of the recovery. In addition, the samples contained small amounts of sediment that probably contributed to non-homogeneous distribution of Zinc in the samples. This was also apparent from the replicate analyses. No further corrective action was feasible.

The matrix spike recovery of Silver in sample E-CH03-9,10,11,20-T-B (comp) was outside CAS/Kelso control criteria. The sample was re-digested and reanalyzed, but again produced low recovery. The other sample in the group that was spiked produced acceptable results. In addition, the Standard Reference Material (SRM) was fine. The cause of the low recovery was not identified. No further corrective action was feasible.

No other anomalies associated with the analysis of these samples were observed.

Butyltins by GC-FPD (M.O. Stallard, et al.)

No anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 11/15/03

Chain of Custody Documentation

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES K2307185

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-9	N. virens		A-E	K2307177
CH03-10	N. virens		A-E	↓
CH03-11	N. virens		A-E	↓
CH03-12	N. virens		A-E	↓
CH03-13	N. virens		A-E	K2307180
CH03-14	N. virens		A-E	↓
CH03-15	N. virens		A-E	↓
CH03-16	N. virens		A-E	↓
CH03-17	N. virens		A-E	K2307185
Total Number of Samples:	9			

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Anacortes / Canoe Island Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[signature]	[signature]	9/16/03	15A
[signature]	Fed-Ex	9/16/03	1700
	Tracy Black CAI	9/17/03	1000

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03 -20	N. virens		A-E	17307185
Pre-Test	N. virens			↓
E-CH03-CTRL	N. virens		A-F	*Used for sample CH03-20

Total Number of Samples:	3	

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Aromar / Coastal Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
Craig [illegible]	[illegible]	9/16/03	1577
[illegible]	Fed-Ex	9/16/03	1700
	Tracy B Clark CAS	9/17/03	1000

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Anamar Work Order K23 07185

Cooler received on 9-17-03 and opened on 9-17-03 by KM.

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: FX - Attach. Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.0 1.1 0.5
   Temperature Blank:
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Water, ice, plastic
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

000009

CRFREV.DOC3/5/2003

K2307177, 7180, and 7185 (N.virens - "worms")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-9A		7177-001					
CH03-10A		7177-006					
CH03-11A		7177-011					
CH03-20A		7185-006					
	E-CH03-9,10,11,20-T-A (comp)			X	X	X	X
CH03-9B		7177-002					
CH03-10B		7177-007					
CH03-11B		7177-012					
CH03-20B		7185-007					
	E-CH03-9,10,11,20-T-B (comp)			X	X	X	X
CH03-9C		7177-003					
CH03-10C		7177-008					
CH03-11C		7177-013					
CH03-20C		7185-008					
	E-CH03-9,10,11,20-T-C (comp)			X	X	X	X
CH03-9D		7177-004					
CH03-10D		7177-009					
CH03-11D		7177-014					
CH03-20D		7185-009					
	E-CH03-9,10,11,20-T-D (comp)			X	X	X	X
CH03-9E		7177-005					
CH03-10E		7177-010					
CH03-11E		7177-015					
CH03-20E		7185-010					
	E-CH03-9,10,11,20-T-E (comp)			X	X	X	X
CH03-12A	E-CH03-12-T-A	7177-016	X				
CH03-12B	E-CH03-12-T-B	7177-017	X				
CH03-12C	E-CH03-12-T-C	7177-018	X				
CH03-12D	E-CH03-12-T-D	7177-019	X				
CH03-12E	E-CH03-12-T-E	7177-020	X				

000010

K2307177, 7180, and 7185 (N.virens - "worms")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-12A		7177-016					
CH03-15A		7180-011					
	E-CH03-12,15-T-A (comp)			X	X	X	X
CH03-12B		7177-017					
CH03-15B		7180-012					
	E-CH03-12,15-T-B (comp)			X	X	X	X
CH03-12C		7177-018					
CH03-15C		7180-013					
	E-CH03-12,15-T-C (comp)			X	X	X	X
CH03-12D		7177-019					
CH03-15D		7180-014					
	E-CH03-12,15-T-D (comp)			X	X	X	X
CH03-12E		7177-020					
CH03-15E		7180-015					
	E-CH03-12,15-T-E (comp)			X	X	X	X
CH03-13A		7180-001					
CH03-16A		7180-016					
	E-CH03-13,16-T-A (comp)			X	X	X	X
CH03-13B		7180-002					
CH03-16B		7180-017					
	E-CH03-13,16-T-B (comp)			X	X	X	X
CH03-13C		7180-003					
CH03-16C		7180-018					
	E-CH03-13,16-T-C (comp)			X	X	X	X
CH03-13D		7180-004					
CH03-16D		7180-019					
	E-CH03-13,16-T-D (comp)			X	X	X	X
CH03-13E		7180-005					
CH03-16E		7180-020					
	E-CH03-13,16-T-E (comp)			X	X	X	X

K2307177, 7180, and 7185 (N.virens - "worms")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
E-CH03-CTRL-A	RS-CH03-T-A	7185-012	X	X	X	X	X
E-CH03-CTRL-B	RS-CH03-T-B	7185-013	X	X	X	X	X
E-CH03-CTRL-C	RS-CH03-T-C	7185-014	X	X	X	X	X
E-CH03-CTRL-D	RS-CH03-T-D	7185-015	X	X	X	X	X
E-CH03-CTRL-E	RS-CH03-T-E	7185-016	X	X	X	X	X
N.virens Pre-Tissue	N.virens CH03 Pre	7185-011	X	X	X	X	X

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	9/17/03

Solids, Total

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	Freeze Dry	Basis:	Wet
Test Notes:			

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
E-CH03-9,10,11,20-T-A (comp)	K2307751-005	10/15/03	11.9	
E-CH03-9,10,11,20-T-B (comp)	K2307751-010	10/15/03	12.1	
E-CH03-9,10,11,20-T-C (comp)	K2307751-015	10/15/03	12.3	
E-CH03-9,10,11,20-T-D (comp)	K2307751-020	10/15/03	12.5	
E-CH03-9,10,11,20-T-E (comp)	K2307751-025	10/15/03	12.0	
E-CH03-12,15,T-A (comp)	K2307751-028	10/15/03	11.3	
E-CH03-12,15-T-B (comp)	K2307751-031	10/15/03	12.2	
E-CH03-12,15-T-C (comp)	K2307751-034	10/15/03	11.1	
E-CH03-12,15-T-D (comp)	K2307751-037	10/15/03	12.3	
E-CH03-12,15-T-E (comp)	K2307751-040	10/15/03	12.1	
E-CH03-13,16-T-A (comp)	K2307751-043	10/15/03	12.1	
E-CH03-13,16-T-B (comp)	K2307751-046	10/15/03	12.3	
E-CH03-13,16-T-C (comp)	K2307751-049	10/15/03	10.5	
E-CH03-13,16-T-D (comp)	K2307751-052	10/15/03	11.7	
E-CH03-13,16-T-E (comp)	K2307751-055	10/15/03	10.6	

Approved By: _____ Date: 11/11/03

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	9/17/03
		Date Extracted:	NA
		Date Analyzed:	10/15/03

Duplicate Summary
Total Metals

Sample Name:	E-CH03-12,15-T-D (comp)	Units:	PERCENT
Lab Code:	K2307751-037D	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	12.3	12.4	12.4	<1	

Approved By: _____ Date: 11/14/03

DUP/052595

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Sample No.	Lab Sample ID.
E-CH03-9,10,11,20-T-A (comp)	K2307751-005
E-CH03-9,10,11,20-T-A (comp)D	K2307751-005D
E-CH03-9,10,11,20-T-B (comp)	K2307751-010
E-CH03-9,10,11,20-T-B (comp)S	K2307751-010S
E-CH03-9,10,11,20-T-C (comp)	K2307751-015
E-CH03-9,10,11,20-T-D (comp)	K2307751-020
E-CH03-9,10,11,20-T-E (comp)	K2307751-025
E-CH03-12,15,T-A (comp)	K2307751-028
E-CH03-12,15-T-B (comp)	K2307751-031
E-CH03-12,15-T-C (comp)	K2307751-034
E-CH03-12,15-T-D (comp)	K2307751-037
E-CH03-12,15-T-D (comp)D	K2307751-037D
E-CH03-12,15-T-D (comp)S	K2307751-037S
E-CH03-12,15-T-E (comp)	K2307751-040
E-CH03-13,16-T-A (comp)	K2307751-043
E-CH03-13,16-T-B (comp)	K2307751-046
E-CH03-13,16-T-C (comp)	K2307751-049
E-CH03-13,16-T-D (comp)	K2307751-052
E-CH03-13,16-T-E (comp)	K2307751-055
Method Blank	K2307751-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 11/11/03

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-A (comp) Lab Code: K2307751-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.24	0.02	5	10/17/03	10/28/03	9.66		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.45		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.032		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.05	B	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.460		
Lead	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0893		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.014		
Nickel	200.8	0.048	0.002	5	10/17/03	10/28/03	0.094		
Silver	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0219		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	8.59		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-B (comp) Lab Code: K2307751-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.24	0.02	5	10/17/03	10/28/03	10.0		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.42		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.031		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	B	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.480		
Lead	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0809		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.012		
Nickel	200.8	0.048	0.002	5	10/17/03	10/28/03	0.112		
Silver	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0224		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	17.7		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-C (comp) Lab Code: K2307751-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.25	0.02	5	10/17/03	10/28/03	12.7		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.002	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.38		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.028		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	U	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.240		
Lead	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0727		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.013		
Nickel	200.8	0.049	0.002	5	10/17/03	10/28/03	0.097		
Silver	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0169		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	13.8		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-D (comp) Lab Code: K2307751-020

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.25	0.03	5	10/17/03	10/28/03	24.5		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.53		
Cadmium	200.8	0.003	0.001	5	10/17/03	10/28/03	0.033		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.05	B	
Copper	200.8	0.013	0.008	5	10/17/03	10/28/03	1.690		
Lead	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0879		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.015		
Nickel	200.8	0.050	0.003	5	10/17/03	10/28/03	0.107		
Silver	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0173		N
Zinc	200.8	0.06	0.03	5	10/17/03	10/28/03	33.0		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-9,10,11,20-T-E (comp) Lab Code: K2307751-025

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.24	0.02	5	10/17/03	10/28/03	8.79		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.002	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.40		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.028		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	B	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.280		
Lead	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0639		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.014		
Nickel	200.8	0.048	0.002	5	10/17/03	10/28/03	0.079		
Silver	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0300		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	26.5		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15,T-A (comp)
Lab Code: K2307751-028

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.23	0.02	5	10/17/03	10/28/03	6.66		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.42		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.030		
Chromium	6010B	0.06	0.03	1	10/17/03	10/28/03	0.06		
Copper	200.8	0.011	0.007	5	10/17/03	10/28/03	1.410		
Lead	200.8	0.0023	0.0003	5	10/17/03	10/28/03	0.0663		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.014		
Nickel	200.8	0.045	0.002	5	10/17/03	10/28/03	0.175		
Silver	200.8	0.0023	0.0003	5	10/17/03	10/28/03	0.0178		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	39.9		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-B (comp)
Lab Code: K2307751-031

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.24	0.02	5	10/17/03	10/28/03	3.56		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.57		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.034		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	U	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	2.440		
Lead	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0790		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.017		
Nickel	200.8	0.049	0.002	5	10/17/03	10/28/03	0.180		
Silver	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0167		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	17.6		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-C (comp)
Lab Code: K2307751-034

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.22	0.02	5	10/17/03	10/28/03	6.73		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.56		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.033		
Chromium	6010B	0.06	0.03	1	10/17/03	10/28/03	0.03	U	
Copper	200.8	0.011	0.007	5	10/17/03	10/28/03	1.320		
Lead	200.8	0.0022	0.0003	5	10/17/03	10/28/03	0.0727		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.019		
Nickel	200.8	0.044	0.002	5	10/17/03	10/28/03	0.171		
Silver	200.8	0.0022	0.0003	5	10/17/03	10/28/03	0.0140		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	44.4		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-D (comp)
Lab Code: K2307751-037

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.25	0.02	5	10/17/03	10/28/03	5.81		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.44		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.035		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	B	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.520		
Lead	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0831		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.018		
Nickel	200.8	0.049	0.002	5	10/17/03	10/28/03	0.182		
Silver	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0143		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	17.9		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-12,15-T-E (comp)
Lab Code: K2307751-040

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.24	0.02	5	10/17/03	10/28/03	3.18		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.002	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.45		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.031		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	U	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.390		
Lead	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0704		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.016		
Nickel	200.8	0.048	0.002	5	10/17/03	10/28/03	0.115		
Silver	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0219		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	31.3		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-A (comp)
Lab Code: K2307751-043

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.24	0.02	5	10/17/03	10/28/03	2.48		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.57		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.031		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	U	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.860		
Lead	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0661		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.013		
Nickel	200.8	0.048	0.002	5	10/17/03	10/28/03	0.156		
Silver	200.8	0.0024	0.0004	5	10/17/03	10/28/03	0.0158		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	46.8		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-B (comp)
Lab Code: K2307751-046

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.25	0.02	5	10/17/03	10/28/03	7.41		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.46		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.030		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	B	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.570		
Lead	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0698		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.015		
Nickel	200.8	0.049	0.002	5	10/17/03	10/28/03	0.139		
Silver	200.8	0.0025	0.0004	5	10/17/03	10/28/03	0.0196		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	9.30		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-C (comp)
Lab Code: K2307751-049

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.21	0.02	5	10/17/03	10/28/03	3.64		
Antimony	200.8	0.005	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.05	0.01	5	10/17/03	10/28/03	1.32		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.028		
Chromium	6010B	0.05	0.03	1	10/17/03	10/28/03	0.04	B	
Copper	200.8	0.011	0.006	5	10/17/03	10/28/03	1.390		
Lead	200.8	0.0021	0.0003	5	10/17/03	10/28/03	0.0609		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.014		
Nickel	200.8	0.042	0.002	5	10/17/03	10/28/03	0.145		
Silver	200.8	0.0021	0.0003	5	10/17/03	10/28/03	0.0141		N
Zinc	200.8	0.05	0.02	5	10/17/03	10/28/03	32.9		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-D (comp)
Lab Code: K2307751-052

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.23	0.02	5	10/17/03	10/28/03	2.64		
Antimony	200.8	0.006	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.06	0.01	5	10/17/03	10/28/03	1.39		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.031		
Chromium	6010B	0.06	0.04	1	10/17/03	10/28/03	0.04	B	
Copper	200.8	0.012	0.007	5	10/17/03	10/28/03	1.340		
Lead	200.8	0.0023	0.0004	5	10/17/03	10/28/03	0.0659		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.016		
Nickel	200.8	0.047	0.002	5	10/17/03	10/28/03	0.136		
Silver	200.8	0.0023	0.0004	5	10/17/03	10/28/03	0.0179		N
Zinc	200.8	0.06	0.02	5	10/17/03	10/28/03	21.9		N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Wet

Sample Name: E-CH03-13,16-T-E (comp)
Lab Code: K2307751-055

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.21	0.02	5	10/17/03	10/28/03	2.39		
Antimony	200.8	0.005	0.001	5	10/17/03	10/28/03	0.001	B	
Arsenic	200.8	0.05	0.01	5	10/17/03	10/28/03	1.27		
Cadmium	200.8	0.002	0.001	5	10/17/03	10/28/03	0.028		
Chromium	6010B	0.05	0.03	1	10/17/03	10/28/03	0.04	B	
Copper	200.8	0.011	0.006	5	10/17/03	10/28/03	1.120		
Lead	200.8	0.0021	0.0003	5	10/17/03	10/28/03	0.0585		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.018		
Nickel	200.8	0.043	0.002	5	10/17/03	10/28/03	0.104		
Silver	200.8	0.0021	0.0003	5	10/17/03	10/28/03	0.0191		N
Zinc	200.8	0.05	0.02	5	10/17/03	10/28/03	7.19		N*

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307751
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: Method Blank Lab Code: K2307751-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	0.30	0.03	5	10/17/03	10/28/03	0.27	B	
Antimony	200.8	0.008	0.001	5	10/17/03	10/28/03	0.001	U	
Arsenic	200.8	0.08	0.01	5	10/17/03	10/28/03	0.01	U	
Cadmium	200.8	0.003	0.002	5	10/17/03	10/28/03	0.002	U	
Chromium	6010B	0.08	0.05	1	10/17/03	10/28/03	0.05	U	
Copper	200.8	0.015	0.009	5	10/17/03	10/28/03	0.009	U	
Lead	200.8	0.0030	0.0005	5	10/17/03	10/28/03	0.0005	U	
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.002	U	
Nickel	200.8	0.060	0.003	5	10/17/03	10/28/03	0.004	B	
Silver	200.8	0.0030	0.0005	5	10/17/03	10/28/03	0.0005	U	N
Zinc	200.8	0.08	0.03	5	10/17/03	10/28/03	0.03	U	N*

% Solids: NA

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-A (comp) Lab Code: K2307751-005

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	81.1		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	12.2		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.27		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.4	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	12.3		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.750		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.12		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.79		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.184		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	72.2		N*

% Solids: 11.9

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-B (comp) Lab Code: K2307751-010

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	82.8		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	11.8		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.26		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	12.3		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.668		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.10		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.92		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.185		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	147		N*

% Solids: 12.1

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-C (comp) Lab Code: K2307751-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	104		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.02	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	11.2		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.23		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	10.1		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.591		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.10		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.79		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.138		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	112		N*

% Solids: 12.3

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-D (comp) Lab Code: K2307751-020

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	196		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	12.3		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.27		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.4	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	13.5		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.703		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.12		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.86		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.139		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	264		N*

% Solids: 12.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-9,10,11,20-T-E (comp) Lab Code: K2307751-025

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	73.3		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	11.7		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.23		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.4	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	10.7		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.532		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.12		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.66		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.250		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	221		N*

% Solids: 12.0

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15,T-A (comp)
Lab Code: K2307751-028

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	59.0		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	12.6		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.26		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.5		
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	12.4		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.587		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.12		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.55		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.158		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	353		N*

% Solids: 11.3

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-B (comp)
Lab Code: K2307751-031

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	29.2		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	12.9		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.28		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	20.0		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.648		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.14		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.48		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.137		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	144		N*

% Solids: 12.2

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-C (comp)
Lab Code: K2307751-034

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	60.7		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	14.0		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.30		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	11.9		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.655		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.17		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.54		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.126		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	400		N*

% Solids: 11.1

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-D (comp)
Lab Code: K2307751-037

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	47.2		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	11.7		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.29		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	12.4		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.675		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.15		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.48		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.116		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	145		N*

% Solids: 12.3

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-12,15-T-E (comp)
Lab Code: K2307751-040

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	26.3		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.02	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	12.0		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.26		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	11.5		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.582		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.13		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.95		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.181		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	258		N*

% Solids: 12.1

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-A (comp)
Lab Code: K2307751-043

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	20.5		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	13.0		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.26		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	15.3		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.546		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.11		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.29		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.130		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	387		N*

% Solids: 12.1

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-B (comp)
Lab Code: K2307751-046

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	60.3		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	11.9		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.24		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	12.8		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.567		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.12		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.13		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.160		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	75.6		N*

% Solids: 12.3

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-C (comp)
Lab Code: K2307751-049

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	34.7		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	12.6		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.27		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.4	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	13.2		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.580		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.13		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.39		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.135		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	314		N*

% Solids: 10.5

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-D (comp)
Lab Code: K2307751-052

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	22.6		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	11.9		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.27		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.4	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	11.4		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.563		
Mercury	7471A	0.03	0.02	1	10/24/03	10/28/03	0.14		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	1.16		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.153		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	187		N*

% Solids: 11.7

Comments:

METALS
-1-
INORGANIC ANALYSIS DATA SHEET

Client: ANAMAR Environmental Chemistry, Inc.
Project No.: NA
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Date Collected: //
Date Received: 09/17/03
Units: MG/KG
Basis: Dry

Sample Name: E-CH03-13,16-T-E (comp)
Lab Code: K2307751-055

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	22.5		
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	B	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	12.0		
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.26		
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.4	B	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	10.5		
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.552		
Mercury	7471A	0.04	0.02	1	10/24/03	10/28/03	0.17		
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.98		
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.180		N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	67.8		N*

% Solids: 10.6

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307751
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: Method Blank Lab Code: K2307751-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.2	5	10/17/03	10/28/03	1.8	B	
Antimony	200.8	0.05	0.01	5	10/17/03	10/28/03	0.01	U	
Arsenic	200.8	0.50	0.05	5	10/17/03	10/28/03	0.05	U	
Cadmium	200.8	0.02	0.01	5	10/17/03	10/28/03	0.01	U	
Chromium	6010B	0.5	0.3	1	10/17/03	10/28/03	0.3	U	
Copper	200.8	0.10	0.06	5	10/17/03	10/28/03	0.06	U	
Lead	200.8	0.020	0.003	5	10/17/03	10/28/03	0.003	U	
Mercury	7471A	0.02	0.01	1	10/24/03	10/28/03	0.01	U	
Nickel	200.8	0.40	0.02	5	10/17/03	10/28/03	0.02	B	
Silver	200.8	0.020	0.003	5	10/17/03	10/28/03	0.003	U	N
Zinc	200.8	0.5	0.2	5	10/17/03	10/28/03	0.2	U	N*

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	100	95.4	95	25.0	25.0	100	24.1	96	200.8
Antimony	25.0	25.3	101	25.0	25.0	100	24.8	99	200.8
Arsenic	25.0	24.6	98	25.0	24.3	97	24.8	99	200.8
Cadmium	12.5	12.7	102	25.0	24.8	99	24.7	99	200.8
Chromium	500	491	98	500	499	100	494	99	6010B
Copper	12.5	12.5	100	25.0	24.4	98	24.8	99	200.8
Lead	25.0	25.0	100	25.0	25.0	100	24.8	99	200.8
Mercury	5.0	5.43	109	5.0	5.26	105	5.40	108	7471A
Nickel	25.0	25.4	102	25.0	25.0	100	25.3	101	200.8
Silver	12.5	12.3	98	25.0	24.7	99	24.7	99	200.8
Zinc	25.0	25.3	101	25.0	24.6	98	25.1	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				25.0	23.9	96	23.8	95	200.8
Antimony				25.0	24.5	98	24.9	100	200.8
Arsenic				25.0	24.4	98	24.3	97	200.8
Cadmium				25.0	24.9	100	24.8	99	200.8
Chromium				500	495	99	504	101	6010B
Copper				25.0	24.4	98	24.5	98	200.8
Lead				25.0	23.7	95	23.6	94	200.8
Mercury				5.0	5.40	108	5.41	108	7471A
Nickel				25.0	24.9	100	25.0	100	200.8
Silver				25.0	24.8	99	24.6	98	200.8
Zinc				25.0	24.9	100	24.9	100	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				25.0	24.2	97	25.0	100	200.8
Antimony				25.0	24.8	99	24.8	99	200.8
Arsenic				25.0	24.4	98	24.3	97	200.8
Cadmium				25.0	24.7	99	24.6	98	200.8
Chromium				500	501	100	500	100	6010B
Copper				25.0	24.5	98	24.4	98	200.8
Lead				25.0	24.2	97	24.4	98	200.8
Mercury				5.0	5.33	107			7471A
Nickel				25.0	24.8	99	24.9	100	200.8
Silver				25.0	24.5	98	24.5	98	200.8
Zinc				25.0	24.8	99	24.7	99	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Chromium				500	508	102	496	99	6010B

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Chromium				500	504	101	499	100	6010B

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Chromium				500	500	100			6010B

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Concentration Units: ug/I

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				4.0	4.19	105		
Antimony				0.10	0.11	105		
Arsenic				1.0	1.09	109		
Cadmium				0.10	0.10	103		
Chromium				5.0	4.69	94		
Copper				0.20	0.20	100		
Lead				0.04	0.0415	104		
Mercury	0.20	0.164	82					
Nickel				0.40	0.46	115		
Silver				0.04	0.0433	108		
Zinc				1.0	0.92	92		

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Aluminum	0.40	U	0.40	U	0.40	U	-0.52	B					200.8
Antimony	0.029	B	0.012	U	0.02	B	0.021	B					200.8
Arsenic	0.10	U	0.10	U	0.10	U	0.12	B					200.8
Cadmium	0.020	U	0.020	U	0.02	U	0.020	U					200.8
Chromium	3.00	U	3.00	U	3.00	U	3.00	U					6010B
Copper	0.120	U	0.120	U	0.120	U	0.120	U					200.8
Lead	0.0060	U	0.0060	U	0.0060	U	0.0060	U					200.8
Mercury	0.100	U	0.100	U	0.100	U	0.100	U					7471A
Nickel	0.060	B	0.045	B	0.04	U	0.040	U					200.8
Silver	0.0060	U	0.0060	U	0.0060	U	0.0060	U					200.8
Zinc	0.40	U	0.40	U	0.40	U	0.40	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum			0.40	U	0.40	U	0.40	U					200.8
Antimony			0.020	B	0.02	B	0.024	B					200.8
Arsenic			0.10	U	0.19	B	0.16	B					200.8
Cadmium			0.020	U	0.02	U	0.020	U					200.8
Chromium			3.00	U	3.00	U	3.00	U					6010B
Copper			0.120	U	0.120	U	0.120	U					200.8
Lead			0.0060	U	0.0060	U	0.0060	U					200.8
Mercury			0.100	U	0.100	U							7471A
Nickel			0.040	U	0.05	B	0.040	U					200.8
Silver			0.0060	U	0.0060	U	0.0060	U					200.8
Zinc			0.40	U	0.40	U	0.40	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Chromium			3.00	U	3.00	U	3.00	U					6010B

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Chromium			3.00	U	3.00	U								6010B

METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Chromium		500	-0.08	443	89			

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307751
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/N. Virens
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: E-CH03-9,10,11,20-T-B (comp)S
Lab Code: K2307751-010S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	29.2		10.0		24.2	79		200.8
Antimony	70 - 130	5.640		0.001	B	6.050	93		200.8
Arsenic	70 - 130	4.10		1.42		2.42	111		200.8
Cadmium	70 - 130	0.588		0.031		0.605	92		200.8
Chromium	60 - 130	2.46		0.04	B	2.42	100		6010B
Copper	70 - 130	4.140		1.480		3.020	88		200.8
Lead	70 - 130	5.6000		0.0809		6.0500	91		200.8
Nickel	70 - 130	5.670		0.112		6.050	92		200.8
Silver	70 - 130	0.2530		0.0224		0.6050	38	N	200.8
Zinc	70 - 130	27.9		17.7		6.05	169	N	200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307751
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/N. Virens
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: E-CH03-12,15-T-D (comp)S
Lab Code: K2307751-037S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	26.7		5.81		24.6	85		200.8
Antimony	70 - 130	5.920		0.001	B	6.160	96		200.8
Arsenic	70 - 130	3.20		1.44		2.46	72		200.8
Cadmium	70 - 130	0.635		0.035		0.616	97		200.8
Chromium	60 - 130	2.59		0.04	B	2.46	104		6010B
Copper	70 - 130	4.340		1.520		3.080	92		200.8
Lead	70 - 130	5.5800		0.0831		6.1600	89		200.8
Mercury	60 - 130	0.100		0.018		0.097	84		7471A
Nickel	70 - 130	5.980		0.182		6.160	94		200.8
Silver	70 - 130	0.4500		0.0143		0.6160	71		200.8
Zinc	70 - 130	14.0		17.9		6.16	-63	N	200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307751
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/N. Virens
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name:E-CH03-9,10,11,20-T-A (comp)D Lab Code: K2307751-005D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	9.66		8.69		11		200.8
Antimony		0.001	B	0.001	B	11		200.8
Arsenic	30	1.45		1.28		12		200.8
Cadmium	30	0.032		0.027		15		200.8
Chromium		0.05	B	0.15		104		6010B
Copper	30	1.460		1.290		12		200.8
Lead	30	0.0893		0.0861		4		200.8
Nickel		0.094		0.116		21		200.8
Silver	30	0.0219		0.0178		21		200.8
Zinc	30	8.59		19.6		78	*	200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Form VI - IN

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Project No.:
Project Name: Canaveral Harbor/N. Virens
Matrix: TISSUE

Service Request: K2307751
Units: mg/kg
Basis: Wet
% Solids: NA

Sample Name:E-CH03-12,15-T-D (comp)D Lab Code: K2307751-037D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	5.81		5.55		5		200.8
Antimony		0.001	B	0.001	B	6		200.8
Arsenic	30	1.44		1.47		1		200.8
Cadmium	30	0.035		0.035		2		200.8
Chromium		0.04	B	0.06	B	38		6010B
Copper	30	1.520		1.550		2		200.8
Lead	30	0.0831		0.0816		2		200.8
Mercury		0.018		0.016		13		7471A
Nickel		0.182		0.190		4		200.8
Silver	30	0.0143		0.0156		9		200.8
Zinc	30	17.9		20.3		13		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmantal Chemistry, Inc.
Project: Canaveral Harbor/N.virens
LCS Matrix: Tissue

Service Request: K2307751
Date Collected: NA
Date Received: NA
Date Extracted: 10/17-31/03
Date Analyzed: 10/28-11/5/03

Laboratory Control Sample Summary
Total Metals

Sample Name: Laboratory Control Sample
Lab Code: K2307751-LCS
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Source: N.R.C.C. Dorm-2

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Arsenic	PSEP Tissue	200.8	18.0	20.0	111	13.5-22.9	
Chromium	PSEP Tissue	6010B	34.7	38.6	111	23.4-48.2	
Copper	PSEP Tissue	200.8	2.34	2.22	95	1.74-3.0	
Lead	PSEP Tissue	200.8	0.065	0.055	85	0.020-0.091	
Nickel	PSEP Tissue	200.8	19.4	19.9	103	13.0-27.0	
Zinc	PSEP Tissue	200.8	25.6	27.1	106	20.3-31.0	

Approved By: _____ Date: 11/11/03

LCS/032295

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmantal Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/N.virens	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/17-31/03
		Date Analyzed:	10/28-11/5/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307751-LCS	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dolt-3

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Aluminum	PSEP Tissue	200.8	24.7	25.8	104	18.2-31.9	
Arsenic	PSEP Tissue	200.8	10.2	10.1	99	7.76-12.8	
Cadmium	PSEP Tissue	200.8	19.4	19.9	103	15.0-24.0	
Copper	PSEP Tissue	200.8	31.2	32.4	104	24.2-38.6	
Lead	PSEP Tissue	200.8	0.319	0.300	94	0.219-0.437	
Mercury	PSEP Tissue	7471A	3.37	3.08	91	2.58-4.21	
Nickel	PSEP Tissue	200.8	2.72	3.40	125	1.90-3.68	
Silver	PSEP Tissue	200.8	1.2	1.21	101	0.90-1.52	
Zinc	PSEP Tissue	200.8	86.6	99.5	115	67.4-107	

Approved By: _____ Date: 11/11/03

LCS/032295

METALS
-9-
ICP SERIAL DILUTIONS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.: Units: ug/L

Project Name: Canaveral Harbor/N. Virens

Sample Name: E-CH03-13,16-T-E (comp)I Lab Code: K2307751-055L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ-	Q	Method
Chromium	3.71	B	15.0	U			6010B

000063

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.200	0.100	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	27		4.00	0.40	200.8
Antimony	123		0.100	0.012	200.8
Arsenic	75		1.00	0.10	200.8
Cadmium	111		0.040	0.020	200.8
Copper	65		0.200	0.120	200.8
Lead	208		0.0400	0.0060	200.8
Nickel	60		0.800	0.040	200.8
Silver	107		0.0400	0.0060	200.8
Zinc	66		1.00	0.40	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Chromium	267.72		5.00	3.00	6010B

Comments

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0009000	0.0000000	-0.0035000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0125000
Arsenic	189.0	0.0000000	0.0000000	-0.0001400	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000900	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000230	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003000	0.0000000	0.0000000	0.0000000	-0.0003600
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009500	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000780	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0005000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0001000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	-0.0012000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Mo	Ni	Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019000
Antimony	206.8	-0.0280000	0.0000000	0.0002400	0.0000000	0.0004000
Arsenic	189.0	0.0010000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	-0.0004700	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000250	-0.0000120	0.0000600	0.0000000	-0.0000560
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001700	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015000	0.0000000	0.0000000
Copper	324.7	0.0003400	0.0000000	-0.0000070	-0.0017000	0.0000000
Iron	259.9	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.0740000	0.0700000
Lead	220.3	-0.0016000	0.0004600	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0001200
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0006800	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0003000	0.0000000	0.0000000	-0.0001700	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0005500	-0.0060000	-0.0002500	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0016000	0.0017000	0.0037000
Tin	189.9	0.0000000	0.0000000	-0.0019000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002500	0.0000000	-0.0006400	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	-0.0000600	0.0000000	0.0000000

Columbia Analytical Services, Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003100	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0004000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0005900	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	15.00	1000.0	200.8
Antimony	15.00	1000.0	200.8
Arsenic	15.00	800.0	200.8
Cadmium	15.00	1000.0	200.8
Copper	15.00	1000.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	1000.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	1000.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Chromium	5.00	200000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2307751-028	10/17/03	PSEP TISSUE	2.65	30
K2307751-031	10/17/03	PSEP TISSUE	2.48	30
K2307751-034	10/17/03	PSEP TISSUE	2.71	30
K2307751-037	10/17/03	PSEP TISSUE	2.45	30
K2307751-037D	10/17/03	PSEP TISSUE	2.43	30
K2307751-037S	10/17/03	PSEP TISSUE	2.44	30
K2307751-040	10/17/03	PSEP TISSUE	2.48	30
K2307751-043	10/17/03	PSEP TISSUE	2.48	30
K2307751-046	10/17/03	PSEP TISSUE	2.45	30
K2307751-049	10/17/03	PSEP TISSUE	2.86	30
K2307751-052	10/17/03	PSEP TISSUE	2.57	30
K2307751-055	10/17/03	PSEP TISSUE	2.82	30
K2307751-005	10/17/03	PSEP TISSUE	2.53	30
K2307751-005D	10/17/03	PSEP TISSUE	1.69	20
K2307751-010	10/17/03	PSEP TISSUE	2.49	30
K2307751-010S	10/17/03	PSEP TISSUE	1.65	20
K2307751-015	10/17/03	PSEP TISSUE	2.43	30
K2307751-020	10/17/03	PSEP TISSUE	2.39	30
K2307751-025	10/17/03	PSEP TISSUE	2.50	30
LCSS DORM	10/17/03	PSEP TISSUE	0.302	30
LCSS DOLT	10/17/03	PSEP TISSUE	0.301	30
K2307751-MB	10/17/03	PSEP TISSUE	2.00	30

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2307751-028	10/24/03	PSEP TISSUE	2.53	50
K2307751-031	10/24/03	PSEP TISSUE	2.66	50
K2307751-034	10/24/03	PSEP TISSUE	2.61	50
K2307751-037	10/24/03	PSEP TISSUE	2.57	50
K2307751-037D	10/24/03	PSEP TISSUE	2.67	50
K2307751-037S	10/24/03	PSEP TISSUE	2.58	50
K2307751-040	10/24/03	PSEP TISSUE	2.53	50
K2307751-043	10/24/03	PSEP TISSUE	2.51	50
K2307751-046	10/24/03	PSEP TISSUE	2.55	50
K2307751-049	10/24/03	PSEP TISSUE	2.55	50
K2307751-052	10/24/03	PSEP TISSUE	2.53	50
K2307751-055	10/24/03	PSEP TISSUE	2.52	50
K2307751-005	10/24/03	PSEP TISSUE	2.57	50
K2307751-010	10/24/03	PSEP TISSUE	2.51	50
K2307751-015	10/24/03	PSEP TISSUE	2.52	50
K2307751-020	10/24/03	PSEP TISSUE	2.51	50
K2307751-025	10/24/03	PSEP TISSUE	2.51	50
LCS DOLT	10/24/03	PSEP TISSUE	0.549	100
K2307751-MB	10/24/03	PSEP TISSUE	2.50	50

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
K2307751-028	10/17/03	PSEP TISSUE	2.65	30
K2307751-031	10/17/03	PSEP TISSUE	2.48	30
K2307751-034	10/17/03	PSEP TISSUE	2.71	30
K2307751-037	10/17/03	PSEP TISSUE	2.45	30
K2307751-037D	10/17/03	PSEP TISSUE	2.43	30
K2307751-037S	10/17/03	PSEP TISSUE	2.44	30
K2307751-040	10/17/03	PSEP TISSUE	2.48	30
K2307751-043	10/17/03	PSEP TISSUE	2.48	30
K2307751-046	10/17/03	PSEP TISSUE	2.45	30
K2307751-049	10/17/03	PSEP TISSUE	2.86	30
K2307751-052	10/17/03	PSEP TISSUE	2.57	30
K2307751-055	10/17/03	PSEP TISSUE	2.82	30
K2307751-005	10/17/03	PSEP TISSUE	2.53	30
K2307751-005D	10/17/03	PSEP TISSUE	1.69	20
K2307751-010	10/17/03	PSEP TISSUE	2.49	30
K2307751-010S	10/17/03	PSEP TISSUE	1.65	20
K2307751-015	10/17/03	PSEP TISSUE	2.43	30
K2307751-020	10/17/03	PSEP TISSUE	2.39	30
K2307751-025	10/17/03	PSEP TISSUE	2.50	30
LCS DORM	10/17/03	PSEP TISSUE	0.302	30
LCS DOLT	10/17/03	PSEP TISSUE	0.301	30
K2307751-MB	10/17/03	PSEP TISSUE	2.00	30

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	08:36																X									
STANDARD #1	1.00	08:38																X									
STANDARD #2	1.00	08:39																X									
STANDARD #3	1.00	08:41																X									
STANDARD #4	1.00	08:43																X									
STANDARD #5	1.00	08:44																X									
ICV	1.00	08:46																X									
ICB	1.00	08:47																X									
CCV1	1.00	08:49																X									
CCB1	1.00	08:51																X									
CRA	1.00	08:52																X									
K2307751-MB	1.00	08:54																X									
LCS DOLT	2.00	08:55																X									
K2307751-005	1.00	08:57																X									
K2307751-010	1.00	08:59																X									
K2307751-015	1.00	09:00																X									
K2307751-020	1.00	09:02																X									
K2307751-025	1.00	09:04																X									
K2307751-028	1.00	09:05																X									
K2307751-031	1.00	09:07																X									
CCV2	1.00	09:08																X									
CCB2	1.00	09:10																X									
K2307751-034	1.00	09:12																X									
K2307751-037	1.00	09:13																X									
K2307751-037D	1.00	09:15																X									
ZK2307751-037S	1.00	09:16																									
K2307751-040	1.00	09:18																X									
K2307751-043	1.00	09:20																X									
K2307751-046	1.00	09:21																X									
K2307751-049	1.00	09:23																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2307751-052	1.00	09:25																X									
K2307751-055	1.00	09:26																X									
CCV3	1.00	09:28																X									
CCB3	1.00	09:29																X									
ZZZZZZ	1.00	09:31																									
CCV4	1.00	09:33																X									
CCB4	1.00	09:34																X									
K2307751-037S	2.00	09:37																X									
CCV5	1.00	09:38																X									
CCB5	1.00	09:40																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	08:29									X																
CAL-STDA	1.00	08:32									X																
CAL-STDB	1.00	08:35																									
ICV	1.00	08:40									X																
ZZZZZZ	1.00	08:44																									
ICB	1.00	08:50									X																
CCV1	1.00	08:54									X																
ZZZZZZ	1.00	08:59																									
CCB1	1.00	09:04									X																
CRI	1.00	09:11									X																
ICSA	1.00	09:13									X																
ICSAB	1.00	09:17									X																
ZZZZZZ	1.00	09:21																									
ZZZZZZ	1.00	09:24																									
ZZZZZZ	1.00	09:26																									
ZZZZZZ	1.00	09:30																									
ZZZZZZ	5.00	09:34																									
ZZZZZZ	1.00	09:38																									
ZZZZZZ	1.00	09:40																									
CCVA2	1.00	09:43									X																
ZZZZZZ	1.00	09:46																									
CCB2	1.00	09:48									X																
ZZZZZZ	1.00	10:10																									
ZZZZZZ	1.00	10:13																									
ZZZZZZ	1.00	10:15																									
ZZZZZZ	1.00	10:17																									
ZZZZZZ	1.00	10:20																									
ZZZZZZ	1.00	10:24																									
ZZZZZZ	1.00	10:27																									
ZZZZZZ	1.00	10:29																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	10:32																									
ZZZZZZ	1.00	10:35																									
CCVA3	1.00	10:38									X																
ZZZZZZ	1.00	10:41																									
CCB3	1.00	10:44									X																
CCVA4	1.00	10:47									X																
ZZZZZZ	1.00	10:50																									
CCB4	1.00	10:52									X																
ZZZZZZ	1.00	10:55																									
ZZZZZZ	1.00	10:57																									
ZZZZZZ	1.00	11:00																									
ZZZZZZ	1.00	11:02																									
ZZZZZZ	1.00	11:10																									
ZZZZZZ	1.00	11:13																									
ZZZZZZ	1.00	11:16																									
ZZZZZZ	1.00	11:18																									
ZZZZZZ	1.00	11:21																									
ZZZZZZ	1.00	11:23																									
CCVA5	1.00	11:26									X																
ZZZZZZ	1.00	11:28																									
CCB5	1.00	11:31									X																
ZZZZZZ	1.00	11:34																									
ZZZZZZ	1.00	11:36																									
ZZZZZZ	5.00	11:39																									
ZZZZZZ	1.00	11:41																									
ZZZZZZ	1.00	11:44																									
ZZZZZZ	1.00	11:47																									
CCVA6	1.00	11:49									X																
ZZZZZZ	1.00	11:52																									
CCB6	1.00	11:54									X																

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Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCVA7	1.00	13:24									X																
ZZZZZZ	1.00	13:28																									
CCB7	1.00	13:30									X																
ZZZZZZ	1.00	13:33																									
ZZZZZZ	1.00	13:36																									
ZZZZZZ	1.00	13:38																									
ZZZZZZ	1.00	13:40																									
ZZZZZZ	1.00	13:43																									
ZZZZZZ	1.00	13:47																									
ZZZZZZ	1.00	13:50																									
ZZZZZZ	1.00	13:52																									
ZZZZZZ	1.00	13:55																									
ZZZZZZ	1.00	13:58																									
CCVA8	1.00	14:01									X																
ZZZZZZ	1.00	14:03																									
CCB8	1.00	14:09									X																
ZZZZZZ	1.00	14:12																									
ZZZZZZ	1.00	14:14																									
ZZZZZZ	1.00	14:16																									
ZZZZZZ	1.00	14:19																									
ZZZZZZ	5.00	14:23																									
K2307751-MB	1.00	14:27									X																
LCSS DORM	1.00	14:29									X																
LCSS DOLT	1.00	14:31									X																
K2307751-005	1.00	14:35									X																
K2307751-005D	1.00	14:37									X																
CCVA9	1.00	14:40									X																
ZZZZZZ	1.00	14:42																									
CCB9	1.00	14:45									X																
K2307751-010	1.00	14:48									X																

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Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2307751-010S	1.00	14:50									X																
K2307751-015	1.00	14:53									X																
K2307751-020	1.00	14:56									X																
K2307751-025	1.00	14:58									X																
K2307751-028	1.00	15:01									X																
K2307751-031	1.00	15:03									X																
K2307751-034	1.00	15:06									X																
K2307751-037	1.00	15:08									X																
K2307751-037D	1.00	15:10									X																
CCVA10	1.00	15:13									X																
ZZZZZZ	1.00	15:16																									
CCB10	1.00	15:18									X																
K2307751-037S	1.00	15:22									X																
K2307751-040	1.00	15:25									X																
K2307751-043	1.00	15:39									X																
K2307751-046	1.00	15:42									X																
K2307751-049	1.00	15:44									X																
K2307751-052	1.00	15:47									X																
K2307751-055	1.00	15:50									X																
K2307751-055L	5.00	15:53									X																
ZZZZZZ	1.00	15:56																									
ZZZZZZ	1.00	15:58																									
CCVA11	1.00	16:01									X																
ZZZZZZ	1.00	16:08																									
CCB11	1.00	16:11									X																
ZZZZZZ	1.00	16:15																									
ZZZZZZ	1.00	16:17																									
ZZZZZZ	1.00	16:20																									
ZZZZZZ	1.00	16:22																									
ZZZZZZ	1.00	16:25																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	14:47		X	X	X			X				X		X				X			X				X	
25 PPB STD. MS4-9-C	1.00	14:52		X	X	X			X				X		X				X			X				X	
ICV	1.00	14:58		X	X	X			X				X		X				X			X				X	
CCV1	1.00	15:02		X	X	X			X				X		X				X			X				X	
ICB	1.00	15:08		X	X	X			X				X		X				X			X				X	
CCB1	1.00	15:12		X	X	X			X				X		X				X			X				X	
CRA	1.00	15:17		X	X	X			X				X		X				X			X				X	
K2307751-MB	5.00	15:21		X	X	X			X				X		X				X			X				X	
LCS DORM	5.00	15:25		X	X	X			X				X		X				X			X				X	
LCS DOLT	5.00	15:29		X	X	X			X				X		X				X			X				X	
K2307751-005	5.00	15:33		X	X	X			X				X		X				X			X				X	
K2307751-005D	5.00	15:38		X	X	X			X				X		X				X			X				X	
K2307751-010	5.00	15:42		X	X	X			X				X		X				X			X				X	
K2307751-010S	25.00	15:46		X	X	X			X				X		X				X			X				X	
K2307751-015	5.00	15:52		X	X	X			X				X		X				X			X				X	
K2307751-020	5.00	15:56		X	X	X			X				X		X				X			X				X	
CCV2	1.00	16:00		X	X	X			X				X		X				X			X				X	
CCB2	1.00	16:06		X	X	X			X				X		X				X			X				X	
K2307751-025	5.00	16:10		X	X	X			X				X		X				X			X				X	
K2307751-028	5.00	16:15		X	X	X			X				X		X				X			X				X	
K2307751-031	5.00	16:19		X	X	X			X				X		X				X			X				X	
K2307751-034	5.00	16:23		X	X	X			X				X		X				X			X				X	
K2307751-037	5.00	16:27		X	X	X			X				X		X				X			X				X	
K2307751-037D	5.00	16:32		X	X	X			X				X		X				X			X				X	
K2307751-037S	25.00	16:36		X	X	X			X				X		X				X			X				X	
K2307751-040	5.00	16:41		X	X	X			X				X		X				X			X				X	
K2307751-043	5.00	16:46		X	X	X			X				X		X				X			X				X	
K2307751-046	5.00	16:50		X	X	X			X				X		X				X			X				X	
CCV3	1.00	16:54		X	X	X			X				X		X				X			X				X	
CCB3	1.00	17:00		X	X	X			X				X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2307751-049	5.00	17:04		X	X	X			X				X		X				X			X				X	
K2307751-052	5.00	17:09		X	X	X			X				X		X				X			X				X	
K2307751-055	5.00	17:13		X	X	X			X				X		X				X			X				X	
ZZZZZZ	5.00	17:17																									
ZZZZZZ	5.00	17:21																									
ZZZZZZ	5.00	17:26																									
ZZZZZZ	5.00	17:30																									
ZZZZZZ	5.00	17:35																									
ZZZZZZ	5.00	17:39																									
ZZZZZZ	25.00	17:43																									
CCV4	1.00	17:49		X	X	X			X				X		X				X			X				X	
CCB4	1.00	17:55		X	X	X			X				X		X				X			X				X	
ZZZZZZ	5.00	17:59																									
ZZZZZZ	5.00	18:05																									
ZZZZZZ	5.00	18:09																									
ZZZZZZ	5.00	18:14																									
ZZZZZZ	5.00	18:18																									
ZZZZZZ	5.00	18:23																									
ZZZZZZ	5.00	18:27																									
ZZZZZZ	5.00	18:31																									
ZZZZZZ	5.00	18:36																									
ZZZZZZ	5.00	18:40																									
CCV5	1.00	18:44		X	X	X			X				X		X				X			X				X	
CCB5	1.00	18:50		X	X	X			X				X		X				X			X				X	
ZZZZZZ	25.00	18:54																									
ZZZZZZ	5.00	19:00																									
ZZZZZZ	5.00	19:05																									
ZZZZZZ	5.00	19:09																									
ZZZZZZ	5.00	19:13																									
CCV6	1.00	19:18		X	X	X			X				X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307751

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB6	1.00	19:23		X	X	X			X				X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Lipids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	9/17/2003

Lipids, Total

Prep Method:	TISSUEMIZER	Units:	PERCENT
Analysis Method:	PSEP	Basis:	AS RECEIVED
Test Notes:			

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
E-CH03-9,10,11,20-T-A (comp)	K2307751-005	0.25	10/28/2003	10/28/2003	0.66	
E-CH03-9,10,11,20-T-B (comp)	K2307751-010	0.25	10/28/2003	10/28/2003	0.74	
E-CH03-9,10,11,20-T-C (comp)	K2307751-015	0.24	10/28/2003	10/28/2003	0.79	
E-CH03-9,10,11,20-T-D (comp)	K2307751-020	0.25	10/28/2003	10/28/2003	0.85	
E-CH03-9,10,11,20-T-E (comp)	K2307751-025	0.25	10/28/2003	10/28/2003	0.71	
E-CH03-12,15,T-A (comp)	K2307751-028	0.25	10/28/2003	10/28/2003	0.51	
E-CH03-12,15-T-B (comp)	K2307751-031	0.25	10/28/2003	10/28/2003	0.64	
E-CH03-12,15-T-C (comp)	K2307751-034	0.25	10/28/2003	10/28/2003	0.57	
E-CH03-12,15-T-D (comp)	K2307751-037	0.25	10/28/2003	10/28/2003	0.73	
E-CH03-12,15-T-E (comp)	K2307751-040	0.25	10/28/2003	10/28/2003	0.75	
E-CH03-13,16-T-A (comp)	K2307751-043	0.25	10/28/2003	10/28/2003	0.78	
E-CH03-13,16-T-B (comp)	K2307751-046	0.25	10/28/2003	10/28/2003	0.80	
E-CH03-13,16-T-C (comp)	K2307751-049	0.25	10/28/2003	10/28/2003	0.64	
E-CH03-13,16-T-D (comp)	K2307751-052	0.24	10/28/2003	10/28/2003	0.68	
E-CH03-13,16-T-E (comp)	K2307751-055	0.25	10/28/2003	10/28/2003	0.54	

Approved By: _____ Date: 10/30/03

1A/092099p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens
Sample Matrix: Tissue

Service Request: K2307751
Date Collected:
Date Received: 9/17/2003
Date Extracted: 10/28/2003
Date Analyzed: 10/28/2003

Triplicate Summary
Lipids, Total

Sample Name: E-CH03-13,16-T-E (comp)
Lab Code: K2307751-055
Test Notes:

Units: PERCENT
Basis: AS RECEIVED

Lab Code	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Triplicate Sample Result	Average	Percent Relative Standard Deviation	Result Notes
K2307751-055	TISSUEMIZER	PSEP	0.25	0.54	0.59	0.54	0.56	5	

Approved By: _____ Date: 10/30/03

DUP/091599p

07751SVG.ab1 - TRP 10/30/2003

Butyltins

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-9,10,11,20-T-A (comp)	K2307751-005		09/17/2003
E-CH03-9,10,11,20-T-B (comp)	K2307751-010		09/17/2003
E-CH03-9,10,11,20-T-C (comp)	K2307751-015		09/17/2003
E-CH03-9,10,11,20-T-D (comp)	K2307751-020		09/17/2003
E-CH03-9,10,11,20-T-E (comp)	K2307751-025		09/17/2003
E-CH03-12,15,T-A (comp)	K2307751-028		09/17/2003
E-CH03-12,15-T-B (comp)	K2307751-031		09/17/2003
E-CH03-12,15-T-C (comp)	K2307751-034		09/17/2003
E-CH03-12,15-T-D (comp)	K2307751-037		09/17/2003
E-CH03-12,15-T-E (comp)	K2307751-040		09/17/2003
E-CH03-13,16-T-A (comp)	K2307751-043		09/17/2003
E-CH03-13,16-T-B (comp)	K2307751-046		09/17/2003
E-CH03-13,16-T-C (comp)	K2307751-049		09/17/2003
E-CH03-13,16-T-D (comp)	K2307751-052		09/17/2003
E-CH03-13,16-T-E (comp)	K2307751-055		09/17/2003
E-CH03-9,10,11,20-T-A (comp)	KWG0317130-1		09/17/2003
E-CH03-9,10,11,20-T-A (comp)	KWG0317130-2		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Christina Quinn

Name: CHRISTINA QUINN

Date: 111303

Title: SCIENTIST

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-005	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.98	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**5.1**		0.98	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.9**		0.98	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-010	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.99	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**3.5**		0.99	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.6**		0.99	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-015	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**3.3**		1.0	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.2**		1.0	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-020	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	**0.36**	J	0.99	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**4.8**		0.99	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.5**		0.99	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-025	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.99	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**3.1**		0.99	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**0.92**	J	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15,T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-028	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.99	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**3.4**		0.99	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.4**		0.99	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/06/03	Acceptable

Comments:

000093

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-031	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.99	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**2.2**		0.99	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**0.56**	J	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	109	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-034	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**3.2**		1.0	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.1**		1.0	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	101	26-169	11/06/03	Acceptable

Comments:

000101

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-037	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**6.2**		1.0	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**12**		1.0	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	103	26-169	11/06/03	Acceptable

Comments:

000102

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-040	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.99	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**3.6**		0.99	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.7**		0.99	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	106	26-169	11/06/03	Acceptable

Comments:

000103

000102

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-043	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**2.1**		1.0	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.3**		1.0	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	107	26-169	11/06/03	Acceptable

Comments:

000104

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-046	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.98	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**1.5**		0.98	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**2.1**		0.98	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	100	26-169	11/06/03	Acceptable

Comments:

000105

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-049	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.99	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**3.8**		0.99	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.6**		0.99	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	103	26-169	11/06/03	Acceptable

Comments:

000106

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-052	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.98	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	0.98	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**5.6**		0.98	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**2.2**		0.98	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	101	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-055	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**1.6**		1.0	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**1.3**		1.0	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	98	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317130-4	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	91	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-005	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.2	3.2	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.2	2.8	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**43**		8.2	3.0	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**16**		8.2	3.2	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-010	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.2	3.2	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.2	2.8	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**29**		8.2	2.9	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**13**		8.2	3.2	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-015	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.1	3.1	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.1	2.7	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**27**		8.1	2.9	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**10**		8.1	3.1	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-020	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.9	3.1	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	**2.9**	J	7.9	2.7	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**38**		7.9	2.8	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**12**		7.9	3.1	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-025	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.2	3.2	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.2	2.8	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**26**		8.2	3.0	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**7.7**	J	8.2	3.2	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/06/03	Acceptable

Comments:

000114

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15,T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-028	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.8	3.4	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.8	3.0	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**30**		8.8	3.1	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**12**		8.8	3.4	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	105	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-031	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.1	3.2	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.1	2.8	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**18**		8.1	2.9	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**4.6**	J	8.1	3.2	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	109	26-169	11/06/03	Acceptable

Comments:

000116

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-034	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	9.0	3.5	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	9.0	3.0	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**29**		9.0	3.2	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**9.7**		9.0	3.5	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	101	26-169	11/06/03	Acceptable

Comments:

000117

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-037	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.2	3.1	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.2	2.7	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**51**		8.2	2.9	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**98**		8.2	3.1	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	103	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-12,15-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-040	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.2	3.2	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.2	2.8	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**30**		8.2	2.9	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**14**		8.2	3.2	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	106	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-043	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.3	3.2	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.3	2.8	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**18**		8.3	2.9	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**10**		8.3	3.2	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	107	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-046	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.0	3.1	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.0	2.7	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**12**		8.0	2.9	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**17**		8.0	3.1	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	100	26-169	11/06/03	Acceptable

Comments:

000121

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-049	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	9.4	3.7	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	9.4	3.2	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**37**		9.4	3.4	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**15**		9.4	3.7	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	103	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-052	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.4	3.3	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	8.4	2.9	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**48**		8.4	3.0	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**19**		8.4	3.3	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	101	26-169	11/06/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	E-CH03-13,16-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-055	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	9.5	3.6	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	9.5	3.2	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	**15**		9.5	3.4	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	**12**		9.5	3.6	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	98	26-169	11/06/03	Acceptable

Comments:

000124

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317130-4	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/06/03	KWG0317130	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/06/03	KWG0317130	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/06/03	KWG0317130	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	91	26-169	11/06/03	Acceptable

Comments:

000125

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens
Sample Matrix: Tissue

Service Request: K2307751

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
E-CH03-9,10,11,20-T-A (comp)	K2307751-005	104
E-CH03-9,10,11,20-T-B (comp)	K2307751-010	110
E-CH03-9,10,11,20-T-C (comp)	K2307751-015	112
E-CH03-9,10,11,20-T-D (comp)	K2307751-020	105
E-CH03-9,10,11,20-T-E (comp)	K2307751-025	104
E-CH03-12,15,T-A (comp)	K2307751-028	105
E-CH03-12,15-T-B (comp)	K2307751-031	109
E-CH03-12,15-T-C (comp)	K2307751-034	101
E-CH03-12,15-T-D (comp)	K2307751-037	103
E-CH03-12,15-T-E (comp)	K2307751-040	106
E-CH03-13,16-T-A (comp)	K2307751-043	107
E-CH03-13,16-T-B (comp)	K2307751-046	100
E-CH03-13,16-T-C (comp)	K2307751-049	103
E-CH03-13,16-T-D (comp)	K2307751-052	101
E-CH03-13,16-T-E (comp)	K2307751-055	98
Method Blank	KWG0317130-4	91
E-CH03-9,10,11,20-T-A (comp)	KWG0317130-1	101
E-CH03-9,10,11,20-T-A (comp)	KWG0317130-2	104
Lab Control Sample	KWG0317130-3	89

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 26-169

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

000126

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/06/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	E-CH03-9,10,11,20-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-005	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317130

Analyte Name	Sample Result	E-CH03-9,10,11,20-T-A (comp)MS KWG0317130-1 Matrix Spike			E-CH03-9,10,11,20-T-A (comp)DMS KWG0317130-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Tetra-n-butyltin	ND	15.1	24.2	62	15.4	24.3	63	29-120	2	50
Tri-n-butyltin	ND	19.7	24.2	82	20.5	24.3	84	10-155	4	50
Di-n-butyltin	5.1	22.5	24.2	72	23.2	24.3	75	30-131	3	50
n-Butyltin	1.9	16.0	24.2	58	18.5	24.3	68	10-178	15	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000127

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/06/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/Kg
Analysis Method:	GC-FPD	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	KWG0317130

	Lab Control Sample KWG0317130-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	15.6	25.0	62	32-134
Tri-n-butyltin	18.0	25.0	72	39-146
Di-n-butyltin	18.5	25.0	74	42-142
n-Butyltin	13.3	25.0	53	28-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000128

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/06/2003
		Time Analyzed:	16:33

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\110603\1106F001.D
Lab Code:	KWG0317130-4	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317130

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317130-3	J:\GC11\DATA\110603\1106F002.D	11/06/03	16:51
E-CH03-9,10,11,20-T-A (comp)	K2307751-005	J:\GC11\DATA\110603\1106F003.D	11/06/03	17:08
E-CH03-9,10,11,20-T-A (comp)MS	KWG0317130-1	J:\GC11\DATA\110603\1106F004.D	11/06/03	17:26
E-CH03-9,10,11,20-T-A (comp)DMS	KWG0317130-2	J:\GC11\DATA\110603\1106F005.D	11/06/03	17:44
E-CH03-9,10,11,20-T-B (comp)	K2307751-010	J:\GC11\DATA\110603\1106F006.D	11/06/03	18:02
E-CH03-9,10,11,20-T-C (comp)	K2307751-015	J:\GC11\DATA\110603\1106F007.D	11/06/03	18:20
E-CH03-9,10,11,20-T-D (comp)	K2307751-020	J:\GC11\DATA\110603\1106F008.D	11/06/03	18:37
E-CH03-9,10,11,20-T-E (comp)	K2307751-025	J:\GC11\DATA\110603\1106F009.D	11/06/03	18:55
E-CH03-12,15,T-A (comp)	K2307751-028	J:\GC11\DATA\110603\1106F010.D	11/06/03	19:13
E-CH03-12,15-T-B (comp)	K2307751-031	J:\GC11\DATA\110603\1106F014.D	11/06/03	20:24
E-CH03-12,15-T-C (comp)	K2307751-034	J:\GC11\DATA\110603\1106F015.D	11/06/03	20:42
E-CH03-12,15-T-D (comp)	K2307751-037	J:\GC11\DATA\110603\1106F016.D	11/06/03	21:00
E-CH03-12,15-T-E (comp)	K2307751-040	J:\GC11\DATA\110603\1106F017.D	11/06/03	21:18
E-CH03-13,16-T-A (comp)	K2307751-043	J:\GC11\DATA\110603\1106F018.D	11/06/03	21:35
E-CH03-13,16-T-B (comp)	K2307751-046	J:\GC11\DATA\110603\1106F019.D	11/06/03	21:53
E-CH03-13,16-T-C (comp)	K2307751-049	J:\GC11\DATA\110603\1106F020.D	11/06/03	22:11
E-CH03-13,16-T-D (comp)	K2307751-052	J:\GC11\DATA\110603\1106F021.D	11/06/03	22:28
E-CH03-13,16-T-E (comp)	K2307751-055	J:\GC11\DATA\110603\1106F022.D	11/06/03	22:46

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/06/2003
		Time Analyzed:	16:51

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\110603\1106F002.D
Lab Code:	KWG0317130-3	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317130

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317130-4	J:\GC11\DATA\110603\1106F001.D	11/06/03	16:33
E-CH03-9,10,11,20-T-A (comp)	K2307751-005	J:\GC11\DATA\110603\1106F003.D	11/06/03	17:08
E-CH03-9,10,11,20-T-A (comp)MS	KWG0317130-1	J:\GC11\DATA\110603\1106F004.D	11/06/03	17:26
E-CH03-9,10,11,20-T-A (comp)DMS	KWG0317130-2	J:\GC11\DATA\110603\1106F005.D	11/06/03	17:44
E-CH03-9,10,11,20-T-B (comp)	K2307751-010	J:\GC11\DATA\110603\1106F006.D	11/06/03	18:02
E-CH03-9,10,11,20-T-C (comp)	K2307751-015	J:\GC11\DATA\110603\1106F007.D	11/06/03	18:20
E-CH03-9,10,11,20-T-D (comp)	K2307751-020	J:\GC11\DATA\110603\1106F008.D	11/06/03	18:37
E-CH03-9,10,11,20-T-E (comp)	K2307751-025	J:\GC11\DATA\110603\1106F009.D	11/06/03	18:55
E-CH03-12,15,T-A (comp)	K2307751-028	J:\GC11\DATA\110603\1106F010.D	11/06/03	19:13
E-CH03-12,15-T-B (comp)	K2307751-031	J:\GC11\DATA\110603\1106F014.D	11/06/03	20:24
E-CH03-12,15-T-C (comp)	K2307751-034	J:\GC11\DATA\110603\1106F015.D	11/06/03	20:42
E-CH03-12,15-T-D (comp)	K2307751-037	J:\GC11\DATA\110603\1106F016.D	11/06/03	21:00
E-CH03-12,15-T-E (comp)	K2307751-040	J:\GC11\DATA\110603\1106F017.D	11/06/03	21:18
E-CH03-13,16-T-A (comp)	K2307751-043	J:\GC11\DATA\110603\1106F018.D	11/06/03	21:35
E-CH03-13,16-T-B (comp)	K2307751-046	J:\GC11\DATA\110603\1106F019.D	11/06/03	21:53
E-CH03-13,16-T-C (comp)	K2307751-049	J:\GC11\DATA\110603\1106F020.D	11/06/03	22:11
E-CH03-13,16-T-D (comp)	K2307751-052	J:\GC11\DATA\110603\1106F021.D	11/06/03	22:28
E-CH03-13,16-T-E (comp)	K2307751-055	J:\GC11\DATA\110603\1106F022.D	11/06/03	22:46

000130

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D	D	J:\GC11\DATA\110403B\1104F006.D
B	J:\GC11\DATA\110403B\1104F004.D	E	J:\GC11\DATA\110403B\1104F007.D
C	J:\GC11\DATA\110403B\1104F005.D	F	J:\GC11\DATA\110403B\1104F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	618	B	54	552	C	110	576	D	540	539	E	1100	555
	F	2100	512												
Tetra-n-butyltin	A	10	626	B	50	562	C	100	561	D	500	539	E	1000	580
	F	2000	514												
Tri-n-butyltin	A	10	835	B	50	689	C	100	711	D	500	635	E	1000	653
	F	2000	603												
Di-n-butyltin	A	10	905	B	50	846	C	100	887	D	500	838	E	1000	856
	F	2000	793												
n-Butyltin	A	10	1320	B	50	1180	C	100	1160	D	500	1050	E	1000	1100
	F	2000	1010												

Results flagged with an asterisk (*) indicate values outside control criteria.

000131

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	6.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	11.9		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	9.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	410	564	493	-13	NA	± 30 %	AverageRF
Tri-n-butyltin	480	420	688	599	-13	NA	± 30 %	AverageRF
Di-n-butyltin	480	400	854	722	-16	NA	± 30 %	AverageRF
n-Butyltin	490	410	1140	947	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000133

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D\1104R003.D	D	J:\GC11\DATA\110403B\1104F006.D\1104R006.D
B	J:\GC11\DATA\110403B\1104F004.D\1104R004.D	E	J:\GC11\DATA\110403B\1104F007.D\1104R007.D
C	J:\GC11\DATA\110403B\1104F005.D\1104R005.D	F	J:\GC11\DATA\110403B\1104F008.D\1104R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	186	B	54	191	C	110	178	D	540	183	E	1100	202
	F	2100	192												
Tetra-n-butyltin	A	10	219	B	50	196	C	100	195	D	500	193	E	1000	206
	F	2000	203												
Tri-n-butyltin	A	10	263	B	50	225	C	100	238	D	500	231	E	1000	246
	F	2000	238												
Di-n-butyltin	A	10	330	B	50	275	C	100	285	D	500	299	E	1000	316
	F	2000	307												
n-Butyltin	A	10	507	B	50	365	C	100	392	D	500	391	E	1000	421
	F	2000	403												

Results flagged with an asterisk (*) indicate values outside control criteria.

000134

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	4.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	5.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	6.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	11.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

000135

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D\1104R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	400	202	174	-14	NA	± 30 %	AverageRF
Tri-n-butyltin	480	400	240	200	-17	NA	± 30 %	AverageRF
Di-n-butyltin	480	410	302	262	-13	NA	± 30 %	AverageRF
n-Butyltin	490	410	413	345	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000136

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F081.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	589	5	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	520	564	582	3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	688	686	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	870	2	NA	± 25 %	AverageRF
n-Butyltin	500	470	1140	1070	-5	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000137

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F081.D\1105R081.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	580	189	203	8	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	520	202	208	3	NA	± 25 %	AverageRF
Tri-n-butyltin	500	510	240	244	2	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	302	309	2	NA	± 25 %	AverageRF
n-Butyltin	500	500	413	410	-1	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000138

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F013.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	587	5	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	510	564	578	2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	688	681	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	854	861	1	NA	± 25 %	AverageRF
n-Butyltin	500	460	1140	1060	-7	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000139

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F013.D\1105R013.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	192	2	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	490	202	198	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	240	239	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	302	310	3	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	404	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F025.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	570	559	593	6	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	550	564	620	10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	500	688	687	0	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	878	3	NA	± 25 %	AverageRF
n-Butyltin	500	490	1140	1100	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000141

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens

Service Request: K2307751
Date Analyzed: 11/06/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1105F025.D\1105R025.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	192	2	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	490	202	197	-2	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	240	236	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	302	307	2	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	402	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000142

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307751
Project: Canaveral Harbor/ N.virens

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1105F080.D	Instrument Blank	KWG0318147-1	11/6/2003	14:46		11/6/2003	14:58
1105F081.D	Continuing Calibration Verification	KWG0318147-8	11/6/2003	15:03		11/6/2003	15:15
1106F001.D	Method Blank	KWG0317130-4	11/6/2003	16:33		11/6/2003	16:45
1106F002.D	Lab Control Sample	KWG0317130-3	11/6/2003	16:51		11/6/2003	17:03
1106F003.D	E-CH03-9,10,11,20-T-A (comp)	K2307751-005	11/6/2003	17:08		11/6/2003	17:20
1106F004.D	E-CH03-9,10,11,20-T-A (comp)MS	KWG0317130-1	11/6/2003	17:26		11/6/2003	17:38
1106F005.D	E-CH03-9,10,11,20-T-A (comp)DMS	KWG0317130-2	11/6/2003	17:44		11/6/2003	17:56
1106F006.D	E-CH03-9,10,11,20-T-B (comp)	K2307751-010	11/6/2003	18:02		11/6/2003	18:14
1106F007.D	E-CH03-9,10,11,20-T-C (comp)	K2307751-015	11/6/2003	18:20		11/6/2003	18:32
1106F008.D	E-CH03-9,10,11,20-T-D (comp)	K2307751-020	11/6/2003	18:37		11/6/2003	18:49
1106F009.D	E-CH03-9,10,11,20-T-E (comp)	K2307751-025	11/6/2003	18:55		11/6/2003	19:07
1106F010.D	E-CH03-12,15,T-A (comp)	K2307751-028	11/6/2003	19:13		11/6/2003	19:25
1105F012.D	Instrument Blank	KWG0318147-2	11/6/2003	19:48		11/6/2003	20:00
1105F013.D	Continuing Calibration Verification	KWG0318147-9	11/6/2003	20:06		11/6/2003	20:18
1106F014.D	E-CH03-12,15-T-B (comp)	K2307751-031	11/6/2003	20:24		11/6/2003	20:36
1106F015.D	E-CH03-12,15-T-C (comp)	K2307751-034	11/6/2003	20:42		11/6/2003	20:54
1106F016.D	E-CH03-12,15-T-D (comp)	K2307751-037	11/6/2003	21:00		11/6/2003	21:12
1106F017.D	E-CH03-12,15-T-E (comp)	K2307751-040	11/6/2003	21:18		11/6/2003	21:30
1106F018.D	E-CH03-13,16-T-A (comp)	K2307751-043	11/6/2003	21:35		11/6/2003	21:47
1106F019.D	E-CH03-13,16-T-B (comp)	K2307751-046	11/6/2003	21:53		11/6/2003	22:05
1106F020.D	E-CH03-13,16-T-C (comp)	K2307751-049	11/6/2003	22:11		11/6/2003	22:23
1106F021.D	E-CH03-13,16-T-D (comp)	K2307751-052	11/6/2003	22:28		11/6/2003	22:40
1106F022.D	E-CH03-13,16-T-E (comp)	K2307751-055	11/6/2003	22:46		11/6/2003	22:58
1105F024.D	Instrument Blank	KWG0318147-3	11/6/2003	23:21		11/6/2003	23:33
1105F025.D	Continuing Calibration Verification	KWG0318147-10	11/6/2003	23:39		11/6/2003	23:51
1106F026.D	ZZZZZZ	ZZZZZZ	11/6/2003	23:57		11/7/2003	00:09
1106F027.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:14		11/7/2003	00:26
1106F028.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:32		11/7/2003	00:44
1106F029.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:50		11/7/2003	01:02
1106F030.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:07		11/7/2003	01:19
1106F031.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:25		11/7/2003	01:37
1106F032.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:43		11/7/2003	01:55
1106F033.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:01		11/7/2003	02:13
1106F034.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:19		11/7/2003	02:31
1106F035.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:37		11/7/2003	02:49

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000143

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307751
Project: Canaveral Harbor/ N.virens

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1106F037.D	Instrument Blank	KWG0318147-4	11/7/2003	03:13		11/7/2003	03:25
1106F038.D	Continuing Calibration Verification	KWG0318147-11	11/7/2003	03:31		11/7/2003	03:43
1106F039.D	ZZZZZZ	ZZZZZZ	11/7/2003	03:49		11/7/2003	04:01
1106F040.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:06		11/7/2003	04:18
1106F041.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:25		11/7/2003	04:37
1106F042.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:42		11/7/2003	04:54
1106F043.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:00		11/7/2003	05:12
1106F044.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:18		11/7/2003	05:30
1106F045.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:36		11/7/2003	05:48
1106F046.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:54		11/7/2003	06:06
1106F047.D	ZZZZZZ	ZZZZZZ	11/7/2003	06:13		11/7/2003	06:25
1106F049.D	Instrument Blank	KWG0318147-5	11/7/2003	06:49		11/7/2003	07:01
1106F050.D	Continuing Calibration Verification	KWG0318147-12	11/7/2003	07:06		11/7/2003	07:18
1106F051.D	ZZZZZZ	ZZZZZZ	11/7/2003	07:24		11/7/2003	07:36
1106F052.D	ZZZZZZ	ZZZZZZ	11/7/2003	07:42		11/7/2003	07:54
1106F053.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:00		11/7/2003	08:12
1106F054.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:18		11/7/2003	08:30
1106F055.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:36		11/7/2003	08:48
1106F056.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:54		11/7/2003	09:06
1106F057.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:12		11/7/2003	09:24
1106F058.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:31		11/7/2003	09:43
1106F059.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:48		11/7/2003	10:00
1106F060.D	ZZZZZZ	ZZZZZZ	11/7/2003	10:06		11/7/2003	10:18
1106F062.D	Instrument Blank	KWG0318147-6	11/7/2003	10:43		11/7/2003	10:55
1106F063.D	Continuing Calibration Verification	KWG0318147-13	11/7/2003	11:00		11/7/2003	11:12
1106F064.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:18		11/7/2003	11:30
1106F065.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:36		11/7/2003	11:48
1106F066.D	ZZZZZZ	ZZZZZZ	11/7/2003	11:54		11/7/2003	12:06
1106F067.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:12		11/7/2003	12:24
1106F068.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:30		11/7/2003	12:42
1106F069.D	ZZZZZZ	ZZZZZZ	11/7/2003	12:48		11/7/2003	13:00
1106F070.D	ZZZZZZ	ZZZZZZ	11/7/2003	13:06		11/7/2003	13:18
1106F071.D	ZZZZZZ	ZZZZZZ	11/7/2003	13:24		11/7/2003	13:36
1106F073.D	Instrument Blank	KWG0318147-7	11/7/2003	14:00		11/7/2003	14:12
1106F074.D	Continuing Calibration Verification	KWG0318147-14	11/7/2003	14:18		11/7/2003	14:30

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000144

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/ N.virens
Sample Matrix: Tissue

Service Request: K2307751
Date Extracted: 10/27/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0317130
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-9,10,11,20-T-A (com	K2307751-005		09/17/03	10.25g	0.5ml	NA	
E-CH03-9,10,11,20-T-B (com	K2307751-010		09/17/03	10.11g	0.5ml	NA	
E-CH03-9,10,11,20-T-C (com	K2307751-015		09/17/03	10.07g	0.5ml	NA	
E-CH03-9,10,11,20-T-D (com	K2307751-020		09/17/03	10.18g	0.5ml	NA	
E-CH03-9,10,11,20-T-E (com	K2307751-025		09/17/03	10.18g	0.5ml	NA	
E-CH03-12,15,T-A (comp)	K2307751-028		09/17/03	10.17g	0.5ml	NA	
E-CH03-12,15-T-B (comp)	K2307751-031		09/17/03	10.14g	0.5ml	NA	
E-CH03-12,15-T-C (comp)	K2307751-034		09/17/03	10.04g	0.5ml	NA	
E-CH03-12,15-T-D (comp)	K2307751-037		09/17/03	10.02g	0.5ml	NA	
E-CH03-12,15-T-E (comp)	K2307751-040		09/17/03	10.12g	0.5ml	NA	
E-CH03-13,16-T-A (comp)	K2307751-043		09/17/03	10.07g	0.5ml	NA	
E-CH03-13,16-T-B (comp)	K2307751-046		09/17/03	10.26g	0.5ml	NA	
E-CH03-13,16-T-C (comp)	K2307751-049		09/17/03	10.20g	0.5ml	NA	
E-CH03-13,16-T-D (comp)	K2307751-052		09/17/03	10.29g	0.5ml	NA	
E-CH03-13,16-T-E (comp)	K2307751-055		09/17/03	10.00g	0.5ml	NA	
Method Blank	KWG0317130-4	NA	NA	10.00g	0.5ml	NA	
E-CH03-9,10,11,20-T-A (com	KWG0317130-1		09/17/03	10.35g	0.5ml	NA	
E-CH03-9,10,11,20-T-A (com	KWG0317130-2		09/17/03	10.29g	0.5ml	NA	
Lab Control Sample	KWG0317130-3	NA	NA	10.00g	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000145

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-005	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.98	0.35	5.1	4.7	8.2		1	11/06/03
n-Butyltin	0.98	0.38	1.9	1.7	11.1		1	11/06/03

000146

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-010	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.99	0.35	3.5	2.9	18.8		1	11/06/03
n-Butyltin	0.99	0.38	1.6	1.5	6.5		1	11/06/03

000147

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-015	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	3.3	2.5	27.6		1	11/06/03
n-Butyltin	1.0	0.38	1.2	1.2	0.0		1	11/06/03

000148

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-020	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	0.36	0.34	5.7	J	1	11/06/03
Di-n-butyltin	0.99	0.35	4.8	3.9	20.7		1	11/06/03
n-Butyltin	0.99	0.38	1.5	1.5	0.0		1	11/06/03

000149

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-9,10,11,20-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-025	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.99	0.35	3.1	2.8	10.2		1	11/06/03
n-Butyltin	0.99	0.38	0.92	0.71	25.8	J	1	11/06/03

000150

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15,T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-028	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.99	0.35	3.4	2.7	23.0		1	11/06/03
n-Butyltin	0.99	0.38	1.4	1.1	24.0		1	11/06/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-031	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.99	0.35	2.2	1.8	20.0		1	11/06/03
n-Butyltin	0.99	0.38	0.56	0.39	35.8	J	1	11/06/03

000152

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-034	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	3.2	2.5	24.6		1	11/06/03
n-Butyltin	1.0	0.38	1.1	0.87	23.4		1	11/06/03

000153

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-037	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	6.2	4.9	23.4		1	11/06/03
n-Butyltin	1.0	0.38	12	11	8.7		1	11/06/03

000154

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-12,15-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-040	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.99	0.35	3.6	2.7	28.6		1	11/06/03
n-Butyltin	0.99	0.38	1.7	1.6	6.1		1	11/06/03

000155

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-A (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-043	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	2.1	1.7	21.1		1	11/06/03
n-Butyltin	1.0	0.38	1.3	1.1	16.7		1	11/06/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-B (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-046	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.98	0.35	1.5	1.1	30.8		1	11/06/03
n-Butyltin	0.98	0.38	2.1	1.9	10.0		1	11/06/03

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-C (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-049	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.99	0.35	3.8	2.6	37.5		1	11/06/03
n-Butyltin	0.99	0.38	1.6	1.4	13.3		1	11/06/03

000158

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-D (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-052	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	0.98	0.35	5.6	4.4	24.0		1	11/06/03
n-Butyltin	0.98	0.38	2.2	2.0	9.5		1	11/06/03

000159

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307751
Project:	Canaveral Harbor/ N.virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	E-CH03-13,16-T-E (comp)	**Units:**	ug/Kg
Lab Code:	K2307751-055	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Di-n-butyltin	1.0	0.35	1.6	1.3	20.7		1	11/06/03
n-Butyltin	1.0	0.38	1.3	0.95	31.1		1	11/06/03

00016J

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

November 18, 2003 Service Request No: K2307177

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on September 17, 2003. For your reference, these analyses have been assigned our service request number K2307177.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2307177
Project:	Canaveral Harbor/N. Virens	**Date Received:**	9/17/03
Sample Matrix:	Tissue		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Tissue samples were received for analysis at Columbia Analytical Services on 9/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored frozen at -20°C upon receipt at the laboratory.

The samples were placed on hold after receipt at the laboratory until compositing and analysis instructions were received. Refer to the Chain of Custody section of the report for a summary of the compositing and revised nomenclature received from ANAMAR.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C/SIM

No anomalies associated with the analysis of these samples were observed.

Approved by _____ Date 11/17/03

Chain of Custody Documentation

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES K2307185

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CHO3- 9	N. virens		A-E	K2307177
CHO3 - 10	N. virens		A-E	↓
CHO3 - 11	N. virens		A-E	↓
CHO3 - 12	N. virens		A-E	↓
CHO3 - 13	N. virens		A-E	K2307180
CHO3 - 14	N. virens		A-E	↓
CHO3 - 15	N. virens		A-E	↓
CHO3 - 16	N. virens		A-E	↓
CHO3 - 17	N. virens		A-E	K2307185
Total Number of Samples:	9			

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Anacostia / Canaveral Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	15A
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAI	9/17/03	1000

000007

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-20	N. virens		A-E	17307185
Pre-Test	N. virens			↓
E-CH03-CTRL	N. virens		A-F	*used for sample CH03-20

Total Number of Samples:	3	

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Arthur / Commercial Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
Craig [illegible]	[illegible]	9/16/03	1577
[illegible]	Fed-Ex	9/16/03	1700
	Tracy B Clark CAS	9/17/03	1000

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

K2307167

Project/Client Anamar Work Order K23 ~~0747~~ TB

Cooler received on 9-17-03 and opened on 9-17-03 by KM.

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: FX - Attach. Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.0 1.1 0.5
   Temperature Blank:
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Water, ice, plastic
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

000009

CRFREV.DOC3/5/2003

K2307177, 7180, and 7185 (N.virens - "worms")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-12A		7177-016					
CH03-15A		7180-011					
	E-CH03-12,15-T-A (comp)			X	X	X	X
CH03-12B		7177-017					
CH03-15B		7180-012					
	E-CH03-12,15-T-B (comp)			X	X	X	X
CH03-12C		7177-018					
CH03-15C		7180-013					
	E-CH03-12,15-T-C (comp)			X	X	X	X
CH03-12D		7177-019					
CH03-15D		7180-014					
	E-CH03-12,15-T-D (comp)			X	X	X	X
CH03-12E		7177-020					
CH03-15E		7180-015					
	E-CH03-12,15-T-E (comp)			X	X	X	X
CH03-13A		7180-001					
CH03-16A		7180-016					
	E-CH03-13,16-T-A (comp)			X	X	X	X
CH03-13B		7180-002					
CH03-16B		7180-017					
	E-CH03-13,16-T-B (comp)			X	X	X	X
CH03-13C		7180-003					
CH03-16C		7180-018					
	E-CH03-13,16-T-C (comp)			X	X	X	X
CH03-13D		7180-004					
CH03-16D		7180-019					
	E-CH03-13,16-T-D (comp)			X	X	X	X
CH03-13E		7180-005					
CH03-16E		7180-020					
	E-CH03-13,16-T-E (comp)			X	X	X	X

K2307177, 7180, and 7185 (N.virens - "worms")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
E-CH03-CTRL-A	RS-CH03-T-A	7185-012	X	X	X	X	X
E-CH03-CTRL-B	RS-CH03-T-B	7185-013	X	X	X	X	X
E-CH03-CTRL-C	RS-CH03-T-C	7185-014	X	X	X	X	X
E-CH03-CTRL-D	RS-CH03-T-D	7185-015	X	X	X	X	X
E-CH03-CTRL-E	RS-CH03-T-E	7185-016	X	X	X	X	X
N.virens Pre-Tissue	N.virens CH03 Pre	7185-011	X	X	X	X	X

009011

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	9/17/03

Solids, Total

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	Freeze Dry	Basis:	Wet
Test Notes:			

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
E-CH03-12-T-A	K2307177-016	11/17/03	12.3	
E-CH03-12-T-B	K2307177-017	11/17/03	15.4	
E-CH03-12-T-C	K2307177-018	11/17/03	12.2	
E-CH03-12-T-D	K2307177-019	11/17/03	14.9	
E-CH03-12-T-E	K2307177-020	11/17/03	15.5	

Approved By: _____ Date: 11/17/03

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens
Sample Matrix: Tissue

Service Request: K2307177
Date Collected: NA
Date Received: 9/17/03
Date Extracted: NA
Date Analyzed: 11/17/03

Duplicate Summary
Total Metals

Sample Name: E-CH03-12-T-D
Lab Code: K2307177-019D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	14.9	13.9	14.4	4	

Approved By: _____ Date: 11/17/03

DUP/052595

07177SVM.BR1 - DUP 11/17/03

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307177
Project: Canaveral Harbor/N.Virens

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
E-CH03-12-T-A	K2307177-016		09/17/2003
E-CH03-12-T-B	K2307177-017		09/17/2003
E-CH03-12-T-C	K2307177-018		09/17/2003
E-CH03-12-T-D	K2307177-019		09/17/2003
E-CH03-12-T-E	K2307177-020		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner Name: Carl Degner

Date: 11/17/03 Title: SVM Supervisor

000017

U:\Stealth\Crystal.rpt\FormSSum.rpt SuperSet Reference: RR32381

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-A	**Units:**	ug/Kg
Lab Code:	K2307177-016	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.5**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.1**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.26**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.18**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**0.60**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**1.1**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**0.77**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.30**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**0.66**	J	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	54-102	11/12/03	Acceptable
Fluoranthene-d10	89	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-B	**Units:**	ug/Kg
Lab Code:	K2307177-017	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.4**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.1**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.27**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.25**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**0.58**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**1.1**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**0.74**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.30**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	54-102	11/12/03	Acceptable
Fluoranthene-d10	86	57-107	11/12/03	Acceptable
Terphenyl-d14	95	53-116	11/12/03	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-C	**Units:**	ug/Kg
Lab Code:	K2307177-018	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.5**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.1**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.26**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.21**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**0.57**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**1.2**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**1.2**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**1.1**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	84	54-102	11/12/03	Acceptable
Fluoranthene-d10	91	57-107	11/12/03	Acceptable
Terphenyl-d14	101	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-D	**Units:**	ug/Kg
Lab Code:	K2307177-019	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.5**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.2**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.18**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**0.24**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**1.5**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**0.25**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**4.7**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**3.1**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	**0.74**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**1.4**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	**0.66**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	**0.52**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**0.26**	J	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**0.24**	J	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.23**	J	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	67	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-E	**Units:**	ug/Kg
Lab Code:	K2307177-020	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**2.1**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.8**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.29**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.32**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**0.20**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**0.74**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**1.1**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**0.67**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.35**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	97	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317780-5	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	ND	U	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	ND	U	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	ND	U	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**0.20**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	68	54-102	11/12/03	Acceptable
Fluoranthene-d10	75	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-A	**Units:**	ug/Kg
Lab Code:	K2307177-016	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**12**	J	41	2.2	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**9.3**	J	41	1.3	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**2.1**	J	41	0.41	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**1.5**	J	41	0.61	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**1.5**	J	41	0.43	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**2.2**	J	41	0.44	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**4.9**	J	41	0.54	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	41	0.45	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**8.6**	J	41	0.44	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**6.2**	J	41	0.57	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	41	0.44	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**2.4**	J	41	0.66	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	41	0.37	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	41	0.66	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**5.4**	J	41	0.62	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	41	0.60	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	41	0.65	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.83**	J	41	0.79	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	54-102	11/12/03	Acceptable
Fluoranthene-d10	89	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-B	**Units:**	ug/Kg
Lab Code:	K2307177-017	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**8.8**	J	33	1.7	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**7.3**	J	33	0.98	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**1.8**	J	33	0.33	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**1.7**	J	33	0.49	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**1.2**	J	33	0.34	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**1.8**	J	33	0.36	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**3.8**	J	33	0.43	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	33	0.36	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**7.2**	J	33	0.35	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**4.8**	J	33	0.46	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	33	0.36	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**2.0**	J	33	0.52	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	33	0.30	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	33	0.53	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	33	0.50	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	33	0.48	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	33	0.52	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.71**	J	33	0.63	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	79	54-102	11/12/03	Acceptable
Fluoranthene-d10	86	57-107	11/12/03	Acceptable
Terphenyl-d14	95	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-C	**Units:**	ug/Kg
Lab Code:	K2307177-018	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**12**	J	41	2.2	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**9.3**	J	41	1.3	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**2.1**	J	41	0.41	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**1.7**	J	41	0.61	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**1.5**	J	41	0.43	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**2.4**	J	41	0.45	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**4.7**	J	41	0.55	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	41	0.46	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**9.6**	J	41	0.44	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**10**	J	41	0.58	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	41	0.45	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**9.2**	J	41	0.66	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	41	0.37	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	41	0.67	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	41	0.63	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	41	0.60	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	41	0.65	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.90**	J	41	0.80	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	84	54-102	11/12/03	Acceptable
Fluoranthene-d10	91	57-107	11/12/03	Acceptable
Terphenyl-d14	101	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-D	**Units:**	ug/Kg
Lab Code:	K2307177-019	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**10**	J	34	1.8	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**8.1**	J	34	1.1	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	ND	U	34	0.34	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**1.2**	J	34	0.50	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**1.6**	J	34	0.35	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**2.3**	J	34	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**9.9**	J	34	0.45	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**1.7**	J	34	0.37	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**32**	J	34	0.36	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**21**	J	34	0.47	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	**4.9**	J	34	0.37	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**9.6**	J	34	0.54	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	**4.4**	J	34	0.31	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	**3.5**	J	34	0.55	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**1.7**	J	34	0.52	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**1.6**	J	34	0.49	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	34	0.54	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**1.6**	J	34	0.66	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	67	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	100	53-116	11/12/03	Acceptable

Comments:

000027

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	E-CH03-12-T-E	**Units:**	ug/Kg
Lab Code:	K2307177-020	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**14**	J	32	1.7	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**12**	J	32	0.97	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**1.9**	J	32	0.33	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**2.1**	J	32	0.48	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**1.3**	J	32	0.34	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**2.2**	J	32	0.35	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**4.8**	J	32	0.43	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	32	0.36	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**7.3**	J	32	0.35	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**4.3**	J	32	0.46	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	32	0.35	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**2.3**	J	32	0.52	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	32	0.30	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	32	0.53	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	32	0.50	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	32	0.48	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	32	0.51	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	32	0.63	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	83	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	97	53-116	11/12/03	Acceptable

Comments:

000028

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317780-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.26	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	ND	U	5.0	0.050	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	ND	U	5.0	0.074	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.052	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.054	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	ND	U	5.0	0.066	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.055	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	5.0	0.053	1	11/05/03	11/12/03	KWG0317780	
Pyrene	ND	U	5.0	0.070	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.054	1	11/05/03	11/12/03	KWG0317780	
Chrysene	ND	U	5.0	0.080	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	**0.12**	J	5.0	0.045	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	**0.11**	J	5.0	0.081	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.076	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**0.16**	J	5.0	0.073	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**0.20**	J	5.0	0.079	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.18**	J	5.0	0.097	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	68	54-102	11/12/03	Acceptable
Fluoranthene-d10	75	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

000029

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens
Sample Matrix: Tissue

Service Request: K2307177

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
E-CH03-12-T-A	K2307177-016	81	89	98
E-CH03-12-T-B	K2307177-017	79	86	95
E-CH03-12-T-C	K2307177-018	84	91	101
E-CH03-12-T-D	K2307177-019	67	90	100
E-CH03-12-T-E	K2307177-020	83	90	97
Method Blank	KWG0317780-5	68	75	98
Batch QC	K2307185-011	77	86	89
Batch QCMS	KWG0317780-1	78	89	87
Batch QCDMS	KWG0317780-2	77	84	83
Lab Control Sample	KWG0317780-3	77	86	91
Duplicate Lab Control Sample	KWG0317780-4	77	84	87

Surrogate Recovery Control Limits (%)

Sur1 =	Fluorene-d10	54-102
Sur2 =	Fluoranthene-d10	57-107
Sur3 =	Terphenyl-d14	53-116

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

000030

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Date Analyzed: 11/12/2003
Time Analyzed: 07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F002.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318310-2
Analysis Lot: KWG0318310

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	157,294	5.16	86,722	6.60	154,481	7.82
	Upper Limit ==>	314,588	5.66	173,444	7.10	308,962	8.32
	Lower Limit ==>	78,647	4.66	43,361	6.10	77,241	7.32
	ICAL Result ==>	204,882	5.17	110,040	6.61	188,958	7.82
Associated Analyses							
Method Blank	KWG0317780-5	171,127	5.15	92,344	6.60	154,242	7.82
Lab Control Sample	KWG0317780-3	152,466	5.15	83,007	6.60	142,556	7.82
Duplicate Lab Control Sample	KWG0317780-4	156,250	5.15	85,461	6.60	145,844	7.82
Batch QCMS	KWG0317780-1	153,176	5.15	83,512	6.60	142,425	7.82
Batch QCDMS	KWG0317780-2	154,204	5.15	84,770	6.60	145,175	7.82
Batch QC	K2307185-011	143,846	5.15	79,287	6.60	133,366	7.82
E-CH03-12-T-A	K2307177-016	153,697	5.16	84,498	6.61	142,091	7.82
E-CH03-12-T-B	K2307177-017	148,295	5.16	80,454	6.61	135,108	7.82
E-CH03-12-T-C	K2307177-018	148,364	5.16	81,052	6.61	137,357	7.82
E-CH03-12-T-D	K2307177-019	146,922	5.16	80,261	6.61	134,363	7.82
E-CH03-12-T-E	K2307177-020	146,469	5.16	80,127	6.61	134,537	7.82

Results flagged with an asterisk (*) indicate values outside control criteria.

000031

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Date Analyzed: 11/12/2003
Time Analyzed: 07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F002.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318310-2
Analysis Lot: KWG0318310

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	151,499	10.77	94,668	14.73
	Upper Limit ==>	302,998	11.27	189,336	15.23
	Lower Limit ==>	75,750	10.27	47,334	14.23
	ICAL Result ==>	189,206	10.78	118,509	14.75
Associated Analyses					
Method Blank	KWG0317780-5	121,700	10.77	69,355	14.72
Lab Control Sample	KWG0317780-3	141,763	10.76	86,874	14.72
Duplicate Lab Control Sample	KWG0317780-4	147,392	10.76	88,762	14.72
Batch QCMS	KWG0317780-1	154,658	10.76	111,819	14.73
Batch QCDMS	KWG0317780-2	157,328	10.77	115,418	14.73
Batch QC	K2307185-011	135,829	10.76	97,162	14.73
E-CH03-12-T-A	K2307177-016	136,176	10.77	93,338	14.74
E-CH03-12-T-B	K2307177-017	128,965	10.77	87,821	14.74
E-CH03-12-T-C	K2307177-018	130,627	10.77	89,602	14.74
E-CH03-12-T-D	K2307177-019	130,088	10.77	88,855	14.74
E-CH03-12-T-E	K2307177-020	131,380	10.77	90,004	14.75

Results flagged with an asterisk (*) indicate values outside control criteria.

000032

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/12/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Batch QC	**Units:**	ug/Kg
Lab Code:	K2307185-011	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317780

		Batch QCMS KWG0317780-1 Matrix Spike			Batch QCDMS KWG0317780-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	3.5	201	249	79	208	249	82	46-109	4	40
2-Methylnaphthalene	2.0	219	249	87	226	249	90	44-118	3	40
Acenaphthylene	1.1	232	249	93	233	249	93	63-114	0	40
Acenaphthene	0.42	229	249	92	231	249	92	59-117	1	40
Dibenzofuran	0.47	231	249	93	232	249	93	64-102	0	40
Fluorene	0.67	243	249	97	242	249	97	67-115	1	40
Phenanthrene	3.6	245	249	97	238	249	94	67-109	3	40
Anthracene	1.3	250	249	100	240	249	96	71-114	4	40
Fluoranthene	8.6	267	249	104	256	249	99	66-120	4	40
Pyrene	8.0	224	249	87	215	249	83	59-110	4	40
Benz(a)anthracene	3.2	240	249	95	232	249	92	55-108	3	40
Chrysene	5.9	254	249	99	244	249	96	61-110	4	40
Benzo(b)fluoranthene	4.2	244	249	96	238	249	94	64-119	3	40
Benzo(k)fluoranthene	3.9	254	249	100	238	249	94	68-117	6	40
Benzo(a)pyrene	4.0	247	249	97	233	249	92	67-117	6	40
Indeno(1,2,3-cd)pyrene	3.7	270	249	107	258	249	102	47-137	4	40
Dibenz(a,h)anthracene	0.65	273	249	109	262	249	105	51-133	4	40
Benzo(g,h,i)perylene	3.6	252	249	100	238	249	94	58-114	6	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000033

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/12/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method:	EPA 3541	**Units:**	ug/Kg
Analysis Method:	8270C SIM	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	KWG0317780

	Lab Control Sample KWG0317780-3 Lab Control Spike			Duplicate Lab Control Sample KWG0317780-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	197	250	79	197	250	79	51-102	0	40
2-Methylnaphthalene	206	250	83	206	250	82	43-109	0	40
Acenaphthylene	213	250	85	211	250	84	45-115	1	40
Acenaphthene	209	250	84	207	250	83	54-106	1	40
Dibenzofuran	210	250	84	209	250	84	44-117	0	40
Fluorene	221	250	88	218	250	87	55-112	1	40
Phenanthrene	217	250	87	213	250	85	55-108	2	40
Anthracene	226	250	90	223	250	89	59-113	1	40
Fluoranthene	235	250	94	227	250	91	57-123	3	40
Pyrene	216	250	87	205	250	82	51-110	5	40
Benz(a)anthracene	220	250	88	208	250	83	45-114	6	40
Chrysene	234	250	93	221	250	88	53-115	6	40
Benzo(b)fluoranthene	239	250	95	229	250	91	49-133	4	40
Benzo(k)fluoranthene	248	250	99	236	250	94	51-132	5	40
Benzo(a)pyrene	241	250	97	229	250	92	54-131	5	40
Indeno(1,2,3-cd)pyrene	253	250	101	234	250	94	38-143	8	40
Dibenz(a,h)anthracene	255	250	102	239	250	96	38-143	7	40
Benzo(g,h,i)perylene	243	250	97	228	250	91	43-129	6	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000034

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
SRM Matrix: Tissue

Service Request: K2307177
Date Collected: NA
Date Received: NA
Date Extracted: 11/5/2003
Date Analyzed: 11/12/2003

Standard Reference Material
Polynuclear Aromatic Hydrocarbons

Sample Name: Standard Reference Material
Lab Code: KWG0317780-6
Test Notes:

Units: ug/Kg (ppb)
Basis: Dry

Analyte	Prep Method	Analysis Method	True Value	Result	CAS Advisory Limits	Result Notes
Phenanthrene	EPA 3541	SIM	2.5	2.3	1.1-5.6	
Fluoranthene	EPA 3541	SIM	19	16	8.8-39	
Pyrene	EPA 3541	SIM	18	14	8.3-36	
Benz(a)anthracene	EPA 3541	SIM	3.7	2.8	1.6-8.5	
Chrysene	EPA 3541	SIM	11	9.0	4.9-23	
Benzo(b)fluoranthene	EPA 3541	SIM	5.3	3.9	2.4-11	
Benzo(k)fluoranthene	EPA 3541	SIM	4.6	3.2	2.2-9.9	
Benzo(a)pyrene	EPA 3541	SIM	1.8	1.7	0.85-3.7	
Indeno(1,2,3-cd)pyrene	EPA 3541	SIM	1.6	1.6	0.65-3.9	
Benzo(g,h,i)perylene	EPA 3541	SIM	2.5	2.7	1.1-5.5	

Approved By: _____ Date: 11/17/03

000035

LCS (44)/091898p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307177
Project:	Canaveral Harbor/N.Virens	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/12/2003
		Time Analyzed:	08:03

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\111203\1112F003.D
Lab Code:	KWG0317780-5	**Instrument ID:**	MS14
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317780

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317780-3	J:\MS14\DATA\111203\1112F004.D	11/12/03	08:30
Duplicate Lab Control Sample	KWG0317780-4	J:\MS14\DATA\111203\1112F005.D	11/12/03	08:57
Batch QCMS	KWG0317780-1	J:\MS14\DATA\111203\1112F007.D	11/12/03	09:51
Batch QCDMS	KWG0317780-2	J:\MS14\DATA\111203\1112F008.D	11/12/03	10:18
Batch QC	K2307185-011	J:\MS14\DATA\111203\1112F009.D	11/12/03	10:45
E-CH03-12-T-A	K2307177-016	J:\MS14\DATA\111203\1112F015.D	11/12/03	13:27
E-CH03-12-T-B	K2307177-017	J:\MS14\DATA\111203\1112F016.D	11/12/03	13:54
E-CH03-12-T-C	K2307177-018	J:\MS14\DATA\111203\1112F017.D	11/12/03	14:21
E-CH03-12-T-D	K2307177-019	J:\MS14\DATA\111203\1112F018.D	11/12/03	14:48
E-CH03-12-T-E	K2307177-020	J:\MS14\DATA\111203\1112F019.D	11/12/03	15:15

000036

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307177
Project: Canaveral Harbor/N.Virens
Sample Matrix: Tissue

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0317780-3	**Lab Code:**	KWG0317780-4
File ID:	J:\MS14\DATA\111203\1112F004.D	**File ID:**	J:\MS14\DATA\111203\1112F005.D
Instrument ID:	MS14	**Instrument ID:**	MS14
Date Extracted:	11/05/2003	**Date Extracted:**	11/05/2003
Date Analyzed:	11/12/2003	**Date Analyzed:**	11/12/2003
Time Analyzed:	08:30	**Time Analyzed:**	08:57

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317780

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317780-5	J:\MS14\DATA\111203\1112F003.D	11/12/03	08:03
Batch QCMS	KWG0317780-1	J:\MS14\DATA\111203\1112F007.D	11/12/03	09:51
Batch QCDMS	KWG0317780-2	J:\MS14\DATA\111203\1112F008.D	11/12/03	10:18
Batch QC	K2307185-011	J:\MS14\DATA\111203\1112F009.D	11/12/03	10:45
E-CH03-12-T-A	K2307177-016	J:\MS14\DATA\111203\1112F015.D	11/12/03	13:27
E-CH03-12-T-B	K2307177-017	J:\MS14\DATA\111203\1112F016.D	11/12/03	13:54
E-CH03-12-T-C	K2307177-018	J:\MS14\DATA\111203\1112F017.D	11/12/03	14:21
E-CH03-12-T-D	K2307177-019	J:\MS14\DATA\111203\1112F018.D	11/12/03	14:48
E-CH03-12-T-E	K2307177-020	J:\MS14\DATA\111203\1112F019.D	11/12/03	15:15

000037

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Date Analyzed: 11/12/2003
Time Analyzed: 07:16

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0318310

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	18.1	157184	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	20.6	178900	PASS
70	69	0	2	0.5	854	PASS
127	198	10	80	36.1	314048	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	47.0	870080	PASS
199	198	5	9	6.7	58032	PASS
275	198	10	60	33.4	290176	PASS
365	442	1	50	2.1	39208	PASS
441	443	0	100	72.4	250240	PASS
442	442	100	100	100.0	1849856	PASS
443	442	15	24	18.7	345664	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0318310-2	J:\MS14\DATA\111203\1112F002.D	11/12/2003	07:34	
Method Blank	KWG0317780-5	J:\MS14\DATA\111203\1112F003.D	11/12/2003	08:03	
Lab Control Sample	KWG0317780-3	J:\MS14\DATA\111203\1112F004.D	11/12/2003	08:30	
Duplicate Lab Control Sample	KWG0317780-4	J:\MS14\DATA\111203\1112F005.D	11/12/2003	08:57	
Batch QCMS	KWG0317780-1	J:\MS14\DATA\111203\1112F007.D	11/12/2003	09:51	
Batch QCDMS	KWG0317780-2	J:\MS14\DATA\111203\1112F008.D	11/12/2003	10:18	
Batch QC	K2307185-011	J:\MS14\DATA\111203\1112F009.D	11/12/2003	10:45	
E-CH03-12-T-A	K2307177-016	J:\MS14\DATA\111203\1112F015.D	11/12/2003	13:27	
E-CH03-12-T-B	K2307177-017	J:\MS14\DATA\111203\1112F016.D	11/12/2003	13:54	
E-CH03-12-T-C	K2307177-018	J:\MS14\DATA\111203\1112F017.D	11/12/2003	14:21	
E-CH03-12-T-D	K2307177-019	J:\MS14\DATA\111203\1112F018.D	11/12/2003	14:48	
E-CH03-12-T-E	K2307177-020	J:\MS14\DATA\111203\1112F019.D	11/12/2003	15:15	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

000038

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\111003\1110F003.D	G	J:\MS14\DATA\111003\1110F009.D
B	J:\MS14\DATA\111003\1110F004.D	H	J:\MS14\DATA\111003\1110F010.D
C	J:\MS14\DATA\111003\1110F005.D	I	J:\MS14\DATA\111003\1110F011.D
D	J:\MS14\DATA\111003\1110F006.D	J	J:\MS14\DATA\111003\1110F012.D
E	J:\MS14\DATA\111003\1110F007.D	K	J:\MS14\DATA\111003\1110F013.D
F	J:\MS14\DATA\111003\1110F008.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	5.0	1.25	B	10	1.18	C	20	1.13	D	40	1.13	E	100	1.14
	F	500	1.10	G	1000	1.08	H	2000	1.13	I	5000	1.12	J	8000	1.13
	K	10000	1.11												
2-Methylnaphthalene	A	5.0	0.753	B	10	0.740	C	20	0.714	D	40	0.724	E	100	0.738
	F	500	0.710	G	1000	0.697	H	2000	0.736	I	5000	0.722	J	8000	0.731
	K	10000	0.718												
Acenaphthylene	A	5.0	2.14	B	10	1.98	C	20	1.93	D	40	1.97	E	100	2.00
	F	500	1.98	G	1000	2.01	H	2000	2.13	I	5000	2.13	J	8000	2.15
	K	10000	2.13												
Acenaphthene	A	5.0	1.27	B	10	1.20	C	20	1.17	D	40	1.19	E	100	1.26
	F	500	1.19	G	1000	1.18	H	2000	1.24	I	5000	1.20	J	8000	1.20
	K	10000	1.17												
Dibenzofuran	A	5.0	1.86	B	10	1.80	C	20	1.74	D	40	1.77	E	100	1.82
	F	500	1.75	G	1000	1.75	H	2000	1.85	I	5000	1.83	J	8000	1.86
	K	10000	1.85												
Fluorene	A	5.0	1.46	B	10	1.39	C	20	1.35	D	40	1.40	E	100	1.45
	F	500	1.43	G	1000	1.43	H	2000	1.52	I	5000	1.49	J	8000	1.48
	K	10000	1.45												
Phenanthrene	A	5.0	1.37	B	10	1.26	C	20	1.25	D	40	1.25	E	100	1.27
	F	500	1.20	G	1000	1.20	H	2000	1.25	I	5000	1.23	J	8000	1.24
	K	10000	1.21												
Anthracene	A	5.0	1.24	B	10	1.15	C	20	1.13	D	40	1.16	E	100	1.21
	F	500	1.18	G	1000	1.20	H	2000	1.27	I	5000	1.25	J	8000	1.25
	K	10000	1.24												
Fluoranthene	A	5.0	1.37	B	10	1.22	C	20	1.23	D	40	1.27	E	100	1.36
	F	500	1.30	G	1000	1.31	H	2000	1.40	I	5000	1.39	J	8000	1.40
	K	10000	1.38												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000039

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	5.0	1.73	B	10	1.60	C	20	1.66	D	40	1.64	E	100	1.68
	F	500	1.50	G	1000	1.45	H	2000	1.46	I	5000	1.34	J	8000	1.31
	K	10000	1.27												
Benz(a)anthracene	A	5.0	1.71	B	10	1.38	C	20	1.21	D	40	1.16	E	100	1.17
	F	500	1.09	G	1000	1.11	H	2000	1.20	I	5000	1.19	J	8000	1.21
	K	10000	1.19												
Chrysene	A	5.0	1.17	B	10	1.05	C	20	1.08	D	40	1.10	E	100	1.14
	F	500	1.11	G	1000	1.11	H	2000	1.17	I	5000	1.15	J	8000	1.16
	K	10000	1.15												
Benzo(b)fluoranthene	A	5.0	1.73	B	10	1.62	C	20	1.54	D	40	1.56	E	100	1.63
	F	500	1.59	G	1000	1.66	H	2000	1.76	I	5000	1.76	J	8000	1.81
	K	10000	1.79												
Benzo(k)fluoranthene	A	5.0	1.54	B	10	1.43	C	20	1.50	D	40	1.51	E	100	1.60
	F	500	1.58	G	1000	1.61	H	2000	1.78	I	5000	1.76	J	8000	1.75
	K	10000	1.74												
Benzo(a)pyrene	A	5.0	1.45	B	10	1.29	C	20	1.27	D	40	1.25	E	100	1.34
	F	500	1.34	G	1000	1.40	H	2000	1.52	I	5000	1.55	J	8000	1.58
	K	10000	1.58												
Indeno(1,2,3-cd)pyrene	A	5.0	1.17	B	10	0.998	C	20	1.01	D	40	1.05	E	100	1.12
	F	500	1.14	G	1000	1.19	H	2000	1.27	I	5000	1.30	J	8000	1.36
	K	10000	1.35												
Dibenz(a,h)anthracene	A	5.0	1.01	B	10	0.890	C	20	0.929	D	40	0.999	E	100	1.09
	F	500	1.16	G	1000	1.19	H	2000	1.27	I	5000	1.28	J	8000	1.34
	K	10000	1.38												
Benzo(g,h,i)perylene	A	5.0	1.43	B	10	1.24	C	20	1.27	D	40	1.29	E	100	1.34
	F	500	1.34	G	1000	1.34	H	2000	1.42	I	5000	1.41	J	8000	1.45
	K	10000	1.44												
Fluorene-d10	A	5.0	1.31	B	10	1.17	C	20	1.14	D	40	1.18	E	100	1.20
	F	500	1.17	G	1000	1.17	H	2000	1.24	I	5000	1.20	J	8000	1.18
	K	10000	1.15												
Fluoranthene-d10	A	5.0	1.18	B	10	1.07	C	20	1.07	D	40	1.11	E	100	1.18
	F	500	1.11	G	1000	1.12	H	2000	1.21	I	5000	1.19	J	8000	1.19
	K	10000	1.16												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000040

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Terphenyl-d14	A	5.0	1.20	B	10	1.06	C	20	1.07	D	40	1.08	E	100	1.11
	F	500	1.02	G	1000	0.988	H	2000	1.01	I	5000	0.925	J	8000	0.901
	K	10000	0.874												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000041

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307177
Project: Canaveral Harbor/N.Virens **Calibration Date:** 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084 **Column:** MS
Instrument ID: MS14

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	4.0		≤ 15	1.14		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	2.2		≤ 15	0.726		0.01
Acenaphthylene	MS	AverageRF	% RSD	4.1		≤ 15	2.05		0.01
Acenaphthene	MS	AverageRF	% RSD	2.9		≤ 15	1.21		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.6		≤ 15	1.81		0.01
Fluorene	MS	AverageRF	% RSD	3.4		≤ 15	1.44		0.01
Phenanthrene	MS	AverageRF	% RSD	3.8		≤ 15	1.25		0.01
Anthracene	MS	AverageRF	% RSD	3.9		≤ 15	1.21		0.01
Fluoranthene	MS	AverageRF	% RSD	5.1		≤ 15	1.33		0.01
Pyrene	MS	AverageRF	% RSD	10.4		≤ 15	1.51		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	14.0		≤ 15	1.24		0.01
Chrysene	MS	AverageRF	% RSD	3.5		≤ 15	1.13		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.6		≤ 15	1.68		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	7.5		≤ 15	1.62		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	9.0		≤ 15	1.42		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	11.0		≤ 15	1.18		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	14.7		≤ 15	1.14		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	5.4		≤ 15	1.36		0.01
Fluorene-d10	SURR	AverageRF	% RSD	4.0		≤ 15	1.19		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.3		≤ 15	1.14		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	9.4		≤ 15	1.02		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000042

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Calibration Date: 11/10/2003
Date Analyzed: 11/11/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL3084
Units: ng/ml

File ID: J:\MS14\DATA\111003\1110F017.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	1.14	1.17	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.726	0.760	5	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	2.05	2.17	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	1.21	1.27	5	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	1.81	1.91	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	1.44	1.57	9	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	1.21	1.24	3	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.33	1.37	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.51	1.55	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	1.24	1.15	-8	NA	± 20 %	AverageRF
Chrysene	2000	2100	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	1.68	1.80	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2300	1.62	1.87	16	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	1.42	1.56	10	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2100	1.18	1.26	7	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	1.14	1.29	13	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	1.36	1.48	9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000043

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens

Service Request: K2307177
Date Analyzed: 11/12/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/10/2003
Calibration ID: CAL3084
Analysis Lot: KWG0318310
Units: ng/ml

File ID: J:\MS14\DATA\111203\1112F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.14	1.16	2	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.726	0.769	6	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	2.05	2.18	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.81	1.89	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	0.01	1.44	1.55	8	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	0.01	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.33	1.38	4	NA	± 20 %	AverageRF
Pyrene	2000	1900	0.01	1.51	1.45	-4	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	2000	0.01	1.24	1.21	-2	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	0.01	1.68	1.79	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.62	1.76	9	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	0.01	1.42	1.53	8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2300	0.01	1.18	1.34	14	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	0.01	1.14	1.33	17	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.36	1.49	9	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.19	1.12	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.14	1.08	-5	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	1.02	0.891	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000344

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307177
Project: Canaveral Harbor/N.Virens

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM **Analysis Lot:** KWG0318310
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1112F001.D	GC/MS Tuning - Decafluorotriphenyl	KWG0318310-1	11/12/2003	07:16		11/12/2003	07:28
1112F002.D	Continuing Calibration Verification	KWG0318310-2	11/12/2003	07:34		11/12/2003	07:53
1112F003.D	Method Blank	KWG0317780-5	11/12/2003	08:03		11/12/2003	08:22
1112F004.D	Lab Control Sample	KWG0317780-3	11/12/2003	08:30		11/12/2003	08:49
1112F005.D	Duplicate Lab Control Sample	KWG0317780-4	11/12/2003	08:57		11/12/2003	09:16
1112F006.D	ZZZZZZ	ZZZZZZ	11/12/2003	09:24		11/12/2003	09:43
1112F007.D	Batch QCMS	KWG0317780-1	11/12/2003	09:51		11/12/2003	10:10
1112F008.D	Batch QCDMS	KWG0317780-2	11/12/2003	10:18		11/12/2003	10:37
1112F009.D	Batch QC	K2307185-011	11/12/2003	10:45		11/12/2003	11:04
1112F010.D	ZZZZZZ	ZZZZZZ	11/12/2003	11:12		11/12/2003	11:32
1112F011.D	ZZZZZZ	ZZZZZZ	11/12/2003	11:39		11/12/2003	11:58
1112F012.D	ZZZZZZ	ZZZZZZ	11/12/2003	12:06		11/12/2003	12:25
1112F013.D	ZZZZZZ	ZZZZZZ	11/12/2003	12:33		11/12/2003	12:53
1112F014.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:00		11/12/2003	13:19
1112F015.D	E-CH03-12-T-A	K2307177-016	11/12/2003	13:27		11/12/2003	13:46
1112F016.D	E-CH03-12-T-B	K2307177-017	11/12/2003	13:54		11/12/2003	14:13
1112F017.D	E-CH03-12-T-C	K2307177-018	11/12/2003	14:21		11/12/2003	14:40
1112F018.D	E-CH03-12-T-D	K2307177-019	11/12/2003	14:48		11/12/2003	15:07
1112F019.D	E-CH03-12-T-E	K2307177-020	11/12/2003	15:15		11/12/2003	15:34
1112F020.D	ZZZZZZ	ZZZZZZ	11/12/2003	15:42		11/12/2003	16:01
1112F021.D	ZZZZZZ	ZZZZZZ	11/12/2003	16:09		11/12/2003	16:28
1112F022.D	ZZZZZZ	ZZZZZZ	11/12/2003	16:36		11/12/2003	16:55
1112F023.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:03		11/12/2003	17:22
1112F024.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:30		11/12/2003	17:50
1112F025.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:57		11/12/2003	18:16
1112F026.D	ZZZZZZ	ZZZZZZ	11/12/2003	18:24		11/12/2003	18:43

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N.Virens
Sample Matrix: Tissue

Service Request: K2307177
Date Extracted: 11/05/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0317780
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
E-CH03-12-T-A	K2307177-016		09/17/03	10.11g	1ml	NA	
E-CH03-12-T-B	K2307177-017		09/17/03	10.13g	1ml	NA	
E-CH03-12-T-C	K2307177-018		09/17/03	10.11g	1ml	NA	
E-CH03-12-T-D	K2307177-019		09/17/03	10.12g	1ml	NA	
E-CH03-12-T-E	K2307177-020		09/17/03	10.13g	1ml	NA	
Method Blank	KWG0317780-5	NA	NA	10.19g	1ml	NA	
Batch QC	K2307185-011	NA	NA	10.19g	1ml	NA	
Batch QCMS	KWG0317780-1	NA	NA	10.03g	1ml	NA	
Batch QCDMS	KWG0317780-2	NA	NA	10.04g	1ml	NA	
Lab Control Sample	KWG0317780-3	NA	NA	10.00g	1ml	NA	
Duplicate Lab Control Sample	KWG0317780-4	NA	NA	10.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000046

Exception Report

Data File: J:\MS14\DATA\111203\1112F015.D
Lab ID: K2307177-016
RunType: SMPL
Matrix: TISSUE

Date Acquired: 11/12/2003 13:27
Date Quantitated: 11/12/2003 13:51
Batch ID: KWG0318310
Analysis Method: 8270C SIM
ListJoinID: LJ4474

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Average RSD	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 11·13·3

Secondary Review: mt 11/13/03

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

November 18, 2003 Service Request No: K2307185

Nadia Lombardero
ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Road
Gainesville, FL 32608

RE: Canaveral Harbor

Dear Nadia:

Enclosed are the results of the sample(s) submitted to our laboratory on September 17, 2003. For your reference, these analyses have been assigned our service request number K2307185.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3316.

Respectfully submitted,

Columbia Analytical Services, Inc.

Jeff Christian
Laboratory Director

JC/afs

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request No.:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Received:**	9/17/03
Sample Matrix:	Tissue		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Tissue samples were received for analysis at Columbia Analytical Services on 9/17/03. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored frozen at -20°C upon receipt at the laboratory.

The samples were placed on hold after receipt at the laboratory until compositing and analysis instructions were received. Refer to the Chain of Custody section of the report for a summary of the compositing and revised nomenclature received from ANAMAR.

Metals by EPA Method 200.8/6000/7000

The control criteria for matrix spike recovery of Aluminum for sample N. virens CH03 Pre are not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The matrix spike recovery of Antimony for sample N. virens CH03 Pre was outside control criteria because of suspected matrix interference. The samples contained relatively high amounts of sediment, which likely caused the low recovery of Antimony through the same mechanism commonly seen when digesting sediment samples. The matrix spike result for another tissue sample in the same analytical batch, which contained a much smaller amount of visible particulate, produced an Antimony recovery of 99%, indicating the analytical batch was in control. As a result of the interference, the results for this analyte might contain a low bias. No further corrective action was taken.

The Relative Percent Difference (RPD) for the replicate analysis of Zinc in sample N. virens CH03 Pre was outside the normal CAS control limits. The variability in the results is attributed to the sediment present in the sample. Standard mixing techniques were used, but were not sufficient for complete homogenization of this sample.

No other anomalies associated with the analysis of these samples were observed.

Butyltins by GC-FPD (M.O. Stallard, et al.)

No anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270C/SIM

No anomalies associated with the analysis of these samples were observed.

Approved by _____ **Date** 11/17/03

Chain of Custody Documentation

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES K2307185

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-9	N. virens		A-E	K2307177
CH03-10	N. virens		A-E	↓
CH03-11	N. virens		A-E	↓
CH03-12	N. virens		A-E	↓
CH03-13	N. virens		A-E	K2307180
CH03-14	N. virens		A-E	↓
CH03-15	N. virens		A-E	↓
CH03-16	N. virens		A-E	↓
CH03-17	N. virens		A-E	K2307185

Total Number of Samples: 9

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Aransas / Canaveral Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	15A
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-20	N. virens		A-E	17307185
Pre-Test	N. virens			↓
E-CH03-CTRL	N. virens		A-F	*used for sample CH03-20

Total Number of Samples:	3	

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Aromar / Coastal Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
Craig Sadler	[illegible]	9/16/03	1577
[illegible]	Fed-Ex	9/16/03	1700
	Tracy Black CAS	9/17/03	1000

Columbia Analytical Services Inc.
Cooler Receipt And Preservation Form

Project/Client Anamar Work Order K23 07185

Cooler received on 9-17-03 and opened on 9-17-03 by Km.

1. Were custody seals on outside of cooler? Y N
   If yes, how many and where?
2. Were seals intact and signature & date correct? Y N
3. Is the shipper's airbill available and filed? If no, record airbill number: FX- Attach. Y N
4. COC #
   Temperature of cooler(s) upon receipt: 2.0 1.1 0.5
   Temperature Blank:
5. Were custody papers properly filled out (ink, signed, etc.)? Y N
6. Type of packing material present Water, ice, plastic
7. Did all bottles arrive in good condition (unbroken)? Y N
8. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? Y N
9. Did all bottle labels and tags agree with custody papers? Y N
10. Were the correct types of bottles used for the tests indicated? Y N
11. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y N~~
12. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
13. Did the bottles originate from CAS/K or a branch laboratory? Y N
14. Are CWA Microbiology samples received with > ½ the 24 hr. hold time remaining from collection? ~~Y N~~
15. Was Cl2/Res negative? ~~Y N~~

Explain any discrepancies:

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

000009

CRFREV.DOC3/5/2003

K2307177, 7180, and 7185 (N.virens - "worms")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
CH03-12A		7177-016					
CH03-15A		7180-011					
	E-CH03-12,15-T-A (comp)			X	X	X	X
CH03-12B		7177-017					
CH03-15B		7180-012					
	E-CH03-12,15-T-B (comp)			X	X	X	X
CH03-12C		7177-018					
CH03-15C		7180-013					
	E-CH03-12,15-T-C (comp)			X	X	X	X
CH03-12D		7177-019					
CH03-15D		7180-014					
	E-CH03-12,15-T-D (comp)			X	X	X	X
CH03-12E		7177-020					
CH03-15E		7180-015					
	E-CH03-12,15-T-E (comp)			X	X	X	X
CH03-13A		7180-001					
CH03-16A		7180-016					
	E-CH03-13,16-T-A (comp)			X	X	X	X
CH03-13B		7180-002					
CH03-16B		7180-017					
	E-CH03-13,16-T-B (comp)			X	X	X	X
CH03-13C		7180-003					
CH03-16C		7180-018					
	E-CH03-13,16-T-C (comp)			X	X	X	X
CH03-13D		7180-004					
CH03-16D		7180-019					
	E-CH03-13,16-T-D (comp)			X	X	X	X
CH03-13E		7180-005					
CH03-16E		7180-020					
	E-CH03-13,16-T-E (comp)			X	X	X	X

000010

K2307177, 7180, and 7185 (N.virens - "worms")

Original Sample I.D.	New Sample I.D.	Original Lab Code	PAH	O-Sn	Lipids	Freeze-dry	Metals
E-CH03-CTRL-A	RS-CH03-T-A	7185-012	X	X	X	X	X
E-CH03-CTRL-B	RS-CH03-T-B	7185-013	X	X	X	X	X
E-CH03-CTRL-C	RS-CH03-T-C	7185-014	X	X	X	X	X
E-CH03-CTRL-D	RS-CH03-T-D	7185-015	X	X	X	X	X
E-CH03-CTRL-E	RS-CH03-T-E	7185-016	X	X	X	X	X
N.virens Pre-Tissue	N.virens CH03 Pre	7185-011	X	X	X	X	X

Total Solids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185
Date Collected: NA
Date Received: 9/17/03

Solids, Total

Prep Method: NONE
Analysis Method: Freeze Dry
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
N. virens CH03 Pre	K2307185-011	10/15/03	14.8	
RS-CH03-T-A	K2307185-012	10/15/03	12.8	
RS-CH03-T-B	K2307185-013	10/15/03	12.2	
RS-CH03-T-C	K2307185-014	10/15/03	11.8	
RS-CH03-T-D	K2307185-015	10/15/03	12.8	
RS-CH03-T-E	K2307185-016	10/15/03	11.8	

Approved By: _____ Date: 10/31/03

1A/052595

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185
Date Collected: NA
Date Received: 9/17/03
Date Extracted: NA
Date Analyzed: 10/15/03

Duplicate Summary
Total Metals

Sample Name: N. virens CH03 Pre
Lab Code: K2307185-011D
Test Notes:

Units: PERCENT
Basis: Wet

Analyte	Prep Method	Analysis Method	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total	NA	Freeze Dry	14.8	14.7	14.8	<1	

Approved By: _____ Date: 10/31/03

DUP/052595

000014

Metals

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Sample No.	Lab Sample ID.
N. virens CH03 Pre	K2307185-011
N. virens CH03 PreD	K2307185-011D
N. virens CH03 PreS	K2307185-011S
RS-CH03-T-A	K2307185-012
RS-CH03-T-B	K2307185-013
RS-CH03-T-C	K2307185-014
RS-CH03-T-D	K2307185-015
RS-CH03-T-E	K2307185-016
Method Blank	K2307185-MB
Method Blank	K2307185-MB2
Batch QCD	K2307751-037D
Batch QCS	K2307751-037S

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 10/31/03

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: N. virens CH03 Pre Lab Code: K2307185-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.7	0.7	1	10/18/03	10/28/03	774		
Antimony	200.8	0.007	0.001	5	10/18/03	10/28/03	0.003	B	N
Arsenic	200.8	0.07	0.01	5	10/18/03	10/28/03	1.50		
Cadmium	200.8	0.003	0.001	5	10/18/03	10/28/03	0.035		
Chromium	6010B	0.07	0.04	1	10/18/03	10/28/03	1.69		
Copper	200.8	0.015	0.009	5	10/18/03	10/28/03	1.810		
Lead	200.8	0.0030	0.0004	5	10/18/03	10/28/03	0.7790		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.026		
Nickel	200.8	0.059	0.003	5	10/18/03	10/28/03	0.819		
Silver	200.8	0.0030	0.0004	5	10/18/03	10/28/03	0.0349		
Zinc	200.8	0.07	0.03	5	10/18/03	10/28/03	17.8		*

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-A Lab Code: K2307185-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.6	0.6	1	10/18/03	10/28/03	4.1		
Antimony	200.8	0.006	0.001	5	10/18/03	10/28/03	0.002	B	N
Arsenic	200.8	0.06	0.01	5	10/18/03	10/28/03	2.27		
Cadmium	200.8	0.003	0.001	5	10/18/03	10/28/03	0.037		
Chromium	6010B	0.06	0.04	1	10/18/03	10/28/03	0.04	U	
Copper	200.8	0.013	0.008	5	10/18/03	10/28/03	1.070		
Lead	200.8	0.0026	0.0004	5	10/18/03	10/28/03	0.1110		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.009		
Nickel	200.8	0.051	0.003	5	10/18/03	10/28/03	0.066		
Silver	200.8	0.0026	0.0004	5	10/18/03	10/28/03	0.0143		
Zinc	200.8	0.06	0.03	5	10/18/03	10/28/03	29.9		*

% Solids: NA

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-B Lab Code: K2307185-013

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.6	0.6	1	10/18/03	10/28/03	3.8		
Antimony	200.8	0.006	0.001	5	10/18/03	10/28/03	0.002	B	N
Arsenic	200.8	0.06	0.01	5	10/18/03	10/28/03	1.76		
Cadmium	200.8	0.002	0.001	5	10/18/03	10/28/03	0.029		
Chromium	6010B	0.06	0.04	1	10/18/03	10/28/03	0.05	B	
Copper	200.8	0.012	0.007	5	10/18/03	10/28/03	1.360		
Lead	200.8	0.0024	0.0004	5	10/18/03	10/28/03	0.0895		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.008		
Nickel	200.8	0.049	0.002	5	10/18/03	10/28/03	0.104		
Silver	200.8	0.0024	0.0004	5	10/18/03	10/28/03	0.0152		
Zinc	200.8	0.06	0.02	5	10/18/03	10/28/03	8.25		*

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-C Lab Code: K2307185-014

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.6	0.6	1	10/18/03	10/28/03	8.6		
Antimony	200.8	0.006	0.001	5	10/18/03	10/28/03	0.002	B	N
Arsenic	200.8	0.06	0.01	5	10/18/03	10/28/03	1.94		
Cadmium	200.8	0.002	0.001	5	10/18/03	10/28/03	0.034		
Chromium	6010B	0.06	0.04	1	10/18/03	10/28/03	0.21		
Copper	200.8	0.012	0.007	5	10/18/03	10/28/03	1.740		
Lead	200.8	0.0024	0.0004	5	10/18/03	10/28/03	0.0956		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.009		
Nickel	200.8	0.047	0.002	5	10/18/03	10/28/03	0.238		
Silver	200.8	0.0024	0.0004	5	10/18/03	10/28/03	0.0134		
Zinc	200.8	0.06	0.02	5	10/18/03	10/28/03	24.9		*

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-D Lab Code: K2307185-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.6	0.6	1	10/18/03	10/28/03	2.6		
Antimony	200.8	0.006	0.001	5	10/18/03	10/28/03	0.001	B	N
Arsenic	200.8	0.06	0.01	5	10/18/03	10/28/03	2.28		
Cadmium	200.8	0.003	0.001	5	10/18/03	10/28/03	0.039		
Chromium	6010B	0.06	0.04	1	10/18/03	10/28/03	0.04	U	
Copper	200.8	0.013	0.008	5	10/18/03	10/28/03	1.130		
Lead	200.8	0.0026	0.0004	5	10/18/03	10/28/03	0.1070		
Mercury	7471A	0.004	0.002	1	10/24/03	10/28/03	0.006		
Nickel	200.8	0.051	0.003	5	10/18/03	10/28/03	0.073		
Silver	200.8	0.0026	0.0004	5	10/18/03	10/28/03	0.0131		
Zinc	200.8	0.06	0.03	5	10/18/03	10/28/03	26.2		*

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: RS-CH03-T-E Lab Code: K2307185-016

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	0.6	0.6	1	10/18/03	10/28/03	1.9		
Antimony	200.8	0.006	0.001	5	10/18/03	10/28/03	0.002	B	N
Arsenic	200.8	0.06	0.01	5	10/18/03	10/28/03	1.90		
Cadmium	200.8	0.002	0.001	5	10/18/03	10/28/03	0.034		
Chromium	6010B	0.06	0.04	1	10/18/03	10/28/03	0.04	U	
Copper	200.8	0.012	0.007	5	10/18/03	10/28/03	1.390		
Lead	200.8	0.0024	0.0004	5	10/18/03	10/28/03	0.0966		
Mercury	7471A	0.004	0.002	1	10/21/03	10/22/03	0.008		
Nickel	200.8	0.047	0.002	5	10/18/03	10/28/03	0.068		
Silver	200.8	0.0024	0.0004	5	10/18/03	10/28/03	0.0118		
Zinc	200.8	0.06	0.02	5	10/18/03	10/28/03	7.45		*

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: Method Blank Lab Code: K2307185-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	5.0	U	
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.006	U	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	0.05	U	
Cadmium	200.8	0.020	0.010	5	10/18/03	10/28/03	0.010	U	
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	0.30	U	
Copper	200.8	0.100	0.060	5	10/18/03	10/28/03	0.166		
Lead	200.8	0.0200	0.0030	5	10/18/03	10/28/03	0.0057	B	
Mercury	7471A	0.005	0.003	1	10/21/03	10/22/03	0.003	U	
Nickel	200.8	0.400	0.020	5	10/18/03	10/28/03	0.020	U	
Silver	200.8	0.0200	0.0030	5	10/18/03	10/28/03	0.0030	U	
Zinc	200.8	0.50	0.20	5	10/18/03	10/28/03	0.20	U	*

% Solids: NA

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Wet

Sample Name: Method Blank Lab Code: K2307185-MB2

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Mercury	7471A	0.005	0.003	1	10/24/03	10/28/03	0.003	U	

% Solids: NA

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: N. virens CH03 Pre Lab Code: K2307185-011

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	5230		
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.019	B	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	10.2		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.24		
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	11.4		
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	12.3		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	5.260		
Mercury	7471A	0.027	0.013	1	10/21/03	10/22/03	0.175		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	5.53		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.236		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	120		*

% Solids: 14.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-A Lab Code: K2307185-012

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	32.0		
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.012	B	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	17.8		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.29		
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	0.30	U	
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	8.35		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.868		
Mercury	7471A	0.030	0.015	1	10/21/03	10/22/03	0.068		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	0.51		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.112		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	234		*

% Solids: 12.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-B Lab Code: K2307185-013

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	31.0		
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.013	B	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	14.5		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.24		
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	0.41	B	
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	11.1		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.734		
Mercury	7471A	0.032	0.016	1	10/21/03	10/22/03	0.067		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	0.85		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.125		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	67.7		*

% Solids: 12.2

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-C Lab Code: K2307185-014

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	72.5		
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.014	B	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	16.4		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.29		
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	1.76		
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	14.7		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.810		
Mercury	7471A	0.034	0.017	1	10/21/03	10/22/03	0.075		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	2.02		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.113		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	211		*

% Solids: 11.8

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-D Lab Code: K2307185-015

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	20.4		
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.010	B	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	17.8		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.30		
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	0.30	U	
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	8.87		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.839		
Mercury	7471A	0.034	0.017	1	10/24/03	10/28/03	0.047		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	0.57		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.102		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	205		*

% Solids: 12.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	09/17/03
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: RS-CH03-T-E Lab Code: K2307185-016

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	16.2		
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.013	B	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	16.1		
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.29		
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	0.30	U	
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	11.8		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.819		
Mercury	7471A	0.034	0.017	1	10/21/03	10/22/03	0.068		
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	0.58		
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.100		
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	63.1		*

% Solids: 11.8

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: Method Blank Lab Code: K2307185-MB

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	6010B	5.0	5.0	1	10/18/03	10/28/03	5.0	U	
Antimony	200.8	0.050	0.006	5	10/18/03	10/28/03	0.006	U	N
Arsenic	200.8	0.50	0.05	5	10/18/03	10/28/03	0.05	U	
Cadmium	200.8	0.02	0.01	5	10/18/03	10/28/03	0.01	U	
Chromium	6010B	0.50	0.30	1	10/18/03	10/28/03	0.30	U	
Copper	200.8	0.10	0.06	5	10/18/03	10/28/03	0.17		
Lead	200.8	0.020	0.003	5	10/18/03	10/28/03	0.006	B	
Mercury	7471A	0.005	0.003	1	10/21/03	10/22/03	0.003	U	
Nickel	200.8	0.40	0.02	5	10/18/03	10/28/03	0.02	U	
Silver	200.8	0.020	0.003	5	10/18/03	10/28/03	0.003	U	
Zinc	200.8	0.5	0.2	5	10/18/03	10/28/03	0.2	U	*

% Solids: 100.0

Comments:

METALS

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INORGANIC ANALYSIS DATA SHEET

Client:	ANAMAR Environmental Chemistry, Inc.	Service Request:	K2307185
Project No.:	NA	Date Collected:	NA
Project Name:	Canaveral Harbor/N. Virens	Date Received:	NA
Matrix:	TISSUE	Units:	mg/kg
		Basis:	Dry

Sample Name: Method Blank Lab Code: K2307185-MB2

Analyte	Analysis Method	MRL	MDL	Dil.	Date Extracted	Date Analyzed	Result	C	Q
Mercury	7471A	0.005	0.003	1	10/24/03	10/28/03	0.003	U	

% Solids: 100.0

Comments:

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	4910	98	5000	5000	100	5050	101	6010B
Antimony	25.0	25.2	101	25.0	24.9	100	24.3	97	200.8
Arsenic	25.0	25.4	102	25.0	24.9	100	24.8	99	200.8
Cadmium	12.5	13.0	104	25.0	25.2	101	25.1	100	200.8
Chromium	500	491	98	500	499	100	494	99	6010B
Copper	12.5	12.6	101	25.0	24.7	99	24.5	98	200.8
Lead	25.0	24.9	100	25.0	24.8	99	24.6	98	200.8
Mercury	5.0	4.92	98	5.0	5.01	100	5.30	106	7471A
Nickel	25.0	25.3	101	25.0	24.9	100	24.6	98	200.8
Silver	12.5	12.7	102	25.0	25.0	100	25.0	100	200.8
Zinc	25.0	25.6	102	25.0	24.7	99	24.5	98	200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5110	102	4940	99	6010B
Antimony				25.0	24.8	99			200.8
Arsenic				25.0	24.4	98			200.8
Cadmium				25.0	24.8	99			200.8
Chromium				500	495	99	504	101	6010B
Copper				25.0	24.0	96			200.8
Lead				25.0	24.6	98			200.8
Mercury				5.0	5.26	105	5.24	105	7471A
Nickel				25.0	24.1	96			200.8
Silver				25.0	24.3	97			200.8
Zinc				25.0	24.0	96			200.8

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	4940	99			6010B
Chromium				500	501	100			6010B

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: Inorganic Ventures CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	5.0	5.43	109	5.0	5.26	105	5.40	108	7471A

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	5.40	108	5.41	108	7471A

METALS
- 2a -
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICV Source: CCV Source: Various

Concentration Units: ug/I

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				5.0	5.33	107			7471A

000033

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Concentration Units: ug/I

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				100	116	116		
Antimony				0.10	0.11	112		
Arsenic				1.0	1.05	105		
Cadmium				0.10	0.11	107		
Chromium				5.0	4.69	94		
Copper				0.20	0.28	139		
Lead				0.04	0.0526	132		
Mercury	0.20	0.216	108					
Nickel				0.40	0.46	114		
Silver				0.04	0.0559	140		
Zinc				1.0	1.24	124		

METALS
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Mercury	0.20	0.164	82					

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U					6010B
Antimony	0.021	B	0.012	U	0.01	B	0.012	U					200.8
Arsenic	0.10	U	0.10	U	0.10	U	0.10	U					200.8
Cadmium	0.020	U	0.020	U	0.02	U	0.020	U					200.8
Chromium	3.00	U	3.00	U	3.00	U	3.00	U					6010B
Copper	0.12	U	0.12	U	0.12	U	0.12	U					200.8
Lead	0.0060	U	0.0060	U	0.0060	U	0.0060	U					200.8
Mercury	0.100	U	0.100	U	0.100	U	0.100	U					7471A
Nickel	0.040	U	0.040	U	-0.080	B	-0.140	B					200.8
Silver	0.0060	U	0.0060	U	0.0060	U	0.0060	U					200.8
Zinc	0.40	U	0.40	U	0.40	U	0.40	U					200.8

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C			Method
Aluminum			50.0	U	50.0	U								6010B
Chromium			3.00	U	3.00	U								6010B
Mercury			0.100	U										7471A

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank C			Method
Mercury	0.100	U	0.100	U	0.100	U	0.100	U					7471A

METALS
- 3 -
BLANKS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C		Preparation Blank	C		Method
Mercury			0.100	U	0.100	U							7471A

METALS
- 4 -
ICP INTERFERENCE CHECK SAMPLE

Client: ANAMAR Environmental Chemistry, Inc. Service Request:K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP ID Number: TJA Iris ICP ICS Source: Inorganic Ventures

Concentration Units): ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	482000	491000	98			
Chromium		500	-0.08	443	89			

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307185
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/N. Virens
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: N. virens CH03 PreS
Lab Code: K2307185-011S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum		813		774		28.3	138		6010B
Antimony	70 - 130	2.990		0.003	B	7.430	40	N	200.8
Arsenic	70 - 130	4.30		1.50		2.97	94		200.8
Cadmium	70 - 130	0.867		0.035		0.743	112		200.8
Chromium	60 - 130	4.59		1.69		2.83	103		6010B
Copper	70 - 130	6.080		1.810		3.720	115		200.8
Lead	70 - 130	8.5400		0.7790		7.4300	104		200.8
Mercury	60 - 130	0.105		0.026		0.097	82		7471A
Nickel	70 - 130	8.980		0.819		7.430	110		200.8
Silver	70 - 130	0.6790		0.0349		0.7430	87		200.8
Zinc	70 - 130	23.2		17.8		7.43	73		200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307185
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/N. Virens
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: Batch QCS
Lab Code: K2307751-037S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Mercury	60 - 130	0.100		0.018		0.097	84		7471A

An empty field in the Control Limit column indicates the control limit is not applicabl

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307185
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/N. Virens
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: N. virens CH03 PreD
Lab Code: K2307185-011D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	30	774		809		4		6010B
Antimony		0.003	B	0.003	B	4		200.8
Arsenic	30	1.50		1.57		4		200.8
Cadmium	30	0.035		0.036		1		200.8
Chromium	30	1.69		1.74		3		6010B
Copper	30	1.810		1.890		4		200.8
Lead	30	0.7790		0.8130		4		200.8
Mercury	30	0.026		0.026		2		7471A
Nickel	30	0.819		0.870		6		200.8
Silver	30	0.0349		0.0353		1		200.8
Zinc	30	17.8		11.3		45	*	200.8

An empty field in the Control Limit column indicates the control limit is not applicabl

METALS
- 6 -
DUPLICATES

Client: ANAMAR Environmental Chemistry, Inc.
Service Request: K2307185
Project No.:
Units: mg/kg
Project Name: Canaveral Harbor/N. Virens
Basis: Wet
Matrix: TISSUE
% Solids: NA

Sample Name: Batch QCD
Lab Code: K2307751-037D

Analyte	Control Limit (%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Mercury		0.018		0.016		13		7471A

An empty field in the Control Limit column indicates the control limit is not applicabl

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Caneveral Harbor/M.Nasuta	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/18,21/03
		Date Analyzed:	10/22-28/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307185-LCS	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dorm-2

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Arsenic	PSEP Tissue	200.8	18.0	20.5	114	13.5-22.9	
Chromium	PSEP Tissue	6010B	34.7	34.6	100	23.4-48.2	
Copper	PSEP Tissue	200.8	2.34	2.28	97	1.74-3.00	
Lead	PSEP Tissue	200.8	0.065	0.062	95	0.020-0.091	
Nickel	PSEP Tissue	200.8	19.4	18.9	97	13.0-27.0	
Zinc	PSEP Tissue	200.8	25.6	26.5	104	20.3-31.0	

Approved By: JC Date: 10/31/03

LCS/032295

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Caneveral Harbor/M.Nasuta
LCS Matrix: Tissue

Service Request: K2307185
Date Collected: NA
Date Received: NA
Date Extracted: 10/18,21/03
Date Analyzed: 10/22-28/03

Laboratory Control Sample Summary
Total Metals

Sample Name: Laboratory Control Sample
Lab Code: K2307185-LCS
Test Notes:

Units: mg/Kg (ppm)
Basis: Dry

Source: N.R.C.C. Dolt-3

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Aluminum	PSEP Tissue	6010B	24.7	30.9	125	18.2-31.9	
Arsenic	PSEP Tissue	200.8	10.2	10.7	105	7.76-12.8	
Cadmium	PSEP Tissue	200.8	19.4	20.7	107	15.0-24.0	
Copper	PSEP Tissue	200.8	31.2	33.2	106	24.2-38.6	
Lead	PSEP Tissue	200.8	0.319	0.359	113	0.219-0.437	
Mercury	PSEP Tissue	7471A	3.37	3.19	95	2.58-4.21	
Nickel	PSEP Tissue	200.8	2.72	3.30	121	1.90-3.68	
Silver	PSEP Tissue	200.8	1.2	1.27	106	0.90-1.52	
Zinc	PSEP Tissue	200.8	86.6	101	117	67.4-107	

Approved By: _____ Date: 10/31/03

LCS/032295

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Caneveral Harbor/M.Nasuta	**Date Collected:**	NA
LCS Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	10/18,21/03
		Date Analyzed:	10/22-28/03

Laboratory Control Sample Summary
Total Metals

Sample Name:	Laboratory Control Sample	Units:	mg/Kg (ppm)
Lab Code:	K2307185-LCS2	Basis:	Dry
Test Notes:			

Source: N.R.C.C. Dolt-3

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	Control Limits	Result Notes
Mercury	PSEP Tissue	7471A	3.37	3.08	91	2.58-4.21	

Approved By: JC Date: 10/31/03

LCS/032295

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP/ICP-MS ID #:

GFAA ID #: AA ID #: CETAC-1

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Mercury	253.70	BD	0.200	0.100	7471A

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP/ICP-MS ID #: Excell ICPMS

GFAA ID #: AA ID #:

Analyte	Mass	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Antimony	123		0.100	0.012	200.8
Arsenic	75		1.00	0.10	200.8
Cadmium	111		0.040	0.020	200.8
Copper	65		0.20	0.12	200.8
Lead	208		0.0400	0.0060	200.8
Nickel	60		0.800	0.040	200.8
Silver	107		0.0400	0.0060	200.8
Zinc	66		1.00	0.40	200.8

Comments

METALS
-10-
METHOD DETECTION LIMITS

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP/ICP-MS ID #: TJA Iris ICP

GFAA ID #: AA ID #:

Analyte	Wave-length	Back-ground	MRL (ug/L)	MDL (ug/L)	Method
Aluminum	237.30		50.0	50.0	6010B
Chromium	267.72		5.00	3.00	6010B

Comments

Columbia Analytical Services, Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Cr
Aluminum	237.3	0.0000000	0.0000000	0.0009000	0.0000000	-0.0035000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0125000
Arsenic	189.0	0.0000000	0.0000000	-0.0001400	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	-0.0010000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000900	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	-0.0000230	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	-0.0002000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0003000	0.0000000	0.0000000	0.0000000	-0.0003600
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	-0.0009500	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	-0.0000780	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	-0.0005000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0001000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001220
Zinc	213.8	0.0000000	0.0000000	0.0000000	0.0000000	-0.0012000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mo	Ni	Interelement Correction Factors for: Ti	V	Co
Aluminum	237.3	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019000
Antimony	206.8	-0.0280000	0.0000000	0.0002400	0.0000000	0.0004000
Arsenic	189.0	0.0010000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000	-0.0004700	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000	0.0012000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000250	-0.0000120	0.0000600	0.0000000	-0.0000560
Calcium	317.9	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	-0.0001700	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0015000	0.0000000	0.0000000
Copper	324.7	0.0003400	0.0000000	-0.0000070	-0.0017000	0.0000000
Iron	259.9	-0.0003000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000	-0.0740000	0.0700000
Lead	220.3	-0.0016000	0.0004600	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000	0.0000000	0.3000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0001200
Phosphorous	178.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	-0.0006800	0.0000000	0.0000000	0.0000000
Silicon	251.6	0.0118000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.0	-0.0003000	0.0000000	0.0000000	-0.0001700	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0005500	-0.0060000	-0.0002500	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.0016000	0.0017000	0.0037000
Tin	189.9	0.0000000	0.0000000	-0.0019000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0002500	0.0000000	-0.0006400	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0056600	-0.0000600	0.0000000	0.0000000

Columbia Analytical Services,Inc.

METALS
-11A-
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

ICP ID Number : ICP IRIS
1/15/03

Analyte	Wave-length (nm)	Mn	P	C
Aluminum	237.3	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000
Arsenic	189.0	0.0000000	0.0000000	0.0000000
Barium	233.5	0.0000000	0.0000000	0.0000000
Beryllium	313.0	0.0000000	0.0000000	0.0000000
Boron	249.7	0.0000000	0.0000000	0.0000000
Cadmium	226.5	0.0000000	0.0000000	0.0000000
Calcium	317.9	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0003100	0.0000330	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000
Iron	259.9	-0.0004000	0.0000000	0.0000000
Iron	271.4	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000
Magnesium	202.5	0.0000000	0.0000000	0.0000000
Magnesium	285.2	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000
Molybdenum	202.0	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000
Phosphorous	178.2	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000
Selenium	196.0	0.0000000	0.0000000	0.0000000
Silicon	251.6	-0.0040000	0.0000000	0.0000000
Silver	328.0	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000
Sulfur	182.0	0.0000000	0.0000000	0.0000000
Strontium	346.4	0.0000000	0.0000000	0.0000000
Thallium	190.8	-0.0005900	0.0000000	0.0000000
Tin	189.9	0.0000000	0.0000000	0.0000000
Titanium	323.4	0.0000000	0.0000000	0.0000000
Vanadium	310.2	0.0000000	0.0000000	0.0000000
Zinc	213.8	0.0000000	0.0000000	0.0000000

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP ID Number: Excell ICPMS

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	15.00	1000.0	200.8
Arsenic	15.00	800.0	200.8
Cadmium	15.00	1000.0	200.8
Copper	15.00	1000.0	200.8
Lead	15.00	1000.0	200.8
Nickel	15.00	1000.0	200.8
Silver	15.00	300.0	200.8
Zinc	15.00	1000.0	200.8

Comments:

METALS

-12-

ICP LINEAR RANGES (QUARTERLY)

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

ICP ID Number: TJA Iris ICP

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.00	1000000.0	6010B
Chromium	5.00	200000.0	6010B

Comments:

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Canaveral Harbor/N. Virens

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCS DORM	10/18/03	PSEP TISSUE	0.301	30
LCS DOLT	10/18/03	PSEP TISSUE	0.302	30
K2307185-MB	10/18/03	PSEP TISSUE	0.300	30
K2307185-011	10/18/03	PSEP TISSUE	2.03	30
K2307185-011D	10/18/03	PSEP TISSUE	2.02	30
K2307185-011S	10/18/03	PSEP TISSUE	2.12	30
K2307185-012	10/18/03	PSEP TISSUE	2.34	30
K2307185-013	10/18/03	PSEP TISSUE	2.46	30
K2307185-014	10/18/03	PSEP TISSUE	2.54	30
K2307185-015	10/18/03	PSEP TISSUE	2.35	30
K2307185-016	10/18/03	PSEP TISSUE	2.54	30

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Canaveral Harbor/N. Virens

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCS DOLT	10/21/03	PSEP TISSUE	0.538	100
K2307185-MB	10/21/03	PSEP TISSUE	2.00	50
K2307185-011	10/21/03	PSEP TISSUE	2.55	50
K2307185-011D	10/21/03	PSEP TISSUE	2.63	50
K2307185-011S	10/21/03	PSEP TISSUE	2.58	50
K2307185-012	10/21/03	PSEP TISSUE	2.58	50
K2307185-013	10/21/03	PSEP TISSUE	2.56	50
K2307185-014	10/21/03	PSEP TISSUE	2.50	50
K2307185-016	10/21/03	PSEP TISSUE	2.52	50
K2307751-037D	10/24/03	PSEP TISSUE	2.67	50
K2307751-037S	10/24/03	PSEP TISSUE	2.58	50
LCS DOLT2	10/24/03	PSEP TISSUE	0.549	100
K2307185-MB2	10/24/03	PSEP TISSUE	2.00	50
K2307185-015	10/24/03	PSEP TISSUE	2.52	50

METALS
- 13 -
PREPARATION LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Canaveral Harbor/N. Virens

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
LCS DORM	10/18/03	PSEP TISSUE	0.301	30
LCS DOLT	10/18/03	PSEP TISSUE	0.302	30
K2307185-MB	10/18/03	PSEP TISSUE	0.300	30
K2307185-011	10/18/03	PSEP TISSUE	2.03	30
K2307185-011D	10/18/03	PSEP TISSUE	2.02	30
K2307185-011S	10/18/03	PSEP TISSUE	2.02	30
K2307185-012	10/18/03	PSEP TISSUE	2.34	30
K2307185-013	10/18/03	PSEP TISSUE	2.46	30
K2307185-014	10/18/03	PSEP TISSUE	2.54	30
K2307185-015	10/18/03	PSEP TISSUE	2.35	30
K2307185-016	10/18/03	PSEP TISSUE	2.54	30

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/22/03 End Date: 10/22/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	10:04																X									
STANDARD #1	1.00	10:06																X									
STANDARD #2	1.00	10:07																X									
STANDARD #3	1.00	10:09																X									
STANDARD #4	1.00	10:10																X									
STANDARD #5	1.00	10:12																X									
ICV	1.00	10:14																X									
ICB	1.00	10:15																X									
CCV1	1.00	10:17																X									
CCB1	1.00	10:18																X									
CRA	1.00	10:20																X									
ZZZZZZ	1.00	10:22																									
ZZZZZZ	2.00	10:23																									
ZZZZZZ	1.00	10:25																									
ZZZZZZ	1.00	10:26																									
ZZZZZZ	1.00	10:28																									
ZZZZZZ	1.00	10:30																									
ZZZZZZ	1.00	10:31																									
ZZZZZZ	1.00	10:33																									
ZZZZZZ	1.00	10:35																									
CCV2	1.00	10:36																X									
CCB2	1.00	10:38																X									
ZZZZZZ	1.00	10:39																									
CCV3	1.00	10:41																X									
CCB3	1.00	10:43																X									
K2307185-MB	1.00	10:45																X									
LCS DOLT	2.00	10:47																X									
K2307185-011	1.00	10:49																X									
K2307185-011D	1.00	10:50																X									
K2307185-011S	1.00	10:52																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/22/03 End Date: 10/22/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2307185-012	1.00	10:53																X									
K2307185-013	1.00	10:55																X									
K2307185-014	1.00	10:57																X									
K2307185-016	1.00	10:58																X									
CCV4	1.00	11:00																X									
CCB4	1.00	11:01																X									

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Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION ZERO	1.00	08:36																X									
STANDARD #1	1.00	08:38																X									
STANDARD #2	1.00	08:39																X									
STANDARD #3	1.00	08:41																X									
STANDARD #4	1.00	08:43																X									
STANDARD #5	1.00	08:44																X									
ICV2	1.00	08:46																X									
ICB2	1.00	08:47																X									
CCV1	1.00	08:49																X									
CCB1	1.00	08:51																X									
CRA2	1.00	08:52																X									
K2307185-MB2	1.00	08:54																X									
LCS DOLT2	2.00	08:55																X									
ZZZZZZ	1.00	08:57																									
ZZZZZZ	1.00	08:59																									
ZZZZZZ	1.00	09:00																									
ZZZZZZ	1.00	09:02																									
ZZZZZZ	1.00	09:04																									
ZZZZZZ	1.00	09:05																									
ZZZZZZ	1.00	09:07																									
CCV2	1.00	09:08																X									
CCB2	1.00	09:10																X									
ZZZZZZ	1.00	09:12																									
ZZZZZZ	1.00	09:13																									
K2307751-037D	1.00	09:15																X									
ZZZZZZ	1.00	09:16																									
ZZZZZZ	1.00	09:18																									
ZZZZZZ	1.00	09:20																									
ZZZZZZ	1.00	09:21																									
ZZZZZZ	1.00	09:23																									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: CETAC-1 Method: CV

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	09:25																									
ZZZZZZ	1.00	09:26																									
CCV3	1.00	09:28																X									
CCB3	1.00	09:29																X									
K2307185-015	1.00	09:31																X									
CCV4	1.00	09:33																X									
CCB4	1.00	09:34																X									
K2307751-037S	2.00	09:37																X									
CCV5	1.00	09:38																X									
CCB5	1.00	09:40																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Columbia Analytical Services

METALS
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ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CAL-BLANK	1.00	08:29		X							X																
CAL-STDA	1.00	08:32									X																
CAL-STDB	1.00	08:35		X																							
ICV	1.00	08:40		X							X																
ZZZZZZ	1.00	08:44																									
ICB	1.00	08:50		X							X																
CCV1	1.00	08:54									X																
CCV1	1.00	08:59		X																							
CCB1	1.00	09:04		X							X																
CRI	1.00	09:11		X							X																
ICSA	1.00	09:13		X							X																
ICSAB	1.00	09:17		X							X																
K2307185-MB	1.00	09:21		X							X																
LCS DORM	1.00	09:24		X							X																
LCS DOLT	1.00	09:26		X							X																
ZZZZZZ	1.00	09:30																									
ZZZZZZ	5.00	09:34																									
ZZZZZZ	1.00	09:38																									
ZZZZZZ	1.00	09:40																									
CCV2	1.00	09:43									X																
CCV2	1.00	09:46		X																							
CCB2	1.00	09:48		X							X																
ZZZZZZ	1.00	10:10																									
ZZZZZZ	1.00	10:13																									
ZZZZZZ	1.00	10:15																									
ZZZZZZ	1.00	10:17																									
ZZZZZZ	1.00	10:20																									
K2307185-011	1.00	10:24		X							X																
K2307185-011D	1.00	10:27		X							X																
K2307185-011S	1.00	10:29		X							X																

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METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: TJA Iris ICP Method: P

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
K2307185-012	1.00	10:32		X							X																
K2307185-013	1.00	10:35		X							X																
CCV3	1.00	10:38									X																
CCV3	1.00	10:41		X																							
CCB3	1.00	10:44		X							X																
CCV4	1.00	10:47									X																
CCV4	1.00	10:50		X																							
CCB4	1.00	10:52		X							X																
K2307185-014	1.00	10:55		X							X																
K2307185-015	1.00	10:57		X							X																
K2307185-016	1.00	11:00		X							X																
ZZZZZZ	1.00	11:02																									
ZZZZZZ	1.00	11:10																									
ZZZZZZ	1.00	11:13																									
ZZZZZZ	1.00	11:16																									
ZZZZZZ	1.00	11:18																									
ZZZZZZ	1.00	11:21																									
ZZZZZZ	1.00	11:23																									
CCV5	1.00	11:26									X																
CCV5	1.00	11:28		X																							
CCB5	1.00	11:31		X							X																

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Columbia Analytical Services

METALS
- 14 -
ANALYSIS RUN LOG

Client: ANAMAR Environmental Chemistry, Inc. Service Request: K2307185

Project No.:

Project Name: Canaveral Harbor/N. Virens

Instrument ID Number: Excell ICPMS Method: MS

Start Date: 10/28/03 End Date: 10/28/03

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CALIBRATION BLANK	1.00	11:27			X	X			X				X		X				X			X				X	
25 PPB STD. MS4-9-C	1.00	11:32			X	X			X				X		X				X			X				X	
ICV	1.00	11:37			X	X			X				X		X				X			X				X	
CCV1	1.00	11:40			X	X			X				X		X				X			X				X	
ICB	1.00	11:47			X	X			X				X		X				X			X				X	
CCB1	1.00	11:49			X	X			X				X		X				X			X				X	
CRA	1.00	11:53			X	X			X				X		X				X			X				X	
K2307185-MB	5.00	12:15			X	X			X				X		X				X			X				X	
LCS DORM	5.00	12:19			X	X			X				X		X				X			X				X	
LCS DOLT	5.00	12:22			X	X			X				X		X				X			X				X	
ZZZZZZ	5.00	12:25																									
ZZZZZZ	5.00	12:29																									
ZZZZZZ	25.00	12:36																									
ZZZZZZ	5.00	12:42																									
ZZZZZZ	5.00	12:45																									
ZZZZZZ	5.00	12:48																									
CCV2	1.00	12:53			X	X			X				X		X				X			X				X	
CCB2	1.00	13:00			X	X			X				X		X				X			X				X	
ZZZZZZ	5.00	13:04																									
ZZZZZZ	5.00	13:07																									
K2307185-011	5.00	13:14			X	X			X				X		X				X			X				X	
K2307185-011D	5.00	13:18			X	X			X				X		X				X			X				X	
K2307185-011S	25.00	13:21			X	X			X				X		X				X			X				X	
K2307185-012	5.00	13:29			X	X			X				X		X				X			X				X	
K2307185-013	5.00	13:33			X	X			X				X		X				X			X				X	
K2307185-014	5.00	13:36			X	X			X				X		X				X			X				X	
K2307185-015	5.00	13:40			X	X			X				X		X				X			X				X	
K2307185-016	5.00	13:43			X	X			X				X		X				X			X				X	
CCV3	1.00	13:47			X	X			X				X		X				X			X				X	
CCB3	1.00	13:56			X	X			X				X		X				X			X				X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

Lipids

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	9/17/2003

Lipids, Total

Prep Method:	TISSUEMIZER	Units:	PERCENT
Analysis Method:	PSEP	Basis:	AS RECEIVED
Test Notes:			

Sample Name	Lab Code	MRL	Date Extracted	Date Analyzed	Result	Result Notes
N. virens CH03 Pre	K2307185-011	0.25	10/24/2003	10/28/2003	0.69	
RS-CH03-T-A	K2307185-012	0.24	10/24/2003	10/28/2003	0.97	
RS-CH03-T-B	K2307185-013	0.25	10/24/2003	10/28/2003	0.98	
RS-CH03-T-C	K2307185-014	0.25	10/24/2003	10/28/2003	0.81	
RS-CH03-T-D	K2307185-015	0.24	10/24/2003	10/28/2003	1.2	
RS-CH03-T-E	K2307185-016	0.25	10/24/2003	10/28/2003	1.1	

Approved By: _____ Date: 10/30/03

1A/092099p

Butyltins

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307185
Project: Canaveral Harbor/N. Virens

Cover Page - Organic Analysis Data Package
Butyltins

Sample Name	Lab Code	Date Collected	Date Received
N. virens CH03 Pre	K2307185-011		09/17/2003
RS-CH03-T-A	K2307185-012		09/17/2003
RS-CH03-T-B	K2307185-013		09/17/2003
RS-CH03-T-C	K2307185-014		09/17/2003
RS-CH03-T-D	K2307185-015		09/17/2003
RS-CH03-T-E	K2307185-016		09/17/2003
N. virens CH03 PreMS	KWG0317203-3		09/17/2003
N. virens CH03 PreDMS	KWG0317203-4		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: christina Dunn Name: CHRISTINA DUNN

Date: 11/3/03 Title: SCIENTIST

000074

U:\Stealth\Crystal.rpt\FormSSum.rpt SuperSet Reference: RR32308

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	N. virens CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307185-011	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/07/03	Acceptable

Comments:

000075

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307185-012	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**0.74**	J	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**12**		1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**3.5**		1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/07/03	Acceptable

Comments:

000076

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307185-013	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**0.48**	J	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**5.1**		1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**2.6**		1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	106	26-169	11/07/03	Acceptable

Comments:

000077

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307185-014	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**0.83**	J	0.99	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**7.1**		0.99	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**3.3**		0.99	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/07/03	Acceptable

Comments:

000078

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307185-015	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**0.75**	J	0.99	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**5.5**		0.99	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**2.6**		0.99	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	116	26-169	11/07/03	Acceptable

Comments:

000079

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307185-016	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	0.99	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**0.59**	J	0.99	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**9.0**		0.99	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**3.1**		0.99	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	108	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317203-6	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

000081

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	N. virens CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307185-011	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	6.8	2.6	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	6.8	2.3	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	ND	U	6.8	2.4	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	6.8	2.6	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	104	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307185-012	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.8	3.0	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**5.8**	J	7.8	2.6	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**94**		7.8	2.8	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**27**		7.8	3.0	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	110	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307185-013	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.2	3.2	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**3.9**	J	8.2	2.8	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**42**		8.2	2.9	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**21**		8.2	3.2	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	106	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307185-014	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.4	3.3	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**7.0**	J	8.4	2.8	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**61**		8.4	3.0	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**28**		8.4	3.3	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	112	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307185-015	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	7.8	3.0	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**5.8**	J	7.8	2.6	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**43**		7.8	2.8	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**20**		7.8	3.0	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	116	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Butyltins

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307185-016	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	8.4	3.3	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	**5.0**	J	8.4	2.8	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	**76**		8.4	3.0	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	**27**		8.4	3.3	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	108	26-169	11/07/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Butyltins

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317203-6	**Basis:**	Dry
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetra-n-butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	
Tri-n-butyltin	ND	U	1.0	0.33	1	10/27/03	11/07/03	KWG0317203	
Di-n-butyltin	ND	U	1.0	0.35	1	10/27/03	11/07/03	KWG0317203	
n-Butyltin	ND	U	1.0	0.38	1	10/27/03	11/07/03	KWG0317203	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Tri-n-propyltin	102	26-169	11/07/03	Acceptable

Comments:

000088

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185

Surrogate Recovery Summary
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
N. virens CH03 Pre	K2307185-011	104
RS-CH03-T-A	K2307185-012	110
RS-CH03-T-B	K2307185-013	106
RS-CH03-T-C	K2307185-014	112
RS-CH03-T-D	K2307185-015	116
RS-CH03-T-E	K2307185-016	108
Method Blank	KWG0317203-6	102
N. virens CH03 PreMS	KWG0317203-3	101
N. virens CH03 PreDMS	KWG0317203-4	101
Lab Control Sample	KWG0317203-5	107

Surrogate Recovery Control Limits (%)

Sur1 = Tri-n-propyltin 26-169

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

000089

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003

Matrix Spike/Duplicate Matrix Spike Summary
Butyltins

Sample Name:	N. virens CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307185-011	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317203

		N. virens CH03 PreMS KWG0317203-3 Matrix Spike			N. virens CH03 PreDMS KWG0317203-4 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Tetra-n-butyltin	ND	20.2	25.0	81	15.9	25.0	64	29-120	24	50
Tri-n-butyltin	ND	21.2	25.0	85	21.1	25.0	85	10-155	1	50
Di-n-butyltin	ND	20.3	25.0	81	19.9	25.0	79	30-131	2	50
n-Butyltin	ND	17.6	25.0	71	16.8	25.0	67	10-178	4	50

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000090

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003

Lab Control Spike Summary
Butyltins

Extraction Method:	METHOD	**Units:**	ug/Kg
Analysis Method:	GC-FPD	**Basis:**	Wet
		Level:	Low
		Extraction Lot:	KWG0317203

	Lab Control Sample KWG0317203-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Tetra-n-butyltin	18.4	25.0	74	32-134
Tri-n-butyltin	21.9	25.0	87	39-146
Di-n-butyltin	21.8	25.0	87	42-142
n-Butyltin	16.1	25.0	65	28-125

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000091

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003
		Time Analyzed:	07:24

Method Blank Summary
Butyltins

Sample Name:	Method Blank	**File ID:**	J:\GC11\DATA\110603\1106F051.D
Lab Code:	KWG0317203-6	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317203

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317203-5	J:\GC11\DATA\110603\1106F052.D	11/07/03	07:42
N. virens CH03 Pre	K2307185-011	J:\GC11\DATA\110603\1106F064.D	11/07/03	11:18
N. virens CH03 PreMS	KWG0317203-3	J:\GC11\DATA\110603\1106F065.D	11/07/03	11:36
N. virens CH03 PreDMS	KWG0317203-4	J:\GC11\DATA\110603\1106F066.D	11/07/03	11:54
RS-CH03-T-A	K2307185-012	J:\GC11\DATA\110603\1106F067.D	11/07/03	12:12
RS-CH03-T-B	K2307185-013	J:\GC11\DATA\110603\1106F068.D	11/07/03	12:30
RS-CH03-T-C	K2307185-014	J:\GC11\DATA\110603\1106F069.D	11/07/03	12:48
RS-CH03-T-D	K2307185-015	J:\GC11\DATA\110603\1106F070.D	11/07/03	13:06
RS-CH03-T-E	K2307185-016	J:\GC11\DATA\110603\1106F071.D	11/07/03	13:24

000092

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Extracted:**	10/27/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/07/2003
		Time Analyzed:	07:42

Lab Control Sample Summary
Butyltins

Sample Name:	Lab Control Sample	**File ID:**	J:\GC11\DATA\110603\1106F052.D
Lab Code:	KWG0317203-5	**Instrument ID:**	GC11
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD	**Extraction Lot:**	KWG0317203

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317203-6	J:\GC11\DATA\110603\1106F051.D	11/07/03	07:24
N. virens CH03 Pre	K2307185-011	J:\GC11\DATA\110603\1106F064.D	11/07/03	11:18
N. virens CH03 PreMS	KWG0317203-3	J:\GC11\DATA\110603\1106F065.D	11/07/03	11:36
N. virens CH03 PreDMS	KWG0317203-4	J:\GC11\DATA\110603\1106F066.D	11/07/03	11:54
RS-CH03-T-A	K2307185-012	J:\GC11\DATA\110603\1106F067.D	11/07/03	12:12
RS-CH03-T-B	K2307185-013	J:\GC11\DATA\110603\1106F068.D	11/07/03	12:30
RS-CH03-T-C	K2307185-014	J:\GC11\DATA\110603\1106F069.D	11/07/03	12:48
RS-CH03-T-D	K2307185-015	J:\GC11\DATA\110603\1106F070.D	11/07/03	13:06
RS-CH03-T-E	K2307185-016	J:\GC11\DATA\110603\1106F071.D	11/07/03	13:24

000093

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D	D	J:\GC11\DATA\110403B\1104F006.D
B	J:\GC11\DATA\110403B\1104F004.D	E	J:\GC11\DATA\110403B\1104F007.D
C	J:\GC11\DATA\110403B\1104F005.D	F	J:\GC11\DATA\110403B\1104F008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	618	B	54	552	C	110	576	D	540	539	E	1100	555
	F	2100	512												
Tetra-n-butyltin	A	10	626	B	50	562	C	100	561	D	500	539	E	1000	580
	F	2000	514												
Tri-n-butyltin	A	10	835	B	50	689	C	100	711	D	500	635	E	1000	653
	F	2000	603												
Di-n-butyltin	A	10	905	B	50	846	C	100	887	D	500	838	E	1000	856
	F	2000	793												
n-Butyltin	A	10	1320	B	50	1180	C	100	1160	D	500	1050	E	1000	1100
	F	2000	1010												

Results flagged with an asterisk (*) indicate values outside control criteria.

000094

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	6.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	6.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	11.9		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	4.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	9.6		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

000095

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	410	564	493	-13	NA	± 30 %	AverageRF
Tri-n-butyltin	480	420	688	599	-13	NA	± 30 %	AverageRF
Di-n-butyltin	480	400	854	722	-16	NA	± 30 %	AverageRF
n-Butyltin	490	410	1140	947	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000096

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Level ID	File ID	Level ID	File ID
A	J:\GC11\DATA\110403B\1104F003.D\1104R003.D	D	J:\GC11\DATA\110403B\1104F006.D\1104R006.D
B	J:\GC11\DATA\110403B\1104F004.D\1104R004.D	E	J:\GC11\DATA\110403B\1104F007.D\1104R007.D
C	J:\GC11\DATA\110403B\1104F005.D\1104R005.D	F	J:\GC11\DATA\110403B\1104F008.D\1104R008.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Tri-n-propyltin	A	11	186	B	54	191	C	110	178	D	540	183	E	1100	202
	F	2100	192												
Tetra-n-butyltin	A	10	219	B	50	196	C	100	195	D	500	193	E	1000	206
	F	2000	203												
Tri-n-butyltin	A	10	263	B	50	225	C	100	238	D	500	231	E	1000	246
	F	2000	238												
Di-n-butyltin	A	10	330	B	50	275	C	100	285	D	500	299	E	1000	316
	F	2000	307												
n-Butyltin	A	10	507	B	50	365	C	100	392	D	500	391	E	1000	421
	F	2000	403												

Results flagged with an asterisk (*) indicate values outside control criteria.

000097

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/04/2003

Initial Calibration Summary
Butyltins

Calibration ID: CAL3064
Instrument ID: GC11

Column: RTX-OPP

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Tri-n-propyltin	SURR	AverageRF	% RSD	4.4		≤ 20
Tetra-n-butyltin	MS	AverageRF	% RSD	4.8		≤ 20
Tri-n-butyltin	MS	AverageRF	% RSD	5.5		≤ 20
Di-n-butyltin	MS	AverageRF	% RSD	6.6		≤ 20
n-Butyltin	MS	AverageRF	% RSD	11.9		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

000093

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/04/2003
Date Analyzed: 11/04/2003

Second Source Calibration Verification
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration ID: CAL3064
Units: ng/ml

File ID: J:\GC11\DATA\110403B\1104F010.D\1104R010.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Tetra-n-butyltin	470	400	202	174	-14	NA	± 30 %	AverageRF
Tri-n-butyltin	480	400	240	200	-17	NA	± 30 %	AverageRF
Di-n-butyltin	480	410	302	262	-13	NA	± 30 %	AverageRF
n-Butyltin	490	410	413	345	-17	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000099

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F050.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	585	5	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	510	564	571	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	688	676	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	520	854	893	5	NA	± 25 %	AverageRF
n-Butyltin	500	480	1140	1100	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000100

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F050.D\1106R050.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	189	0	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	480	202	194	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	240	232	-3	NA	± 25 %	AverageRF
Di-n-butyltin	500	500	302	299	-1	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	403	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000101

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F063.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	560	559	583	4	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	500	564	567	1	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	688	672	-2	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	873	2	NA	± 25 %	AverageRF
n-Butyltin	500	490	1140	1100	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000102

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F063.D\1106R063.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	540	189	189	0	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	460	202	184	-9	NA	± 25 %	AverageRF
Tri-n-butyltin	500	480	240	231	-4	NA	± 25 %	AverageRF
Di-n-butyltin	500	480	302	292	-3	NA	± 25 %	AverageRF
n-Butyltin	500	480	413	395	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000103

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F074.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	570	559	593	6	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	550	564	622	10	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	688	678	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	854	865	1	NA	± 25 %	AverageRF
n-Butyltin	500	490	1140	1100	-3	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000104

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/07/2003

Continuing Calibration Verification Summary
Butyltins

Calibration Type: External Standard
Analysis Method: GC-FPD

Calibration Date: 11/04/2003
Calibration ID: CAL3064
Analysis Lot: KWG0318147
Units: ng/ml

File ID: J:\GC11\DATA\110603\1106F074.D\1106R074.D

Column ID: RTX-OPP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Tri-n-propyltin	540	550	189	193	3	NA	± 25 %	AverageRF
Tetra-n-butyltin	500	480	202	195	-4	NA	± 25 %	AverageRF
Tri-n-butyltin	500	490	240	237	-1	NA	± 25 %	AverageRF
Di-n-butyltin	500	510	302	309	2	NA	± 25 %	AverageRF
n-Butyltin	500	490	413	404	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

000105

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307185
Project: Canaveral Harbor/N. Virens

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1105F080.D	Instrument Blank	KWG0318147-1	11/6/2003	14:46		11/6/2003	14:58
1105F081.D	Continuing Calibration Verification	KWG0318147-8	11/6/2003	15:03		11/6/2003	15:15
1106F001.D	ZZZZZZ	ZZZZZZ	11/6/2003	16:33		11/6/2003	16:45
1106F002.D	ZZZZZZ	ZZZZZZ	11/6/2003	16:51		11/6/2003	17:03
1106F003.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:08		11/6/2003	17:20
1106F004.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:26		11/6/2003	17:38
1106F005.D	ZZZZZZ	ZZZZZZ	11/6/2003	17:44		11/6/2003	17:56
1106F006.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:02		11/6/2003	18:14
1106F007.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:20		11/6/2003	18:32
1106F008.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:37		11/6/2003	18:49
1106F009.D	ZZZZZZ	ZZZZZZ	11/6/2003	18:55		11/6/2003	19:07
1106F010.D	ZZZZZZ	ZZZZZZ	11/6/2003	19:13		11/6/2003	19:25
1105F012.D	Instrument Blank	KWG0318147-2	11/6/2003	19:48		11/6/2003	20:00
1105F013.D	Continuing Calibration Verification	KWG0318147-9	11/6/2003	20:06		11/6/2003	20:18
1106F014.D	ZZZZZZ	ZZZZZZ	11/6/2003	20:24		11/6/2003	20:36
1106F015.D	ZZZZZZ	ZZZZZZ	11/6/2003	20:42		11/6/2003	20:54
1106F016.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:00		11/6/2003	21:12
1106F017.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:18		11/6/2003	21:30
1106F018.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:35		11/6/2003	21:47
1106F019.D	ZZZZZZ	ZZZZZZ	11/6/2003	21:53		11/6/2003	22:05
1106F020.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:11		11/6/2003	22:23
1106F021.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:28		11/6/2003	22:40
1106F022.D	ZZZZZZ	ZZZZZZ	11/6/2003	22:46		11/6/2003	22:58
1105F024.D	Instrument Blank	KWG0318147-3	11/6/2003	23:21		11/6/2003	23:33
1105F025.D	Continuing Calibration Verification	KWG0318147-10	11/6/2003	23:39		11/6/2003	23:51
1106F026.D	ZZZZZZ	ZZZZZZ	11/6/2003	23:57		11/7/2003	00:09
1106F027.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:14		11/7/2003	00:26
1106F028.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:32		11/7/2003	00:44
1106F029.D	ZZZZZZ	ZZZZZZ	11/7/2003	00:50		11/7/2003	01:02
1106F030.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:07		11/7/2003	01:19
1106F031.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:25		11/7/2003	01:37
1106F032.D	ZZZZZZ	ZZZZZZ	11/7/2003	01:43		11/7/2003	01:55
1106F033.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:01		11/7/2003	02:13
1106F034.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:19		11/7/2003	02:31
1106F035.D	ZZZZZZ	ZZZZZZ	11/7/2003	02:37		11/7/2003	02:49

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000106

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307185
Project: Canaveral Harbor/N. Virens

Analysis Run Log
Butyltins

Analysis Method: GC-FPD

Analysis Lot: KWG0318147
Instrument ID: GC11
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1106F037.D	Instrument Blank	KWG0318147-4	11/7/2003	03:13		11/7/2003	03:25
1106F038.D	Continuing Calibration Verification	KWG0318147-11	11/7/2003	03:31		11/7/2003	03:43
1106F039.D	ZZZZZZ	ZZZZZZ	11/7/2003	03:49		11/7/2003	04:01
1106F040.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:06		11/7/2003	04:18
1106F041.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:25		11/7/2003	04:37
1106F042.D	ZZZZZZ	ZZZZZZ	11/7/2003	04:42		11/7/2003	04:54
1106F043.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:00		11/7/2003	05:12
1106F044.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:18		11/7/2003	05:30
1106F045.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:36		11/7/2003	05:48
1106F046.D	ZZZZZZ	ZZZZZZ	11/7/2003	05:54		11/7/2003	06:06
1106F047.D	ZZZZZZ	ZZZZZZ	11/7/2003	06:13		11/7/2003	06:25
1106F049.D	Instrument Blank	KWG0318147-5	11/7/2003	06:49		11/7/2003	07:01
1106F050.D	Continuing Calibration Verification	KWG0318147-12	11/7/2003	07:06		11/7/2003	07:18
1106F051.D	Method Blank	KWG0317203-6	11/7/2003	07:24		11/7/2003	07:36
1106F052.D	Lab Control Sample	KWG0317203-5	11/7/2003	07:42		11/7/2003	07:54
1106F053.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:00		11/7/2003	08:12
1106F054.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:18		11/7/2003	08:30
1106F055.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:36		11/7/2003	08:48
1106F056.D	ZZZZZZ	ZZZZZZ	11/7/2003	08:54		11/7/2003	09:06
1106F057.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:12		11/7/2003	09:24
1106F058.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:31		11/7/2003	09:43
1106F059.D	ZZZZZZ	ZZZZZZ	11/7/2003	09:48		11/7/2003	10:00
1106F060.D	ZZZZZZ	ZZZZZZ	11/7/2003	10:06		11/7/2003	10:18
1106F062.D	Instrument Blank	KWG0318147-6	11/7/2003	10:43		11/7/2003	10:55
1106F063.D	Continuing Calibration Verification	KWG0318147-13	11/7/2003	11:00		11/7/2003	11:12
1106F064.D	N. virens CH03 Pre	K2307185-011	11/7/2003	11:18		11/7/2003	11:30
1106F065.D	N. virens CH03 PreMS	KWG0317203-3	11/7/2003	11:36		11/7/2003	11:48
1106F066.D	N. virens CH03 PreDMS	KWG0317203-4	11/7/2003	11:54		11/7/2003	12:06
1106F067.D	RS-CH03-T-A	K2307185-012	11/7/2003	12:12		11/7/2003	12:24
1106F068.D	RS-CH03-T-B	K2307185-013	11/7/2003	12:30		11/7/2003	12:42
1106F069.D	RS-CH03-T-C	K2307185-014	11/7/2003	12:48		11/7/2003	13:00
1106F070.D	RS-CH03-T-D	K2307185-015	11/7/2003	13:06		11/7/2003	13:18
1106F071.D	RS-CH03-T-E	K2307185-016	11/7/2003	13:24		11/7/2003	13:36
1106F073.D	Instrument Blank	KWG0318147-7	11/7/2003	14:00		11/7/2003	14:12
1106F074.D	Continuing Calibration Verification	KWG0318147-14	11/7/2003	14:18		11/7/2003	14:30

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000107

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185
Date Extracted: 10/27/2003

Extraction Prep Log
Butyltins

Extraction Method: METHOD
Analysis Method: GC-FPD

Extraction Lot: KWG0317203
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
N. virens CH03 Pre	K2307185-011		09/17/03	10.04g	0.5ml	NA	
RS-CH03-T-A	K2307185-012		09/17/03	10.06g	0.5ml	NA	
RS-CH03-T-B	K2307185-013		09/17/03	10.06g	0.5ml	NA	
RS-CH03-T-C	K2307185-014		09/17/03	10.14g	0.5ml	NA	
RS-CH03-T-D	K2307185-015		09/17/03	10.14g	0.5ml	NA	
RS-CH03-T-E	K2307185-016		09/17/03	10.20g	0.5ml	NA	
Method Blank	KWG0317203-6	NA	NA	10.00g	0.5ml	NA	
N. virens CH03 PreMS	KWG0317203-3		09/17/03	10.02g	0.5ml	NA	
N. virens CH03 PreDMS	KWG0317203-4		09/17/03	10.01g	0.5ml	NA	
Lab Control Sample	KWG0317203-5	NA	NA	10.00g	0.5ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000108

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307185-012	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	0.74	0.62	17.6	J	1	11/07/03
Di-n-butyltin	1.0	0.35	12	10	18.2		1	11/07/03
n-Butyltin	1.0	0.38	3.5	2.7	25.8		1	11/07/03

000109

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307185-013	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	1.0	0.33	0.48	0.39	20.7	J	1	11/07/03
Di-n-butyltin	1.0	0.35	5.1	4.2	19.4		1	11/07/03
n-Butyltin	1.0	0.38	2.6	2.1	21.3		1	11/07/03

000110

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307185-014	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	0.83	0.60	32.2	J	1	11/07/03
Di-n-butyltin	0.99	0.35	7.1	5.7	21.9		1	11/07/03
n-Butyltin	0.99	0.38	3.3	2.7	20.0		1	11/07/03

000111

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185
Date Collected:
Date Received: 09/17/2003
Date Extracted: 10/27/2003

Butyltins

Sample Name: RS-CH03-T-D
Lab Code: K2307185-015
Extraction Method: METHOD
Analysis Method: GC-FPD

Units: ug/Kg
Basis: Wet
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	0.75	0.66	12.8	J	1	11/07/03
Di-n-butyltin	0.99	0.35	5.5	5.0	9.5		1	11/07/03
n-Butyltin	0.99	0.38	2.6	2.2	16.7		1	11/07/03

000112

COLUMBIA ANALYTICAL SERVICES, INC.

Confirmation Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003
		Date Extracted:	10/27/2003

Butyltins

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307185-016	**Basis:**	Wet
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	GC-FPD		

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	%D	Q	Dilution Factor	Date Analyzed
Tri-n-butyltin	0.99	0.33	0.59	0.52	12.6	J	1	11/07/03
Di-n-butyltin	0.99	0.35	9.0	7.3	20.9		1	11/07/03
n-Butyltin	0.99	0.38	3.1	2.9	6.7		1	11/07/03

000113

Polynuclear Aromatic Hydrocarbons
Method 8270

Organic Analysis:
Polynuclear Aromatic Hydrocarbons

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: ANAMAR Environmental Chemistry, Inc. **Service Request:** K2307185
Project: Canaveral Harbor/N. Virens

Cover Page - Organic Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
N. virens CH03 Pre	K2307185-011		09/17/2003
RS-CH03-T-A	K2307185-012		09/17/2003
RS-CH03-T-B	K2307185-013		09/17/2003
RS-CH03-T-C	K2307185-014		09/17/2003
RS-CH03-T-D	K2307185-015		09/17/2003
RS-CH03-T-E	K2307185-016		09/17/2003
N. virens CH03 PreMS	KWG0317780-1		09/17/2003
N. virens CH03 PreDMS	KWG0317780-2		09/17/2003

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Carl Degner

Date: 11/18/03 Title: SVM Supervisor

000116

U:\Stealth\Crystal.rpt\FormSSum.rpt SuperSet Reference: RR32383

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	N. virens CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307185-011	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**3.5**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**2.0**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**1.1**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.42**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**0.47**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**0.67**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**3.6**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**1.3**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**8.6**		5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**8.0**		5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	**3.2**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**5.9**		5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	**4.2**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	**3.9**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**4.0**	J	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**3.7**	J	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**0.65**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**3.6**	J	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	54-102	11/12/03	Acceptable
Fluoranthene-d10	86	57-107	11/12/03	Acceptable
Terphenyl-d14	89	53-116	11/12/03	Acceptable

Comments:

000117

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307185-012	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**2.2**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.3**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.33**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.28**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**0.24**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**1.0**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**0.20**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**0.91**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**1.2**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.53**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.37**	J	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	97	53-116	11/12/03	Acceptable

Comments:

000118

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307185-013	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.6**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**0.99**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.30**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.24**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**0.22**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**0.38**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**0.98**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**0.23**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**1.3**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.51**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**0.23**	J	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.27**	J	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	54-102	11/12/03	Acceptable
Fluoranthene-d10	89	57-107	11/12/03	Acceptable
Terphenyl-d14	97	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307185-014	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.6**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.0**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.30**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.25**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**0.30**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**0.48**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**1.1**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**0.21**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**2.3**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.35**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**0.20**	J	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**0.54**	J	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	95	53-116	11/12/03	Acceptable

Comments:

000119

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307185-015	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.8**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.2**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.30**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.23**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**0.88**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**0.17**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**0.99**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**1.0**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.90**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**0.25**	J	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**0.24**	J	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	95	53-116	11/12/03	Acceptable

Comments:

000120

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307185-016	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**1.8**	J	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**1.1**	J	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**0.29**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**0.26**	J	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**0.87**	J	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**0.15**	J	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**0.83**	J	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**0.90**	J	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**0.42**	J	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**0.35**	J	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	93	53-116	11/12/03	Acceptable

Comments:

000121

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317780-5	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	ND	U	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	ND	U	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	ND	U	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**0.20**	**J**	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	68	54-102	11/12/03	Acceptable
Fluoranthene-d10	75	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

000122

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	N. virens CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307185-011	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**24**	J	34	3.8	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**14**	J	34	3.8	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**7.6**	J	34	0.82	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**2.8**	J	34	0.57	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**3.2**	J	34	1.3	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**4.6**	J	34	2.5	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**24**	J	34	1.3	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**8.5**	J	34	0.82	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**58**		34	2.5	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**54**		34	2.7	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	**22**	J	34	1.2	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**40**		34	1.2	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	**28**	J	34	1.1	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	**27**	J	34	1.2	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**27**	J	34	0.68	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**25**	J	34	1.3	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**4.4**	J	34	1.1	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**25**	J	34	1.4	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	54-102	11/12/03	Acceptable
Fluoranthene-d10	86	57-107	11/12/03	Acceptable
Terphenyl-d14	89	53-116	11/12/03	Acceptable

Comments:

000123

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-A	**Units:**	ug/Kg
Lab Code:	K2307185-012	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**17**	J	39	4.3	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**10**	J	39	4.4	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**2.6**	J	39	0.94	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**2.2**	J	39	0.65	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**1.9**	J	39	1.5	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	39	2.9	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**8.0**	J	39	1.5	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**1.6**	J	39	0.94	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**7.1**	J	39	2.9	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**9.5**	J	39	3.1	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	39	1.4	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**4.2**	J	39	1.4	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	39	1.2	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	39	1.4	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	39	0.79	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	39	1.5	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	39	1.2	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**2.9**	J	39	1.6	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	74	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	97	53-116	11/12/03	Acceptable

Comments:

000124

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-B	**Units:**	ug/Kg
Lab Code:	K2307185-013	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**13**	J	41	4.6	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**8.1**	J	41	4.6	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**2.5**	J	41	0.99	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**2.0**	J	41	0.69	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**1.8**	J	41	1.6	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**3.1**	J	41	3.1	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**8.1**	J	41	1.6	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**1.8**	J	41	0.99	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	41	3.1	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**10**	J	41	3.2	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	41	1.4	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**4.2**	J	41	1.4	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	41	1.3	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	41	1.4	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	41	0.82	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**1.9**	J	41	1.5	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	41	1.3	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**2.2**	J	41	1.7	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	54-102	11/12/03	Acceptable
Fluoranthene-d10	89	57-107	11/12/03	Acceptable
Terphenyl-d14	97	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-C	**Units:**	ug/Kg
Lab Code:	K2307185-014	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**14**	J	42	4.7	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**8.7**	J	42	4.8	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**2.6**	J	42	1.1	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**2.1**	J	42	0.71	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	**2.6**	J	42	1.7	1	11/05/03	11/12/03	KWG0317780	
Fluorene	**4.0**	J	42	3.2	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**8.9**	J	42	1.7	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**1.8**	J	42	1.1	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	42	3.2	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**20**	J	42	3.4	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	42	1.5	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**3.0**	J	42	1.5	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	42	1.3	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	42	1.5	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	42	0.85	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**1.7**	J	42	1.6	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**4.6**	J	42	1.3	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	42	1.7	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	78	54-102	11/12/03	Acceptable
Fluoranthene-d10	90	57-107	11/12/03	Acceptable
Terphenyl-d14	95	53-116	11/12/03	Acceptable

Comments:

000126

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-D	**Units:**	ug/Kg
Lab Code:	K2307185-015	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**14**	J	39	4.3	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**9.7**	J	39	4.4	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**2.3**	J	39	0.94	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**1.8**	J	39	0.65	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	39	1.5	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	39	2.9	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**6.9**	J	39	1.5	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**1.4**	J	39	0.94	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**7.7**	J	39	2.9	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**7.9**	J	39	3.1	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	39	1.4	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**7.0**	J	39	1.4	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	39	1.2	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	39	1.4	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	39	0.79	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	**2.0**	J	39	1.5	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	39	1.2	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	**1.9**	J	39	1.6	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	77	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	95	53-116	11/12/03	Acceptable

Comments:

000127

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	
Sample Matrix:	Tissue	**Date Received:**	09/17/2003

Polynuclear Aromatic Hydrocarbons

Sample Name:	RS-CH03-T-E	**Units:**	ug/Kg
Lab Code:	K2307185-016	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	**15**	J	43	4.7	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	**9.4**	J	43	4.8	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	**2.5**	J	43	1.1	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	**2.2**	J	43	0.71	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	43	1.7	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	43	3.2	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	**7.4**	J	43	1.7	1	11/05/03	11/12/03	KWG0317780	
Anthracene	**1.3**	J	43	1.1	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	**7.0**	J	43	3.2	1	11/05/03	11/12/03	KWG0317780	
Pyrene	**7.6**	J	43	3.4	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	43	1.5	1	11/05/03	11/12/03	KWG0317780	
Chrysene	**3.5**	J	43	1.5	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	43	1.3	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	43	1.5	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	**2.9**	J	43	0.85	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	43	1.6	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	ND	U	43	1.3	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	43	1.7	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	81	54-102	11/12/03	Acceptable
Fluoranthene-d10	88	57-107	11/12/03	Acceptable
Terphenyl-d14	93	53-116	11/12/03	Acceptable

Comments:

000128

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	NA
Sample Matrix:	Tissue	**Date Received:**	NA

Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**Units:**	ug/Kg
Lab Code:	KWG0317780-5	**Basis:**	Dry
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	0.55	1	11/05/03	11/12/03	KWG0317780	
2-Methylnaphthalene	ND	U	5.0	0.56	1	11/05/03	11/12/03	KWG0317780	
Acenaphthylene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Acenaphthene	ND	U	5.0	0.083	1	11/05/03	11/12/03	KWG0317780	
Dibenzofuran	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Fluorene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Phenanthrene	ND	U	5.0	0.19	1	11/05/03	11/12/03	KWG0317780	
Anthracene	ND	U	5.0	0.12	1	11/05/03	11/12/03	KWG0317780	
Fluoranthene	ND	U	5.0	0.37	1	11/05/03	11/12/03	KWG0317780	
Pyrene	ND	U	5.0	0.39	1	11/05/03	11/12/03	KWG0317780	
Benz(a)anthracene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Chrysene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(b)fluoranthene	ND	U	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(k)fluoranthene	ND	U	5.0	0.17	1	11/05/03	11/12/03	KWG0317780	
Benzo(a)pyrene	ND	U	5.0	0.10	1	11/05/03	11/12/03	KWG0317780	
Indeno(1,2,3-cd)pyrene	ND	U	5.0	0.18	1	11/05/03	11/12/03	KWG0317780	
Dibenz(a,h)anthracene	**0.20**	**J**	5.0	0.15	1	11/05/03	11/12/03	KWG0317780	
Benzo(g,h,i)perylene	ND	U	5.0	0.20	1	11/05/03	11/12/03	KWG0317780	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorene-d10	68	54-102	11/12/03	Acceptable
Fluoranthene-d10	75	57-107	11/12/03	Acceptable
Terphenyl-d14	98	53-116	11/12/03	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
N. virens CH03 Pre	K2307185-011	77	86	89
RS-CH03-T-A	K2307185-012	74	88	97
RS-CH03-T-B	K2307185-013	78	89	97
RS-CH03-T-C	K2307185-014	78	90	95
RS-CH03-T-D	K2307185-015	77	88	95
RS-CH03-T-E	K2307185-016	81	88	93
Method Blank	KWG0317780-5	68	75	98
N. virens CH03 PreMS	KWG0317780-1	78	89	87
N. virens CH03 PreDMS	KWG0317780-2	77	84	83
Lab Control Sample	KWG0317780-3	77	86	91
Duplicate Lab Control Sample	KWG0317780-4	77	84	87

Surrogate Recovery Control Limits (%)

Sur1 =	Fluorene-d10	54-102
Sur2 =	Fluoranthene-d10	57-107
Sur3 =	Terphenyl-d14	53-116

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/12/2003
Time Analyzed: 07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F002.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318310-2
Analysis Lot: KWG0318310

		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10	
		Area	RT	Area	RT	Area	RT
	Results ==>	157,294	5.16	86,722	6.60	154,481	7.82
	Upper Limit ==>	314,588	5.66	173,444	7.10	308,962	8.32
	Lower Limit ==>	78,647	4.66	43,361	6.10	77,241	7.32
	ICAL Result ==>	204,882	5.17	110,040	6.61	188,958	7.82
Associated Analyses							
Method Blank	KWG0317780-5	171,127	5.15	92,344	6.60	154,242	7.82
Lab Control Sample	KWG0317780-3	152,466	5.15	83,007	6.60	142,556	7.82
Duplicate Lab Control Sample	KWG0317780-4	156,250	5.15	85,461	6.60	145,844	7.82
N. virens CH03 PreMS	KWG0317780-1	153,176	5.15	83,512	6.60	142,425	7.82
N. virens CH03 PreDMS	KWG0317780-2	154,204	5.15	84,770	6.60	145,175	7.82
N. virens CH03 Pre	K2307185-011	143,846	5.15	79,287	6.60	133,366	7.82
RS-CH03-T-A	K2307185-012	139,703	5.15	75,793	6.60	127,525	7.82
RS-CH03-T-B	K2307185-013	143,469	5.15	78,424	6.60	130,788	7.82
RS-CH03-T-C	K2307185-014	137,101	5.15	74,975	6.60	125,677	7.82
RS-CH03-T-D	K2307185-015	145,321	5.16	79,181	6.60	134,011	7.82
RS-CH03-T-E	K2307185-016	148,430	5.16	81,313	6.60	136,298	7.82

Results flagged with an asterisk (*) indicate values outside control criteria.

000131

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/12/2003
Time Analyzed: 07:34

Internal Standard Area and RT Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F002.D
Instrument ID: MS14
Analysis Method: 8270C SIM

Lab Code: KWG0318310-2
Analysis Lot: KWG0318310

		Chrysene-d12		Perylene-d12	
		Area	**RT**	**Area**	**RT**
	Results ==>	151,499	10.77	94,668	14.73
	Upper Limit ==>	302,998	11.27	189,336	15.23
	Lower Limit ==>	75,750	10.27	47,334	14.23
	ICAL Result ==>	189,206	10.78	118,509	14.75
Associated Analyses					
Method Blank	KWG0317780-5	121,700	10.77	69,355	14.72
Lab Control Sample	KWG0317780-3	141,763	10.76	86,874	14.72
Duplicate Lab Control Sample	KWG0317780-4	147,392	10.76	88,762	14.72
N. virens CH03 PreMS	KWG0317780-1	154,658	10.76	111,819	14.73
N. virens CH03 PreDMS	KWG0317780-2	157,328	10.77	115,418	14.73
N. virens CH03 Pre	K2307185-011	135,829	10.76	97,162	14.73
RS-CH03-T-A	K2307185-012	124,367	10.77	87,250	14.73
RS-CH03-T-B	K2307185-013	130,004	10.77	91,622	14.73
RS-CH03-T-C	K2307185-014	125,685	10.77	88,367	14.73
RS-CH03-T-D	K2307185-015	129,782	10.77	91,962	14.74
RS-CH03-T-E	K2307185-016	136,669	10.77	96,709	14.74

Results flagged with an asterisk (*) indicate values outside control criteria.

000132

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/12/2003

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	N. virens CH03 Pre	**Units:**	ug/Kg
Lab Code:	K2307185-011	**Basis:**	Wet
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317780

		N. virens CH03 PreMS KWG0317780-1 Matrix Spike			N. virens CH03 PreDMS KWG0317780-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	3.5	201	249	79	208	249	82	46-109	4	40
2-Methylnaphthalene	2.0	219	249	87	226	249	90	44-118	3	40
Acenaphthylene	1.1	232	249	93	233	249	93	63-114	0	40
Acenaphthene	0.42	229	249	92	231	249	92	59-117	1	40
Dibenzofuran	0.47	231	249	93	232	249	93	64-102	0	40
Fluorene	0.67	243	249	97	242	249	97	67-115	1	40
Phenanthrene	3.6	245	249	97	238	249	94	67-109	3	40
Anthracene	1.3	250	249	100	240	249	96	71-114	4	40
Fluoranthene	8.6	267	249	104	256	249	99	66-120	4	40
Pyrene	8.0	224	249	87	215	249	83	59-110	4	40
Benz(a)anthracene	3.2	240	249	95	232	249	92	55-108	3	40
Chrysene	5.9	254	249	99	244	249	96	61-110	4	40
Benzo(b)fluoranthene	4.2	244	249	96	238	249	94	64-119	3	40
Benzo(k)fluoranthene	3.9	254	249	100	238	249	94	68-117	6	40
Benzo(a)pyrene	4.0	247	249	97	233	249	92	67-117	6	40
Indeno(1,2,3-cd)pyrene	3.7	270	249	107	258	249	102	47-137	4	40
Dibenz(a,h)anthracene	0.65	273	249	109	262	249	105	51-133	4	40
Benzo(g,h,i)perylene	3.6	252	249	100	238	249	94	58-114	6	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000133

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185
Date Extracted: 11/05/2003
Date Analyzed: 11/12/2003

Lab Control Spike/Duplicate Lab Control Spike Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Units: ug/Kg
Basis: Wet
Level: Low
Extraction Lot: KWG0317780

	Lab Control Sample KWG0317780-3 Lab Control Spike			Duplicate Lab Control Sample KWG0317780-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Naphthalene	197	250	79	197	250	79	51-102	0	40
2-Methylnaphthalene	206	250	83	206	250	82	43-109	0	40
Acenaphthylene	213	250	85	211	250	84	45-115	1	40
Acenaphthene	209	250	84	207	250	83	54-106	1	40
Dibenzofuran	210	250	84	209	250	84	44-117	0	40
Fluorene	221	250	88	218	250	87	55-112	1	40
Phenanthrene	217	250	87	213	250	85	55-108	2	40
Anthracene	226	250	90	223	250	89	59-113	1	40
Fluoranthene	235	250	94	227	250	91	57-123	3	40
Pyrene	216	250	87	205	250	82	51-110	5	40
Benz(a)anthracene	220	250	88	208	250	83	45-114	6	40
Chrysene	234	250	93	221	250	88	53-115	6	40
Benzo(b)fluoranthene	239	250	95	229	250	91	49-133	4	40
Benzo(k)fluoranthene	248	250	99	236	250	94	51-132	5	40
Benzo(a)pyrene	241	250	97	229	250	92	54-131	5	40
Indeno(1,2,3-cd)pyrene	253	250	101	234	250	94	38-143	8	40
Dibenz(a,h)anthracene	255	250	102	239	250	96	38-143	7	40
Benzo(g,h,i)perylene	243	250	97	228	250	91	43-129	6	40

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

000134

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Collected:**	NA
SRM Matrix:	Tissue	**Date Received:**	NA
		Date Extracted:	11/5/2003
		Date Analyzed:	11/12/2003

Standard Reference Material
Polynuclear Aromatic Hydrocarbons

Sample Name:	Standard Reference Material	Units:	ug/Kg (ppb)
Lab Code:	KWG0317780-6	Basis:	Dry
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	CAS Advisory Limits	Result Notes
Phenanthrene	EPA 3541	SIM	2.5	2.3	1.1-5.6	
Fluoranthene	EPA 3541	SIM	19	16	8.8-39	
Pyrene	EPA 3541	SIM	18	14	8.3-36	
Benz(a)anthracene	EPA 3541	SIM	3.7	2.8	1.6-8.5	
Chrysene	EPA 3541	SIM	11	9.0	4.9-23	
Benzo(b)fluoranthene	EPA 3541	SIM	5.3	3.9	2.4-11	
Benzo(k)fluoranthene	EPA 3541	SIM	4.6	3.2	2.2-9.9	
Benzo(a)pyrene	EPA 3541	SIM	1.8	1.7	0.85-3.7	
Indeno(1,2,3-cd)pyrene	EPA 3541	SIM	1.6	1.6	0.65-3.9	
Benzo(g,h,i)perylene	EPA 3541	SIM	2.5	2.7	1.1-5.5	

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Approved By: _____ Date: 11/17/03

LCS (44)/091898p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ANAMAR Environmental Chemistry, Inc.	**Service Request:**	K2307185
Project:	Canaveral Harbor/N. Virens	**Date Extracted:**	11/05/2003
Sample Matrix:	Tissue	**Date Analyzed:**	11/12/2003
		Time Analyzed:	08:03

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\111203\1112F003.D
Lab Code:	KWG0317780-5	**Instrument ID:**	MS14
Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317780

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0317780-3	J:\MS14\DATA\111203\1112F004.D	11/12/03	08:30
Duplicate Lab Control Sample	KWG0317780-4	J:\MS14\DATA\111203\1112F005.D	11/12/03	08:57
N. virens CH03 PreMS	KWG0317780-1	J:\MS14\DATA\111203\1112F007.D	11/12/03	09:51
N. virens CH03 PreDMS	KWG0317780-2	J:\MS14\DATA\111203\1112F008.D	11/12/03	10:18
N. virens CH03 Pre	K2307185-011	J:\MS14\DATA\111203\1112F009.D	11/12/03	10:45
RS-CH03-T-A	K2307185-012	J:\MS14\DATA\111203\1112F010.D	11/12/03	11:12
RS-CH03-T-B	K2307185-013	J:\MS14\DATA\111203\1112F011.D	11/12/03	11:39
RS-CH03-T-C	K2307185-014	J:\MS14\DATA\111203\1112F012.D	11/12/03	12:06
RS-CH03-T-D	K2307185-015	J:\MS14\DATA\111203\1112F013.D	11/12/03	12:33
RS-CH03-T-E	K2307185-016	J:\MS14\DATA\111203\1112F014.D	11/12/03	13:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185

Lab Control Sample/Duplicate Lab Control Sample Summary
Polynuclear Aromatic Hydrocarbons

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0317780-3	**Lab Code:**	KWG0317780-4
File ID:	J:\MS14\DATA\111203\1112F004.D	**File ID:**	J:\MS14\DATA\111203\1112F005.D
Instrument ID:	MS14	**Instrument ID:**	MS14
Date Extracted:	11/05/2003	**Date Extracted:**	11/05/2003
Date Analyzed:	11/12/2003	**Date Analyzed:**	11/12/2003
Time Analyzed:	08:30	**Time Analyzed:**	08:57

Extraction Method:	EPA 3541	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0317780

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0317780-5	J:\MS14\DATA\111203\1112F003.D	11/12/03	08:03
N. virens CH03 PreMS	KWG0317780-1	J:\MS14\DATA\111203\1112F007.D	11/12/03	09:51
N. virens CH03 PreDMS	KWG0317780-2	J:\MS14\DATA\111203\1112F008.D	11/12/03	10:18
N. virens CH03 Pre	K2307185-011	J:\MS14\DATA\111203\1112F009.D	11/12/03	10:45
RS-CH03-T-A	K2307185-012	J:\MS14\DATA\111203\1112F010.D	11/12/03	11:12
RS-CH03-T-B	K2307185-013	J:\MS14\DATA\111203\1112F011.D	11/12/03	11:39
RS-CH03-T-C	K2307185-014	J:\MS14\DATA\111203\1112F012.D	11/12/03	12:06
RS-CH03-T-D	K2307185-015	J:\MS14\DATA\111203\1112F013.D	11/12/03	12:33
RS-CH03-T-E	K2307185-016	J:\MS14\DATA\111203\1112F014.D	11/12/03	13:00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/12/2003
Time Analyzed: 07:16

Tune Summary
Polynuclear Aromatic Hydrocarbons

File ID: J:\MS14\DATA\111203\1112F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0318310

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	18.1	157184	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	20.6	178900	PASS
70	69	0	2	0.5	854	PASS
127	198	10	80	36.1	314048	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	47.0	870080	PASS
199	198	5	9	6.7	58032	PASS
275	198	10	60	33.4	290176	PASS
365	442	1	50	2.1	39208	PASS
441	443	0	100	72.4	250240	PASS
442	442	100	100	100.0	1849856	PASS
443	442	15	24	18.7	345664	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0318310-2	J:\MS14\DATA\111203\1112F002.D	11/12/2003	07:34	
Method Blank	KWG0317780-5	J:\MS14\DATA\111203\1112F003.D	11/12/2003	08:03	
Lab Control Sample	KWG0317780-3	J:\MS14\DATA\111203\1112F004.D	11/12/2003	08:30	
Duplicate Lab Control Sample	KWG0317780-4	J:\MS14\DATA\111203\1112F005.D	11/12/2003	08:57	
N. virens CH03 PreMS	KWG0317780-1	J:\MS14\DATA\111203\1112F007.D	11/12/2003	09:51	
N. virens CH03 PreDMS	KWG0317780-2	J:\MS14\DATA\111203\1112F008.D	11/12/2003	10:18	
N. virens CH03 Pre	K2307185-011	J:\MS14\DATA\111203\1112F009.D	11/12/2003	10:45	
RS-CH03-T-A	K2307185-012	J:\MS14\DATA\111203\1112F010.D	11/12/2003	11:12	
RS-CH03-T-B	K2307185-013	J:\MS14\DATA\111203\1112F011.D	11/12/2003	11:39	
RS-CH03-T-C	K2307185-014	J:\MS14\DATA\111203\1112F012.D	11/12/2003	12:06	
RS-CH03-T-D	K2307185-015	J:\MS14\DATA\111203\1112F013.D	11/12/2003	12:33	
RS-CH03-T-E	K2307185-016	J:\MS14\DATA\111203\1112F014.D	11/12/2003	13:00	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\111003\1110F003.D	G	J:\MS14\DATA\111003\1110F009.D
B	J:\MS14\DATA\111003\1110F004.D	H	J:\MS14\DATA\111003\1110F010.D
C	J:\MS14\DATA\111003\1110F005.D	I	J:\MS14\DATA\111003\1110F011.D
D	J:\MS14\DATA\111003\1110F006.D	J	J:\MS14\DATA\111003\1110F012.D
E	J:\MS14\DATA\111003\1110F007.D	K	J:\MS14\DATA\111003\1110F013.D
F	J:\MS14\DATA\111003\1110F008.D		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Naphthalene	A	5.0	1.25	B	10	1.18	C	20	1.13	D	40	1.13	E	100	1.14
	F	500	1.10	G	1000	1.08	H	2000	1.13	I	5000	1.12	J	8000	1.13
	K	10000	1.11												
2-Methylnaphthalene	A	5.0	0.753	B	10	0.740	C	20	0.714	D	40	0.724	E	100	0.738
	F	500	0.710	G	1000	0.697	H	2000	0.736	I	5000	0.722	J	8000	0.731
	K	10000	0.718												
Acenaphthylene	A	5.0	2.14	B	10	1.98	C	20	1.93	D	40	1.97	E	100	2.00
	F	500	1.98	G	1000	2.01	H	2000	2.13	I	5000	2.13	J	8000	2.15
	K	10000	2.13												
Acenaphthene	A	5.0	1.27	B	10	1.20	C	20	1.17	D	40	1.19	E	100	1.26
	F	500	1.19	G	1000	1.18	H	2000	1.24	I	5000	1.20	J	8000	1.20
	K	10000	1.17												
Dibenzofuran	A	5.0	1.86	B	10	1.80	C	20	1.74	D	40	1.77	E	100	1.82
	F	500	1.75	G	1000	1.75	H	2000	1.85	I	5000	1.83	J	8000	1.86
	K	10000	1.85												
Fluorene	A	5.0	1.46	B	10	1.39	C	20	1.35	D	40	1.40	E	100	1.45
	F	500	1.43	G	1000	1.43	H	2000	1.52	I	5000	1.49	J	8000	1.48
	K	10000	1.45												
Phenanthrene	A	5.0	1.37	B	10	1.26	C	20	1.25	D	40	1.25	E	100	1.27
	F	500	1.20	G	1000	1.20	H	2000	1.25	I	5000	1.23	J	8000	1.24
	K	10000	1.21												
Anthracene	A	5.0	1.24	B	10	1.15	C	20	1.13	D	40	1.16	E	100	1.21
	F	500	1.18	G	1000	1.20	H	2000	1.27	I	5000	1.25	J	8000	1.25
	K	10000	1.24												
Fluoranthene	A	5.0	1.37	B	10	1.22	C	20	1.23	D	40	1.27	E	100	1.36
	F	500	1.30	G	1000	1.31	H	2000	1.40	I	5000	1.39	J	8000	1.40
	K	10000	1.38												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000139

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Pyrene	A	5.0	1.73	B	10	1.60	C	20	1.66	D	40	1.64	E	100	1.68
	F	500	1.50	G	1000	1.45	H	2000	1.46	I	5000	1.34	J	8000	1.31
	K	10000	1.27												
Benz(a)anthracene	A	5.0	1.71	B	10	1.38	C	20	1.21	D	40	1.16	E	100	1.17
	F	500	1.09	G	1000	1.11	H	2000	1.20	I	5000	1.19	J	8000	1.21
	K	10000	1.19												
Chrysene	A	5.0	1.17	B	10	1.05	C	20	1.08	D	40	1.10	E	100	1.14
	F	500	1.11	G	1000	1.11	H	2000	1.17	I	5000	1.15	J	8000	1.16
	K	10000	1.15												
Benzo(b)fluoranthene	A	5.0	1.73	B	10	1.62	C	20	1.54	D	40	1.56	E	100	1.63
	F	500	1.59	G	1000	1.66	H	2000	1.76	I	5000	1.76	J	8000	1.81
	K	10000	1.79												
Benzo(k)fluoranthene	A	5.0	1.54	B	10	1.43	C	20	1.50	D	40	1.51	E	100	1.60
	F	500	1.58	G	1000	1.61	H	2000	1.78	I	5000	1.76	J	8000	1.75
	K	10000	1.74												
Benzo(a)pyrene	A	5.0	1.45	B	10	1.29	C	20	1.27	D	40	1.25	E	100	1.34
	F	500	1.34	G	1000	1.40	H	2000	1.52	I	5000	1.55	J	8000	1.58
	K	10000	1.58												
Indeno(1,2,3-cd)pyrene	A	5.0	1.17	B	10	0.998	C	20	1.01	D	40	1.05	E	100	1.12
	F	500	1.14	G	1000	1.19	H	2000	1.27	I	5000	1.30	J	8000	1.36
	K	10000	1.35												
Dibenz(a,h)anthracene	A	5.0	1.01	B	10	0.890	C	20	0.929	D	40	0.999	E	100	1.09
	F	500	1.16	G	1000	1.19	H	2000	1.27	I	5000	1.28	J	8000	1.34
	K	10000	1.38												
Benzo(g,h,i)perylene	A	5.0	1.43	B	10	1.24	C	20	1.27	D	40	1.29	E	100	1.34
	F	500	1.34	G	1000	1.34	H	2000	1.42	I	5000	1.41	J	8000	1.45
	K	10000	1.44												
Fluorene-d10	A	5.0	1.31	B	10	1.17	C	20	1.14	D	40	1.18	E	100	1.20
	F	500	1.17	G	1000	1.17	H	2000	1.24	I	5000	1.20	J	8000	1.18
	K	10000	1.15												
Fluoranthene-d10	A	5.0	1.18	B	10	1.07	C	20	1.07	D	40	1.11	E	100	1.18
	F	500	1.11	G	1000	1.12	H	2000	1.21	I	5000	1.19	J	8000	1.19
	K	10000	1.16												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000140

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Terphenyl-d14	A	5.0	1.20	B	10	1.06	C	20	1.07	D	40	1.08	E	100	1.11
	F	500	1.02	G	1000	0.988	H	2000	1.01	I	5000	0.925	J	8000	0.901
	K	10000	0.874												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000141

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/10/2003

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

Calibration ID: CAL3084
Instrument ID: MS14

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Naphthalene	MS	AverageRF	% RSD	4.0		≤ 15	1.14		0.01
2-Methylnaphthalene	MS	AverageRF	% RSD	2.2		≤ 15	0.726		0.01
Acenaphthylene	MS	AverageRF	% RSD	4.1		≤ 15	2.05		0.01
Acenaphthene	MS	AverageRF	% RSD	2.9		≤ 15	1.21		0.01
Dibenzofuran	MS	AverageRF	% RSD	2.6		≤ 15	1.81		0.01
Fluorene	MS	AverageRF	% RSD	3.4		≤ 15	1.44		0.01
Phenanthrene	MS	AverageRF	% RSD	3.8		≤ 15	1.25		0.01
Anthracene	MS	AverageRF	% RSD	3.9		≤ 15	1.21		0.01
Fluoranthene	MS	AverageRF	% RSD	5.1		≤ 15	1.33		0.01
Pyrene	MS	AverageRF	% RSD	10.4		≤ 15	1.51		0.01
Benz(a)anthracene	MS	AverageRF	% RSD	14.0		≤ 15	1.24		0.01
Chrysene	MS	AverageRF	% RSD	3.5		≤ 15	1.13		0.01
Benzo(b)fluoranthene	MS	AverageRF	% RSD	5.6		≤ 15	1.68		0.01
Benzo(k)fluoranthene	MS	AverageRF	% RSD	7.5		≤ 15	1.62		0.01
Benzo(a)pyrene	MS	AverageRF	% RSD	9.0		≤ 15	1.42		0.01
Indeno(1,2,3-cd)pyrene	MS	AverageRF	% RSD	11.0		≤ 15	1.18		0.01
Dibenz(a,h)anthracene	MS	AverageRF	% RSD	14.7		≤ 15	1.14		0.01
Benzo(g,h,i)perylene	MS	AverageRF	% RSD	5.4		≤ 15	1.36		0.01
Fluorene-d10	SURR	AverageRF	% RSD	4.0		≤ 15	1.19		0.01
Fluoranthene-d10	SURR	AverageRF	% RSD	4.3		≤ 15	1.14		0.01
Terphenyl-d14	SURR	AverageRF	% RSD	9.4		≤ 15	1.02		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000142

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Calibration Date: 11/10/2003
Date Analyzed: 11/11/2003

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL3084
Units: ng/ml

File ID: J:\MS14\DATA\111003\1110F017.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2100	1.14	1.17	3	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.726	0.760	5	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	2.05	2.17	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	1.21	1.27	5	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	1.81	1.91	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	1.44	1.57	9	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	1.21	1.24	3	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	1.33	1.37	3	NA	± 20 %	AverageRF
Pyrene	2000	2000	1.51	1.55	2	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	1800	1.24	1.15	-8	NA	± 20 %	AverageRF
Chrysene	2000	2100	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	1.68	1.80	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2300	1.62	1.87	16	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	1.42	1.56	10	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2100	1.18	1.26	7	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	1.14	1.29	13	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	1.36	1.48	9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000143

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185
Date Analyzed: 11/12/2003

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/10/2003
Calibration ID: CAL3084
Analysis Lot: KWG0318310
Units: ng/ml

File ID: J:\MS14\DATA\111203\1112F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Naphthalene	2000	2000	0.01	1.14	1.16	2	NA	± 20 %	AverageRF
2-Methylnaphthalene	2000	2100	0.01	0.726	0.769	6	NA	± 20 %	AverageRF
Acenaphthylene	2000	2100	0.01	2.05	2.18	6	NA	± 20 %	AverageRF
Acenaphthene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Dibenzofuran	2000	2100	0.01	1.81	1.89	5	NA	± 20 %	AverageRF
Fluorene	2000	2200	0.01	1.44	1.55	8	NA	± 20 %	AverageRF
Phenanthrene	2000	2000	0.01	1.25	1.25	0	NA	± 20 %	AverageRF
Anthracene	2000	2100	0.01	1.21	1.25	4	NA	± 20 %	AverageRF
Fluoranthene	2000	2100	0.01	1.33	1.38	4	NA	± 20 %	AverageRF
Pyrene	2000	1900	0.01	1.51	1.45	-4	NA	± 20 %	AverageRF
Benz(a)anthracene	2000	2000	0.01	1.24	1.21	-2	NA	± 20 %	AverageRF
Chrysene	2000	2100	0.01	1.13	1.18	5	NA	± 20 %	AverageRF
Benzo(b)fluoranthene	2000	2100	0.01	1.68	1.79	7	NA	± 20 %	AverageRF
Benzo(k)fluoranthene	2000	2200	0.01	1.62	1.76	9	NA	± 20 %	AverageRF
Benzo(a)pyrene	2000	2200	0.01	1.42	1.53	8	NA	± 20 %	AverageRF
Indeno(1,2,3-cd)pyrene	2000	2300	0.01	1.18	1.34	14	NA	± 20 %	AverageRF
Dibenz(a,h)anthracene	2000	2300	0.01	1.14	1.33	17	NA	± 20 %	AverageRF
Benzo(g,h,i)perylene	2000	2200	0.01	1.36	1.49	9	NA	± 20 %	AverageRF
Fluorene-d10	2000	1900	0.01	1.19	1.12	-6	NA	± 20 %	AverageRF
Fluoranthene-d10	2000	1900	0.01	1.14	1.08	-5	NA	± 20 %	AverageRF
Terphenyl-d14	2000	1700	0.01	1.02	0.891	-13	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

000144

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens

Service Request: K2307185

Analysis Run Log
Polynuclear Aromatic Hydrocarbons

Analysis Method: 8270C SIM

Analysis Lot: KWG0318310
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1112F001.D	GC/MS Tuning - Decafluorotripheny	KWG0318310-1	11/12/2003	07:16		11/12/2003	07:28
1112F002.D	Continuing Calibration Verification	KWG0318310-2	11/12/2003	07:34		11/12/2003	07:53
1112F003.D	Method Blank	KWG0317780-5	11/12/2003	08:03		11/12/2003	08:22
1112F004.D	Lab Control Sample	KWG0317780-3	11/12/2003	08:30		11/12/2003	08:49
1112F005.D	Duplicate Lab Control Sample	KWG0317780-4	11/12/2003	08:57		11/12/2003	09:16
1112F006.D	ZZZZZZ	ZZZZZZ	11/12/2003	09:24		11/12/2003	09:43
1112F007.D	N. virens CH03 PreMS	KWG0317780-1	11/12/2003	09:51		11/12/2003	10:10
1112F008.D	N. virens CH03 PreDMS	KWG0317780-2	11/12/2003	10:18		11/12/2003	10:37
1112F009.D	N. virens CH03 Pre	K2307185-011	11/12/2003	10:45		11/12/2003	11:04
1112F010.D	RS-CH03-T-A	K2307185-012	11/12/2003	11:12		11/12/2003	11:32
1112F011.D	RS-CH03-T-B	K2307185-013	11/12/2003	11:39		11/12/2003	11:58
1112F012.D	RS-CH03-T-C	K2307185-014	11/12/2003	12:06		11/12/2003	12:25
1112F013.D	RS-CH03-T-D	K2307185-015	11/12/2003	12:33		11/12/2003	12:53
1112F014.D	RS-CH03-T-E	K2307185-016	11/12/2003	13:00		11/12/2003	13:19
1112F015.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:27		11/12/2003	13:46
1112F016.D	ZZZZZZ	ZZZZZZ	11/12/2003	13:54		11/12/2003	14:13
1112F017.D	ZZZZZZ	ZZZZZZ	11/12/2003	14:21		11/12/2003	14:40
1112F018.D	ZZZZZZ	ZZZZZZ	11/12/2003	14:48		11/12/2003	15:07
1112F019.D	ZZZZZZ	ZZZZZZ	11/12/2003	15:15		11/12/2003	15:34
1112F020.D	ZZZZZZ	ZZZZZZ	11/12/2003	15:42		11/12/2003	16:01
1112F021.D	ZZZZZZ	ZZZZZZ	11/12/2003	16:09		11/12/2003	16:28
1112F022.D	ZZZZZZ	ZZZZZZ	11/12/2003	16:36		11/12/2003	16:55
1112F023.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:03		11/12/2003	17:22
1112F024.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:30		11/12/2003	17:50
1112F025.D	ZZZZZZ	ZZZZZZ	11/12/2003	17:57		11/12/2003	18:16
1112F026.D	ZZZZZZ	ZZZZZZ	11/12/2003	18:24		11/12/2003	18:43

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

000145

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: ANAMAR Environmental Chemistry, Inc.
Project: Canaveral Harbor/N. Virens
Sample Matrix: Tissue

Service Request: K2307185
Date Extracted: 11/05/2003

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: EPA 3541
Analysis Method: 8270C SIM

Extraction Lot: KWG0317780
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
N. virens CH03 Pre	K2307185-011		09/17/03	10.19g	1ml	NA	
RS-CH03-T-A	K2307185-012		09/17/03	10.15g	1ml	NA	
RS-CH03-T-B	K2307185-013		09/17/03	10.00g	1ml	NA	
RS-CH03-T-C	K2307185-014		09/17/03	10.10g	1ml	NA	
RS-CH03-T-D	K2307185-015		09/17/03	10.14g	1ml	NA	
RS-CH03-T-E	K2307185-016		09/17/03	10.06g	1ml	NA	
Method Blank	KWG0317780-5	NA	NA	10.19g	1ml	NA	
N. virens CH03 PreMS	KWG0317780-1		09/17/03	10.03g	1ml	NA	
N. virens CH03 PreDMS	KWG0317780-2		09/17/03	10.04g	1ml	NA	
Lab Control Sample	KWG0317780-3	NA	NA	10.00g	1ml	NA	
Duplicate Lab Control Sample	KWG0317780-4	NA	NA	10.00g	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Appendix D

Bioassay and Bioaccumulation Data

D 1

Chain of Custody Forms

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-9	M. nasuta		A-E	
CH03-10	M. nasuta		A-E	
CH03-11	M. nasuta		A-E	
CH03-12	M. nasuta		A-E	
CH03-13	M. nasuta		A-E	
CH03-14	M. nasuta		A-E	
CH03-15	M. nasuta		A-E	
CH03-16	M. nasuta		A-E	
CH03-17	M. nasuta		A-E	

Total Number of Samples:	9	

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Aramar / Canaveral Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	1577
[illegible]	FedEx	9/16/03	1700

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03- 9	N. virens		A+E	
CH03 - 10	N. virens		A-E	
CH03 - 11	N. virens		A-E	
CH03 - 12	N. virens		A-E	
CH03 - 13	N. virens		A-E	
CH03 - 14	N. virens		A-E	
CH03 - 15	N. virens		A-E	
CH03 - 16	N. virens		A-E	
CH03 - 17	N. virens		A-E	
Total Number of Samples:	9			

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Anacortes / Canoe Island Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	15A
[illegible]	Fed-Ex	9/16/03	1700

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03 - 20	M. nasuta		A-E	
Pre-test	M. nasuta			
E-CH03-CTRL	M. nasuta		A-F	*CTRL for sample CH03-20

Total Number of Samples: 3

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Arsenic / Coastal Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
[illegible]	[illegible]	9/16/03	1517
[illegible]	Fed-Ex	9/16/03	1700

MACTEC Engineering and Consulting, Inc. (formerly Harding ESE)
Toxicology Laboratory
Gainesville, Florida

QA Form Number: 063COCt
Revised: Jan2003

SAMPLE CHAIN OF CUSTODY for TISSUE SAMPLES

Facility: MACTEC Engineering and Consulting

Location: Gainesville, FL

Other:

SAMPLE IDENTIFICATION

Sample Identification	Organism Genus species		Replicate Bags	Observations
CH03-20	N. virens		A-E	
Pre-Test	N. virens			
E-CH03-CTRL	N. virens		A-F	*used for sample CH03-20

Total Number of Samples: 3

SAMPLE INFORMATION

Toxicity Test Type: Bioaccumulation

Exposed to Sediment from: Anomar / Commercial Harbor

Observations/Remarks:

CHAIN OF CUSTODY

Relinquished By:	Received By:	Date	Time
Craig [illegible]	[illegible]	9/16/03	1577
[illegible]	[illegible]	9/16/03	1700

ANAMAR
Environmental Chemistry, Inc.

Canaveral Harbor 103 Evaluation Chain-of-Custody
NAVY Samples

Station ID	Sample Date	Sample Time	Sample Matrix	Sample Containers	Number of Containers	Analyses Requested	Lab Sample ID	Comments
E-CH3-9	03/31/03	1109	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-10	04/01/03	1420	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-11	04/01/03	0924	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-12	04/01/03	1346	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-13	04/01/03	0930	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-14	03/31/03	1554	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-15	03/31/03	1332	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-16	04/01/03	0835	Sediment	Bag inside Cooler	2	Per Contract		
E-CH3-17	03/31/03	1635	Sediment	Bag inside Cooler	2	Per Contract		
RS-CH03	04/03/03	1004	Sediment	Bag inside Cooler	2	Per Contract		

Samples Relinquished by: [signature]
Date: 4/8/03 Time: 1100
Samples Relinquished by: _____
Date: _____ Time: _____

Received by: [signature]
Date: 4/8/03 Time: 1520
Received by: _____
Date: _____ Time: _____

ANAMAR Environmental Chemistry, Inc.
6821 SW Archer Rd.
Gainesville, FL 32608
(352) 377-5770 FAX (352) 378-1500

D 2

Elutriate Bioassay Data

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No. 106
Effective: July 2002

DAILY FEEDING LOG

Sponsor: Canaveral

Project No.: 6063030002

Test Substance: Elutriate

Test Species: M. bahia

TEST DAY	DATE	TIME	INITIALS	FOOD TYPE	QUANTITY	COMMENTS
0	5/14/03	1100	[illegible]	BS	0.5 mL	in holding
1	5/15/03	1730	[illegible]	BS	0.5 mL	
2	5/16/03	1800	RD	brine shrimp	0.5 mL	
3	5/17/03	1400	DD	brine shrimp	0.5 ml	
4	5/18/03	1045	KG	BS	.5 ml	

BS= Brine Shrimp nauplii YTC= Yeast/Trout Chow/Cereal Leaves Algae= Green Algae (*Selenastrum capricornutum*)

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

Page: 1

QA Form No. 018
Revised: October 2002

Project No: 6063030002 Client: Anamar/Canaveral Harbor Test: Elutriate, M. bahia

DAILY LOG

5/14/03 Elutriate prepared using control, client sediments + sitewater, 1 part sediment, 4 parts sitewater. Well water added to bring elutriate to test salinity (20ppt). Stirred/mixed for 30 minutes. Allowed to settle for 1 hour, then elutriate siphoned off. Elutriate aerated until use. Concentrations prepared + poured into appropriate vessels. Organisms received + placed into holding vessels. Organisms fed during holding. Water quality (test elutriate) monitored. Organisms loaded + observed.

5/15/03 Water quality monitored, organism observed + fed.

5/16/03 Water quality monitored, organisms observed + fed.

5/17/03 Water quality monitored, organisms observed + fed.

5/18/03 Water quality monitored in morning, organisms observed + fed. Organisms counted. Test terminated, in afternoon.

JW

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002

TEST MATERIAL

Test Material: Sediment elutriate
658 thm

See Page 667 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

SOP-S-07

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Mysidopis bahia

Lot Number: 2003-38

Age/ Life Stage: 2 day

Date Acclimation/ Maintenance Began: 5/14/03

See Page 73 of Invertebrate Holding Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: —

TEST CONDITIONS

( ) Range Finder
( ) Screening
(X) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 96 hrs

Test Area Used: Water bath

Test Temperature (°C): 20 +/- 2

Test Salinity (ppt): 20 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: ~~20~~ 10

Dilution Water: Natural filtered seawater

TEST VESSELS

Dimensions (cm): Length x 9.5 Width x 5 Height

Test Solution Height (cm) : 4

Test Vessels: (x) ~~Open~~ thm (X) Covered

Test Container Volume: 0.34 L

Test Solution Volume: 0.20 L

TEST SOLUTION PREPARATION

Test Concentration %	Control	10	50	100					
Volume of Dilution Water Added (mL)	1250	1125	625	0					
Volume of Effluent/ Stock Added (mL)	0	125	625	1250					

ADDITIONAL OBSERVATIONS:

DATA BY: thm DATE: 5/14/03

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05-14-03				05/15/03				5/16/03				5/17/03				5/18/03			
TIME		~~1200~~ 1400				1200				1800				1400				0945			
INIT.		DD				CG				KD				DD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Seawater Control 100%	A	19.3	8.3	8.5	20	21.1	~~7.8~~		20												
	B					21.1	7.8	6.7	20												
	C									21.8	7.8	6.6	21								
	D													21.5	7.8	8.0	20				
	E																	21.1	8.3	6.5	20
Control Sediment 10%	A	19.4	8.3	8.4	20				21												
	B					21.0	7.8	7.1	21												
	C	~~19.4~~	~~8.3~~	~~8.4~~	~~20~~					~~7.8~~ 22.0	7.8	6.5	21								
	D													21.6	7.9	7.6	20				
	E																	20.9	8.1	7.0	20
Control Sediment 50%	A	19.6	8.0	8.4	20																
	B					21.0	7.9	6.9	19												
	C									22.0	7.9	6.6	20								
	D													21.6	7.9	7.6	20				
	E																	21.2	8.2	7.2	20
INST/METH		FS6	SA200B	DO3	Ref10	FS6	SA200	DO3	Ref10	FS6	SA 200	DO3	Ref9	FS6	SA 200	DO3	Ref9	FS6	SA 200	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05-14-03				05/15/03				5/16/03				5/17/03				5/18/03			
TIME		1420				1200				1800				1415				0945			
INIT.		DD				CG				RD				DD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Control Sediment 100%	A	19.4	8.1	8.4	20																
	B					21.1	8.0	7.0	20												
	C									22.0	7.9	6.6	22								
	D													21.6	7.9	7.3	20				
	E																	20.5	8.1	7.2	20
CG B7 10%	A	19.6	8.2	8.5	20																
	B					21.1	8.0	7.0	21												
	C									22.1	7.9	7.4	22								
	D													21.5	8.0	8.2	20				
	E																	20.1	8.2	7.2	20
CG B7 50%	A	19.9	8.1	8.5	20																20
	B					21.2	8.0	7.2	21												
	C									22.1	7.9	7.0	22								
	D													21.5	8.0	7.9	20				
	E																	20.5	8.1	7.2	20
CG																					
INST/METH		FS6	SA 290 B	DO3	Ref 9	FS6	SA 290 B	DO3	Ref 9	FS6	SA 290 B	DO3	Ref 9	FS6	SA 290 B	DO3	Ref 9	FS6	SA 290 B	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		DD				CG				RD				JM				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-9 10%	A	19.9	7.9	8.0	20																
	B					20.3	8.2	7.8	19	~~19~~											
	C									21.1	8.0	7.3	20								
	D													21.2	8.0	6.5	~~25~~ 20				
	E																	21.1	8.1	5.8	20
E-CH03-9 50%	A	19.5	8.2	8.0	20																
	B					20.8	8.2	7.8	21	~~21~~											
	C									21.6	8.1	7.2	21								
	D													21.9	8.1	6.9	~~22~~ 20				
	E																	21.3	8.1	5.7	20
E-CH03-9 100%	A	18.8	7.9	8.0	21																
	B					20.5	8.2	6.1	22	~~22~~											
	C									22.0	7.9	5.6	21								
	D													21.5	8.0	7.7	~~21~~ 20				
	E																	21.3	8.0	5.7	20
INST/METH		FSG	SA 290D	DO3	Ref 9	FSG	SA 290D	DO3	Ref 9	FSG	SA 290C	DO3	Ref 9	FSG	SA 290D	DO3	Ref 9	FSG	SA 290D	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		DD				CG				RD				JA				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-10 10%	A	19.8	8.2	8.3	20																
	B					20.3	8.1	6.8	20												
	C									21.2	8.1	6.1	19								
	D													21.0	8.1	6.7	21				
	E																	20.9	8.3	5.7	21
E-CH03-10 50%	A	20.0	8.0	8.2	20																
	B					20.4	8.2	6.9	20												
	C									21.3	8.0	5.3	20								
	D													21.9	8.1	6.9	21				
	E																	21.1	8.1	5.9	21
E-CH03-10 100%	A	18.5	7.9	8.3	20																
	B					20.7	8.1	6.8	20												
	C									21.6	7.9	6.3	20								
	D													21.2	8.1	7.6	21				
	E																	21.1	8.0	5.7	21
INST/METH		FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 10	FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		DD				CG				RD				JM				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-11 10%	A	19.4	8.3	8.3	20																
	B					20.6	8.1	5.5	20												
	C									21.5	7.9	6.1	20								
	D													21.4	8.0	7.3	20 ~~21~~	~~DD~~			
	E																	21.1	8.0	7.0	21
E-CH03-11 50%	A	19.4	8.2	8.4	20																
	B					20.5	8.1	6.0	18												
	C									21.4	8.1	6.5	21								
	D													21.4	8.1	7.2	20 ~~21~~	~~DD~~			KG ~~21~~
	E																	21.2	8.1 ~~8.2~~	6.3	21
E-CH03-11 100%	A	19.1	8.1	8.4	20																
	B					20.5	8.1	6.5	20												
	C									21.6	7.9	5.8	20								
	D													21.2	8.1	7.0	20 ~~21~~	~~DD~~			
	E																	21.2	8.3	6.8	21
INST/METH		FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 10	FS6	SA 290C	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		DD				CG				RD				JM				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-12 10%	A	19.9	8.2	8.2	19																
	B					20.5	8.1	6.7	21												
	C									21.5	7.9	6.3	20								
	D													21.3	8.0	6.7	~~21~~ 20 DD				
	E																	21.3	8.0	6.5	22
E-CH03-12 50%	A	19.9	8.2	~~15~~ ~~DD~~	19																
	B			8.1					20												
	C					20.4	8.1	7.1		21.5	8.0	6.7	20								
	D													21.2	8.1	7.1	~~21~~ 20 ~~DD~~				
	E																	21.1	8.2	6.4	21
E-CH03-12 100%	A	18.8	7.9	7.9	18																
	B					20.5	8.1	6.9	21												
	C									21.4	8.0	6.3	20			6.5					
	D													21.1	8.0	~~6.9~~	~~21~~ 20 ~~DD~~				
	E																	21.1	8.0	7.1	21
INST/METH		FS6	SA 2900	DO3	Ref 9	FS6	SA 2900	DO3	Ref 9	FS6	SA 2900	DO3	Ref 9	FS6	SA 2900	DO3	Ref 9	FS6	SA 2900	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		DD				CG				RD				JA				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-13 10%	A	19.7	8.2	8.3	20																
	B					20.5	8.2	7.5	21												
	C									21.4	7.9	6.5	21								
	D													21.0	8.0	6.5	~~21~~ 20				
	E																	21.1	8.2	7.2	22
E-CH03-13 50%	A	19.9	8.1	8.2	20																
	B					20.5	8.1	7.5	21												
	C									21.4	8.1	6.8	21								
	D													21.1	8.1	7.1	~~21~~ 20				KC 22
	E																	21.1	8.1	7.4	22
E-CH03-13 100%	A	18.9	7.8	7.5	20																
	B					20.5	8.1	6.8	22												
	C									21.4	7.9	7.0	21								
	D													21.1	8.0	6.1	~~21~~ 20				
	E																	21.0	8.2	7.7	21
INST/METH		FS6	SA 290P	DO3	Ref 9	FS6	SA 290P	DO3	Ref 9	FS6	SA 290P	DO3	Ref 9	FS6	SA 290P	DO3	Ref 9	FS6	SA 290P	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

JM

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		RD				CG				RD				JM				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-14 10%	A	19.9	8.3	8.2	20																
	B					20.3	8.1	7.4	20												
	C									21.5	8.0	6.6	20								
	D													21.1	8.0	7.7	~~21~~ 20				
	E																	21.1	8.2	7.5	20
E-CH03-14 50%	A	19.9	8.2	8.1	20																
	B					20.2	8.1	7.7	22												
	C									21.4	8.1	7.0	21								
	D													21.1	8.1	7.5	~~21~~ 20				
	E																	21.0	8.1	7.4	20
E-CH03-14 100%	A	19.2	7.9	8.4	21																
	B					20.1	8.1	7.0	23												
	C									21.3	8.1	6.5	22								
	D													21.1	8.0	6.6	~~22~~ 20				
	E																	20.9	8.0	7.3	20
INST/METH		FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

JM

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		[illegible]				CG				RD				JA				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-15 10%	A	19.6	8.3	8.6	20																
	B					20.1	8.1	6.7	22												
	C									21.2	8.0	6.5	21								
	D													21.0	8.1	8.1	~~22~~ 20				
	E																	20.9	8.2	7.2	21
E-CH03-15 50%	A	19.5	8.2	8.6	~~28~~ 20																
	B					20.2	8.2	7.3	23												
	C									21.1	8.1	6.8	21								
	D													21.0	8.1	7.3	~~22~~ 20				
	E																	20.5	8.0	6.5	21
E-CH03-15 100%	A	18.2	8.1	8.6	20																
	B					20.2	8.2	6.8	24												
	C									21.0	8.1	6.8	23								
	D													20.9	8.1	7.0	~~26~~ 20				
	E																	20.5	8.1	7.1	21
																		~~20.5~~	~~8.1~~	~~7.1~~	~~21~~
INST/METH		FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9	FS6	SA 290D	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor | PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate | TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.		DJJ				CG				RD				JH				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-16 10%	A	20.0	8.3	8.3	20																
	B					20.0	8.2 8.4 8.6	7.5	22												
	C									20.7	8.0	6.5	21								
	D													20.7	8.1	7.8	22 ~~20~~				
	E																	20.9	8.2	6.9	21
E-CH03-16 50%	A	19.9	8.1	8.3	20																
	B					19.7	8.2	7.4	22												
	C									20.5	8.1	6.9	21								
	D													20.6	8.1	7.2	22 ~~20~~				
	E		7.															20.9	8.3	6.9	21
E-CH03-16 100%	A	17.7	7.9	8.6	20																
	B					19.5	8.1	6.6	22												
	C									20.3	8.0	6.2	22								
	D													20.4	8.1	6.0	22 ~~20~~				
	E																	20.7	8.2	7.0	21
INST/METH		FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9	FS6	SA 2090	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMINCONCN-Nominalconcentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		05/14/03				5/15/03				5/16/03				5/17/03				5/18/03			
TIME		13:30				1200				1800				1400				0945			
INIT.						CG				RD				JA				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-17 10%	A	19.2	8.3	8.3	20																
	B					20.2	8.1	6.4	22												
	C									20.3	7.9	6.0	21								
	D													20.3	8.0	7.5	~~22~~ 20				
	E																	20.8	8.1	7.1 ~~20~~	20
E-CH03-17 50%	A	19.3	8.2	8.4	20																
	B					20.1	8.2	6.8	21												
	C									20.3	8.0	6.4	22								
	D													20.3	8.1	6.9	~~22~~ 20				
	E																	20.5	8.3	~~20~~ 7.1	20
E-CH03-17 100%	A	18.9	7.9	8.0	20																
	B					19.5	8.1	6.8	25												
	C									20.5	8.0	6.5	24								
	D													20.5	8.1	7.6	~~24~~ 20				
	E																	20.2	8.1	~~20~~ 7.1	20
INST/METH		FSb	SA 2000	DO3	Ref 9	FSb	SA 2000	DO3	Ref 10	FSb	SA 2000	DO3	Ref 9	FSb	SA 2000	DO3	Ref 9	FSb	SA 2000	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour	0-Hour	24-Hours	48 ~~24~~-Hours	72 ~~48~~-Hours	96 ~~72~~-Hours	~~96~~-Hours
Date	05/14/03	5/15/03	5/16/03	5/17/03	5/18/03	
Feeding	BS	yes BS	yes BS	yes BS	yes BS	
Time	13:30	1630	1950	1930	1600	
Technician	DD	RP	RP	~~DD 1430~~	JH	

Nominal Concentration mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	48-Hours Observ.	48-Hours No. Alive	72-Hours Observ.	72-Hours No. Alive	96-Hours Observ.	96-Hours No. Alive	~~96~~-Hours Observ.	~~96~~-Hours No. Alive
Seawater Control 100%	A	80 loaded		N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	N 2NF	18		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	N 2NF	18		
Control Sediment 10%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	1 NF	19		
	E			N	20	N	20	N	20	1 NF	19		
Control Sediment 50%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	1 NF	~~18~~ 19		
	E			N	20	N	20	N	20	1 NF	19		
Control Sediment 100%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	4 NF	16		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	2 NF	18		
	E			N	20	N	20	N	20	N	20		
CC ~~B7 10%~~	A			N	20	N	20	N	20	1d	19		
	B			N	20	N	20	N	20	1d	19		
	C			N	20	N	20	N	20	3d	17		
	D			N	20	N	20	N	20	N	20		
CC	E			N	20	N	20	N	20	1d	19		

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour	0-Hour		24-Hours		48 ~~24~~-Hours		72 ~~48~~-Hours		90 ~~72~~-Hours		~~96~~-Hours	
Date	05/14/03		5/15/03		5/16/03		5/17/03		5/18/03			
Feeding	BS		BS yes		yes BS		yes BS		yes BS			
Time	13:30		1630		1950		1430		1400			
Technician	DD		RD		RP		DD		JA			
Nominal Concentration Mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
E-CH03-9 10%	A	20 load		N	20	N	20	N	20	2NF	18		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	N	20		
E-CH03-9 50%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-9 100%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	3NF	17		
	C			N	20	N	20	N	20	1NF	19		
	D			N	20	N	20	N	20	2NF	18		
	E			N	20	N	20	N	20	N	20		
E-CH03-10 10%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	3NF	17		
	C			N	20	N	20	N	20	2NF	18		
	D			N	20	N	20	N	20	3NF	17		
	E			N	20	N	20	N	20	1NF	19		
E-CH03-10 50%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	3NF	17		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	N	20		

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour	0-Hour	24-Hours	48 ~~24~~-Hours	72 ~~48~~-Hours	96 ~~72~~-Hours	~~96~~-Hours
Date	05/14/03	5/15/03	5/16/03	5/17/03	5/18/03	
Feeding	BS	yes BS	yes BS	yes BS	yes BS	
Time	13:30	1630	1950	1400	14:30	
Technician	DD	RD	RD	DD	JM	

Nominal Concentration Mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	48-Hours Observ.	48-Hours No. Alive	72-Hours Observ.	72-Hours No. Alive	96-Hours Observ.	96-Hours No. Alive	~~96~~-Hours Observ.	~~96~~-Hours No. Alive
E-CH03-10 100%	A	20	loaded	N	20	N	20	N	20	3d	17		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	3NF	17		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-11 10%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1NF	19		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-11 50%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1NF	19		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	3NF	17		
	E			N	20	N	20	N	20	N	20		
E-CH03-11 100%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	2NF	18		
	C			N	20	N	20	N	20	1NF	19		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	N	20		
E-CH03-12 10%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1NF	19		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	2NF	18		

Observation Key

AS = Organisms At Surface of Water	LE = Loss of Equilibrium	OBS = Observations
BS = Brine Shrimp	LETH = Lethargic	PRE = Precipitate
ERR = Erratic	LT = Light Pigmentation	RAR = Rapid Respiration
FOS = Film on Surface of Water	N (NONE) = Normal Conditions	REP = Replicate
G = Gulping	NF = Not Found	UC = Undissolved Chemical
GY = Gyrating	NO. ALIVE = Number of Organisms Alive (survival)	YTC/ALG = YTC and green algae (daphnids)
HYP = Hyperactive		

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour	0-Hour	24-Hours	48-Hours	72-Hours	96-Hours	
Date	05/14/03	5/15/03	5/16/03	5/17/03	5/18/03	
Feeding	BS	yes BS	yes BS	yes BS	yes BS	
Time	13:30	1630	1950	1450	1480	
Technician	DD	RD	RD	DD	M	

Nominal Concentration mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	48-Hours Observ.	48-Hours No. Alive	72-Hours Observ.	72-Hours No. Alive	96-Hours Observ.	96-Hours No. Alive	96-Hours Observ.	96-Hours No. Alive
E-CH03-12 50%	A	20 loaded		N	20	N	20	N	20	1 NF	19		
	B			N	20	N	20	N	20	1 NF	19		
	C			N	20	N	20	N	20	2 NF	18		
	D			N	20	N	20	N	20	2 NF	18		
	E			N	20	N	20	N	20	1 NF	19		
E-CH03-12 100%	A			N	20	N	20	N	20	1 NF	19		
	B			N	20	N	20	N	20	1 NF	19		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	1 NF	19		
E-CH03-13 10%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1 NF	19		
	C			N	20	N	20	N	20	2 NF	18		
	D			N	20	N	20	N	20	1 NF	19		
	E			N	20	N	20	N	20	1 NF	19		
E-CH03-13 50%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1 NF	19		
	C			N	20	N	20	N	20	2 NF	18		
	D			N	20	N	20	N	20	1 NF	19		
	E			N	20	N	20	N	20	2 NF	18		
E-CH03-13 100%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1d	15	4 NF	
	C			N	20	N	20	N	20	1 NF	19		
	D			N	20	N	20	N	20	4 NF	16		
	E			N	20	N	20	N	20	1 NF	19		

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour		0-Hour		24-Hours		48-Hours		72-Hours		96-Hours			
Date		05/14/03		5/15/03		5/16/03		5/17/03		5/18/03			
Feeding		BS		yes BS		yes BS		yes BS		yes BS			
Time		13:30		1630		1950		1450		1450			
Technician		DD		RD		RD		DD		JH			
Nominal Concentration mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
E-CH03-14 10%	A	20 loaded		N	20	N	20	N	20	1NF	19		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	2NF	18		
	D			N	20	N	20	N	20	1NF	19		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-14 50%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1NF	19		
	C			N	20	N	20	N	20	3NF	17		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-14 100%	A			N	20	N	20	N	20	1NF	19		
	B			N	20	N	20	N	20	5NF	15		
	C			N	20	N	20	N	20	8NF	12		
	D			N	20	N	20	N	20	2NF	18		
	E			N	20	N	20	N	20	5NF	15		
E-CH03-15 10%	A			N	20	N	20	N	20	2NF	18		
	B			N	20	N	20	N	20	3NF	17		
	C			N	20	N	20	N	20	3NF	17		
	D			N	20	N	20	N	20	1NF	19		
	E			N	20	N	20	N	20	3NF	17		
E-CH03-15 50%	A			N	20	N	20	N	20	2NF	18		
	B			N	20	N	20	N	20	1d	19		
	C			N	20	N	20	N	20	2NF	18		
	D			N	20	N	20	N	20	1NF	19		
	E			N	20	N	20	N	20	3NF	17		

Observation Key

AS = Organisms At Surface of Water	LE = Loss of Equilibrium	OBS = Observations
BS = Brine Shrimp	LETH = Lethargic	PRE = Precipitate
ERR = Erratic	LT = Light Pigmentation	RAR = Rapid Respiration
FOS = Film on Surface of Water	N (NONE) = Normal Conditions	REP = Replicate
G = Gulping	NF = Not Found	UC = Undissolved Chemical
GY = Gyrating	NO. ALIVE = Number of Organisms Alive (survival)	YTC/ALG = YTC and green algae (daphnids)
HYP = Hyperactive		

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour	0-Hour	24-Hours	48 ~~24~~-Hours	72 ~~48~~-Hours	96 ~~72~~-Hours	~~96~~-Hours
Date	05/14/03	5/15/03	5/16/03	5/17/03	5/18/03	
Feeding	BS	yes BS	yes BS	yes BS	yes BS	
Time	13:30	1630	1950	1450	1430	
Technician	JSB	RD	RD	JSB	JM	

Nominal Concentration Mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	48-Hours Observ.	48-Hours No. Alive	72-Hours Observ.	72-Hours No. Alive	96-Hours Observ.	96-Hours No. Alive	~~96~~-Hours Observ.	~~96~~-Hours No. Alive
E-CH03-15 100%	A	20 loaded		N	20	N	20	N	20	5NF	15		
	B			N	20	N	20	N	20	4NF	16		
	C			N	20	N	20	N	20	1NF	19		
	D			N	20	N	20	N	20	1NF	19		
	E			N	20	N	20	N	20	4NF	16		
E-CH03-16 10%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	2NF	18		
	C			N	20	N	20	N	20	2NF	18		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-16 50%	A			N	20	N	20	N	20	2NF	18		
	B			N	20	N	20	N	20	2NF	18		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	1NF	19		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-16 100%	A			N	20	N	20	N	20	2NF	18		
	B			N	20	N	20	N	20	N	20		
	C			N	20	N	20	N	20	3NF	17		
	D			N	20	N	20	N	20	6NF	14		
	E			N	20	N	20	N	20	2NF	18		
E-CH03-17 10%	A			N	20	N	20	N	20	1NF	19		
	B			N	20	N	20	N	20	2NF	18		
	C			N	20	N	20	N	20	N	20		
	D			N	20	N	20	N	20	2NF	18		
	E			N	20	N	20	N	20	2NF	18		

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour	0-Hour	24-Hours	48 ~~24~~-Hours	72 48-Hours	96 ~~72~~-Hours	~~96~~-Hours
Date	05/14/03	5/15/03	5/16/03	5/17/03	5/18/03	
Feeding	BS	yes BS	yes BS	yes BS	BS	
Time	13:30	1630	1950	1430	1450	
Technician	DJ	RD	RD	DJ	JA	

Nominal Concentration Mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	48-Hours Observ.	48-Hours No. Alive	72-Hours Observ.	72-Hours No. Alive	96-Hours Observ.	96-Hours No. Alive	~~96~~-Hours Observ.	~~96~~-Hours No. Alive
E-CH03-17 50%	A	20 loaded		N	20	N	20	N	20	~~4NF~~ ~~16~~		N	20
	B			N	20	N	20	N	20	1d	19		
	C			N	20	N	20	N	20	2NF	18		
	D			N	20	N	20	N	20	N	20		
	E			N	20	N	20	N	20	N	20		
E-CH03-17 100%	A			N	20	N	20	N	20	N	20		
	B			N	20	N	20	N	20	1d 2NF	18		
	C			N	20	N	20	N	20	1d 1NF	18		
	D			N	20	N	20	N	20	6NF	14		
	E			N	20	N	20	N	20	3NF	17		
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of SDS : 0.100 (g) Volume of Milli-Q Water: 100 (mL) Date Prepared: 5/14/03	[x] Definitive [x] Static [ ] Screening Duration: 48 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: M. bahia Batch Number: 2003-38 Age/Life Stage: 2 days Date of Acclimation/Maintenance: 5/14/03 See Page 108 of organism Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 1 No. Of Organisms/Replicate: 10	Lighting: [x] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 100 L X W 50 H Test Solution Height: 4 (cm) Test Vessel Volume: 0.34 (L) Test Solution Volume: 0.20 (L) Test Temperature: 20 ± 1 °C Test Salinity: 20 ~~30~~ ± 2 ppt
Test Area Used: Waterbath table	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed: SOP-A004

Test Concentrations: (Units: mg/L)	Control	2.5	5.0	10.0	20.0	40.0	
Amount Dilution Water Added (mL)	200	199.5	199	198	196	192	
Amount of Stock Added (mL)	0	0.5	1.0	2.0	4.0	8.0	

Additional Observations:

Data By: CG Date: 5/14/03

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: *M. bahia*

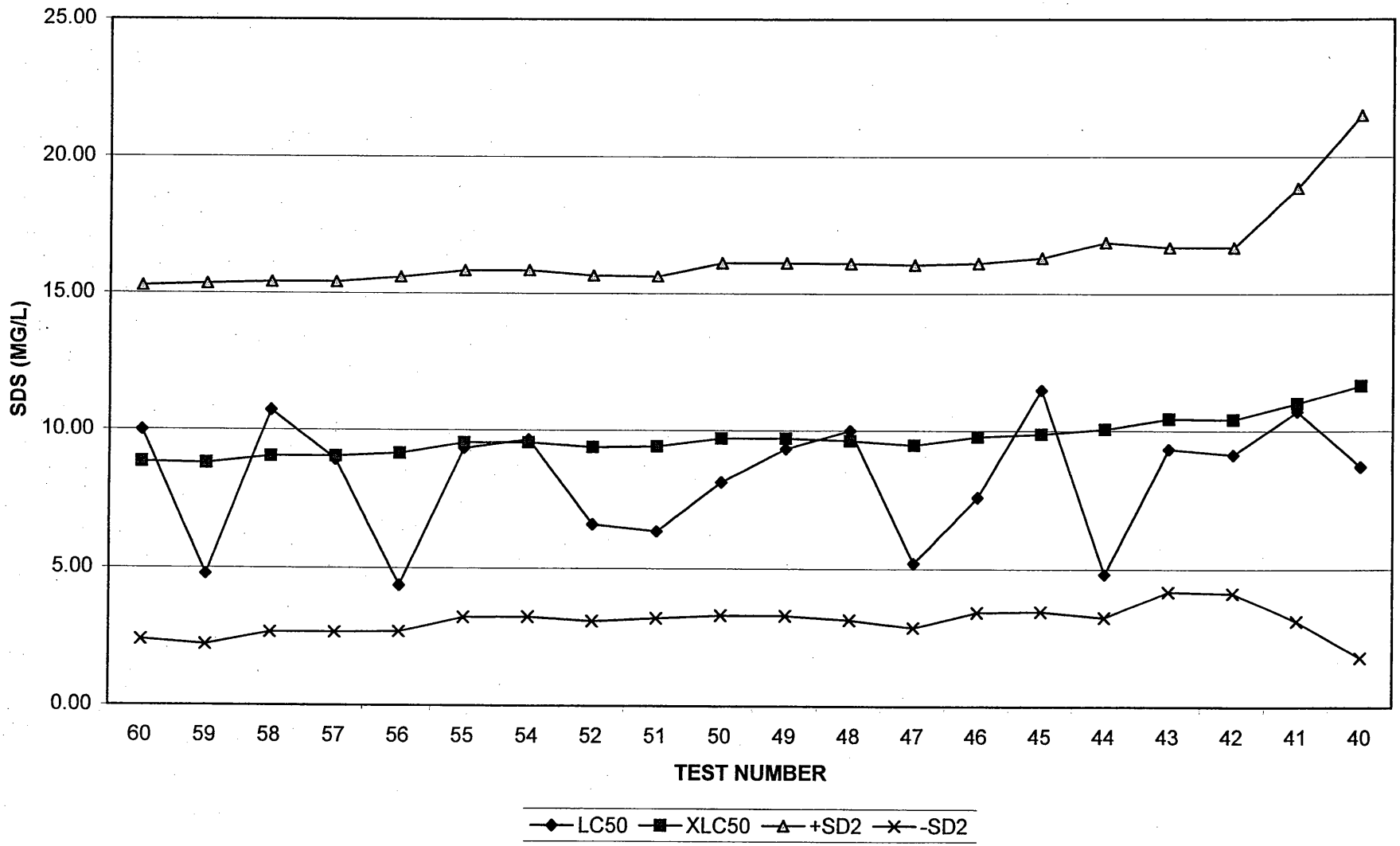
DAY 0 — REF TOXICANT: SDS

Nominal Concentration (mg/L)	Date: 5/14/03		Time: 1500		Analyst: CG	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10 Loaded	N	20.4	20	8.4	8.2
2.5	↓	↓	20.4	20	8.4	8.2
5.0			20.4	20	8.4	8.2
10.0			20.4	20	8.4	8.2
20.0			20.3	20	8.4	8.2
40.0			20.4	20	8.4	8.2

DAY 1	Date: 5/15/03		Time: 1145		Analyst: CG	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	20.4	21	8.0	8.2
2.5	9	1d	20.4	21	8.0	8.2
5.0	7	3d	20.5	21	7.9	8.2
10.0	4	6d	20.3	21	8.0	8.2
20.0	0	10d	20.2	21	8.0	8.2
40.0	0	10d	20.3	21	8.0	8.2

DAY 2	Date: 5/16/03		Time: 1330		Analyst: KG	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	20.5	22	7.7	8.1
2.5	~~8~~	~~1~~ 1d	20.6	22	7.8	8.1
5.0	~~3~~ KG 5	~~4~~ KG 2d	20.6	22	7.8	8.1
10.0	KG ~~0~~ 1	~~3~~ 3d	20.7	22	7.7	8.1
20.0						
40.0						

MYSIDOPSIS BAHIA
ACUTE REFERENCE TOXICITY TEST:SODIUM LAURYL SULFATE



8/28/2003

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: 05/14/03 TEST NUMBER: 1 DURATION: 48 h
TOXICANT : SDS
SPECIES: M. bahia

RAW DATA:

Concentration (mg/L)	Number Exposed	Mortalities
.00	10	0
2.50	10	2
5.00	10	5
10.00	10	9
20.00	10	10
40.00	10	10

SPEARMAN-KARBER TRIM: 20.00%

SPEARMAN-KARBER ESTIMATES: LC50: 4.79
95% LOWER CONFIDENCE: 3.25
95% UPPER CONFIDENCE: 7.06

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

Page: _____
QA Form No. 018
Revised: October 2002

Project No: 6063030002 Client: Anamar/Canaveral Harbor Test: Elutriate, M. bahia & M. beryllina

DAILY LOG E-CHØ3-20

5/~~28~~ 29/03 - Organisms ~~fed~~ fed in holding, loaded and then observed. WQ taken and airlines placed in M. beryllina vessels. All vessels covered. jmw

~~5/29/03~~ Elutriate prepared using site sample and control, and site water. jmw (data reviewed, jmw)

5/30/03 WQ taken ~~before~~. Airline checked. Organisms ~~fed~~ fed. jmw organisms observed. covered

5/31/03 WQ taken. Organisms observed & fed. airlines checked. covered

6/1/03 WQ taken. Organisms observed & fed. Airlines checked. Covered

6/2/03 WQ taken. Organisms observed. Test terminated.

jmw

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002

TEST MATERIAL

Test Material: Sediment elutriate

See Page 31 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

SOP-S-07

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Mysidopis bahia

Lot Number: 2003-47

Age/ Life Stage: 2 day

Date Acclimation/ Maintenance Began: 5/29/03

See Page 108 of organism receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: < 1%

TEST CONDITIONS

( ) Range Finder
( ) Screening
(X) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 96 hrs

Test Area Used: Water bath

Test Temperature (°C): 20 +/- 2

Test Salinity (ppt): 20 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 10

Dilution Water: Natural filtered seawater

TEST VESSELS

Dimensions (cm): Length x 9.5 Width x 5 Height

Test Solution Height (cm) : 4

Test Vessels: ~~(x) Open~~ (X) Covered

Test Container Volume: 0.34 L

Test Solution Volume: 0.20 L

TEST SOLUTION PREPARATION

Test Concentration %	Control	10	50	100					
Volume of Dilution Water Added (mL)	1250	1125	625	0					
Volume of Effluent/ Stock Added (mL)	0	125	625	1250					

ADDITIONAL OBSERVATIONS:

DATA BY: CG DATE: 5/28/03

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		5/29/03				5/30/03				5/31/03				6/1/03				6/2/03			
TIME		~~8~~ 1400				10:00				0920				1430				1345			
INIT.		CG				~~DD~~				KG				RD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Seawater Control ~~Control~~ ~~Sediment~~ 100%	A	19.2	8.4	9.1	21																
	B					19.2	8.2	7.9	20												
	C									19.1	8.1	8.3	20								
	D													20.2	8.2	7.9	19				
	E																	20.8	8.3	8.7	20
CTRL SED ~~E-CH03-20~~ CG 10%	A	19.3	8.4	8.9	20																
	B					19.0	8.3	7.9	20												
	C									18.9	8.1	8.2	20								
	D													20.0	8.2	7.8	19				
	E																	20.6	8.2	8.7	20
CTRL SED ~~E-CH03-20~~ CG 50%	A	19.2	8.3	9.0 ~~8.6~~	19																
	B					19.1	8.3	7.7	19												
	C									18.9	8.1	8.1	20								
	D													19.7	8.1	8.0	19				
	E																	20.5	8.3	8.7	20
INST/METH		FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA 2900	DO3	Ref9	FS6	SA2900	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		5/29/03				5/30/03				5/31/03				6/1/03				6/2/03			
TIME		1400				1000				0930				1430				1345			
INIT.		CG				[illegible]				KG				RD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Control Sediment 100%	A	18.1	8.2	9.1	19																
	B					19.1	8.2	7.7	19												
	C									18.8	8.1	8.0	20								
	D													19.8	8.1	7.9	19				
	E																	20.8	8.3	8.7	20
E-CH03-20 10%	A	18.9	8.4	9.2	20																
	B					19.2	8.2	7.6	20												
	C									19.2	8.2	7.9	20								
	D													19.9	8.2	7.5	20				
	E																	20.4	8.3	8.8	20
E-CH03-20 50%	A	19.1	8.4	9.1	20																
	B					19.5	8.2	7.6	20												
	C									19.3	8.2	7.8	20								
	D													19.8	8.2	7.1	20			~~8.7~~	~~20~~ KG
	E																	20.3	8.3	8.7	20
INST/METH		FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA 2900	DO3	Ref9	FS6	SA2900	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

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MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. bahia

DATE		5/29/03				5/30/03				5/31/03				6/1/03				6/2/03			
TIME		1400				10:00				0930				1430				1345			
INIT.		CG				DS				KG				RD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-20 100%	A	18.0	8.1	8.2	20																
	B					19.5	8.2	7.6	20												
	C									19.3	8.3	7.8	20								
	D													19.7	8.3	7.1	20				
	E																	20.2	8.4	8.7	20
	A																				
	B																				
	C																				
	D																				
	E																				
	A																				
	B																				
	C																				
	D																				
	E																				
INST/METH		FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA 2900	DO3	Ref9	FS6	SA2900	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour		0-Hour		24-Hours		48-Hours		72-Hours		96-Hours			
Date		5/29/03		5/30/03		5/31/03		6/1/03		6/2/03			
Feeding		~~1400~~ BS		BS		BS		BS		—			
Time		1400		1300		0930		1440		1400			
Technician		CG		JA		KG		RD		KG			
Nominal Concentration mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
Seawater Control 100%	A	N	20	N	20	N	20	N	20	N	20		
	B	N	20	N	20	N	20	N	20	N	20		
	C	N	20	N	20	N	20	N	20	N	20		
	D	N	20	N	20	N	20	N	20	N	20		
	E	N	20	N	20	N	20	N	20	N	20		
Control Sediment 10%	A	N	20	N	20	N	20	N	20	N	20		
	B	N	20	N	20	N	20	N	20	N	20		
	C	N	20	N	20	N	20	N	20	1d	19		
	D	N	20	N	20	N	20	N	20	N	20		
	E	N	20	N	20	N	20	N	20	N	20		
Control Sediment 50%	A	N	20	N	20	N	20	N	20	1d	19		
	B	N	20	N	20	N	20	N	20	1d	19		
	C	N	20	N	20	N	20	N	20	1d	~~18~~ 19		
	D	N	20	N	20	N	20	N	20	N	20		
	E	N	20	N	20	N	20	N	20	1d	19		
Control Sediment 100%	A	N	20	N	20	N	20	N	20	N	20		
	B	N	20	N	20	N	20	N	20	N	20		
	C	N	20	N	20	N	20	N	20	N	20		
	D	N	20	N	20	N	20	N	20	N	20		
	E	N	20	N	20	N	20	N	20	N	20		
ECHO3-20 10%	A	N	20	N	20	N	20	N	20	N	20		
	B	N	20	N	20	N	20	N	20	3d	17		
	C	N	20	N	20	N	20	N	20	N	20		
	D	N	20	N	20	N	20	N	20	N	20		
	E	N	20	N	20	N	20	N	20	2d	18		

1 corrected

Observation Key

AS = Organisms At Surface of Water
BS = Brine Shrimp
ERR = Erratic
FOS = Film on Surface of Water
G = Gulping
GY = Gyrating
HYP = Hyperactive
LE = Loss of Equilibrium
LETH = Lethargic
LT = Light Pigmentation
N (NONE) = Normal Conditions
NF = Not Found
NO. ALIVE = Number of Organisms Alive (survival)
OBS = Observations
PRE = Precipitate
RAR = Rapid Respiration
REP = Replicate
UC = Undissolved Chemical
YTC/ALG = YTC and green algae (daphnids)

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. bahia

Test Hour		0-Hour		24-Hours		48-Hours		72-Hours		96-Hours			
Date		5/29/03		5/30/03		5/31/03		6/1/03		6/2/03			
Feeding		BS		BS		BS		BS		—			
Time		1400		1300		0930		1440		1400			
Technician		CG		JM		KG		RD		RD			
Nominal Concentration mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
ECHO3-20 50%	A	N	20	N	20	N	20	N	20	N	20		
	B	N	20	N	20	N	20	N	20	N	20		
	C	N	20	N	20	N	20	N	20	N	20		
	D	N	20	N	20	N	20	N	20	N	20		
	E	N	20	N	20	N	20	N	20	N	20		
ECHO3-20 100%	A	N	20	N	20	N	20	N	20	N	20		
	B	N	20	N	20	N	20	N	20	N	20		
	C	N	20	N	20	N	20	N	20	N	20		
	D	N	20	N	20	N	20	N	20	N	20		
	E	N	20	N	20	N	20	N	20	N	20		
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												

Loached

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of SDS : 0.100 (g) Volume of Milli-Q Water: 100 (mL) Date Prepared: 5/29/03	[x] Definitive [x] Static [ ] Screening Duration: 48 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: M. bahia Batch Number: 2003-47 Age/Life Stage: 2 days Date of Acclimation/Maintenance: 5/29/03 See Page 108 of ~~organism receipt~~ Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 1 No. Of Organisms/Replicate: 10	Lighting: [x] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 100 L X W 50 H Test Solution Height: 4 (cm) Test Vessel Volume: 0.34 (L) Test Solution Volume: 0.20 (L) Test Temperature: 20 ± 1 °C Test Salinity: ~~30~~ 20 ± 2 ppt
Test Area Used: Waterbath table	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed: SOP-A004

Test Concentrations: (Units: mg/L)	Control	2.5	5.0	10.0	20.0	40.0	
Amount Dilution Water Added (mL)	200	199.5	199	198	196	192	
Amount of Stock Added (mL)	0	0.5	1.0	2.0	4.0	8.0	

Additional Observations:

Data By: CG Date: 5/29/03

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: *M. bahia*

DAY 0 — REF TOXICANT: SDS

Nominal Concentration (mg/L)	Date: 5/29/03		Time: 14:00		Analyst: JA	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	loaded	19.1	20	8.9	8.4
2.5	10	loaded	19.3	20	8.7	8.4
5.0	10	loaded	19.4	20	8.2	8.4
10.0	10	loaded	19.5	20	8.3	8.4
20.0	10	loaded	19.5	20	8.1	8.4
40.0	10	loaded	19.5	20	7.9	8.4

DAY 1	Date: 5/30/03		Time: 11:00		Analyst: [illegible]	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	20.2	20	8.3	8.3
2.5	10	N	19.8	20	8.2	8.2
5.0	10	N	20.1	20	8.1	8.2
10.0	10	N	20.1	20	8.2	8.3
20.0	0	10d	19.8	20	8.3	8.3
40.0	0	10d	20.1	20	8.2	8.3

DAY 2	Date: 5/31/03		Time: 0915*		Analyst: KG	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	19.6	20	8.4	8.3
2.5	10	N	19.5	20	8.4	8.3
5.0	8	2d	19.7	20	8.3	8.3
10.0	8	2d	20.0	20	8.2	8.2
20.0						
40.0						

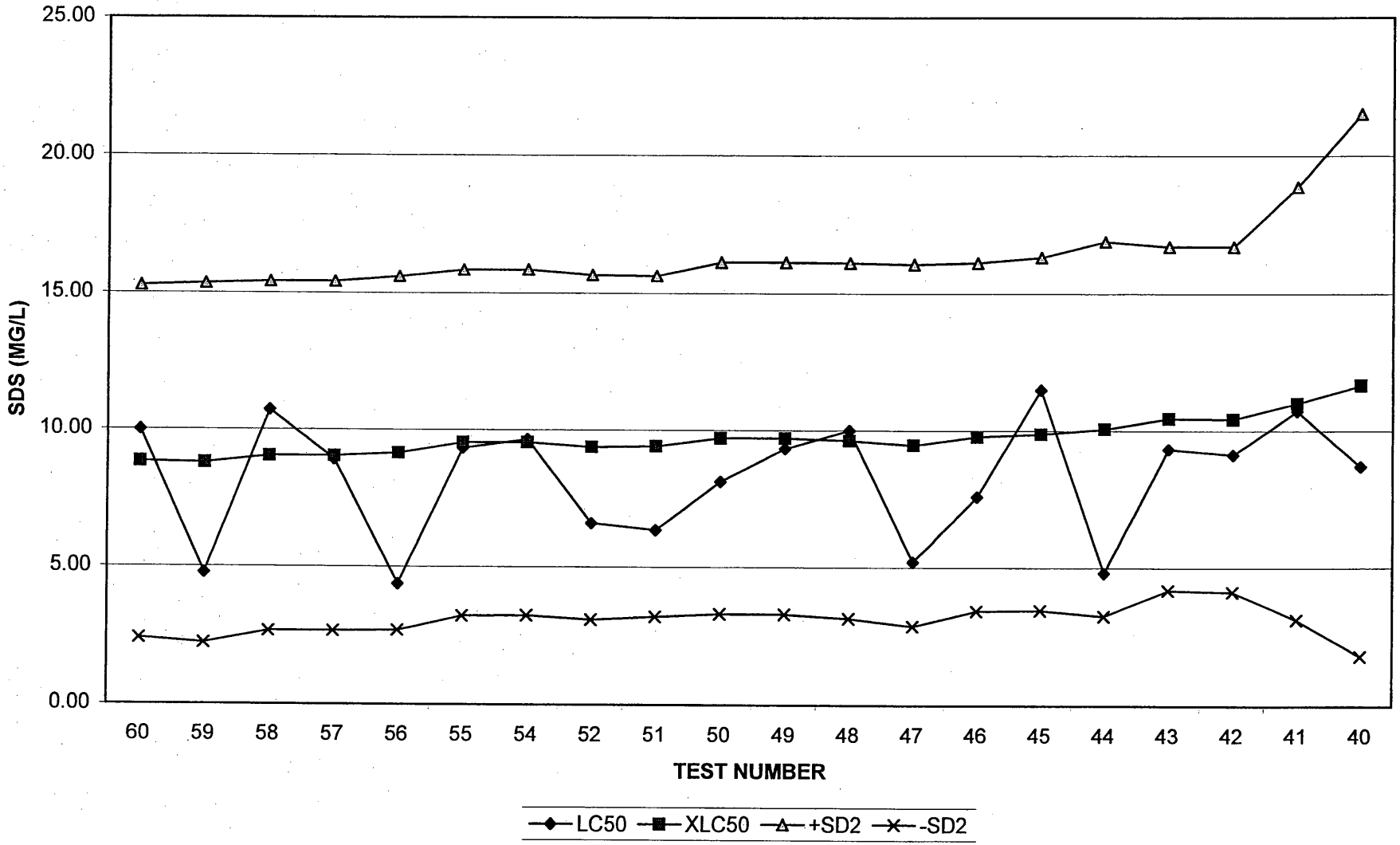
*water quality monitored in AM, test terminated @ 1430.

SUMMARY – Ref Tox, M. bahia, SDS toxicant.

COMMENTS:

Nominal Concentration	Number Dead
Control	0
2.5	0
5.0	2
10.0	2
20.0	10
40.0	10

MYSIDOPSIS BAHIA
ACUTE REFERENCE TOXICITY TEST:SODIUM LAURYL SULFATE



8/28/2003

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

D/ May 03 TEST NUMBER: Ref Tox DURATION: 48 H
TC ANT : SDS
SPECIES: M. bahia

RAW DATA:	Concentration (mg/L)	Number Exposed	Mortalities
	.00	10	0
	2.50	10	0
	5.00	10	2
	10.00	10	2
	20.00	10	10
	40.00	10	10

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 10.72
95% LOWER CONFIDENCE: 8.36
95% UPPER CONFIDENCE: 13.73

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No. 106
Effective: July 2002

DAILY FEEDING LOG

Sponsor: Canaveral

Project No.: 6063030002

Test Substance: Sediment (~~effluent~~ elutriate from)

Test Species: M. beryllina

TEST DAY	DATE	TIME	INITIALS	FOOD TYPE	QUANTITY	COMMENTS
0	5/16/03	2000	RD	Brine Shrimp	0.5 mL	
1	5/17/03	1100	~~DD~~	Brine Shrimp	.2 ml	
2	5/18/03	1050	KG	BS	.2 mL	
3	5/19/03	0845	CG	BS	.2 mL	
4	5/20/03	0840	CG	BS	.2 mL	

BS= Brine Shrimp nauplii YTC= Yeast/Trout Chow/Cereal Leaves Algae= Green Algae (*Selenastrum capricornutum*)

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: October 2002

Project No: 6063030002 Client: Anamar/Canaveral Harbor Test: Elutriate, M. beryllina

DAILY LOG

5/16/03. Elutriate prepared using chem sediments, control sediment and sitewater, mixing 1 part sediment with 4 parts siteswater. Salinity adjusted (with addition) of well water to test salinity. Sediment and siteswater mixed/stirred for half hour, then allowed to settle for at least ½ hour. Elutriate siphoned off, Elutriate aerated until use. and concentrations prepared. Water quality monitored. Elutriate (prepared) poured into appropriate test vessels. Organisms loaded into test vessels (organisms fed during holding), and observed. Vessels covered.

5/17/03 Water quality monitored. Organisms observed + fed.

5/18/03 Water quality monitored. Organisms observed + fed.

5/19/03 Water quality monitored. Organisms observed + fed. Aeration started.

5/20/03 Water quality monitored in morning. Organisms observed + fed. Airlines checked. Organisms counted. Test terminated in afternoon.

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002

TEST MATERIAL

Test Material: Sediment elutriate

See Page 658 thru 667 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

SOP-S-007

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Menidia beryllina

Lot Number: 2003-41

Age/ Life Stage: 9 days

Date Acclimation/ Maintenance Began: 5/16/03

See Page 108 of Organism Receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <5%

TEST CONDITIONS

( ) Range Finder
( ) Screening
(X) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 96 hrs

Test Area Used: Water bath

Test Temperature (°C): 20 +/- 2

Test Salinity (ppt): 20 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 10

Dilution Water: Natural filtered seawater

TEST VESSELS

Dimensions (cm): Length x 9 Width x 12 Height

Test Solution Height (cm) : 6

Test Vessels: ~~(x) Open~~ (X) Covered

Test Container Volume: 0.500 L

Test Solution Volume: 0.250 L

TEST SOLUTION PREPARATION

Test Concentration % mg/L	Control	0	10	50	100				
Volume of Dilution Water Added (mL)	1500	1500	1350	750	-				
Volume of Effluent/ Stock Added (mL)	-	-	150	750	1500				

ADDITIONAL OBSERVATIONS:

DATA BY: [illegible] DATE: 5/16/03

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/0				5/18/03				5/19/03				5/20/03			
TIME		1400				1300				1100				1300				0900			
INIT.		JMR				DB				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Seawater Control 100%	A	19.8	8.1	7.9	20				~~20~~												
	B					18.8	7.9	7.5	20												
	C									18.1	8.1	8.0	20								
	D													19.0	7.9	7.4	20				
	E																	18.8	8.2	8.6	20
Control Sediment 10%	A	20.3	8.2	8.1	18																
	B					18.7	8.0	8.6	20												
	C									18.8	8.0	7.5	20								
	D													19.1	8.0	6.6	20				
Pinch Jars	E																	18.8	8.3	8.5	20
Control Sediment 50%	A	20.5	8.2	8.1	18																
	B					18.7	8.0	7.6	20												
	C									18.9	8.0	7.5	20								
	D													19.1	8.0	6.5	20				
Pinch Jars	E																	18.6	8.0	8.5	19
INST/METH		FS6	SA290D	D03	Ref 9	FS6	SA290D	D03	Ref 9	FS6	SA290D	D03	Ref 9	FS6	SA 290	D03	Ref 9	FS6	SA290	D03	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

JMR

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1325				1100				1330				0900			
INIT.		KG				[illegible]				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Control Sediment 100%	A	20.4	8.1	8.0	18																
	B					18.8	7.9	7.3	20												
	C									19.0	8.0	7.5	20								
	D													19.1	8.0	6.4	20				
	E																	18.8	8.3	8.4	19
B7 10%	A	20.4	8.0	8.1	19																
	B					18.8	8.0	8.1	20												
	C									19.0	8.0 7.9	7.5	20								
	D													19.0	7.9	7.1	20				
	E																	19.7	8.2	8.3	21
B7 50%	A	20.5	8.0	8.0	19																
	B					18.9	8.0	7.5	20												
	C									19.0	8.0	7.3	20								
	D													19.0	7.9	7.0	20				
	E																	19.5	8.3	8.3	19
INST/METH		FS6	SA290P	DO3	Ref 9	FS6	SA290P	DO3	Ref 9	FS6	SA290P	DO3	Ref 9	FS6	SA290P	DO3	Ref 9	[illegible]	SA290P	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1345				1100				1300				0900			
INIT.		KG				DD				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-9 10%	A	20.5	8.1	8.1	20																
	B					19.3	7.9	7.1	20												
	C									19.2	7.9	7.4	20								
	D													19.1	7.9	5.6	20				
	E																	19.9	8.2	8.0	20
E-CH03-9 50%	A	20.2	8.0	8.2	20																
	B					19.4	7.9	6.6	20												
	C									19.0	8.0	6.0	20								
	D													19.0	7.9	5.7	20				
	E																	20.1	8.1	7.8	19
E-CH03-9 100%	A	19.7	7.9	8.2	20																
	B					19.3	7.9	6.7	20												
	C									19.0	7.8	6.7	20								
	D													18.9	7.9	5.7	20				
	E																	20.2	8.3	8.1	20
INST/METH		ESG	SA290D	DO3	Ref 9	ESG	SA290D	DO3	Ref 9	ESG	SA 290D	DO3	Ref 9	ESG	SA 290D	DO3	Ref 9	ESG	SA290D	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/19/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1100				1300				0900			
INIT.		KG				DD				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-10 10%	A	20.2	8.0	8.3	20																
	B					19.4	7.9	6.6	20												
	C									18.9	8.0	6.7	20								
	D													18.9	7.9	5.8	20				
	E																	20.0	8.3	8.2	20
E-CH03-10 50%	A	19.6	7.9	8.4	19	~~19.4 DD 7.9~~															
	B				/	19.4	7.9	7.0	20												
	C									19.1	8.0	6.7	20								
	D													19.0	7.9	5.6	20				
	E																	20.2	8.4	8.2	21
E-CH03-10 100%	A	18.9	7.8	7.9	20																
	B					19.3	7.9	6.9	20												
	C									19.0	8.2	6.7	20								
	D													19.0	8.0	5.8	20				
	E																	20.2	8.4	8.2	21
INST/METH		FS6	SA2900	DO3	Ref 9	FS6	SA2900	DO3	Ref 9	FS6	SA2900	DO3	Ref 9	FS6	SA2900	DO3	Ref 9	FS6	SA2900	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1100				1300				0900			
INIT.		KG				DD				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-11 10%	A	20.4	8.0	7.9	19																
	B					19.2	7.9	6.6	20												
	C									19.1	8.0	7.0	20								
	D													19.0	7.9	5.7	20				
	E																	20.0	8.3	8.3	20
E-CH03-11 50%	A	20.2	8.0	8.2	20																
	B					19.3	8.0	6.7	20				KC 2								
	C									18.9	8.2	7.1	20								
	D													18.9	8.0	6.0	20				
	E																	20.1	8.5	8.2	20
E-CH03-11 100%	A	20.0	7.8	7.9	20																
	B					19.1	8.0	6.8	20												
	C									18.9	8.1	7.2	20								
	D													18.9	8.0	5.8	20				
	E																	20.1	8.5	8.2	19
INST/METH		FS6	SA290D	D03	Ref9	FS6	SA290D	D03	Ref9	FS6	SA290D	D03	Ref9	FS6	SA290B	D03	Ref9	FS6	SA290B	D03	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1100				1300				0900			
INIT.		KG				DD				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-12 10%	A	20.4	8.0	8.1	20																
	B					19.0	7.9	6.1	20												
	C									18.8	8.1	7.5	20								
	D													19.2	7.9	6.0	20				
	E																	20.0	8.4	8.3	20
E-CH03-12 50%	A	20.2	8.0	7.8	21																
	B					19.1	7.9	6.5	20												
	C									18.9	8.0	7.5	20								
	D													19.0	7.9	6.1	20				
	E																	20.0	8.3	8.3	20
E-CH03-12 100%	A	19.7	7.9	8.3	20																
	B					19.2	7.9	6.7	20												
	C									19.1	8.0	7.4	20								
	D													19.1	7.9	6.2	20				
	E																	20.1	8.4	8.2	21
INST/METH		FS6	SA290D	DO3	Ref 9	FS6	SA290D	DO3	Ref 9	FS6	SA290D	DO3	Ref 9	FS6	SA290D	DO3	Ref 9	FS6	SA290D	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1100				1330				0900			
INIT.		KG				DD				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-13 10%	A	20.4	8.1	7.8	20																
	B					19.9	7.9	7.5	20												
	C									19.1	8.1	7.2	20								
	D													19.4	7.9	6.1	20				
	E																	19.3	8.2	8.3	21
E-CH03-13 50%	A	20.4	8.0	7.5	20																
	B					18.9	8.0	7.1	20												
	C									19.2	8.1	7.3	20								
	D													19.3	8.0	6.1	20				
	E																	19.3	8.4	8.3	21
E-CH03-13 100%	A	20.4	7.9	7.8	20																
	B					18.9	8.0	7.1	21												
	C									19.2	8.1	7.3	20								
	D													19.3	8.0	6.1	20				
	E																	19.3	8.4	8.3	22
INST/METH		FS6	SA290D	DO3	Ref9	FS6	SA290D	DO3	Ref9	FS6	SA290D	DO3	Ref9	FS6	SA290D	DO3	Ref9	FS6	SA290D	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1100				1330				0900			
INIT.		KG				[illegible]				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-14 10%	A	20.4	8.1	7.7	20																
	B					18.8	8.0	7.3	20												
	C									19.2	8.1	7.0	20								
	D													19.4	7.9	6.0	20				
	E																	19.1	8.1	7.2	21
E-CH03-14 50%	A	20.4	8.0	7.5	20	18.9															
	B					18.9	8.0	7.1	20												
	C									19.3	8.1	6.9	20								
	D													19.4	8.0	6.2	20				
	E																	19.0	8.1	6.9	21
E-CH03-14 100%	A	20.4	7.8	7.6	20																
	B					18.9	8.0	7.0	20												
	C									19.2	8.2	6.9	20								
	D													19.5	8.1	5.9	20				
	E																	19.1	8.5	8.3	22
INST/METH		FS6	SA 290D	D03	Ref 9	FS6	SA 290D	D03	Ref 9	FS6	SA 290D	D03	Ref 9	FS6	SA 290D	D03	Ref 9	FS6	SA 290D	D03	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1100				1330				0900			
INIT.		KG				~~DB~~				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-15 10%	A	20.4	8.1	8.0	20																
	B					19.0	8.0	7.0	20												
	C									19.4	8.0	6.8	20								
	D													19.5	8.0	5.7	20				
	E																	19.1	8.4	8.1	20
E-CH03-15 50%	A	20.3	8.0	8.1	20																
	B					19.1	8.0	7.0	20												
	C									19.4	8.1	6.9	20								
	D													19.5	7.9	5.7	20				
	E					~~20.0~~												18.9	8.4	8.1	21
E-CH03-15 100%	A	20.1	7.9	8.1	20	~~19.0~~	~~8.0~~														
	B					19.0	8.0	7.1	20												
	C									19.2	8.2	6.9	20								
	D													19.5	~~7.9~~ 8.0	5.8	20				
	E																	18.8	8.2	7.1	21
INST/METH		FS6	SA 2900	D03	Ref 9	FS6	SA 2900	D03	Ref 9	FS6	SA 2900	D03	Ref 9	FS6	SA 2900	D03	Ref 9	FS6	SA 2900	D03	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1130				1330				0900			
INIT.		KG				[illegible]				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-16 10%	A	20.4	8.2	8.2	19																
	B					19.1	8.0	7.1	20												
	C									19.3	8.1	7.3	20								
	D													19.4	7.9	6.0	20				
	E																	18.9	8.0	8.3	21
E-CH03-16 50%	A	20.3	8.0	7.9	19																
	B					19.1	8.0	7.0	20												
	C						[illegible]			19.1	8.0	6.8	20								
	D													19.3	8.0	5.7	20				
	E																	18.8	8.1	8.1	21
E-CH03-16 100%	A	20.3	7.8	8.0	19																
	B					19.2	8.0	7.0	20												
	C								[illegible]	19.2	8.1	7.0	20								
	D													19.3	8.0	5.7	20				
	E																	18.9	8.4	8.5	21
INST/METH		FS6	SA290P	DO3	Ref 9	FS6	SA290P	DO3	Ref 9	FS6	SA290P	DO3	Ref 9	FS6	SA290P	DO3	Ref 9	FS6	SA290P	DO3	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMINCONCN-Nominalconcentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/16/03				5/17/03				5/18/03				5/19/03				5/20/03			
TIME		1400				1400				1100				1330				0900			
INIT.		KG				DD				KG				KG				CG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-17 10%	A	20.3	8.1	8.2	~~20~~ 18 KG																
	B					19.2	8.0	7.3	20												
	C									19.1	8.1	6.8	21								
	D													19.2	7.9	6.3	21				
	E																	18.9	8.3	7.8	21
E-CH03-17 50%	A	20.3	8.0	8.1	18																
	B					19.2	8.0	7.2	20				~~21~~ KG								
	C									19.2	8.0	6.8	21								
	D													19.3	7.9	6.2	21				
	E																	19.4	8.5	8.2	21
E-CH03-17 100%	A	20.2	7.7	7.6	18																
	B					19.2	8.0	7.2	20												
	C									19.2	8.1	6.8	21	~~21~~ KG							
	D													19.3	8.0	6.5	21				
	E																	19.5	8.5	8.3	21
INST/METH		FS6	SA 290P	D03	Ref 9	FS6	SA 290P	D03	Ref 9	FS6	SA 290P	D03	Ref 9	FS6	SA 290P	D03	Ref 9	FS6	SA 290P	D03	Ref 9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour		0-Hour		24-Hours		48 ~~24~~-Hours		72 ~~48~~-Hours		96 ~~72~~-Hours		~~96 Hours~~	
Date		5/16/03		5/17/03		5/18/03		5/19/03		5/19/03			
Feeding		BS		BS		BS		BS		BS			
Time		1400		1400		1100		1330		1430			
Technician		KG		KG		KG		KG					
Nominal Concentration mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
Seawater Control 100%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
Control Sediment 10%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
Control Sediment 50%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	~~10~~ N	10	N	10	N	10		
	D			N	10	~~10~~ N	10	N	10	N	10		
	E			N	10	~~10~~ N	10	N	10	N	10		
Control Sediment 100%	A	loaded	10	N	10	~~10~~ N	10	N	10	N	10		
	B			N	10	~~10~~ N	10	N	10	N	10		
	C			N	10	~~10~~ N	10	N	10	N	10		
	D			N	10	~~10~~ N	10	N	10	N	10		
	E			N	10	~~10~~ N	10	N	10	N	10		
CG B7 10%	A	loaded	10	N	10	~~10~~ N	10	N	10	2d	~~8~~		
	B			N	10	~~10~~ N	10	N	~~10~~	N	10		
	C			N	10	~~10~~ N	10	N	10	N	10		
	D			N	10	~~10~~ N	10	N	~~10~~	N	10		
CG	E			N	10	~~10~~ N	10	N	10	1d	9		

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour	0-Hour	24-Hours	~~24~~-Hours	~~48~~-Hours	~~72~~-Hours	~~96~~-Hours
Date	5/16/03	5/17/03	5/18/03	5/19/03	5/20/03	
Feeding	BS	BS	BS	BS	BS	
Time	1400	1400	1130	1330	1430	
Technician	KG	~~DP~~	KG	KG	KG	

Nominal Concentration Mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	~~24~~-Hours Observ.	~~24~~-Hours No. Alive	~~48~~-Hours Observ.	~~48~~-Hours No. Alive	~~72~~-Hours Observ.	~~72~~-Hours No. Alive	~~96~~-Hours Observ.	~~96~~-Hours No. Alive
E-CH03-9 10%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-9 50%	A	loaded	0	N	10	N	10	N	10	ld	9		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	ld	9		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-9 100%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	ld	9		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-10 10%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	ld	9	N	9		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-10 50%	A	loaded	0	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	ld	9		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour	0-Hour	24-Hours	~~24~~-Hours	~~48~~-Hours	~~72~~-Hours	~~96~~-Hours
Date	5/16/03	5/17/03	5/18/03	5/19/03	5/20/03	
Feeding	BS	BS	BS	BS	BS	
Time	1400	1400	1100	1330	1430	
Technician	KG	~~DJ~~	KG	KG	KG	

Nominal Concentration Mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
E-CH03-10 100%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-11 10%	A	loaded	0	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	3d	7		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	1d	9	N	9		
	E			N	10	N	10	N	10	N	10		
E-CH03-11 50%	A	loaded	0	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	1d	9		
E-CH03-11 100%	A	loaded	0	N	10	N	10	1d	9	2d	8		
	B			N	10	N	10	1d	9	1d	8		
	C			N	10	N	10	1d	9	N	9		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	1d	9	N	9		
E-CH03-12 10%	A	loaded	0	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	1d	9		
	E			N	10	N	10	N	10	N	10		

Observation Key

AS = Organisms At Surface of Water	LE = Loss of Equilibrium	OBS = Observations
BS = Brine Shrimp	LETH = Lethargic	PRE = Precipitate
ERR = Erratic	LT = Light Pigmentation	RAR = Rapid Respiration
FOS = Film on Surface of Water	N (NONE) = Normal Conditions	REP = Replicate
G = Gulping	NF = Not Found	UC = Undissolved Chemical
GY = Gyrating	NO. ALIVE = Number of Organisms Alive (survival)	YTC/ALG = YTC and green algae (daphnids)
HYP = Hyperactive		

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour	0-Hour	24-Hours	~~24-Hours~~	~~48-Hours~~	~~72-Hours~~	~~96-Hours~~
Date	5/16/03	5/17/03	5/18/03	5/19/03	5/20/03	
Feeding	BS	BS	BS	BS	BS	
Time	1400	1400	1130	1330	1430	
Technician	KG	DS	KG	KG	KG	

Nominal Concentration mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	~~24-Hours~~ Observ.	~~24-Hours~~ No. Alive	~~48-Hours~~ Observ.	~~48-Hours~~ No. Alive	~~72-Hours~~ Observ.	~~72-Hours~~ No. Alive	~~96-Hours~~ Observ.	~~96-Hours~~ No. Alive
E-CH03-12 50%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-12 100%	A	loaded	10	N	10	N	10	N	10	1d	9		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	1d	9		
	D			N	10	N	10	N	10	3d	7		
	E			N	10	N	10	N	10	1d	9		
E-CH03-13 10%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	2d	8	N	8		
	D			N	10	N	10	N	10	1d	9		
	E			N	10	N	10	N	10	3d	7		
E-CH03-13 50%	A	loaded	10	N	10	N	10	1d	9	N	9		
	B			N	10	N	10	N	10	1d	9		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	1d	9		
	E			N	10	N	10	N	10	N	10		
E-CH03-13 100%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	3d	7	N	7		
	C			N	10	N	10	N	10	2d	8		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	2d	8		

Observation Key

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BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour	0-Hour	24-Hours	~~24~~-Hours	~~48~~-Hours	~~72~~-Hours	~~96-Hours~~
Date	5/16/03	5/17/03	5/18/03	5/19/03	5/20/03	
Feeding	BS	BS	~~1130~~ BS	BS	BS	
Time	1400	1400	1130	1330	1430	
Technician	KG	BD	KG	KG	KG	

Nominal Concentration mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
E-CH03-14 10%	A	loaded	10	N	10	N	10	N	10	1d	9		
	B			N	10	N	10	N	10	N	~~9~~ 10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	1d	9	N	9		
	E			N	10	N	10	N	10	1d	9		
E-CH03-14 50%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	1d	9	N	9		
	C			N	10	N	10	2d	8	1d	7		
	D			N	10	N	10	N	10	1d	~~8~~ 9		
	E			N	10	N	10	N	10	N	10		
E-CH03-14 100%	A	loaded	10	N	10	N	10	1d	9	N	9		
	B			N	10	N	10	N	10	9d	1		
	C			N	10	N	10	N	10	9d	1		
	D			N	10	N	10	N	10	7d	3		
	E			N	10	N	10	1d	9	8d	1		
E-CH03-15 10%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	N	10	1d	9		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	1d	9		
	E			N	10	N	10	N	10	N	10		
E-CH03-15 50%	A	loaded	10	N	10	N	10	1d	9	1d	8		
	B			N	10	N	10	1d	9	N	9		
	C			N	10	N	10	4d	6	N	6		
	D			N	10	N	10	N	10	1d	9		
	E			N	10	N	10	1d	9	N	9		

Observation Key

AS = Organisms At Surface of Water	LE = Loss of Equilibrium	OBS = Observations
BS = Brine Shrimp	LETH = Lethargic	PRE = Precipitate
ERR = Erratic	LT = Light Pigmentation	RAR = Rapid Respiration
FOS = Film on Surface of Water	N (NONE) = Normal Conditions	REP = Replicate
G = Gulping	NF = Not Found	UC = Undissolved Chemical
GY = Gyrating	NO. ALIVE = Number of Organisms Alive (survival)	YTC/ALG = YTC and green algae (daphnids)
HYP = Hyperactive		

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour	0-Hour	24-Hours	~~24~~-Hours	~~48~~-Hours	~~72~~-Hours	~~96~~-Hours
Date	5/16/03	5/17/03	5/18/03	5/19/03	5/20/03	
Feeding	BS	BS	BS	BS	BS	
Time	1400	1400	1130	1330	1430	
Technician	KG	KG	KG	KG	KG	

Nominal Concentration Mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	~~24~~-Hours Observ.	~~24~~-Hours No. Alive	~~48~~-Hours Observ.	~~48~~-Hours No. Alive	~~72~~-Hours Observ.	~~72~~-Hours No. Alive	~~96~~-Hours Observ.	~~96~~-Hours No. Alive
E-CH03-15 100%	A	loaded	10	N	10	N	10	N	10	N	10		
	B			N	10	N	10	1d	9	1d	8		
	C			N	10	N	10	2d	8	2d	6		
	D			N	10	N	10	1d	9	1d	8		
	E			N	10	N	10	1d	9	N	9		
E-CH03-16 10%	A	loaded	10	N	10	N	10	2d	8	N	8		
	B			N	10	N	10	2d	8	N	8		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	1d	9	N	9		
	E			N	10	N	10	N	10	1d	9		
E-CH03-16 50%	A	loaded	10	N	10	N	10	N	10	1d	9		
	B			N	10	N	10	N	10	3d	7		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-16 100%	A	loaded	10	N	10	N	10	3d	7	N	7		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	1d	9	1d	8		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		
E-CH03-17 10%	A	loaded	10	N	10	N	10	N	10	2d	8		
	B			N	10	N	10	N	10	N	10		
	C			N	10	N	10	N	10	N	10		
	D			N	10	N	10	N	10	N	10		
	E			N	10	N	10	N	10	N	10		

Observation Key

AS = Organisms At Surface of Water	LE = Loss of Equilibrium	OBS = Observations
BS = Brine Shrimp	LETH = Lethargic	PRE = Precipitate
ERR = Erratic	LT = Light Pigmentation	RAR = Rapid Respiration
FOS = Film on Surface of Water	N (NONE) = Normal Conditions	REP = Replicate
G = Gulping	NF = Not Found	UC = Undissolved Chemical
GY = Gyrating	NO. ALIVE = Number of Organisms Alive (survival)	YTC/ALG = YTC and green algae (daphnids)
HYP = Hyperactive		

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour	0-Hour	24-Hours	~~24~~-Hours	~~48~~-Hours	~~72~~-Hours	~~96~~-Hours
Date	5/16/03	5/17/03	5/18/03	5/19/03	5/20/03	
Feeding	BS	BS	BS	BS	BS	
Time	1400	1400	1130	1330	1430	
Technician	KG	KG	KG	KG	KG	

Nominal Concentration Mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	~~24~~-Hours Observ.	~~24~~-Hours No. Alive	~~48~~-Hours Observ.	~~48~~-Hours No. Alive	~~72~~-Hours Observ.	~~72~~-Hours No. Alive	~~96~~-Hours Observ.	~~96~~-Hours No. Alive
E-CH03-17 50%	A	loaded	10	loaded	10	N	10	N	10	N	10		
	B					N	10	N	10	1d	9		
	C					N	10	N	10	N	10		
	D					N	10	N	10	N	10		
	E					N	10	N	10	2d	8		
E-CH03-17 100%	A	loaded	10	loaded	10	N	10	N	10	4d	6		
	B					N	10	N	10	3d	7		
	C					N	10	N	10	4d	6		
	D					N	10	N	10	2d	8		
	E					N	10	~~7d~~ KG	10	4d	6		
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												

Observation Key

AS =	Organisms At Surface of Water	LE =	Loss of Equilibrium	OBS =	Observations
BS =	Brine Shrimp	LETH =	Lethargic	PRE =	Precipitate
ERR =	Erratic	LT =	Light Pigmentation	RAR =	Rapid Respiration
FOS =	Film on Surface of Water	N (NONE) =	Normal Conditions	REP =	Replicate
G =	Gulping	NF =	Not Found	UC =	Undissolved Chemical
GY =	Gyrating	NO. ALIVE =	Number of Organisms Alive (survival)	YTC/ALG =	YTC and green algae (daphnids)
HYP =	Hyperactive				

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of SDS : 0.100 (g) Volume of Milli-Q Water: 100 (mL) Date Prepared: 5/16/03	[x] Definitive [x] Static [ ] Screening Duration: 48 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: M. beryllina Batch Number: 2003-41 Age/Life Stage: 9 days Date of Acclimation/Maintenance: 5/16/03 See Page 108 of Organism Receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 1 No. Of Organisms/Replicate: 10	Lighting: [x] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: L X 9 W 12 H Test Solution Height: 6 (cm) Test Vessel Volume: 0.600 ~~0.500~~ (L) Test Solution Volume: 0.250 (L) Test Temperature: 20 ± 1 °C Test Salinity: 20 ± 2 ppt
Test Area Used: Waterbath table	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed: SOP-A004

Test Concentrations: (Units: mg/L)	Control	2.5	5.0	10.0	20.0	40.0	
Amount Dilution Water Added (mL)	200	199.5	199	198	196	192	
Amount of Stock Added (mL)	0	0.5	1.0	2.0	4.0	8.0	

Additional Observations:

Data By: CC Date: 5/16/03

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: *M. beryllina*

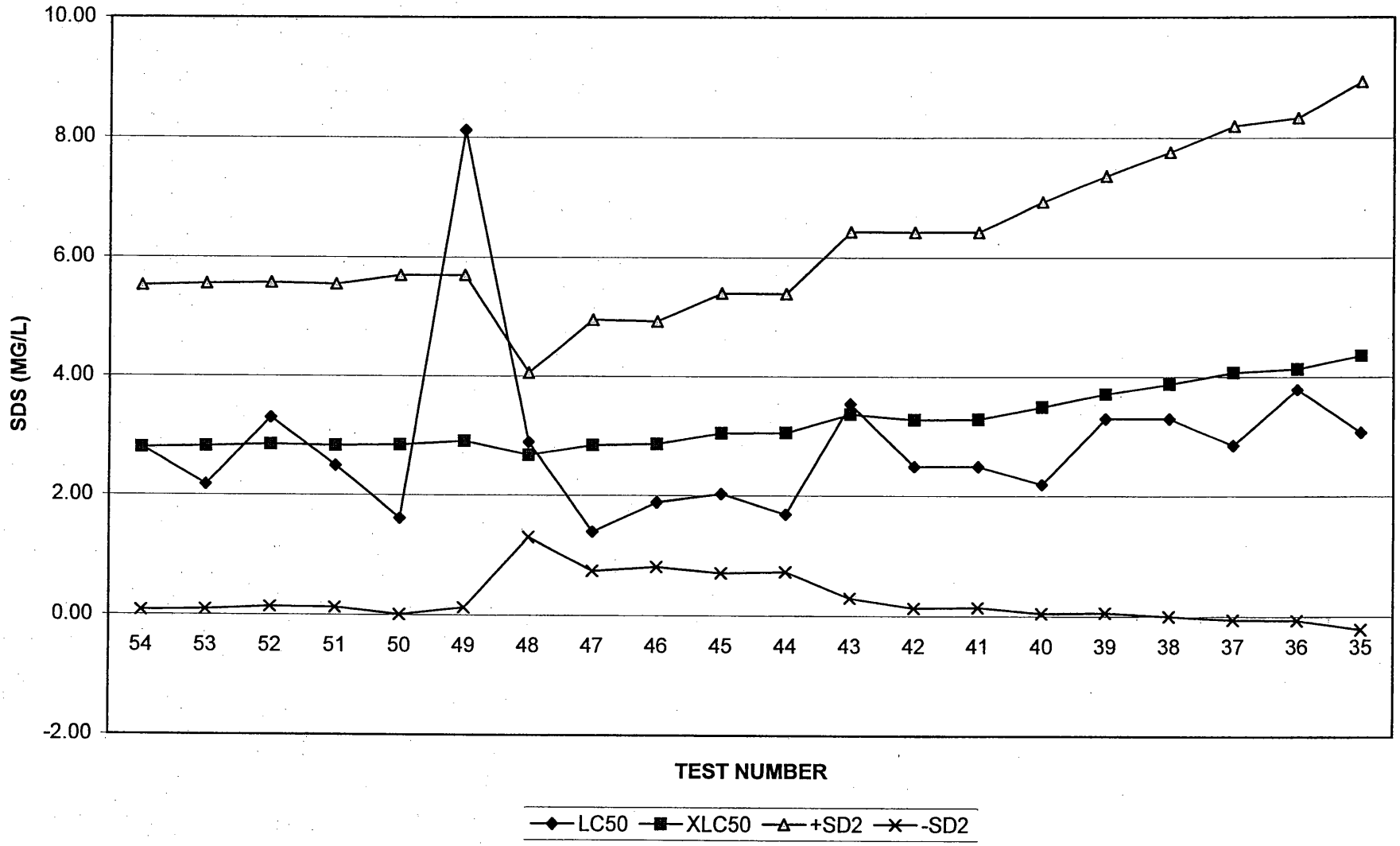
DAY 0 — REF TOXICANT: SDS

Nominal Concentration (mg/L)	Date: 5/16/03		Time: 1700		Analyst: KG	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10 loaded		20.6	20	8.0	8.0
~~1.25~~ 2.5			20.6	20	8.0	8.1
~~2.5~~ 5.0			20.5	20	8.0	8.1
~~5.0~~ 10.0			20.6	20	8.0	8.2
~~10.0~~ 20.0			20.6	20	8.1	8.2
~~20.0~~ 40.0			20.6	20	8.1	8.2

DAY 1	Date: 5/17/03		Time: 1300		Analyst: DJ	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	20.4	20	8.0	8.0
~~1.25~~ 2.5	8	2d	20.4	20	7.4	8.0
~~2.5~~ 5.0	0	10d	20.5	20	7.8	8.0
~~5.0~~ 10.0	0	10d	20.6	20	5.2	7.8
~~10.0~~ 20.0	0	10d	20.6	20	6.0	7.8
~~20.0~~ 40.0	0	10d	20.6	20	6.2	7.9

DAY 2	Date: 5/18/03		Time: 1230		Analyst: KG	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	20.7	21	8.4	8.0
~~1.25~~ 2.5	6	2d	20.8	20	8.3	8.0
~~2.5~~ 5.0	0					
~~5.0~~ 10.0	0					
~~10.0~~ 20.0	0					
~~20.0~~ 40.0	0					

MENIDIA BERYLLINA
ACUTE REFERENCE TOXICITY TEST:SODIUM LAURYL SULFATE



8/28/2003

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: 05/16/03 TEST NUMBER: 1 DURATION: 48 h
TOXICANT : SDS
SPECIES: M. beryllina

RAW DATA:

Concentration (mg/L)	Number Exposed	Mortalities
.00	10	0
2.50	10	4
5.00	10	10
10.00	10	10
20.00	10	10
40.00	10	10

SPEARMAN-KARBER TRIM: 40.00%

SPEARMAN-KARBER ESTIMATES: LC50: 2.81
95% CONFIDENCE LIMITS
ARE NOT RELIABLE.

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

Page: _____
QA Form No. 018
Revised: October 2002

Project No: 6063030002 Client: Anamar/Canaveral Harbor Test: Elutriate, M. bahia & M. beryllina

DAILY LOG E-CHØ3-20

29 jmc
5/28/03 - Organisms ~~fed~~ fed in holding, loaded and then observed. WQ taken and airlines placed in M. beryllina vessels. All vessels covered.

jmc ~~5/29/03~~ Elutriate prepared using site sample and control, and site water, jmc (data reviewed, jmc)

5/30/03 WQ taken ~~before~~. Airline checked. Organisms ~~fed~~ fed. jmc organisms observed. covered

5/31/03 WQ taken. Organisms observed & fed. airlines checked. covered

6/1/03 WQ taken. Organisms observed & fed. Airlines checked. Covered

6/2/03 WQ taken. Organisms observed. Test terminated.

jmc

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002

TEST MATERIAL

Test Material: Sediment elutriate

See Page 1 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

SOP-S-007

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Menidia beryllina

Lot Number: 2003-48

Age/ Life Stage: 11 days

Date Acclimation/ Maintenance Began: 5/29/03

See Page 108 of organism receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <1%

TEST CONDITIONS

( ) Range Finder
( ) Screening
(X) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 96 hrs

Test Area Used: Water bath

Test Temperature (°C): 20 +/- 2

Test Salinity (ppt): 20 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 10

Dilution Water: Natural filtered seawater

TEST VESSELS

Dimensions (cm): Length x 9 Width x 12 Height

Test Solution Height (cm) : 6

Test Vessels: ~~(x) Open~~ (X) Covered

Test Container Volume: 0.600 L

Test Solution Volume: 0.250 L

TEST SOLUTION PREPARATION

Test Concentration % mg/L	Control	0	10	50	100				
Volume of Dilution Water Added (mL)	1500	1500	1350	750	-				
Volume of Effluent/ Stock Added (mL)	-	-	150	750	1500				

ADDITIONAL OBSERVATIONS:

DATA BY: CG

DATE: 5/29/03

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/29/03				5/30/03				5/31/03				6/1/03				6/2/03			
TIME		1430				1035				0935				1405				1330			
INIT.		CG				DD				KG				RD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Seawater Control 100%	A	19.1	8.3	9.2	19																
	B					18.7	8.3	8.6	20												
	C									18.1	8.3	8.4	20								
	D													19.7	8.3	8.3	20				
	E																	19.6	8.2	8.9	20
Control Sediment 10%	A	18.8	8.3	9.6	19																
	B					18.6	8.3	8.6	20												
	C									18.6	8.3	8.4	20								
	D													19.9	8.4	8.3	20				
	E																	19.7	8.4	8.9	20
Control Sediment 50%	A	18.6	8.3	8.7	19																
	B					18.7	8.3	8.6	20												
	C									18.7	8.3	8.4	20								
	D													19.8	8.3	8.4	21				
	E																	19.6	8.1	8.8	20
INST/METH		FS6	SA290D	DO3	Ref9	FS6	SA290D	DO3	Ref9	FS6	SA290D	DO3	Ref9	FS6	SA 290D	DO3	Ref9	FS6	SA290D	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/29/03				5/30/03				5/31/03				6/1/03				6/2/03			
TIME		1430				1045				0940				1405				1330			
INIT.		CG				DD				KG				RD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Control Sediment 100%	A	18.1	8.2	9.1	19																
	B					18.6	8.3	8.6	20												
	C									18.1	8.2	8.3	20								
	D													19.7	8.1	8.1	18				
	E																	20.2	8.6	8.7	20
E-CH03-20 10%	A	18.8	8.9	8.3	19																
	B					18.7	8.3	8.5	20												
	C									19.0	8.3	8.2	20								
	D													19.6	8.2	8.3	19				
	E																	20.5	8.3	8.7	20
E-CH03-20 50%	A	18.6	8.2	8.7	19																
	B					18.8	8.3	8.5	20												
	C									19.0	8.4	8.1	20								
	D													19.5	8.1	7.6	19				
	E																	20.3	8.2	8.7	20
INST/METH		FS6	SA 290D	DO3	Ref9	FS6	SA 290D	DO3	Ref9	FS6	SA 290D	DO3	Ref9	FS6	SA 290D	DO3	Ref9	FS6	SA 290D	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
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METH - Method

MACTEC
Gainesville, Florida

QA Form Number: 016
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral Harbor

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: Elutriate

TEST SPECIES: M. beryllina

DATE		5/29/03				5/30/03				5/31/03				6/1/03				6/2/03			
TIME		1430				1045				0940				1405				1330			
INIT.		CG				[illegible]				KG				RD				KG			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
E-CH03-20 100%	A	18.0	8.1	8.2	20																
	B					18.9	8.4	8.5	20												
	C									19.0	8.4	8.1	20								
	D													19.5	8.4	8.3	20				
	E																	20.3	8.3	8.6	20
	A																				
	B																				
	C																				
	D																				
	E																				
	A																				
	B																				
	C																				
	D																				
	E																				
INST/METH		FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA2900	DO3	Ref9	FS6	SA 2900	DO3	Ref9	FS6	SA2900	DO3	Ref9

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. beryllina

Test Hour	0-Hour	24-Hours	48-Hours	72-Hours	96-Hours
Date	5/29/03	5/30/03	5/31/03	6/1/03	6/2/03
Feeding	BS	~~BS~~ JA BS	BS	BS	–
Time	1430	1300	0959	1425	1340
Technician	CG	JA	KG	RD	KG

Nominal Concentration mg/L %	REP	0-Hour Observ.	0-Hour No. Alive	24-Hours Observ.	24-Hours No. Alive	48-Hours Observ.	48-Hours No. Alive	72-Hours Observ.	72-Hours No. Alive	96-Hours Observ.	96-Hours No. Alive	Observ.	No. Alive
Seawater Control 100%	A	N	10	N	10	N	10	N	10	N	10		
	B	N	10	N	10	N	10	N	10	N	10		
	C	N	10	N	10	N	10	N	10	N	10		
	D	N	10	N	10	N	10	N	10	N	10		
	E	N	10	N	10	N	10	N	10	N	10		
Control Sediment 10%	A	N	10	N	10	N	10	N	10	N	10		
	B	N	10	N	10	N	10	N	10	N	10		
	C	N	10	N	10	N	10	N	10	N	10		
	D	N	10	N	10	N	10	N	10	N	10		
	E	N	10	N	10	N	10	N	10	N	10		
Control Sediment 50%	A	N	10	N	10	N	10	N	10	N	10		
	B	N	10	N	10	N	10	N	10	N	10		
	C	N	10	N	10	N	10	N	10	N	10		
	D	N	10	N	10	N	10	N	10	N	10		
	E	N	10	N	10	N	10	N	10	N	10		
Control Sediment 100%	A	N	10	N	10	N	10	N	10	N	10		
	B	N	10	N	10	N	10	N	10	~~N~~	~~10~~ 9		
	C	N	10	N	10	N	10	N	10	N	10		
	D	N	10	N	10	N	10	N	10	N	10		
	E	N	10	N	10	N	10	N	10	N	10		
ECHO3-20 10%	A	N	10	N	10	N	10	N	10	N	10		
	B	N	10	N	10	N	10	N	10	N	9		
	C	N	10	N	10	N	10	N	10	N	9		
	D	N	10	N	10	N	10	N	10	N	10		
	E	N	10	N	10	N	10	N	10	N	10		

Observation Key

AS = Organisms At Surface of Water	LE = Loss of Equilibrium	OBS = Observations
BS = Brine Shrimp	LETH = Lethargic	PRE = Precipitate
ERR = Erratic	LT = Light Pigmentation	RAR = Rapid Respiration
FOS = Film on Surface of Water	N (NONE) = Normal Conditions	REP = Replicate
G = Gulping	NF = Not Found	UC = Undissolved Chemical
GY = Gyrating	NO. ALIVE = Number of Organisms Alive (survival)	YTC/ALG = YTC and green algae (daphnids)
HYP = Hyperactive		

MACTEC Engineering & Consulting, Inc. (formerly Harding ESE)
Gainesville, Florida

QA Form: 015d Region II
Revised: November 2002

Subject: Acute Toxicity Data Sheet – Survival

Sponsor: Anamar/Canaveral Harbor **Project No.:** 6063030002

Test Substance: elutriate **Test Species:** M. ~~bahia~~ SA Beryllina

Test Hour	0-Hour	24-Hours	48-Hours	72-Hours	96-Hours	
Date	5/29/03	5/30/03	5/31/03	6/1/03	6/2/03	
Feeding	BS	BS	BS	BS	–	
Time	1420	1300	1008	1425	1410	
Technician	GG	JA	KG	RD	KG	

Nominal Concentration mg/L %	REP	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive	Observ.	No. Alive
ECHO3-20 50%	A	N	10	N	10	N	10	N	10	Id	9		
	B	N	10	N	10	N	10	N	10	N	10		
	C	N	10	N	10	N	10	N	10	N	10		
	D	N	10	N	10	N	10	N	10	N	10		
	E	N	10	N	10	N	10	N	10	Id	9		
ECHO3-20 100%	A	N	10	N	10	N	10	N	10	N	10		
	B	N	10	N	10	N	10	N	10	Id	8		
	C	N	10	N	10	N	10	N	10	N	10		
	D	N	10	N	10	N	10	N	10	N	10		
	E	N	10	N	10	N	10	N	10	Id	9		
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												
	A												
	B												
	C												
	D												
	E												

Invalid

Observation Key

AS = Organisms At Surface of Water	LE = Loss of Equilibrium	OBS = Observations
BS = Brine Shrimp	LETH = Lethargic	PRE = Precipitate
ERR = Erratic	LT = Light Pigmentation	RAR = Rapid Respiration
FOS = Film on Surface of Water	N (NONE) = Normal Conditions	REP = Replicate
G = Gulping	NF = Not Found	UC = Undissolved Chemical
GY = Gyrating	NO. ALIVE = Number of Organisms Alive (survival)	YTC/ALG = YTC and green algae (daphnids)
HYP = Hyperactive		

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of SDS : 0.100 (g) Volume of Milli-Q Water: 100 (mL) Date Prepared: 5/29/03	[x] Definitive [x] Static [ ] Screening Duration: 48 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: M. beryllina Batch Number: 2003-48 Age/Life Stage: 11 days Date of Acclimation/Maintenance: 5/29/03 See Page 108 of Organism receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 1 No. Of Organisms/Replicate: 10	Lighting: [x] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: L X 9 W 12 H Test Solution Height: 6 (cm) Test Vessel Volume: 0.500 (L) Test Solution Volume: 0.250 (L) Test Temperature: 20 ± 1 °C Test Salinity: 20 ± 2 ppt
Test Area Used: Waterbath table	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed: SOP-A004

Test Concentrations: (Units: mg/L)	Control	1.25	2.5	5.0	10.0	20.0	
Amount Dilution Water Added (mL)	200	199.5	199	198	196	192	
Amount of Stock Added (mL)	0	0.5	1.0	2.0	4.0	8.0	

Additional Observations:

Data By: CG Date: 5/29/03

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
QA FORM NO: 097RT REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: *M. beryllina*

DAY 0 — REF TOXICANT: SDS

Nominal Concentration (mg/L)	Date: 5/29/03		Time: 14:00		Analyst: JA	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	loaded	19.8	19	8.2	8.3
1.25	10	loaded	19.7	20	8.1	8.4
2.5	10	loaded	19.7	20	8.3	8.4
5.0	10	loaded	19.7	20	8.1	8.4
10.0	10	loaded	19.7	20	8.2	8.4
20.0	10	loaded	19.7	20	8.3	8.4

DAY 1	Date: 5/30/03		Time: 11:00		Analyst: DD	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	20.1	19	8.1	8.2
1.25	1	9d	20.0	20	7.5	8.1
2.5	0	10d	20.1	20	6.4	7.9
5.0	0	10d	20.1	20	6.0	7.9
10.0	0	10d	20.1	20	6.0	8.0
20.0	0	10d	20.2	20	6.1	7.9

DAY 2	Date: 5/31/03		Time: 0915 *		Analyst: KG	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	19.7	19	7.9	8.1
1.25	0	1d	19.8	20	7.8	8.1
2.5	0	N				
5.0	0	N				
10.0	0	N				
20.0	0	N				

PAGE:

* water quality monitored in AM, test terminated @ 1430.

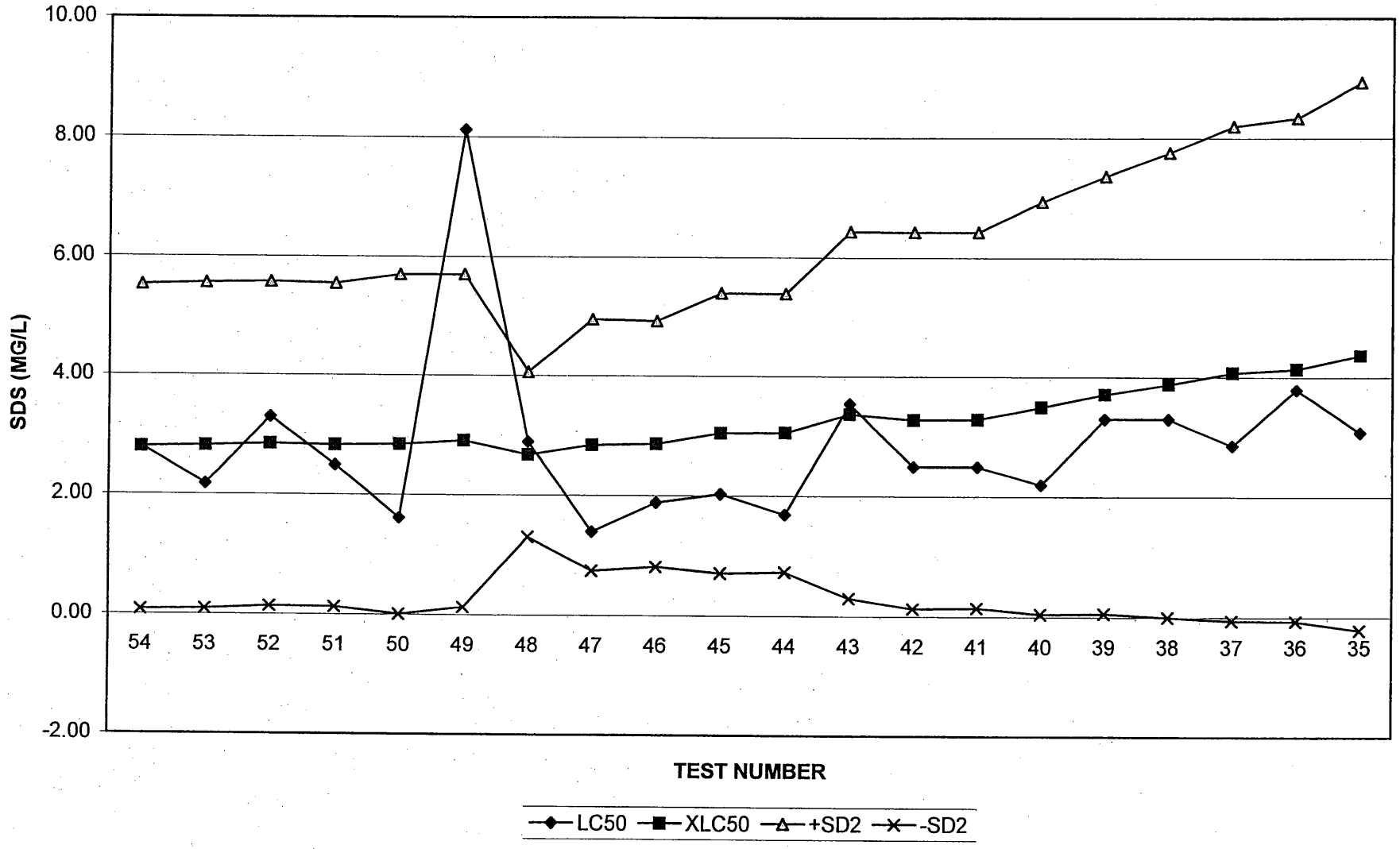
JM

SUMMARY – Ref Tox, M. beryllina, SDS toxicant.

COMMENTS:

Nominal Concentration	Number Dead
Control	0
1.25	10
2.5	10
5.0	10
10.0	10
20.0	10

MENIDIA BERYLLINA
ACUTE REFERENCE TOXICITY TEST:SODIUM LAURYL SULFATE



8/28/2003

MACTEC Engineering and Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No.: 114
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Client: Anamar/Canaveral Harbor

Project No.: 6063030002

Test Substance: Elutriate

Test Species: ~~L. variegatus~~ A. punctulata

Source of Sea Urchins: ARO

Date Received: 6/5/03

See Page 104 of the ~~Invertebrate~~ Organisms Holding Log

Condition of organisms: fair (contains damaged in shipping)

Dilution Water: Natural Filtered Seawater

Salinity: 28%

Test Temperature (°C): 20+/- 1

Type of Lighting: Flourescent

Test Guidelines: SOP-A-004

TEST CONCENTRATIONS

Concentration ( ) Control	Control	10%	50%	100%	
Dilution Water (mL)	50	45	25	-----	
Stock/Effluent (mL)	-----	5	25	50	

Stock Preparation / Comments: Elutriates prepared by stirring (0.5 hr.) 4 parts seawater with 1 part sediment and allowed to settle. Samples were

Type of Test Chamber: Glass Scintillation vials

Test Chamber Volume (mL): 24

Number of Replicates per Concentration: 3
Volume of Test Solution per Replicate (mL): 5

Test Location: Prep Room

Test Duration: 80 minutes

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form Number: 016b
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: elutriate

TEST SPECIES: ~~L. variegatus~~ A. punctulata

DATE		6/12/03																			
TIME		1500																			
INIT.		JMK																			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Control Seawater	A	20.9	8.2	~~6.9~~ 6.9	~~28~~ 28																
	B																				
Control Sed 10%	A	19.8	8.2	7.4	28																
	B																				
Control Sed 50%	A	19.7	8.0	7.5	28																
	B																				
Control Sed 100%	A	20.1	8.1	6.9	28																
	B																				
B7 10%	A	19.8	8.1	7.4	26																
	B																				
B7 50%	A	19.8	7.9	6.0	26																
	B																				
B7 100%	A	19.3	7.6	7.4	27																
	B																				
B8 10%	A	19.8	8.2	7.3	27																
	B																				
INST/METH		CG	SA 2000	DOS	CG 10																

CG

CG

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form Number: 016b
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: elutriate

TEST SPECIES: ~~I. variegatus~~ A. punctulata cc

DATE		6/12/03																			
TIME		1515																			
INIT.		KG																			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
~~CC05-6~~ 100% CG	A	21.1	8.1	7.4	28																
	B																		CG		
ECH03-9 10%	A	20.1	8.2	7.2	28																
	B																				
ECH03-9 50%	A	20.9	8.2	7.2	28																
	B																				
ECH03-9 100%	A	22.4	8.0	7.0	29																
	B																				
ECH03-10 10%	A	20.1	8.2	7.4	27																
	B																				
ECH03-10 50%	A	20.4	8.1	6.7	27																
	B																				
ECH03-10 100%	A	19.8	8.0	7.0	27																
	B																				
ECH03-11 10%	A	20.2	8.1	7.1	27																
	B																				
INST/METH		KG	YSI 6600	DO	YSI 10																

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form Number: 016b
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: elutriate

TEST SPECIES: ~~L. variegatus~~ A. punctulata

DATE		6/12/03																			
TIME		1515																			
INIT.		KG																			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
ECH03-11 50%	A	20.1	8.1	7.4	27																
	B																				
ECH03-11 100%	A	19.8	8.0	7.0	27																
	B				16 ~~27~~																
ECH03-12 10%	A	19.8	8.2	7.4	27																
	B																				
ECH03-12 50%	A	19.5	8.1	7.5	27																
	B																				
ECH03-12 100%	A	19.2	8.0	6.9	27																
	B																				
ECH03-13 10%	A	19.8	8.1	7.4	28																
	B																				
ECH03-~~14~~ 13 50%	A	19.6	8.1	~~6.8~~ 7.3	28																
	B																				
ECH03-~~14~~ 13 100%	A	19.2	7.9	6.9	28																
	B	~~19.2~~	~~7.9~~	~~7.9~~ 6.9	~~28~~ 16																
INST/METH		55 6	SX 200	203	Ner 10																

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form Number: 016b
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: elutriate

TEST SPECIES: 1 ~~variegatus~~ A. puntulata cr

DATE		6/12/03																			
TIME		1520																			
INIT.		KG																			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
ECH03-14 10%	A	19.4	8.2	7.5	28																
	B																				
ECH03-14 50%	A	19.8	8.2	7.2	28																
	B																				
ECH03-14 100%	A	22.3	8.1	7.0	28																
	B																				
ECH03-15 10%	A	20.9	8.1	7.3	27																
	B																				
ECH03-15 50%	A	20.6	8.2	7.3	27																
	B																				
ECH03-15 100%	A	22.4	8.1	7.0	28																
	B																				
ECH03-16 10%	A	20.1	8.2	7.4	28																
	B																				
ECH03-16 50%	A	20.1	8.3	7.3	28																
	B																				
INST/METH		YSI	YSI 2000	DO	Ref 10																

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form Number: 016b
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Anamar/Canaveral

PROJECT NUMBER: 6063030002

TEST SUBSTANCE: elutriate

TEST SPECIES: ~~L. variegatus~~ A. punctulata

DATE		6/12/03																			
TIME		1520																			
INIT.		KG																			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
ECH03-16 100%	A	22.3	8.0	~~8.0~~ 7.1	28																
	B																				
ECH03-17 10%	A	20.5	8.2	7.0	27																
	B																				
ECH03-17 50%	A	20.6	8.2	7.2	27																
	B																				
ECH03-17 100%	A	22.2	8.1	6.9	27																
	B																				
ECH03-20 10%	A	20.3	8.2	7.4	28																
	B																				
ECH03-20 50%	A	20.2	8.2	7.3	28																
	B																				
ECH03-20 100%	A	22.6	8.1	7.0	29																
	B																				
INST/METH		FS6	SA 900P	DO5	Rex 10																

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 116
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Sponsor: ANAMAR / Canaveral

Project No.: 6063030002

Test Substance: Elutriate

Test Species: *A. punctulata*

Investigator: [illegible]

Date: June 16, 2003

FINAL EGG FERTILIZATION COUNTS

Concentration (%, mg/L)	REPLICATE VIAL									
	A		B		C		D		TOTAL	
	F	U	F	U	F	U				
Control Seawater	80	20	73	27	81	19				
Control Sediment 10%	72	28	82	18	76	24				
Control Sediment 50%	83	17	75	25	77	23				
Control Sediment 100%	74	26	79	21	76	24				
~~B7 10%~~	~~81~~	~~19~~	~~77~~	~~23~~	~~69~~	~~31~~				
~~B7 50%~~	~~70~~	~~30~~	~~78~~	~~22~~	~~75~~	~~25~~				
~~B7 100%~~	~~72~~	~~28~~	~~80~~	~~20~~	~~68~~	~~32~~				
~~B8 10%~~	~~83~~	~~17~~	~~71~~	~~29~~	~~74~~	~~26~~				

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 116
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Sponsor: ANAMAR / Canaveral

Project No.: 6063030002

Test Substance: Elutriate

Test Species: *A. punctulata*

Investigator: [illegible]

Date: June 16, 2003

FINAL EGG FERTILIZATION COUNTS

Concentration (%, mg/L)	REPLICATE VIAL									
	A		B		C		D		TOTAL	
	F	U	F	U	F	U				
ECH03-9 10%	70	30	64	36	72	28				
ECH03-9 50%	62	38	77	23	69	31				
ECH03-9 100%	73	27	70	30	60	40				
ECH03-10 10%	71	29	62	38	66	34				
ECH03-10 50%	73	27	70	30	61	39				
ECH03-10 100%	79	21	72	28	66	34				
ECH03-11 10%	68	32	73	27	80	20				
ECH03-11 50%	71	29	67	33	65	35				
ECH03-11 100%	62	38	69	31	79	21				

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 116
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Sponsor: ANAMAR / Canaveral

Project No.: 6063030002

Test Substance: Elutriate

Test Species: *A. punctulata*

Investigator: [illegible]

Date: Jun 14, 2003

FINAL EGG FERTILIZATION COUNTS

Concentration (%, mg/L)	REPLICATE VIAL									
	A		B		C		D		TOTAL	
	F	U	F	U	F	U				
ECH03-12 10%	79	21	82	18	71	29				
ECH03-12 50%	69	31	75	25	80	20				
ECH03-12 100%	79	21	69	31	73	27				
ECH03-13 10%	82	18	69	31	76	24				
ECH03-13 50%	77	23	64	36	78	22				
ECH03-13 100%	68	32	81	19	80	20				
ECH03-14 10%	77	23	81	19	66	34				
ECH03-14 50%	80	20	74	26	70	30				
ECH03-14 100%	69	31	60	40	53	47				

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 116
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Sponsor: ANAMAR / Canaveral

Project No.: 6063030002

Test Substance: Elutriate _____

Test Species: *A. punctulata*

Investigator: [illegible]

Date: June 16, 2003

FINAL EGG FERTILIZATION COUNTS

Concentration (%, mg/L)	REPLICATE VIAL									
	A		B		C		D		TOTAL	
	F	U	F	U	F	U				
ECH03-15 10%	69	31	72	28	73	27				
ECH03-15 50%	71	29	74	26	70	30				
ECH03-15 100%	68	32	73	27	75	25				
ECH03-16 10%	72	28	66	34	85	~~18~~ 15				
ECH03-16 50%	78	22	70	30	71	29				
ECH03-16 100%	69	31	81	19	76	24				
ECH03-17 10%	75	25	76	24	68	32				
ECH03-17 50%	82	18	69	31	77	23				
ECH03-17 100%	68	32	70	30	75	25				

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 116
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Sponsor: ANAMAR / Canaveral

Project No.: 6063030002

Test Substance: Elutriate

Test Species: *A. punctulata*

Investigator: [illegible]

Date: June 16, 2003

FINAL EGG FERTILIZATION COUNTS

Concentration (%, mg/L)	REPLICATE VIAL									
	A		B		C		D		TOTAL	
	F	U	F	U	F	U				
ECH03-20 10%	79	21	85	15	72	28				
ECH03-20 50%	66	34	78	22	79	21				
ECH03-20 100%	73	27	78	22	65	35				

MACTEC Engineering and Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No.: 114
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Client: Misc

Project No.: Ref Tox

Test Substance: Copper sulfate

Test Species: A. punctucata

Source of Sea Urchins: ARO

Date Received: 6/5/03

See Page 109 of the ~~Invertebrate Holding~~ Organism Receipt Log

Condition of organisms: fair (container damaged in shipping)

Dilution Water: Natural Filtered Seawater

Salinity: 28%

Test Temperature (°C): 20+/- 1

Type of Lighting: Flourescent

Test Guidelines: SOP-A-004

TEST CONCENTRATIONS

Concentration ( )	Control	25	50	100	200	400
Dilution Water (mL)	100	99.875	99.75	99.5	99.0	98.0
Stock/Effluent (mL)	0	0.125	0.25	0.5	1.0	2.0

Stock Preparation / Comments: Primary stock: 0.1 g copper sulfate in 500 mL MilliQ water. Final stock solution used 10 mL of primary stock diluted to 100 mL MilliQ

Type of Test Chamber: Glass Scintillation vials

Test Chamber Volume (mL): 24

Number of Replicates per Concentration: 3
Volume of Test Solution per Replicate (mL): 5

Test Location: Prep Room

Test Duration: 80 minutes

seaurch.cov

J. Thy 6/12/03

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form Number: 016b
Revised: March 2001

ACUTE TOXICITY DATA SHEET - WATER QUALITY DATA

SPONSOR: Misc.

PROJECT NUMBER: Ref Tox

TEST SUBSTANCE: Copper sulfate

TEST SPECIES: A. punctucata

DATE		6/12/03																			
TIME		1245																			
INIT.		JMM																			
NOMIN CONCN % mg/L µg/L	REP	TEMP	PH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN	TEMP	pH	DO	SL or CN
Control		19.8	8.2	7.6	27																
25		19.8	8.3	7.4	27																
50		19.7	8.3	7.4	27																
100		19.7	8.3	7.4	27																
200		19.7	8.3	7.5	27																
400		19.7	8.3	7.5	27																
INST/METH																					

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 116
Revised: March 2001

SEA URCHIN FERTILIZATION TEST

Sponsor: ANAMAR / Canaveral

Project No.: ~~6063030002~~ REF TOX

Test Substance: Elutriate _____

Test Species: *A. punctulata*
Toxicant: $CuSO_4$

Investigator: [illegible]

Date: June 16, 2003

FINAL EGG FERTILIZATION COUNTS

Concentration (%, mg/L)	REPLICATE VIAL									
	A		B		C		D		TOTAL	
	F	U	F	U	F	U				
Control	80	20	73	27	81	19				166
25	79	~~79~~ 21	75	25	82	18				164
50	70	30	78	22	66	34				186
100	42	58	39	61	53	47				166
200	2	98	10	90	0	100				288
400	0	100	0	100	0	100				300

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: 06/16/03 TEST NUMBER: sea urch DURATION: 1 h 10 min.
TOXICANT : CuSO4
SPECIES: A. punctulata

RAW DATA: ---	Concentration (mg/L)	Number Exposed	Mortalities
	.00	300	66
	25.00	300	64
	50.00	300	86
	100.00	300	166
	200.00	300	288
	400.00	300	300

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 102.24
95% LOWER CONFIDENCE: 97.35
95% UPPER CONFIDENCE: 107.37

NOTE: MORTALITY PROPORTIONS WERE NOT MONOTONICALLY INCREASING.
ADJUSTMENTS WERE MADE PRIOR TO SPEARMAN-KARBER ESTIMATION.

D 3

Sediment Bioassay Data

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

Page: _____
QA Form No. 018
Revised: October 2002

Project No: 6063030002.0200 Client: Anamar/Canaveral Harbor Test: L. plumulosus, wh. Sed. Test

DAILY LOG

6/13/03	WQ taken, Organisms loaded, Airlines checked Covered
6/14/03	WQ Taken, organis observed, Airlies check vessels covered
6/15/03	WQ Taken, organisms observed, airlines checked, vessels covered, test renewed
6/16/03	WQ taken, test renewed, WQ taken again. Organism observed and airlines checked. Vessels covered
6/17/03	Old WQ Taken, organisms observed ~~and fed~~, Water renewed, new WQ taken, Airlines checked and vessels covered.
6/18/03	old WQ taken, orgaisms observed, water renewed, new WQ taken. Airlines checked and vessels covered
6/19/03	old WQ taken, water renewed, organisms observed, ~~water~~ new WQ taken. Airlines checked and vessels covered.
6/20/03	old WQ taken, water renewed, organisms observed, new WQ taken. Airlines checked and vessel covered.
6/21/03	old WQ take, water renewed, organis observed, new WQ taken, airline checked and vessels recovered

CB

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

Page: _____
QA Form No. 018
Revised: October 2002

Project No: 6063030002.0200 Client: Anamar/Canaveral Harbor Test: L. plumulosus, wh. Sed. Test

DAILY LOG

6/22/03 WQ taken, test renewed, organisms observed and fed, vessels covered, entire checked

6/23/03 - WQ taken, airlines checked, overlying water collected, organisms observed and counted, pore water collected, and test taken down

CG

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002.0200

TEST MATERIAL

Test Material: Sediment

See Page 1 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Leptochirus plumuosus

Lot Number: 2003-52

Age/ Life Stage: 3-5 mm

Date Acclimation/ Maintenance Began: 6/13/03

See Page 109 of Organism Receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <1%

TEST CONDITIONS

( ) Range Finder
(X) Screening
( ) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 24 hours Light
0 Hours Dark

Test Duration: 10 days

Test Area Used: Water bath

Test Temperature (°C): 20 +/- 2

Test Salinity (ppt): 28 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 20

Dilution Water: natural filtered seawater

TEST VESSELS

Dimensions (cm): - Length x 4.5 Width x 9 Height

Test Solution Height (cm) : 6

Test Vessels: (x) Open ( ) Covered

Test Container Volume: 2 qt.

Test Solution Volume: 800 mL

TEST SOLUTION PREPARATION

Test Concentration % mg/L									
Volume of Dilution Water Added (mL)									
Volume of Effluent/ Stock Added (mL)									

ADDITIONAL OBSERVATIONS:

DATA BY: JM

DATE: 6/23/03

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: CH03-Ctrl

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7			8.3	8.3		9.2		27		RD 1830
6/14/03 1	B	18.7 ~~19.7~~	18.7			8.3	8.3	9.1	8.6	28	28	JM 1400	JM 1500
6/15/03 2	C	18.4	18.2			8.2	8.3	7.6	7.6	27	28	RD 1445	RD ~~1445~~ 1700
6/16/03 3	D	18.0	18.0			7.9	7.9	5.0	7.2	28	28	CG 1330	CG 1500
6/17/03 4	E	18.0	18.0			8.2	8.1	7.7	7.8	26	26	CG 0900	CG 1130
6/18/03 5	A	18.1	18.0			8.1	7.9	7.6	7.8	28	28	CG 0930	KG 1345
6/19/03 6	B	18.5	18.1			8.1	8.2	7.9	7.9	28	27	CG 0900	CG 1030
6/20/03 7	C	18.0	18.7			8.2	8.2	8.0	8.1	29	28	CG 1000	CG 1130
6/21/03 8	D	18.3	19.0			8.2	8.2	7.8	7.8	28	28	JM 9:30	JM 1945
6/22/03 9	E	18.9	18.8			8.2	8.2	6.8	7.0 ~~8.0~~	28	28	JM 1900	JM 2000
6/23/03 10	A	19.0				8.2		8.0		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JM
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JM
6/22/03 9	~~19A, N, 1NF~~ jm	~~19A, N, 1NF~~ jm	~~19A, N, 1NF~~ jm	~~20A, N~~ jm	~~N, 18A, 2NF~~ jm	JM/jm
6/23/03 10	19A, 1NF	19A, 1NF	19A, 1NF	20A	18A, 2NF	jm

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-9**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.0				8.0		9.2		28		RD 1830
6/14/03 1	B	18.3	18.7			8.0	8.0	8.6	8.0	28	28	JA 1400	JA 1500
6/15/03 2	C	18.4	18.2			7.9	8.0	8.1	8.0	27	28	RD 1445	RD 1700
6/16/03 3	D	18.0	18.0			8.2	7.7	8.0	7.8	28	28	CG 1330	CG 1500
6/17/03 4	E	18.2	18.0			8.2	7.8	7.7	7.5	28	28	CG 0900	CG 1130
6/18/03 5	A	18.1	18.0			8.2	8.1	7.8	8.1	28	28	CG 0930	KG 1350
6/19/03 6	B	18.4	18.2			8.2	8.3	8.1	8.1	28	28	CG 0900	CG 1030
6/20/03 7	C	18.1	18.3			8.2	8.2	8.0	8.1	28	28	CG 1000	CG 1530
6/21/03 8	D	18.2	18.9			8.2	8.2	8.0	7.9	28	28	JA 930	JA 1945
6/22/03 9	E	18.9	18.9			8.2	8.2	7.9	6.9	28	28	JA 1400	JA 2000
6/23/03 10	A	19.3				8.2		7.9		28		CG 0930	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JA
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JA
6/22/03 9	~~20~~ 20A	~~20~~ A	~~19~~ 17 A	N	N	JA
6/23/03 10	20 A	20 A	15 A SNF	13 A TNF	15 A SNF	JA

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
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HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-10**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.2				8.0		9.2		29		RD 1830
6/14/03 1	B	18.3	18.4			8.0	8.0	8.3	8.5	28	28	JH 1400	JH 1500
6/15/03 2	C	18.4	18.1			7.7	8.4	8.0	8.1	28	28	RD 1445	RD 1700
6/16/03 3	D	18.0	18.0			8.2	7.9	7.9	7.7	28	28	CG 1330	CG 1500
6/17/03 4	E	18.1	18.0			8.1	8.0	6.4	7.0	28	28	CG 0900	CG 1130
6/18/03 5	A	18.2	18.0			8.2	8.1	6.3	8.0	28	28	CG 0930	KG 1350
6/19/03 6	B	18.4	18.0			8.3	8.3	8.0	8.1	28	28	CG 0900	CG 1030
6/20/03 7	C	18.2	18.3			8.2	8.2	7.9	8.2	28	28	CG 1000	CG 1130
6/21/03 8	D	18.1	19.0			8.2	8.2	7.6	7.9	28	28	JH 930	JH 1945
6/22/03 9	E	18.9	18.9			8.3	8.2	7.1	7.2	26	28	JH 1900	JH 2000
6/23/03 10	A	19.4				8.3		7.9		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03 10	15 A 5NF 5NE	16 A 4NF	15 A 5NF	19 A 1NF 1NE	16 A 4NF	JH

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
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HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-11**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt) old	Salinity (ppt) new	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.1				8.0		7.2		28		RD 1830
6/14/03 1	B	18.2	19.0			8.0	8.0	6.9	7.6	28	28	JH 1430	JH 1500
6/15/03 2	C	18.4	18.1			8.4	8.5	8.1	7.9	28	28	RD 1445	RD 1700
6/16/03 3	D	18.1	18.0			8.2	7.8	6.7	7.4	28	28	CG 1330	CG 1500
6/17/03 4	E	18.0	17.5			8.1	8.1	6.0	6.3	28	28	CG 0900	CG 1130
6/18/03 5	A	18.1	18.0 ~~8.1~~ CG			8.1	8.1	6.2	8.0	28	28	CG 0930	KG 1355
6/19/03 6	B	18.2	18.0			8.3	8.3	8.1	8.2	28	28	CG 0900	CG 1030
6/20/03 7	C	18.1	18.2			8.2	8.2	8.0	8.2	28	28	CG 1000	CG 1130
6/21/03 8	D	18.1	19.0			8.2	8.2	8.0	8.1	28	28	JH 930	JH 2000
6/22/03 9	E	18.8	18.9			8.2	8.2	6.3	6.9	27	28	JH 1900	JH 2000
6/23/03 10	A	19.3				8.2		~~6.1~~ 6.9 CG		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03 10	16A 4NF	13 7NF	20	16 4NF	14 6NF	[illegible]

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-12**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.1				8.1		8.8		28		RD 1830
6/14/03 1	B	18.6	18.3			8.1	8.1	6.3	7.6	29	28	JH 14:30	JH 1500
6/15/03 2	C	18.3	17.9			8.2	8.3	6.2	7.1	28	28	RD 1445	RD 1700
6/16/03 3	D	18.0	18.0			8.2	7.8	6.8	7.6	28	28	CG 1330	CG 1500
6/17/03 4	E	18.1	18.1			8.1	8.1	7.0	7.6	28	28	CG 0900	CG 1130
6/18/03 5	A	18.2	18.1			8.2	8.1	7.6	8.1	28	28	CG 0930	KG 1355
6/19/03 6	B	18.1	18.0			8.2	8.3	8.2	8.1	28	28	CG 0900	CG 1030
6/20/03 7	C	18.0	18.1			8.2	8.2	8.1	8.2	29	28	CG 1000	CG 1130
6/21/03 8	D	18.2	18.9			8.2	8.2	7.7	8.1	28	28	JH 930	JH 2000
6/22/03 9	E	18.9	18.8			8.2	8.2	6.8	6.9	28	28	JH 1400	JH 2000
6/23/03 10	A	19.1				8.1		~~7.9~~ 5.9 CG		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03 10	3NF 17 A	3NF 18 A	3NF 18 A	3NF 15 A	3NF 17 A	JH

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

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MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-13**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt) old	Salinity (ppt) new	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.3				8.2		7.6		28		RD 1830
6/14/03 1	B	18.3	18.4			8.3	8.2	7.5	7.7	29	28	JH 1400	JH 1500
6/15/03 2	C	18.4	18.0			8.3	8.4	8.0	8.0	28	28	RD 1445	RD 1700
6/16/03 3	D	18.0	17.8			8.2	8.0	7.2	7.4	28	28	CG 1330	CG 1500
6/17/03 4	E	18.2	18.0			8.1	8.1	5.9	7.6	28	28	CG 0900	CG 1130
6/18/03 5	A	18.0	18.1			8.2	8.0	7.7	7.7	28	28	CG 0930	KG 1400
6/19/03 6	B	18.3	18.0			8.3	8.3	8.0	8.1	29	28	CG 0900	CG 1030
6/20/03 7	C	18.1	18.1			8.2	8.2	8.0	8.2	29	28	CG 1000	CG 1130
6/21/03 8	D	18.0	19.0			8.2	8.2	~~8~~ 7.9 JH	~~8.7~~ JH 7.8	28	28	JH 930	JH 2000
6/22/03 9	E	18.8	18.9			8.2	8.2	6.9	7.0	28	28	JH 1900	JH 2002
6/23/03 10	A	19.3				8.2		7.9		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03 10	14 A 6NF	17 A 3NF	18 A 1NF	17 A 1NF	16 A 1NF	DD

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
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HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-14**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.2				8.1		7.2		29		RD 1930
6/14/03 1	B	18.3	18.4			8.1	8.1	7.6	7.4	28	28	JH 1400	JH 1500
6/15/03 2	C	18.4	18.1			8.2	8.3	8.1	8.0	28	28	RD 1445	RD 1700
6/16/03 3	D	18.0	18.1			8.2	8.1	8.0	7.7	27	28	CG 1330	CG 1500
6/17/03 4	E	18.3	18.2			8.2	8.2	7.7	7.8	27	28	CG 0900	CG 1130
6/18/03 5	A	18.0	18.2			8.2	8.2	7.8	8.1	28	27	CG 0930	KG 1400
6/19/03 6	B	18.5	18.0			8.3	8.3	8.0	8.1	29	28	CG 0900	CG 1030
6/20/03 7	C	18.2	18.2			8.2	8.2	8.0	8.2	29	28	CG 1000	CG 1130
6/21/03 8	D	18.1	18.8			8.2	8.2	8.0	8.0	28	28	JH 9:30	JH 2000
6/22/03 9	E	16.7	18.9			8.2	8.2	6.5	7.0	28	28	JH 1900	JH 2000
6/23/03 10	A	18.7				8.3		7.9 ~~7.9~~ 7.6		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03 10	8NF 12 A	6NF 14 A	20 A	20 A	6NF 14 A	JH

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-15**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.2				8.1		7.8		28		RD 1830
6/14/03 1	B	18.3	18.2			8.1	8.1	7.6	7.6	28	28	JH 1430	JH 1500
6/15/03 2	C	18.4	18.1			8.5	8.5	8.1	8.0	28	28	RD 1445	RD 1700
6/16/03 3	D	18.0	18.0			8.3	8.2	7.3	7.6	29	28	CG 1330	CG 1500
6/17/03 4	E	18.3	18.0			8.2	8.2	7.6	7.7	28	28	CG 0900	CG 1130
6/18/03 5	A	18.0	18.0			8.3	8.2	7.7	8.0	28	28	CG 0930	KG 1400
6/19/03 6	B	18.5	18.1			8.3	8.3	8.0	8.1	28	28	CG 0900	CG 1030
6/20/03 7	C	18.3	18.2			8.3	8.2	8.0	8.2	29	28	CG 1000	CG 1130
6/21/03 8	D	18.1	18.8			8.2	8.2	7.8	8.1	28	28	JH 7:30	JH 2000
6/22/03 9	E	18.8	18.9			8.2	8.2	6.5	7.0	28	28	JH 1400	JH 2000
6/23/03 10	A	18.8				8.3		~~7.9~~ 8.1		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03	18 A, 2NF	15 A, 5NF	7NF, 13 A	20 A	2NF, 18 A	

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-16**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.2				8.2		7.2		27		RD 1830
6/14/03 1	B	18.3	18.4			8.2	8.2	7.9	7.6	28	28	JM 14:30	JM 1500
6/15/03 2	C	18.4	18.1			8.4	8.5	8.1	7.7	29	28	RD 1445	RD 1700
6/16/03 3	D	18.1	18.0			8.2	8.2	7.7	~~7.7~~ 7.9	28	28	CG 1330	CG 1500
6/17/03 4	E	18.3	18.1			8.2	8.2	7.6	7.7	28	28	CG 0900	CG 1130
6/18/03 5	A	18.2	18.1			8.3	8.2	7.7	7.9	28	27	CG 0930	KG 1400
6/19/03 6	B	18.4	18.2			8.1	8.1	8.0	8.1	28	28	CG 0900	CG 1030
6/20/03 7	C	18.3	18.2			8.2	8.2	8.0	8.2	29	28	CG 1000	CG 1130
6/21/03 8	D	18.2	18.8			8.2	8.2	8.1	7.6	28	28	JM 830	JM 2000
6/22/03 9	E	18.9	18.9			8.2	8.2	6.8	6.9	28	28	JM 1400	JM 200
6/23/03 10	A	18.8				8.3		8.0		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JM
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	~~N~~	N	N	N	N	JM
6/22/03 9	N	N	N	N	N	JM
6/23/03 10	16A 4NF	18A 2NF	1NF 19A	3NF 17A	2NF 18A	

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-17**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.3				8.1		7.0		28		RD 1830
6/14/03 1	B	18.4	18.3			8.1	8.1	7.3	7.6	28	28	JH 1430	JH 1600
6/15/03 2	C	18.4	17.9			8.3	8.4	7.5	7.8	29	29	RD 1445	RD 1700
6/16/03 3	D	18.1	18.0			8.2	8.2	7.2	7.9	28	28	CG 1330	CG 1500
6/17/03 4	E	18.2	18.2			8.2	8.1	5.5	6.8	29	28	CG 0900	CG 1130
6/18/03 5	A	18.0	18.2			8.2	8.2	7.8	8.1	28	27	CG 0930	CG 1400
6/19/03 6	B	18.4	18.0			8.2	8.2	7.1	8.1	29	28	CG 0900	CG 1030
6/20/03 7	C	18.3	18.2			8.2	8.2	7.8	8.0	29	28	CG 1000	CG 1130
6/21/03 8	D	18.2	19.0			8.2	8.2	7.9	7.6	28	28	JH 1930	JH 2000
6/22/03 9	E	18.9	19.7			8.2	8.2	6.8	7.0	28	28	JH 1900	JH 2000
6/23/03 10	A	18.6				8.2		~~7.8~~ 8.1		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded	→	→	→	→	RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03 10	20 A NF	18 A NF	19 A NF	19 NF	~~18~~ 17 A NF	JH

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **CHO3-20**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.2				8.2		7.4		28		RD 1830
6/14/03 1	B	18.3	18.4			8.2	8.2	7.3	7.4	28	28	JH 1430	JH 1500
6/15/03 2	C	18.4	18.2			8.3	8.2	8.1	8.1	29	29	RD 1445	RD 1700
6/16/03 3	D	18.2	18.0			8.1	8.1	6.9	7.0	28	28	CG 1330	CG 1500
6/17/03 4	E	18.3	18.1			8.2	8.2	7.6	7.9	28	28	CG 0900	CG 1130
6/18/03 5	A	18.0	18.1			8.2	8.2	7.7	8.0	28	28	CG 0930	KG 1400
6/19/03 6	B	18.5	18.0			8.2	8.1	8.1	8.1	29	28	CG 0900	CG 1030
6/20/03 7	C	~~18.5~~ 18.1	18.1			8.2	8.2	8.1	8.1	29	28	CG 1000	CG 1130
6/21/03 8	D	18.2	18.9			8.2	8.2	8.0	7.9	28	28	JH 930	JH 2000
6/22/03 9	E	18.9	18.9			8.2	8.2	6.8	7.0	28	28	JH 1900	JH 2000
6/23/03 10	A	18.7				8.2		7.8		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	JH
6/23/03	15A, 5NF	19A, 1NF	19A, 1NF	17A, 3NF	17A, 3NF	JM

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

C.6

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **RS-CH03**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: L. plumulosus

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Hard (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.0				8.0		9.2		28		RD 1830
6/14/03 1	B	18.3	18.3			8.1	8.1	7.6	7.6	28	28	JH 1500	JH 1500
6/15/03 2	C	18.5	18.1			8.3	8.0	8.1	8.0	29	29	RD 1445	RD 1700
6/16/03 3	D	18.0	18.0			8.2	7.8	7.9	7.9	29	28	CG 1330	CG 1500
6/17/03 4	E	18.0	17.8			8.0	8.0	5.4	7.8	28	28	CG 0900	CG 1130
6/18/03 5	A	18.0	18.0			8.1	8.0	7.7	8.0	28	28	CG 0930	KC 1350
6/19/03 6	B	18.4	18.0			8.2	8.2	8.1	8.2	28	28	CG 0900	CG 1030
6/20/03 7	C	18.0	18.8			8.2	8.1	7.9	8.1	28	28	CG 1000	CG 1130
6/21/03 8	D	18.1	19.0			8.2	8.2	7.8	7.8	28	28	JH 930	JH 1945
6/22/03 9	E	18.8	18.9			8.1	8.2	6.1	7.0	25	28	JH 1900	JH 2000
6/23/03 10	A	18.4 ~~19.8~~				8.1 ~~8.3~~		7.9		28		CG 0900	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	20 loaded →					RD
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	~~17 JM~~ N	N	N	18 N	N	N
6/23/03	17 A 3NF	14 A 6NF	18 A 2NF	18 A 2NF ~~20 A 3NF~~	17 A 3NF	DD

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE:	5/9/03						5/12/03					
INIT.	CG						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
~~B7~~	~~25.0~~	~~7.8~~	~~7.7~~	~~0.266~~	~~<0.003~~	~~29 ppt OW~~	20.0	~~7.7~~	0.557	~~0.0028~~ 0.011	0.0028	~~27 ppt OW~~
B8	25.7	7.7	1.3	0.0481	<0.003	27 ppt OW	20.0	7.8	1.25	0.031	0.0021	28 ppt OW
B9	25.2	7.7	1.5	0.048	<0.003	27 ppt OW	20.0	7.7	1.00	~~0.024~~ 0.020	0.0023	28 ppt OW
B10	24.0	7.8	3.5	0.127	<0.003	28 ppt OW	20.0	7.8	2.43	0.059	0.0021	28 ppt OW
CC01-2	23.4	7.9	0.86	0.033	<0.003	28 ppt OW	20.0	7.9	0.904	~~0.013~~ 0.028	0.0023	27 ppt OW
CC03-4	23.2	7.9	0.69	~~0.09~~ 0.030	<0.003	27 ppt OW	21.0	7.9	0.351	0.013	0.0020	29 ppt OW
~~CC05-6~~	~~23.5~~	~~7.9~~	~~1.90~~	~~0.073~~	~~<0.003~~	~~28 ppt OW~~	21.0	7.9	3.24	~~0.143~~ 0.106	0.003	28 ppt OW
E-CH03-9	19.8	7.7	11.5	0.243	0.099	27 ppt OW	20.0	7.7	18.0	0.439	0.0031	27 ppt OW
E-CH03-10	20.0	7.8	19.4	0.486	~~0.080~~ 0.008	27 ppt OW	20.0	7.8	30.1	0.734	0.011	27 ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE:	5/9/03						5/12/03					
INIT.	CG						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
E-CHΦ3-11	19.0	7.6	18.8	0.271	0.0030	28 ppt OW	20.0	7.6	19.3	0.299	0.003	28 ppt OW
E-CHΦ3-12	19.1	8.3	12.8	0.889	0.0029	28 ppt OW	20.0	8.3	27.7	2.05 ~~2.50~~	0.0020	28 ppt OW
E-CHΦ3-13	18.7	7.7	19.5	0.348	0.0024	27 ppt OW	20.0	7.7	17.0	0.333 ~~0.415~~	0.0023	27 ppt OW
E-CHΦ3-14	18.7	7.6	18.8	0.265	0.003	28 ppt OW	19.0	7.6	17.0	0.250	0.0029	28 ppt OW
E-CHΦ3-15	18.5	7.6	20.0	0.278	0.0031	28 ppt OW	20.1	7.6	26.3	0.408	0.0019	28 ppt OW
E-CHΦ3-16	18.2	7.6	14.3	0.194	0.0024	28 ppt OW	20.0	7.6	18.4	0.285	0.0029	28 ppt OW
E-CHΦ3-17	18.5	7.7	22.9	0.402	0.003	27 ppt OW	19.0.	7.7	28.1	0.512 ~~0.8~~	0.0039	27 ppt OW
RS-CHΦ3	18.3	7.8	4.59	0.099	0.023	27 ppt OW	19.0	7.8	2.68	0.065	0.0012	27 ppt OW
Ctrl	23.0	7.8	5.03	0.151	0.0150	28 ppt OW	19.0	7.9	3.16	0.089	0.0019	28 ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE:	5/14/03						5/16/03					
INIT.	JA						JK					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overlying Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overlying Water
B7	20.0	7.8	0.261	0.006	0.002	27 ppt OW	20.0	7.8	0.089	0.002	0.0023	28 ppt OW
B8	20.0	7.8	insufficient sample volume		0.0093	28 ppt OW	20.0	7.9	0.001	0	0.0021	28 ppt OW
B9	20.0	7.7	1.30	0.025	0.0084	28 ppt OW	20.0	7.8	0.018	0.0004	0.0024	28 ppt OW
B10	20.0	7.8	3.00	0.073	0.0012	28 ppt OW	20.1	7.8	0.700	0.017	0.0031	28 ppt OW
CC01-2	20.0	7.9	0.471	0.018	0.0314	28 ppt OW	20.2	7.8	>100 interferences	>100	0.0092	28 ppt OW
CC03-4	20.0	8.0	0.210	0.008	0.0217	27 ppt OW	20.0	7.9	0.801	0.024	0.0039	28 ppt OW
CC05-6	20.0	7.9	1.34	0.050	0.0143	28 ppt OW	20.1	7.8	0.012	0.0003	0.0032	28 ppt OW
E-CH03-9	20.0	7.8	8.34	0.203 ~~0.0203~~	0.0239	28 ppt OW	20.1	7.9	0.034	0.001	0.0029	28 ppt OW
E-CH03-10	20.0	7.8	9.77	0.238 ~~0.0246~~	0.0246	28 ppt OW	20.0	7.8	0.015	0.0004	0.0031	28 ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE:	5/14/03						5/16/03						
INIT.	JA						JA						
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
E-CHØ3-11	20.0	7.7	11.0	0.214 ~~0.268~~ Jm	0.034	28 ppt OW	20.1	7.9	10.1	0.3~~08~~	0.0031	29 ppt OW
E-CHØ3-12	20.0	8.3	7.41	0.548 ~~0.670~~ Jm	0.0362	28 ppt OW	20.0	8.2	9.5	0.561	0.0039	29 ppt OW
E-CHØ3-13	20.0	7.7	16.7	0.324 ~~0.407~~ Jm	0.0219	28 ppt OW	20.1	8.1	6.8	0.325	0.0024	29 ppt OW
E-CHØ3-14	20.0	7.6	9.77	0.151	0.0146	28 ppt OW	20.1	8.1	7.3	0.348	0.0036	29 ppt OW
E-CHØ3-15	20.0	7.6	10.0	0.155	0.0239	28 ppt OW	20.0	8.1	11.4	0.540	0.0023	29 ppt OW
E-CHØ3-16	20.0	7.7	6.18	0.120	0.0469	28 ppt OW	20.1	8.2	20.1	1.195	0.0031	29 ppt OW
E-CHØ3-17	20.0	7.8	20.7	0.505	0.013	28 ppt OW	20.1.	8.1	18.6	0.887	0.0029	29 ppt OW
RS-CHØ3	20	7.8	1.75	0.042	0.014	28 ppt OW	20.1	8.0	25.0	0.955	0.0039	29 ppt OW
Ctrl	20	7.9	3.10	0.094	0.023	28 ppt OW	20.1	7.7	1.9	0.037	0.0001	28 ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE:	5/6/03, Day -3						5/8/03, Day -1					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
~~B7~~	~~20.1~~	~~8.0~~	~~7.56~~	~~0.287~~	~~0.016~~	28ppt PW	16.9	~~8.0~~	~~1.80~~	0.055 ~~0.0286~~	0.011	27ppt PW
B8	20.0	7.8	7.87	0.192	0.011	28ppt PW	17.8	7.8	37.1	0.783	0.011	28ppt PW
B9	20.3	8.0 ~~7.9~~	~~9.87~~	0.376	0.03	28ppt PW	17.9	7.9	0.63	0.017 ~~0.0396~~	0.019	25ppt PW
B10	20.1	7.9	19.4	0.601 ~~0.758~~	0.001	27ppt PW	19.5	7.9	0.360	0.014	0.005	25ppt PW
CC01-2	20.0	7.5	5.82	~~0.090~~	0.010	28ppt PW	18.1	7.5	2.0	0.031	0.0019	25ppt PW
CC03-4	20.0	7.7	10.5	0.204	0.022	28ppt PW	18.1	7.8	1.3	0.027	0.0031	27ppt PW
~~CC05-6~~	~~20.2~~	~~7.7~~	~~13.5~~	~~0.267~~	~~0.01~~	~~28ppt PW~~	~~18.4~~	~~7.7~~	~~3.9~~	~~0.068~~	~~0.0021~~	~~27ppt PW~~
E CH03-09	20.1	7.6	46.9	0.733	0.071	28ppt PW	18.8	7.6	1.27	0.018	0.0029	27ppt PW
E CH03-10	19.9	7.5	73.2	0.898	0.092	28ppt PW	18.1	7.5	16.0	0.173	0.073	27ppt PW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE:	5/6/03, Day -3						5/8/03, Day -1					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
ECH03-11	20.0	7.6	68.3	1.05	0.03	28 ppt PW	18.0	7.6	18.1	0.243	0.009	27 ppt PW
ECH03-12	20.1	8.0	34.9	1.33	0.68	28 ppt PW	17.9	7.4	12.5	0.106	0.0019	27 ppt PW
ECH03-13	19.9	~~8.3~~ 7.7	~~2.8~~ 65.1	~~0.144~~ 1.59	0.38	25 ppt PW	18.9	7.7	12.4	~~0.303~~ 0.224	0.0022	27 ppt PW
ECH03-14	19.8	7.6	12.8	0.198	11.0	28 ppt PW	18.7	7.6	13.0	0.184	0.0020	28 ppt PW
ECH03-15	20.1	7.6	73.5	1.14	23.4	28 ppt PW	19.0	7.6	12.9	0.199	0.0021	25 ppt PW
ECH03-16	19.9	7.6	51.3	0.795	0.16	27 ppt PW	18.9	7.6	7.0	~~0.0938~~ 0.100	0.0010	27 ppt PW
ECH03-17	20.1	7.6	75.5	1.170	43.3	28 ppt PW	18.9	7.6	19.2	0.298	0.0018	31 ppt PW
RS CH03	20.2	8.2	9.31	0.549	3.23	29 ppt PW	18.9	7.7	4.59	0.083	0.103	27 ppt PW
Ctrl	20.1	8.4	16.3	1.473	0.03	29 ppt PW	19.0	7.6	5.03	0.073	0.098	27 ppt PW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE: 5/9/03, Day 0

INIT. JK

Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
~~B7~~	~~18.7~~	~~7.7~~	~~1.47~~	~~0.031~~	~~0.0026~~	~~24 ppt PW~~						
B8	19.3	7.8	18.7	0.456	0.0031	24 ppt PW						
B9	19.2	7.9	1.30	0.038	0.0021	26 ppt PW						
B10	18.9	7.7	0.55	0.010	0.0028	26 ppt PW						
CC01-2	19.3	7.6	0.71	0.11	0.0029	24 ppt PW						
CC03-4	19.5	7.6	7.63	0.118	0.003	24 ppt PW						
~~CC05-6~~	~~19.0~~	~~7.6~~	~~1.22~~	~~0.018~~	~~0.002~~	~~24 ppt PW~~						
ECH03-09	18.9	7.7	2.44	0.045	0.0019	24 ppt PW						
ECH03-10	19.0	7.7	5.62	0.105	0.0031	24 ppt PW						

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 0
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: L. plumulosus

DATE: 5/9/03, Day Ø

INIT. JK

Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Wat Overylin Water
ECHØ3-11	19.0	7.6	6.2	0.0961	<.003	24 ppt PW						
ECHØ3-12	19.1	8.3	2.8	0.194	<0.003	27 ppt PW						
ECHØ3-13	18.7	7.7	7.1	0.123	0.002	25 ppt PW						
ECH03-14	18.8	7.6	7.5	0.107	0.0021	27 ppt PW						
ECH03-15	18.5	7.6	11.0	0.149	0.0024	29 ppt PW						
ECH03-16	18.2	7.6	7.4	0.992	0.021	29 ppt PW						
ECH03-17	18.8	7.7	10.2	0.188	0.0023	29 ppt PW						
RS-CH03	18.8	8.0	4.59	0.161	0.0019	28 ppt PW						
Ctrl	18.9	7.7	5.03	0.090	0.0020	28 ppt PW						

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of CdCL2 : 0.0328 (g) Volume of Milli-Q Water: 1000 (mL) Date Prepared: 6/13/03	[X] Definitive [X] Static [ ] Screening Duration: 96 Hours
Test Organism History	Dilution Water: Natural Filtered Seawater
Species: ~~M. bahia~~ L. plumulosus Batch Number: 2003-52 Age/Life Stage: 3-5mm Date of Acclimation/Maintenance: See Page 109 of Organism Receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 1 No. Of Organisms/Replicate: 10	Lighting: [X] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 100 L X - W 50 H Test Solution Height: 4 (cm) Test Vessel Volume: 0.34 (L) Test Solution Volume: 0.20 (L) Test Temperature: 20 ± 1 °C Test Salinity: 28 ± 2 ppt
Test Area Used:	Test Vessel Composition: [X] Glass [ ] Plastic
Test Concentrations Based on: [X] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed:

Test Concentrations: (Units: mg/L)	Control	0.256	0.512	1.02	2.05	4.1	
Amount Dilution Water Added (mL)	250	246.8	243.6	237.2	224.4	199.8	
Amount of Stock Added (mL)	0	3.2	6.4	12.8	25.6	51.2	

Additional Observations:

Data By: [signature] Date: 6/13/03

CG

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: L. plumulosus

DAY 0 — REF TOXICANT: CdCL2

Nominal Concentration (mg/L)	Date: 6/13/03		Time: 1745		Analyst: RD	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	loaded	19.1	28	7.6	8.2
0.256	↓	↓	19.2	28	7.6	8.2
0.512			19.2	28	7.5	8.2
1.02			19.2	27	7.5	8.2
2.05			19.2	26	7.5	8.2
4.10			19.3	26	7.4	8.3

DAY 1	Date: 6/14/03		Time: 1400		Analyst: JH	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	19.3	28	7.6	8.2
0.256	9	1d	19.3	28	7.3	8.2
0.512	10	N	19.3	27	7.5	8.2
1.02	10	N	19.3	28	7.4	8.2
2.05	10	N	19.3	28	7.4	8.2
4.10	10	N	19.	28	7.3	8.2

DAY 2	Date: 6/15/03		Time: 1600		Analyst: [illegible]	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	19.0	28	7.7	8.2
0.256	10	N	19.2	27	7.6	8.2
0.512	10	N	19.2	28	7.7	8.2
1.02	10	N	19.2	27	7.6	8.2
2.05	9	INF	19.2	26	7.6	8.2
4.10	10	N	19.4	26	7.7	8.2

CG

MACTEC Engineering and Consulting, Inc.
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

QA FORM NO: 097 REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 3 AND 4

Client: Mire | Project Number: Ref Tox | Species: L. plumulosus

DAY 3

Nominal Concentration	Date: 06/16/03		Time: 1400		Analyst: DD	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	~	18.8	27	7.5	7.9
0.256	10	~	18.8	27	7.5	8.0
0.512	10	~	18.8	27	7.5	8.0
1.02	10	~	18.9	27	7.5	8.1
2.05	7	3d	18.9	26	7.6	8.1
4.10	7	3 d	19.0	26	7.5	8.1

DAY 4	Date: 6/17/03		Time: 0920		Analyst: CG	
Nominal Concentration	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	19.1	28	7.4	8.1
0.256	10	N	19.3	27	7.3	8.1
0.512	10	N	19.2	27	7.4	8.2
1.02	10	N	19.4	27	7.4	8.2
2.05	1	6d	19.3	26	7.5	8.2
4.10	0	7d	19.4	26	7.4	8.2

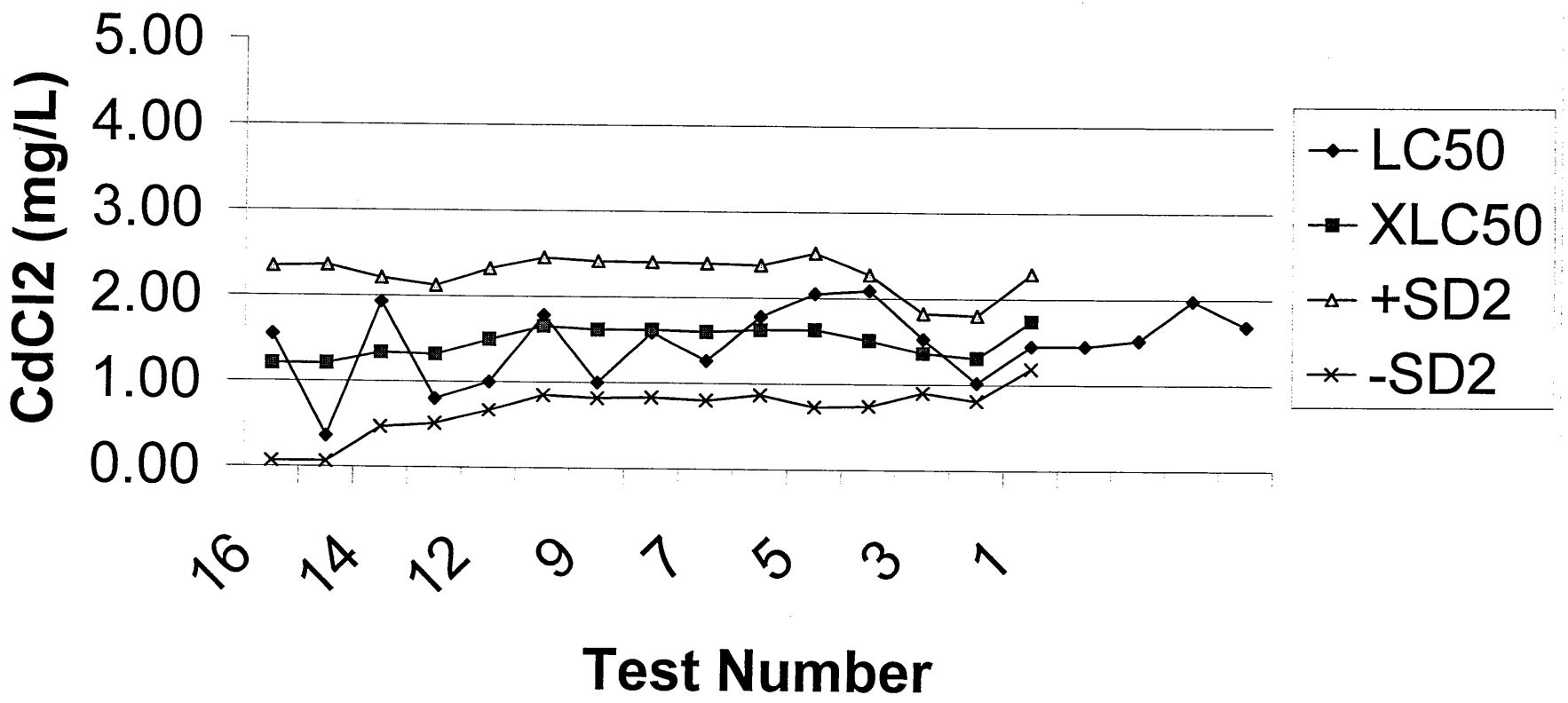
SUMMARY

Nominal Concentration	Number Dead
Control	0
0.256	0
0.512	0
1.02	0
2.05	9
4.10	10

COMMENTS:

CG

L. plumulosus
Reference Toxicant Test:
Cadmium Chloride



TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: 06/16/03 TEST NUMBER: 1 DURATION: 96 h
TOXICANT : CdCl2
SPECIES: L. plumulosus

RAW DATA: --- ----	Concentration (mg/L)	Number Exposed	Mortalities
	.00	10	0
	.26	10	0
	.51	10	0
	1.02	10	0
	2.05	10	9
	4.10	10	10

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 1.55
95% LOWER CONFIDENCE: 1.36
95% UPPER CONFIDENCE: 1.77

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: October 2002

Project No: 6063030002.0200 Client: Anamar/Canaveral Harbor Test: M. bahia, Whole Sediment

DAILY LOG

6/13/03 Organisms loaded, WQ taken, Airlines checked, Covered (vessels). Organisms fed.

6/14/03 WQ taken, test renewed, Airlies checked M. Bahia ~~feed~~ fed. jmm

6/15/03 WQ taken, test renewed, airlines checked M. bahia fed, covered.

6/16/03 WQ taken, test renewed, M. bahia feed, WQ taken again, then airlines checked and vessels covered.

6/17/03 old WQ taken, Bahia feed, water renewed, New WQ taken. Airlines checked and organism observed. Vessels covered.

6/18/03 old WQ taken, bahia feed, water renewed, new WQ taken. Airlines checked and organism observed. vessels covered

6/19/03 Old WQ taken, bahia feed, water renewed, new WQ taken, Airlines checked and organism observed. All vessels covered

6/20/03 old WQ taken, test renewed airlines checked water renewed organism observed. vessels covered organism ~~Feed~~ fed jmm and new WQ taken.

6/21/03 old WQ taken, test renewed airlies checked organism observed vessels covered organism feed new WQ taken

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: October 2002

Project No: 6063030002.0200 Client: Anamar/Canaveral Harbor Test: M. bahia, Whole Sediment

DAILY LOG

6/22/03 WQ taken, test renewed, WQ taken organism observed, and ~~feed~~ fed, results covered, airlines checked.

6/23/03 WQ Taken, airlines checked. Organism observed and counted. Test taken down. Overlaying water collected. Pore water collected.

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002.0200

TEST MATERIAL

Test Material: Sediment

See Page 1 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Mysidopsis bahia

Lot Number: 2003-52

Age/ Life Stage: 3 days

Date Acclimation/ Maintenance Began: 6/13/03

See Page 109 of Organism Receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <1%

TEST CONDITIONS

( ) Range Finder
(X) Screening
( ) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 hours Light
8 Hours Dark

Test Duration: 10 days

Test Area Used: Water bath

Test Temperature (°C): 20 +/- 2

Test Salinity (ppt): 25 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 20

Dilution Water: natural filtered seawater

TEST VESSELS

Dimensions (cm): 95 Length x 26 Width x 7 Height

Test Solution Height (cm) : 5

Test Vessels: ( ) Open (x) Covered

Test Container Volume: 1.6 L

Test Solution Volume: .6 L

TEST SOLUTION PREPARATION

Test Concentration % mg/L									
Volume of Dilution Water Added (mL)									
Volume of Effluent/ Stock Added (mL)									

ADDITIONAL OBSERVATIONS:

200 mL of sediment

DATA BY: [signature] DATE: 6/13/03

[signature]

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No. 106
Effective: July 2002

DAILY FEEDING LOG

Sponsor: Anamar/Canaveral	Project No.: 6063030002.0200
Test Substance: Sediment	Test Species: M. bahia

TEST DAY	DATE	TIME	INITIALS	FOOD TYPE	QUANTITY	COMMENTS
1	6/14/03	1600	JH	BS	≈ 1 mL	
2	6/15/03	1730	RD	BS	≈ 1 mL	
3	6/16/03	1000	CG	BS	≈ 1 mL	
4	6/17/03	1110	CG	BS	≈ 1 mL	
5	6/18/03	1000	CG	BS	≈ 1 mL	
6	6/19/03	0900	CG	BS	≈ 1 mL	
7	6/20/03	1030	CG	BS	≈ 1 mL	
8	6/21/03	1930	JH	BS	≈ 1 mL	
9	6/22/03	1900	DD	DD	≈ 1 ml	
10	—	—	—	—	—	

BS= Brine Shrimp nauplii YTC= Yeast/Trout Chow/Cereal Leaves Algae= Green Algae (*Selenastrum capricornutum*)

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **CH03-CTRL**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7				8.1		8.5		25		KG 1600
6/14/03 1	B	18.5	18.7			8.1	8.1	7.9	8.0	25	25	JA 1400	JA 1500
6/15/03 2	C	18.4	18.1			8.3	8.4	7.8	7.9	26	25	RD 1630	RD 1735
6/16/03 3	D	18.7	18.2			8.1	8.2	7.8	7.9	25	25	CG 1000	CG 1200
6/17/03 4	E	19.3	18.5			8.1	8.1	7.2	7.6	25	25	CG 0830	CG 1045
6/18/03 5	A	18.0	18.0			8.2	8.1	7.9	7.8	25	25	CG 0900	CG 1115
6/19/03 6	B	18.8	18.2			8.2	8.2	8.1	8.0	25	25	CG 0830	CG 1000
6/20/03 7	C	18.1	18.3			8.2	8.2	7.9	8.2	25	25	[illegible]	CG 1130
6/21/03 8	D	18.1	19.0			8.2	8.2	7.6	7.5	25	25	JA 9:00	JA 19:30
6/22/03 9	E	20.2	20.0			8.4	8.3	7.9	7.6	25	25	DD 1800	DD 2000
6/23/03 10	A	19.0				8.2		8.0		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JA
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JA
6/21/03 8	N	N	N	N	N	JA
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	N 20A	N 20A	N 20A	2NF N 18A	1NF N 19A	CG/JA

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-9**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7				8.0		8.4		26		KG 1600
6/14/03 1	B	18.6	18.7			8.0	8.0	7.9	7.8	25	25	JM 1400	JM 1500
6/15/03 2	C	18.3	18.0			8.3	8.3	7.2	7.5	26	25	RD 1630	RD 1735
6/16/03 3	D	18.6	18.2			8.1	8.0	7.2	7.8	26	26	CG 1000	CG 1200
6/17/03 4	E	19.2	18.3			8.2	8.2	7.5	7.8	26	26	CG 0830	CG 1045
6/18/03 5	A	18.0	18.0			8.2	8.1	7.7	7.8	26	26	CG 0900	CG 1115
6/19/03 6	B	18.0	18.0			8.2	8.2	8.2	8.1	26	26	CG 0830	CG 1000
6/20/03 7	C	18.5	18.4			8.1	8.2	6.9	7.9	25	26	JM 9:00	CG 1030
6/21/03 8	D	18.2	19.0			8.2	8.2	7.1	7.8	26	26	JM 9:00	JM 1730
6/22/03 9	E	19.9	18.9			8.5	8.3	8.0	7.9	26	25	DD 1800	DD 2000
6/23/03 10	A	19.0				8.3		7.9		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JM
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JM
6/21/03 8	N	N	N	N	N	JM
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	18 A 2NF	20 A	20 A	19 A 1NF	17 A 3NF	CG/JM

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-10**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.8				8.0		8.4		25		KG 1600
6/14/03 1	B	18.3	18.4			8.0	8.0	7.6	7.9	25	25	JH 1400	JH 1500
6/15/03 2	C	18.5	17.9			8.3	8.3	7.2	7.4	26	25	RD 1630	RD 1735
6/16/03 3	D	18.0	18.0			8.2	8.1	8.0	7.7	26	25	CG 1000	CG 1200
6/17/03 4	E	19.0	18.2			8.2	8.2	7.5	7.7	27	26	CG 0830	CG 1045
6/18/03 5	A	18.0	18.1			8.2	8.2	7.8	7.9	26	26	CG 0900	CG 1115
6/19/03 6	B	18.7	18.2			8.2	8.2	7.9	8.0	26	26	CG 0830	CG 1000
6/20/03 7	C	18.8	18.6			8.1	8.2	5.9	7.9	25	26	JH 9:00	CG 1030
6/21/03 8	D	18.1	18.9			8.2	8.2	7.8	7.6	26	26	JH 700	JH 1930
6/22/03 9	E	19.8	18.9			8.5	8.3	8.1	7.5	26	25	DJ 1800	DJ 2000
6/23/03 10	A	19.4				8.3		7.9		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JH
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DJ
6/23/03 10	16A 4NF	20A	19A 1NF	19A 1NF	19A 1NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-11**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt) old	Salinity (ppt) new	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7				8.1		8.4		26		KG 1600
6/14/03 1	B	18.5	18.6			8.1	8.1	7.9	7.6	25	25	JH 1400	JH 1500
6/15/03 2	C	18.4	17.9			8.3	8.3	7.2	7.6	26	25	RD 1630	RD 1735
6/16/03 3	D	18.0	18.0			8.2	8.1	7.7	7.4	26	26	CG 1000	CG 1200
6/17/03 4	E	19.0	18.2			8.2	8.1	7.1	7.0	27	26	CG 0830	CG 1045
6/18/03 5	A	18.1	18.1			8.2	8.2	7.7	7.7	27	26	CG 0900	CG 1115
6/19/03 6	B	18.8	18.4			8.1	8.2	7.9	8.0	26	25	CG 0830	CG 1000
6/20/03 7	C	18.8	18.6			8.2	8.2	6.9	8.1	25	26	JH 9:00	CG 1030
6/21/03 8	D	18.2	18.8			8.2	8.2	8.1	8.0	26	26	JH 900	JH 1930
6/22/03 9	E	19.8	19.2			8.3	8.2	8.0	7.9	26	25	DD 1800	DD 1800
6/23/03 10	A	19.3				8.2		7.9		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Coded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JH
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	19 A INF	19 A INF	20 A	19 A INF	17 K 3NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-12**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7				8.0		8.6		26		KG 1600
6/14/03 1	B	18.5	18.6			8.0	8.0	7.5	7.6	25	25	JH 1400	JH 1500
6/15/03 2	C	18.4	17.9			8.1	8.2	6.1	6.5	26	25	RD 1630	RD 1735
6/16/03 3	D	18.2	18.1			8.0	8.1	7.9	7.9	27	26 ~~27~~	CG 1000	CG 1200
6/17/03 4	E	18.9	18.1			8.2	8.1	7.6	7.6	27	26	CG 0830	CG 1045
6/18/03 5	A	18.0	18.0			8.2	8.1	7.7	7.7	27	26	CG 0900	CG 1115
6/19/03 6	B	19.0	18.5			8.2	8.2	7.8	7.9	27	25	CG 0820	CG 1000
6/20/03 7	C	18.8	18.7			8.1	8.2	7.0	7.7	25	26	JH 9:15	CG 1030
6/21/03 8	D	18.1	18.9			8.2	8.2	7.7	7.8	26	26	JH 900	JH 1930
6/22/03 9	E	19.5	19.2			8.4	8.3	7.7	7.9	26	25	DD 1800	DD 2000
6/23/03 10	A	19.1				8.1		5.9		26		CG 0830	

Observ Date-Day	Replicate A	Replicate B	Replicate C	Replicate D	Replicate E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JH
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	18 ~~N~~ 2NF	16 ~~N~~ 4NF	16 ~~N~~ 4NF	18 ~~N~~ 2NF	16 ~~N~~ 4NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-13**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7				8.0		8.6		25		KG 1600
6/14/03 1	B	18.5	18.6			8.0	8.0	7.9	8.0	25	25	JH 1400	JH 1500
6/15/03 2	C	18.4	17.9			8.2	8.2	6.1	7.0	26	25	RD 1630	RD 1735
6/16/03 3	D	18.1	18.0			8.2	7.9	7.2	7.3	27	26	CG 1000	CG 1200
6/17/03 4	E	18.9	18.3			8.2	8.1	7.4	7.7	27	26	CG 0880	CG 1045
6/18/03 5	A	18.1	18.0			8.2	8.1	5.7	7.6	27	26	CG 0900	CG 1115
6/19/03 6	B	18.8	18.5			8.2	8.2	7.7	7.9	27	26	CG 0830	CG 1000
6/20/03 7	C	18.6	18.6			8.1	8.2	6.9	7.8	25	26	JH 9:15	CG 1030
6/21/03 8	D	18.1	18.9			8.2	8.2	7.4	7.6	26	26	JH 9:15	JH 1430
6/22/03 9	E	19.3	19.4			8.3	8.2	7.9	7.5	26	25	DS 1800	DS 2000
6/23/03 10	A	19.3				8.2		7.9		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Coded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JH
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DS
6/23/03 10	18 A 2NF	19 A 1NF	18 A 2NF	20 A	18 A 2NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-14**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.6				8.1		8.6		25		KG 1600
6/14/03 1	B	18.5	18.6			8.1	8.1	JH 7.6	7.7	25	25	JH 1400	JH 1500
6/15/03 2	C	18.4	17.9			8.4	8.4	7.6	7.3	26	25	RD 1630	RD 1735
6/16/03 3	D	18.3	18.0			8.3	7.9	8.1	7.9	27	25	CG 1000	CG 1200
6/17/03 4	E	18.2	18.0			8.2	8.2	7.5	7.7	27	26	CG 0830	CG 1045
6/18/03 5	A	18.1	18.0			8.1	8.1	7.9	7.8	27	26	CG 0900	CG 1115
6/19/03 6	B	18.3	18.4			8.2	8.2	8.0	7.9	27	26	CG 0830	CG 1000
6/20/03 7	C	18.2	18.4			8.2	8.2	7.2	8.1	27	26	JH 9:00	CG 1030
6/21/03 8	D	18.2	18.9			8.2	8.2	7.9	7.8	26	26	JH 915	JH 930
6/22/03 9	E	19.4	19.4			8.3	8.3	7.9	7.7	26	26	DD 1800	DD 2000
6/23/03 10	A	19.1				8.2		7.9		27		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JH
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	12 A 8NF	17 A 3NF	12 A 8NF	14 A 6NF	14 A 6NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-15**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.2				8.1		8.6		26		KG 1600
6/14/03 1	B	18.5	18.6			8.1	8.1	7.8	7.6	25	25	JH 1400	JH 1500
6/15/03 2	C	18.3	18.0			8.4	7.2	7.4	7.5	26	25	RD 1630	RD 1735
6/16/03 3	D	18.1	18.0			8.3	8.2	8.0	7.5	27	25	CG 1000	CG 1200
6/17/03 4	E	18.1	18.0			7.9	8.1	7.6	7.4	27	26	CG 0830	CG 1045
6/18/03 5	A	18.0	18.0			8.2	8.1	7.5	7.6	26	26	CG 0900	CG 1115
6/19/03 6	B	18.3	18.1			8.3	8.2	8.0	8.0	27	26	CG 0830	CG 1000
6/20/03 7	C	17.8	18.1			8.2	8.2	7.5	8.1	25	26	JH 9:30	CG 1030
6/21/03 8	D	18.2	19.0			8.2	8.2	7.9	7.8	26	26	JH 9:15	JH 1930
6/22/03 9	E	19.5	19.0			8.3	8.2	7.6	7.4	26	25	DD 1820	DD 2000
6/23/03 10	A	18.9				8.1		7.6		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	JH
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	14 A 6NF	20 A	19 A 1NF	15 A 5NF	14 A 6NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-16**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.8				8.1		7.9		25		KG 1600
6/14/03 1	B	18.5	18.7			8.1	8.1	7.6	7.7	25	25	JH 1400	JH 1500
6/15/03 2	C	19.4	18.5			8.4	8.3	7.5	7.7	26	25	RD 1630	RD 1735
6/16/03 3	D	18.1	18.0			8.1	8.0	5.5	6.0	26	26	CG 1000	CG 1200
6/17/03 4	E	19.2	18.2			8.1	8.2	7.3	7.5	26	26	CG 0830	CG 1045
6/18/03 5	A	18.0	18.1			8.3	8.2	8.0	7.6	27	26	CG 0900	CG 1115
6/19/03 6	B	19.1	18.5			8.1	8.2	7.6	7.9	26	26	CG 0830	CG 1000
6/20/03 7	C	19.2	18.8			8.2	8.2	7.4	7.9	26	26	CG 0940	CG 1030
6/21/03 8	D	18.1	19.0			8.2	8.2	7.4	7.6	26	26	JH 915	JH 1930
6/22/03 9	E	20.0	19.6			7.8	8.0	8.0	7.8	26	26	DS 1830	DS 2000
6/23/03 10	A	18.8				8.3		8.0		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Coded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DS
6/23/03 10	16 A 4NF	17 A 3NF	18 A 2NF	17 A 3NF	18 A 3NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-17**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7				8.1		7.9		26		KG 1600
6/14/03 1	B	18.5	18.6			8.1	8.1	7.6	7.8	25	25	JH 1400	JH 1500
6/15/03 2	C	19.5	18.7			8.4	7.9	7.5	7.7	26	25	RD 1630	RD 1735
6/16/03 3	D	18.4	18.0			8.2	8.1	7.9	7.6	27	26	CG 1000	CG 1200
6/17/03 4	E	18.4	18.0			8.1	7.9	7.6	7.7	27	26	CG 0830	CG 1045
6/18/03 5	A	18.2	18.1			8.2	8.2	8.0	7.8	27	26	CG 0900	CG 1115
6/19/03 6	B	19.1	18.6			8.2	8.2	7.2	7.5	27	26	CG 0830	CG 1000
6/20/03 7	C	19.1	18.8			8.2	8.2	7.5	7.9	26	26	CG 0930	CG 1030
6/21/03 8	D	19.1	19.0			8.2	8.2	7.3	7.8	26	26	JH 915	JH 1930
6/22/03 9	E	19.9	19.4			8.2	8.2	7.9	7.7	26	26	~~DD~~ 1830	~~DD~~ 2000
6/23/03 10	A	18.8				8.2		7.8		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	18A ~~AS~~ 2NF	17 A 3NF	16 A 4NF	17 A 3NF	16 A 4NF	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-20**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)	Salinity (ppt)	INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.7				7.9		8.0		26		KG 1660
6/14/03 1	B	18.5	18.6			7.9	7.9	7.6	7.7	25	25	JH 1400	JH 1500
6/15/03 2	C	19.8	18.9			8.3	8.3	7.3	7.5	26	25	RD 1630	RD 1735
6/16/03 3	D	18.2	18.0			8.3	8.1	8.0	7.7	27	26	CG 1000	CG 1200
6/17/03 4	E	18.3	18.3			8.1	8.0	6.2	6.8	27	27 ~~26~~	CG 0830	CG 1045
6/18/03 5	A	18.1	18.0			8.2	7.9	7.9	7.8	27	27	CG 0900	CG 1115
6/19/03 6	B	19.2	18.6			8.2	8.2	7.4	7.5	27	26	CG 0830	CG 1000
6/20/03 7	C	18.9	18.7			8.2	8.2	7.4	7.9	26	26	CG 0930	CG 1030
6/21/03 8	D	18.1	18.9			8.2	8.2	7.3	7.6	26	26	JH 915	JH 1930
6/22/03 9	E	19.9	19.4			8.3	8.2	7.9	7.5	26	26	DD 1830	DD 2000
6/23/03 10	A	18.9				8.2		7.8		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Loaded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DD
6/23/03 10	CG ~~N~~ 1NF 9A	3NF CG ~~N~~ 17A	2NF ~~N~~ 18A	CG 3NF ~~N~~ 17A	4NF CG ~~N~~ 16A	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC Engineering & Consulting, Inc.
TOXICOLOGY LAB: GAINESVILLE, FL

QA FORM NO: 108
Revised: Jan 2003

SUBJECT: SEDIMENT TOXICITY DATA SHEET

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **RS-CH03**

PROJECT NUMBER: 6063030002.0200
TEST SPECIES: M. bahia

DATE-DAY	REP	TEMP (°C) old	TEMP (°C) new	Sulfide (mg/L)	NH_3 (ppm)	pH (s.u.) old	pH (s.u.) new	DO (mg/L) old	DO (mg/L) new	Salinity (ppt)		INITIAL/ TIME Old	INITIAL/ TIME new
6/13/03 0	A		18.9				8.0		7.9		26		KG 1600
6/14/03 1	B	18.0	18.6			8.0	8.0	6.9	7.0	25	25	JH 1400	JH 1500
6/15/03 2	C	19.6	19.0			8.1	8.2	7.5	7.6	26	25	RD 1630	RD 1735
6/16/03 3	D	18.5	18.2			8.2	8.1	7.6	7.6	26	25	CG 1000	CG 1200
6/17/03 4	E	18.1	18.4			8.1	8.1	7.6	7.5	27	27	CG 0830	CG 1045
6/18/03 5	A	18.0	18.0			8.2	8.1	7.7	7.3	27	26	CG 0900	CG 1115
6/19/03 6	B	19.0	18.6			8.1	8.2	7.9	8.0	27	26	CG 0830	CG 1000
6/20/03 7	C	19.0	18.7			8.2	8.2	7.5	8.0	26	26	CG 0940	CG 1030
6/21/03 8	D	18.3	19.0			8.2	8.2	7.3	8.0	26	26	JH 9:15	JH 1930
6/22/03 9	E	19.9	19.4			8.1	8.2	7.9	8.0	26	26	DS 1930	DS 2000
6/23/03 10	A	19.2				8.2		7.9		26		CG 0830	

Observ Date-Day	Replicate A	B	C	D	E	Int.
6/13/03 0	Coded 20 →					KG
6/14/03 1	N	N	N	N	N	JH
6/15/03 2	N	N	N	N	N	RD
6/16/03 3	N	N	N	N	N	CG
6/17/03 4	N	N	N	N	N	CG
6/18/03 5	N	N	N	N	N	CG
6/19/03 6	N	N	N	N	N	CG
6/20/03 7	N	N	N	N	N	CG
6/21/03 8	N	N	N	N	N	JH
6/22/03 9	N	N	N	N	N	DS
6/23/03 10	1NF CG N (19A)	3NF CG N (17A)	1NF N (19A)	2NF KG N (18A)	N (20A)	CG

KEY: AS = AT SURFACE EMR = EMERGENCE A = ALIVE D = DEAD NF = NOT FOUND N=NONE
REP = REPLICATE COND = CONDUCTIVITY ALK = ALKALINITY AMP = AMPLEXUS
HARD = HARDNESS TEMP = TEMPERATURE YTC = YEAST/ TROUT CHOW/CEROPHYLL

CG

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia

DATE:	5/7/03						5/11/03					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
B7	18.3	7.8	1.0	0.022	0.0021	27ppt OW	19.1	7.9	4.77	0.138	0.0019	26ppt OW
B8	18.3	7.9	1.4	0.038	0.0031	27ppt OW	18.4	7.9	2.30	0.064	0.0016	26ppt OW
B9	18.4	7.9	2.3	0.063	0.0019	27ppt OW	19.1	7.9	5.99	0.174	0.0023	26ppt OW
B10	18.0	7.9	3.9	0.109	0.0021	28ppt OW	19.2	7.9 ~~6.2~~	6.99	0.205	0.0020	27ppt OW
CC01-2	17.6	7.9	1.2	0.039	0.0025	25ppt OW	19.5	7.9	3.54	0.105	0.0023	26ppt OW
CC03-4	18.4	8.0	1.1	0.036	0.0021	25ppt OW	19.9	8.0	3.05	0.116	0.0026	26ppt OW
CC05-6	18.0	8.0	22	0.726	0.0025	28ppt OW	20.0	8.0	4.38	0.167	0.003	28ppt OW
E-CHΦ3-9	18.0	8.0	8.6	0.281	0.0024	31ppt OW	20.0	8.0	12.5	0.470	0.023	28ppt OW
E-CHΦ3-10	18.4	8.1	~~14.1~~ 11.1	0.465	0.0019	31ppt OW	20.0	8.0	15.0	0.575	0.0023	28ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia

DATE:	5/7/03						5/11/03					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
E-CHØ3-11	18.1	8.1	8.7	0.355 ~~0.723~~	0.0018	31ppt OW	20.1	8.2	12.8	0.755	0.0025	28ppt OW
E-CHØ3-12	19.1	8.3	5.8	0.394	0.0020	31ppt OW	20.0	8.2	9.66	0.570	0.0023	31ppt OW
E-CHØ3-13	17.1	8.4	8.3	0.656	0.0031	30ppt OW	20.0	8.4	9.33	0.843	0.0046	31ppt OW
E-CHØ3-14	20.0	8.3	11.0	0.796 ~~0.65~~	0.0016	31ppt OW	20.1	8.2	20.9	1.23	0.0029	31ppt OW
E-CHØ3-15	20.0	8.3	13.5	0.797	0.0017	31ppt OW	19.9	8.3	17.5	1.03	0.0021	32ppt OW
E-CHØ3-16	20.0	8.4	8.8	0.801	0.0056	29ppt OW	20.0	8.4	11.3	1.07	0.0096	31ppt OW
E-CHØ3-17	20.0	8.4	13.2	1.22	0.0016	29ppt OW	20.0	8.4	19.6	1.77	0.015	28ppt OW
E-CH03-RS	20.0	8.2	10.1	0.596	0.032	32ppt OW	20.0	8.2	32.5	1.92	0.019	30ppt OW
Ctrl	17.6	7.8	7.7	0.160	0.0023	26ppt OW	20.0	7.8	2.9	0.070	0.003	28ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 01(
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia.

DATE:	5/13/03						5/15/03					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water, Overyling Water
~~B7~~	~~20.0~~	~~7.8~~	~~0.172~~	~~0.0042~~	~~0.0016~~	27 ppt OW	~~20.0~~	~~7.8~~	~~0.093~~	~~0.0023~~	~~0.0031~~	27 ppt OW
B8	19.8	7.8	0.068	0.0017	0.0012	27 ppt OW	20.0	7.8	0.001	~~0.00002~~	0.0042	27 ppt OW
B9	20.0	7.8	0.031	0.001	0.0021	27 ppt OW	20.0	7.8	0.018	0.00005	0.0031	27 ppt OW
B10	20.0	7.9	0.315	0.008	0.0019	27 ppt OW	19.8	7.8	0.079	~~0.0001~~ 0.0019	0.0023	27 ppt OW
CC01-2	20.0	8.0	0.142	0.005	0.0021	27 ppt OW	20.1	7.9	0.012	0.0003	0.0019	27 ppt OW
CC03-4	19.8	7.9	2.31	0.056	0.0025	31 ppt OW	20.3	7.8	0.031	~~0.0007~~	0.0020	27 ppt OW
CC05-6	20.0	7.8	~~0.488~~ 20.0	0.488	0.0013	29 ppt OW	~~20.0~~	~~7.8~~	~~0.031~~	~~0.0007~~	~~0.0014~~	~~27 ppt OW~~
E-CHØ3-9	20.0	8.0	9.64	0.367	0.018	28 ppt OW	19.8	7.9	0.309	0.010	0.0031	27 ppt OW
E-CHØ3-10	20.0	8.0	0.931	0.023	0.0156	31 ppt OW	20.0	7.8	0.532	0.010	0.0029	29 ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia

DATE:	5/13/03						5/15/03					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
E-CH03-11	20.1	8.0	0.735	0.028	0.0123	27ppt OW	20.1	7.9	8.3	0.203	0.0096	26ppt OW
E-CH03-12	19.6	8.1	0.538	0.020	0.0093	29ppt OW	20.2	8.0	12.0	0.493	0.0031	27ppt OW
E-CH03-13	19.8	8.2	0.743	0.044	0.0178	25ppt OW	19.9	8.1	7.15	0.374	0.0023	27ppt OW
E-CH03-14	20.1	8.0	0.304	0.079	0.0031	25ppt OW	21.1	8.0	6.3	0.265 ~~1.537~~	0.0042	25ppt OW
E-CH03-15	20.3	8.3	6.23	0.468	0.0067	29ppt OW	20.9	7.9	13.4	0.446 ~~0.327~~	0.0031	25ppt OW
E-CH03-16	19.9	8.2	1.78	0.105	0.0076	25ppt OW	20.0	8.0	16.7	0.638 ~~0.407~~	0.0021	28ppt OW
E-CH03-17	20.1	8.3	1.32	0.078	0.0019	28ppt OW	19.9	8.1	17.6	0.829	0.0031	27ppt OW
CH03-RS	19.8	8.2	6.89	0.407 ~~0.0403~~	0.029	25ppt OW	20.0	8.0	1.82	0.069 ~~0.044~~	0.0029	29ppt OW
Ctrl	20.3	7.9	1.8	0.069	0.0021	25ppt OW	20.1	7.9	0.93	0.028 ~~0.001~~	0.0001	29ppt OW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia

DATE:	4/23/03						5/5/03					
INIT.	CG						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
~~B7~~	~~19.8~~	~~8.4~~	~~3.72~~	~~0.336~~	~~0.0031~~	~~26 ppt PW~~	~~20.1~~	~~8.4~~	~~9.23~~	~~0.834~~	~~0.003~~	~~30 ppt PW~~
B8	20.1	~~8.6~~	6.94	0.944		30 ppt PW	20.9	8.6	9.87	~~1.34~~	0.003	31 ppt PW
B9	19.2	8.7	9.04	~~1.400~~		30 ppt PW	20.5	~~8.6~~	12.5	1.70	0.005	30 ppt PW
B10	19.5	8.5	17.2	2.00		~~25 ppt PW~~	20.2	8.5	21.6	~~1.95~~ 2.41	0.003	30 ppt PW
CC01-2	19.2	8.6	5.06	0.680		25 ppt PW	20.5	~~8.6~~	7.6	1.03	0.019	30 ppt PW
CC03-4	~~20.4~~	8.7	4.90	0.970		10 ppt PW	20.1	8.6	8.34	1.14	0.006	30 ppt PW
~~CC05-6~~	~~20.6~~	~~8.5~~	~~13.8~~	~~1.878~~ 1.646		~~26 ppt PW~~	~~19.8~~	~~8.5~~	~~15.1~~	~~1.67~~	~~0.006~~	~~30 ppt PW~~
E-CH03-9	19.8	7.8	44.6	1.08		37 ppt PW	20.1	7.8	50.7	1.24	0.017	30 ppt PW
E-CH03-10	19.8	8.2	77.1	4.54		28 ppt PW	20.2	8.1	81.5	3.89	0.016	30 ppt PW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 01
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia

DATE:	4/23/03						5/5/03					
INIT.	CG						JH					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water Overyling Water
E-CHØ3-11	19.4	7.9	63.3	~~2.41~~ 1.82		30 ppt PW	19.3	7.8	53.0	1.211	0.012	30 ppt PW
E-CHØ3-12	19.3	7.8	36.0	0.878		25 ppt PW	19.2	7.8	41.9	1.02	0.004	25 ppt PW
E-CHØ3-13	19.7	7.9	65.0	~~2.47~~ 1.916		30 ppt PW	19.5	7.8	66.4	1.53	0.037	30 ppt PW
E-CHØ3-14	19.3	8.3	62.5	~~5.50~~ 4.34		30 ppt PW	20.0	8.2	72.6	4.28	0.009	30 ppt PW
E-CHØ3-15	19.4	7.8	67.5	1.65		25 ppt PW	21.0	7.8	76.8	1.98	19.6	30 ppt PW
E-CHØ3-16	19.5	7.9	50.7	1.53		25 ppt PW	20.1	7.9	59.8	~~2.28~~ 1.84	5.15	30 ppt PW
E-CHØ3-17	20.6	7.9	74.5	2.80		24 ppt PW	20.9	7.9	80.6	~~0.011~~ 2.59	0.011	30 ppt PW
RS-CHØ3	20.7	8.2	5.26	0.310		25 ppt PW	21.0	8.2	11.0	0.649	0.003	30 ppt PW
Ctrl	22.1	8.4	0.63	0.064		25 ppt PW	20.8	8.4	1.81	0.164	<0.003	30 ppt PW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia

DATE:	5/6/03						5/11/03					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overyling Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overyling Water
B7	19.5	8.4	7.16	0.647 ~~<0.003~~	<0.003	25 ppt PW	19.6	8.5	4.77	0.525	<0.003	28 ppt PW
B8	19.6	8.6	7.3	0.994	<0.003	27 ppt PW	19.5	8.6	5.47	0.727	<0.003	30 ppt PW
B9	19.9	8.7	6.08	1.014 ~~0.827~~	<0.003	30 ppt PW	19.5	8.4	5.99	0.530	<0.003	28 ppt PW
B10	19.6	8.5	10.6	1.152 ~~0.958~~	<0.003	30 ppt PW	19.7	8.4	6.22	0.558	<0.003	28 ppt PW
CC01-2	19.8	8.6	4.40	0.598	<0.003	30 ppt PW	19.8	8.5	3.54	0.395	<0.003	28 ppt PW
CC03-4	19.9	8.6	3.84	0.523	<0.003	30 ppt PW	20.0	8.6	3.05	0.419	<0.003	30 ppt PW
CC05-6	19.6 ~~20.6~~	8.5	11.0	0.994	<0.003	30 ppt PW	19.5	8.2	4.38	0.248	<0.003	30 ppt PW
E-CH03-9	19.8	7.8	36.3	0.886	0.007	26 ppt PW	19.8	7.8	12.7	0.305	0.003	28 ppt PW
E-CH03-10	19.8	8.2	49.0	2.89	0.006	27 ppt PW	19.6	8.0	15.9	0.590	0.004	28 ppt PW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC
Gainesville, FL

QA Form Number: 016ASa
Revised: May 2003

ACUTE TOXICITY DATA SHEET – Ammonia (NH_3-N) /Sulfide (S^{2-}) Determination in PORE WATER / OVERLYING WATER (circle one)

SPONSOR: ANAMAR/Canaveral Harbor

PROJECT NUMBER: 6063030002.0200

TEST SUBSTANCE: sediment

TEST SPECIES: M. bahia

DATE:	5/6/03						5/11/03					
INIT.	JA						JA					
Sample ID	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	PoreWater /Overlying Water	TEMP	pH	NH_3-N (ppm)	Unionized ammonia (ppm)	Sulfide (ppm) S^{2-}	Pore Water/ Overlying Water
E-CHØ3-11	19.3	8.3	39.1 ~~49.0~~ Jm	2.810	0.006	25 ppt PW	19.3	8.1	12.8 ~~15.1~~ Jm	0.589	0.003	26 ppt PW
E-CHØ3-12	19.8	7.8	19.1	0.466	0.004	25 ppt PW	19.7	7.8	9.66	0.234	<0.003	26 ppt PW
E-CHØ3-13	20.2	7.9	35.7	1.36	0.210	25 ppt PW	19.7	7.8	9.33	0.226	<0.003	26 ppt PW
E-CHØ3-14	19.3	8.3	39.1	2.31	0.007	30 ppt PW	19.0	8.0	20.9	0.727	0.004	31 ppt PW
E-CHØ3-15	19.2	7.8	43.5	1.06	0.0162	25 ppt PW	19.1	7.7	17.5 ~~44.4~~ Jm	0.324	0.004	26 ppt PW
E-CHØ3-16	19.8	7.9	31.5	1.00	0.0064	25 ppt PW	19.8	7.8	11.3	0.277	<0.003	26 ppt PW
E-CHØ3-17	19.4	7.9	44.4	1.32	0.0047	25 ppt PW	19.2	7.9	19.6	0.573	0.004	26 ppt PW
RS-CHØ3	19.6	8.2	5.77	0.340	<0.003	25 ppt PW	19.6	8.0	3.25	0.122	<0.003	26 ppt PW
Ctrl	19.8	8.4	1.56	0.141	0.013	25 ppt PW	19.7	8.3	2.90	0.213	<0.003	26 ppt PW

KEY

TEMP - Temperature
SL - Salinity (ppt)
pH - standard units
OW – overlying water

DO - Dissolved oxygen (mg/L)
CN - Conductivity (µmhos/cm)
INST - Instrument
NOMIN CONCN - Nominal concentration

INIT. - Initials
REP - Replicate
METH - Method
PW – pore water

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of SDS : 0.100 (g) Volume of Milli-Q Water: 100 (mL) Date Prepared: 6/13/03	[X] Definitive [X] Static [ ] Screening Duration: 48 Hours
Test Organism History	Dilution Water: Natural Filtered Seawater
Species: M. bahia Batch Number: 2003-53 Age/Life Stage: 3 days Date of Acclimation/Maintenance: See Page 109 of Organism Receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 1 No. Of Organisms/Replicate: 10	Lighting: [X] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 8 L X 8 W 4 H Test Solution Height: 4 (cm) Test Vessel Volume: 0.34 (L) Test Solution Volume: 0.20 (L) Test Temperature: 20 ± 1 °C Test Salinity: 20 ± 2 ppt
Test Area Used: Waterbath table	Test Vessel Composition: [X] Glass [ ] Plastic
Test Concentrations Based on: [X] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed:

Test Concentrations: (Units: mg/L)	Control	2.5	5.0	10.0	20.0	40.0	
Amount Dilution Water Added (mL)	200	199.5	199	198	196	192	
Amount of Stock Added (mL)	0	0.5	1.0	2.0	4.0	8.0	

Additional Observations:

Data By: JVM Date: 6/13/03

LG

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: M. bahia

DAY 0 — REF TOXICANT: SOS

Nominal Concentration (mg/L)	Date: 6/13/03		Time: 1650		Analyst: RD	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	loaded	19.2	18	8.5	8.4
2.5	↓	↓	19.1	19	8.5	8.4
5.0			19.1	19	8.5	8.4
10.0			19.2	19	8.4	8.4
20.0			19.1	19	8.4	8.4
40.0			19.2	19	8.4	8.4

DAY 1

Nominal Concentration	Date: 6/14/03		Time: 1400		Analyst: JM	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	~~JM~~ 10	N	19.4	19	8.4	8.3
2.5	10	N	19.3	19	8.3	8.4
5.0	10	N	19.3	19	8.4	8.4
10.0	7	3d	19.4	19	8.3	8.4
20.0	2	8d	19.3	19	8.3	8.4
40.0	0	10d	19.4	19	8.2	8.4

DAY 2

Nominal Concentration	Date: 6/15/03		Time: 1600		Analyst: DD	
	# Alive	Observ.	Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	10	N	DD ~~18~~ 19.3	19	8.2	8.3
2.5	10	N	19.2	19	8.3	8.4
5.0	9	1d	19.3	19	8.1	8.4
10.0	6	1d	19.3	19	8.3	8.3
20.0	0	DD ~~10d~~ 8d	19.2	19	8.2	8.3
40.0				19		DD

CG

AM. batch 48 hr Ref Tox conducted 6/13/03

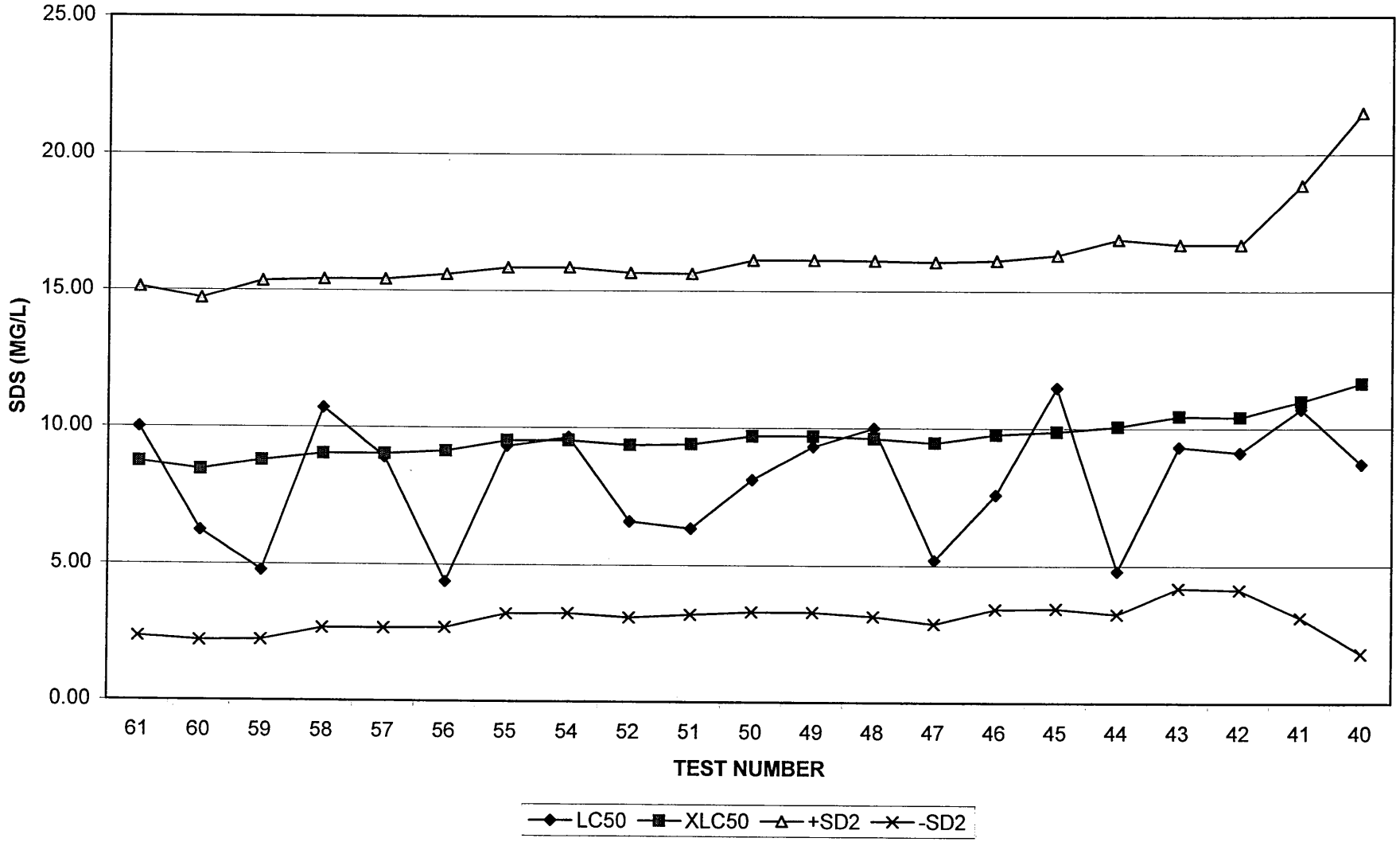
SUMMARY

Nominal Concentration	Number Dead	
Control	0	–
2.5	0	–
5.0	1	–
10.0	4	–
20.0	10	–
40.0	10	–

COMMENTS:

CO

MYSIDOPSIS BAHIA
ACUTE REFERENCE TOXICITY TEST:SODIUM LAURYL SULFATE



8/29/2003

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

D/ June 03 TEST NUMBER: Ref Tox DURATION: 48 H
TC. ANT : SDS
SPECIES: M. bahia

RAW DATA: --- ----	Concentration (mg/L)	Number Exposed	Mortalities
	.00	10	0
	2.50	10	0
	5.00	10	1
	10.00	10	4
	20.00	10	10
	40.00	10	10

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 10.00
95% LOWER CONFIDENCE: 7.77
95% UPPER CONFIDENCE: 12.86

D 4

Bioaccumulation Data

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002.0400

TEST MATERIAL

Test Material: Sediment

See Page 158 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

SOP-S-007

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Macoma nasuta

Lot Number: 2003-31

Age/ Life Stage: adult

Date Acclimation/ Maintenance Began: 4/23/03

See Page 107 of organism receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <1%

TEST CONDITIONS

( ) Range Finder
(X) Screening
( ) Definitive

( ) Static
(X) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 28 days

Test Area Used:

Test Temperature (°C): ~~13~~ 18 +/-2 JMR

Test Salinity (ppt): ~~30~~ 25 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 20

Dilution Water: natural filtered seawater

TEST VESSELS

Dimensions (cm): 49 Length x 25 Width x 32 Height

Test Solution Height (cm) : 27

Test Vessels: (x) Open ( ) Covered

Test Container Volume: 38 L (10 gallons)

Test Solution Volume: 30 L (~8 gal)

TEST SOLUTION PREPARATION

Test Concentration % mg/L									
Volume of Dilution Water Added (mL)									
Volume of Effluent/ Stock Added (mL)									

ADDITIONAL OBSERVATIONS:

DATA BY: ~~4/23/04~~ HB 4/24/03 4/24/03 DATE: JMR

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: October 2002

Project No: 6063030002 Client: Ananar Test: Bivalve - M. nosuta

DAILY LOG

4/23/03 Sediments loaded, saltwater added. Aeration started. Allowed to acclimate overnight.

4/24/03 - Water Qualities monitored, organisms loaded airlines checked (data reviewed, some vessels test temperature below range. Adjusted room thermostat to correct). JMK

4/25/03 - Water qualities monitored, organisms checked, airlines checked, water renewed.

4/26/03 water qualities monitored airlines checked organisms observed

4/27/03 water qualities monitored airlines checked organisms observed

4/28/03 Water qualities monitored. Water renewed. organisms observed and airlines checked

4/29/03 water qualities taken, airlines checked and organisms observed.

4/30/03 Water qualities monitored, airlines checked and organisms observed. Water renewed.

5/1/03 Water qualities taken. Organisms observed. airlines checked

5/2/03 Water qualities monitored, airlines checked & organisms observed (data reviewed, JMK) Water renewed.

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: October 2002

Project No: 006303 0002 Client: Canaveral Harbor Anamar Test: bioacc., M. nasuta

DAILY LOG

5/3/03 - water qualities monitored, Organisms Observed, airlines checked

5/4/03 Water qualities monitored, airlines checked organisms observed

5/5/03 Water qualities monitored, airlines checked organisms observed. Water renewed.

5/6/03 water quality taken, airlines checked organisms observed

5/7/03 Water qualities taken, airlines checked water renewed. Organisms observed.

5/8/03 Water qualities monitored, organism observed. Airlines checked.

5/9/03 Water qualities monitored, organism observed. Airlines checked. Water renewed.

5/10/03 water quality taken, airlines checked organisms observed

5/11/03 Water qualities taken, airlines checked, organisms observed

5/12/03 - water qualities taken, airlines checked, organisms observed, water renewed.

5/13/03 - WQ taken, airlines checked, organism observed.

5/14/03 Water renewed, WQ monitored. Airlines checked. Organism observed

5/15/03 - WQ taken, airlines observed, organism observed.

5/17/03 WQ taken, airline check, organisms observed

5/16/03 WQ monitored. Water renewed. Organisms observed. Airlines checked.

Harding ESE
Toxicology Laboratory
Gainesville, Florida

Page: 3 of 3
QA Form No. 018
Revised: March 2001

Project No: 606303000.400 Client: Anamar/Canaveral Test: Biocc. Canaveral Clams

DAILY LOG

5/18/03 - Water qual. monitored. Organisms observed. Airlines checked

5/19/03 - Water qualities taken, water renewed, organisms observed and airlines checked.

5/20/03 - ~~test observed~~ JM Water quality not monitored due to miscommunication, organisms observed audio check

5/21/03 - Water renewed. Organisms observed. WQ monitored. Airlines checked

5/22/03 - Organisms observed. WQ monitored. Airlines checked. (Clams allowed to depurate overnight in ziploc bags)

Test terminated on 5/22/03.

5/23/03. Depurated Clams rinsed & drained. Placed in freezer, by replicate.

JM

MACTEC Engineering and Consulting (formerly Harding ESE)

Revised: Oct 2002

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY

QA FORM NO: 108

SPONSOR: Anamar / Canaveral Harbor
SAMPLE ID: ctrl

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.3		8.1	8.4	26	KG
4/25/03 1	B	17.9		8.2	7.7	26	CG
4/26/03 2	C	16.8		8.1	8.1	26	KG
4/27/03 3	D	16.9		8.2	8.1	26	KG
4/28/03 4	E	17.9		8.1	8.0	24	RD
4/29/03 5	A	17.6		8.1	8.5	24	CG
4/30/03 6	B	18.6		8.1	7.9	25	RD
5/1/03 7	C	17.4		8.1	7.7	25	KG
5/2/03 8	D	18.9		8.2	8.9	24	RD
5/3/03 9	E	17.2		8.2	7.8	25	DD
5/4/03 10	A	17.5		8.1	8.5	25	RD
5/5/03 11	B	18.7		8.1	8.2	27	RD
5/6/03 12	C	18.4		8.1	8.0	26	JA
5/7/03 13	D	18.1		8.1	8.4	26	KG
5/8/03 14	E	17.5		8.1	7.9	26	KC
5/9/03 15	A	20.0		8.2	7.8	26	KC
5/10/03 16	B	18.1		8.1	7.6	26	JA
5/11/03 17	C	18.0		8.1	8.0	26	RD
5/12/03 18	D	19.1		8.1	7.7	24	CG
5/13/03 19	E	17.8		7.9	7.9	27	CG
5/14/03 20	A	18.1		8.0	7.6	27	JA
5/15/03 21	B	19.1		8.1	8.5	25	CG
5/16/03 22	C	19.9		8.1	8.2	25	KG
5/17/03 23	D	19.4		8.1	8.1	26	JA
5/18/03 24	E	16.3		8.0	8.8	26	KG
5/19/03 25	A	16.7		8.5	8.6	25	CG
5/20/03 26	B						
5/21/03	C	19.1		8.1	8.3	26	KG
5/22/03 28	D	17.4		8.1	8.4	26	[illegible]

[illegible]

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-9**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.4		8.0	8.1	26	KG
4/25/03 1	B	18.2		8.1	7.5	25	CG
4/26/03	C	17.3		8.0	7.8	26	KG
4/27/03	D	16.8		8.2	7.8	27	~~KG~~ KG
4/28/03 4	E	18.2		8.2	7.7	25	RD
4/29/03 5	A	17.7		8.1	8.3	25	CG
4/30/03 6	B	18.1		8.1	8.0	25	RD
5/1/03 7	C	17.6		8.1	7.6	25	KG
5/2/03 8	D	19.0		8.2	8.4	25	RD
5/3/03 9	E	17.4		8.2	7.6	25	~~DD~~
5/4/03 10	A	17.6		8.2	8.0	26	RD
5/5/03 11	B	18.7		8.1	7.9	27	RD
5/6/03 12	C	18.4		8.1	8.0	26	JH
5/7/03 13	D	18.3		8.1	8.3	27	KG
5/8/03 14	E	17.3		8.2	8.1	26	KG
5/9/03 15	A	19.6		8.1	7.8	26	KG
5/10/03 16	B	19.9		8.2	7.9	26	JH
5/11/03 17	C	17.6		8.2	8.3	26	RD
5/12/03 18	D	19.3		8.1	7.6	26	CG
5/13/03 19	E	17.9		8.2	7.8	26	CG
5/14/03 20	A	18.1		8.2	7.5	26	JH
5/15/03 21	B	19.0		CG ~~8.0~~ 8.0	8.0	25	CG
5/16/03 22	C	19.6		8.2	7.8	25	KG
5/17/03 23	D	19.9		8.1	7.9	26	JH
5/18/03 24	E	16.0		8.1	7.9	26	KG
5/19/03 25	A	16.3		8.3	8.4	25	CG
5/20/03 26	B						
5/21/03 27	C	19.8		8.0	8.0	26	KG
5/22/03 28	D	17.7		8.2	8.3	27	JM

JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-10**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.6		8.1	6.3	26	KG
4/25/03 1	B	18.0		8.2	7.6	26	CG
4/26/03 2	C	17.2		7.8	7.7	26	KG
4/27/03	D	17.0		8.2	7.7	26	KG
4/28/03 4	E	18.4		8.2	7.7	25	RD
4/29/03 5	A	17.4		8.2	8.4	25	CG
4/30/03 6	B	18.1		8.2	8.0	25	RD
5/1/03 7	C	17.7		8.1	7.7	26	KG
5/2/03 8	D	18.9		8.2	8.4	26	RD
5/3/03 9	E	17.3		8.3	7.7	25	[illegible]
5/4/03 10	A	17.2		8.3	8.3	25	RD
5/5/03 11	B	18.6		8.1	7.8	25	RD
5/6/03 12	C	18.4		8.1	7.9	26	JH
5/7/03 13	D	18.7		8.1	8.4	27	KG
5/8/03 14	E	17.5		8.2	~~8.8~~ 8.0	26	KG
5/9/03 15	A	19.2		8.2	7.9	26	KG
5/10/03 16	B	19.1		8.2	7.6	26	JH
5/11/03 17	C	17.9		8.1	7.4	26	RD
5/12/03 18	D	18.8		8.1	7.6	26	CG
5/13/03 19	E	17.6		8.2	7.7	26	CG
5/14/03 20	A	18.9		8.1	7.8	26	JH
5/15/03 21	B	19.1		8.1	8.0	25	CG
5/16/03 22	C	19.5		8.2	7.7	25	KG
5/17/03 23	D	19.4		8.1	7.9	26	JH
5/18/03 24	E	16.0		8.1	8.2	26	KG
5/19/03 25	A	16.3		8.3	8.4	26	CG
5/20/03 26	B						
5/21/03 27	C	19.7		8.2	8.0	26	KG
5/22/03 28	D	17.6		8.2	8.3	27	[illegible]

[illegible]

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-11**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.9		8.1	7.1	26	KG
4/25/03 1	B	18.3		8.2	7.3	26	CG
4/26/03 2	C	~~18.6~~ 17.1		8.1 ~~8.2~~	7.6 ~~7.6~~	~~26~~ 26	KG
4/27/03 3	D	16.7		8.2	7.8	26	KG
4/28/03 4	E	17.8		8.2	7.5	24	RD
4/29/03 5	A	17.6		8.2	8.3	25	CG
4/30/03 6	B	18.9		8.2	7.8	24	RD
5/1/03 7	C	17.5		8.1	7.7	25	KG
5/2/03 8	D	18.6		8.2	8.6	25	RD
5/3/03 9	E	17.0		8.2	7.8	25	[illegible]
5/4/03 10	A	17.0		8.3	8.4	25	RD
5/5/03 11	B	18.5		8.1	7.9	27	RD
5/6/03 12	C	18.4		8.1	8.0	26	JH
5/7/03 13	D	18.0		8.1	8.4	27	KG
5/8/03 14	E	17.3		8.2	8.0	26	KG
5/9/03 15	A	20.3		8.2	7.7	26	KG
5/10/03 16	B	19.1		8.2	7.9	26	JH
5/11/03 17	C	17.7		8.2	7.8	26	RD
5/12/03 18	D	18.5		8.1	7.6	26	CG
5/13/03 19	E	17.4		8.2	7.7	26	CG
5/14/03 20	A	18.1		8.2	7.8	26	JH
5/15/03 21	B	18.7		8.1	8.1	25	CG
5/16/03 22	C	19.3		8.2	8.1	23	KG
5/17/03 23	D	19.8		8.2	8.0	26	JH
5/18/03 24	E	16.9		8.1	8.1	26	KG
5/19/03 25	A	16.1		8.3	8.5	25	CG
5/20/03 26	B						
5/21/03 27	C	19.1		8.2	8.3	26	KG
5/22/03 28	D	17.2		8.2	8.4	27	[illegible]

[illegible]

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-12**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.5		8.1	6.4	26	KG
4/25/03 1	B	18.3		8.2	7.7	26	CG
4/26/03 2	C	17.2		8.0	7.6	26	KG
4/27/03 3	D	16.7		8.2	7.7	27	KG
4/28/03 4	E	17.7		8.2	7.5	25	RD
4/29/03 5	A	17.4		8.1	8.4	25	CG
4/30/03 6	B	18.9		8.2	7.8	24	RD
5/1/03 7	C	17.5		8.1	7.7	25	KG
5/2/03 8	D	18.6		8.2	8.6	26	RD
5/3/03 9	E	17.0		8.2	7.7	25	DD
5/4/03 10	A	16.8		8.3	8.3	26	RD
5/5/03 11	B	18.4		8.1	7.8	26	RD
5/6/03 12	C	18.4		8.1	8.0	26	JH
5/7/03 13	D	18.0		8.1	8.1	26	KG
5/8/03 14	E	17.4		8.2	8.2	26	KG
5/9/03 15	A	19.9		8.2	7.6	25	KC
5/10/03 16	B	17.1		8.1	7.7	26	JH
5/11/03 17	C	17.6		8.2	7.7	26	RD
5/12/03 18	D	18.5		8.1	7.7	26	CG
5/13/03 19	E	17.3		8.2	7.5	26	CG
5/14/03 20	A	18.1		8.2	7.9	26	JH
5/15/03 21	B	18.7		8.1	8.1	25	CG
5/16/03 22	C	19.3		8.2	7.9	25	KG
5/17/03 23	D	19.7		8.2	7.8	26	JH
5/18/03 24	E	16.0		8.1	8.0	26	KC
5/19/03 25	A	16.1		8.2	8.3	25	CG
5/20/03 26	B						
5/21/03 27	C	19.7		8.1	8.2	26	KG
5/22/03 28	D	17.4		8.2	8.3	27	JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-13**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/23/03 0	A	18.3		8.1	6.3	26	KG
4/25/03	B	18.0		8.1	7.7	26	CG
4/26/03	C	17.7		8.0	7.4	26	KG
4/27/03	D	16.5		8.3	7.7	27	KG
4/28/03 4	E	17.9		8.2	7.8	26	RD
4/29/03 5	A	17.2		8.2	8.5	26	CG
4/30/03 6	B	18.1		8.1	7.9	24	RD
5/1/03 7	C	17.5		8.1	7.9	24	KG
5/2/03 8	D	18.7		8.2	8.7	25	RD
5/3/03 9	E	17.2		8.3	7.7	25	DD
5/4/03 10	A	17.1		8.2	8.7	25	RD
5/5/03 11	B	18.4		8.1	8.3	25	RD
5/6/03 12	C	18.4		8.1	8.0	26	JA
5/7/03 13	D	18.5		8.1	8.3	27	KG
5/8/03 14	E	18.0		8.2	8.0	25	KG
5/9/03 15	A	20.0		8.2	7.6	26	KG
5/10/03 16	B	19.1		8.1	7.9	26	JA
5/11/03 17	C	18.2		8.1	8.0	26	RD
5/12/03 18	D	19.1		8.1	7.7	26	CG
5/13/03 19	E	17.5		8.2	7.6	26	CG
5/14/03 20	A	19.1		8.1	7.9	26	JA
5/15/03 21	B	19.1		8.1	7.9	25	CG
5/16/03 22	C	20.0		8.1	7.8	26	KG
5/17/03 23	D	19.7		8.1	7.9	26	JA
5/18/03 24	E	16.3		8.2	8.2	26	KG
5/19/03 25	A	16.7		8.3	8.2	25	CG
5/20/03 26	B						
5/21/03 27	C	20.4		8.2	7.9	26	KG
5/22/03 28	D	17.9		8.2	8.2	25	JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-14**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/~~26~~24/03 0	A	18.8		8.1	7.8	26	KG
4/25/03 1	B	17.9		8.1	7.6	25	CG
4/26/03 2	C	17.6		8.1	7.5	26	KG
4/27/03 3	D	16.8		8.2	7.6	27	KG
4/28/03 4	E	18.0		8.1	7.8	26	RL
4/29/03 5	A	17.4		8.1	8.3	26	CG
4/30/03 6	B	18.8		8.1	8.0	25	RD
5/1/03 7	C	18.0		8.1	7.5	25	KG
5/2/03 8	D	19.0		8.2	8.6	25	RD
5/3/03 9	E	17.8		8.2	7.6	25	~~DD~~
5/4/03 10	A	17.3		8.2	8.6	25	RD
5/5/03 11	B	18.7		8.1	8.1	25	RD
5/6/03 12	C	18.4		8.1	8.0	26	JH
5/7/03 13	D	19.6		8.1	8.2	26	KG
5/8/03 14	E	18.5		8.1	7.9	26	KG
5/9/03 15	A	20.4		8.2	7.7	26	KG
5/10/03 16	B	19.1		8.1	7.8	26	JH
5/11/03 17	C	18.6		8.1	8.2	26	RD
5/12/03 18	D	19.5		8.1	7.5	26	CG
5/13/03 19	E	17.9		8.2	7.5	26	CG
5/14/03 20	A	18.9		8.1	7.6	26	JH
5/15/03 21	B	19.3		8.0	7.8	25	CG
5/16/03 22	C	19.9		8.1	8.4	26	KG
5/17/03 23	D	19.1		8.2	8.1	26	JH
5/18/03 24	E	16.8		8.2	8.0	26	KG
5/19/03 25	A	16.8		8.2	8.2	25	CG
5/20/03 26	B				~~8.2~~ 8.6		
5/21/03 27	C	20.5		8.1	8.0	25	KG
5/22/03 28	D	17.0		8.2	8.0	26	JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-15**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.1		8.1	6.4	26	KG
4/25/03 1	B	17.9		8.1	7.7	25	CG
4/26/03 2	C	18.5		8.2	7.8	26	KG
4/27/03 3	D	17.0		8.1	7.5	26	KG
4/28/03 4	E	18.1		8.1	7.8	25	RD
4/29/03 5	A	17.5		8.2	8.3	26	CG
4/30/03 6	B	~~17.5~~ 18.9 CG		~~8.2~~ 8.1 CG	7.7 ~~8.3~~ CG	~~25~~ 24 CG	RD
5/1/03 7	C	17.9		8.0	7.5	25	KG
5/2/03 8	D	19.0		8.1	8.2	25	RD
5/3/03 9	E	17.6		8.2	7.6	25	DD
5/4/03 10	A	17.6		8.2	8.6	25	RD
5/5/03 11	B	18.7		8.1			RD
5/6/03 12	C	18.8		8.1	8.0	26	JH
5/7/03 13	D	21.8		7.8	7.7	27	KG
5/8/03 14	E	18.5		8.1	7.9	25	KG
5/9/03 15	A	20.6		8.2	7.6	26	KC
5/10/03 16	B	18.9		8.1	7.7	26	JH
5/11/03 17	C	18.4		8.1	8.2	25	RD
5/12/03 18	D	19.6		8.1	7.4	26	CG
5/13/03 19	E	18.0		8.2	7.6	26	CG
5/14/03 20	A	18.9		8.1	7.8	26	JH
5/15/03 21	B	19.5		8.1	7.9	25	CG
5/16/03 22	C	19.8		8.1	8.1	25	KG
5/17/03 23	D	19.5		8.1	7.5	26	JH
5/18/03 24	E	16.6		KG ~~8.2~~ 8.1	8.0	26	KG
5/19/03 25	A	17.0		8.1	8.2	~~25~~	CG
5/20/03 26	B						
5/21/03 27	C	19.7		8.2	8.4	26	KG
5/22/03 28	D	17.9		8.1	8.2	27	JM

JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-16**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.1		8.1	6.1	25	KG
4/25/03 1	B	17.4		8.2	7.7	26	CG
4/26/03 2	C	17.3		8.1	7.6	26	KG
4/27/03 3	D	16.2		8.2	7.8	26	KG
4/28/03 4	E	17.3		8.1	8.0	26	RD
4/29/03 5	A	17.5		8.2	8.3	25	CG
4/30/03 6	B	18.8		8.1	7.7	24	RD
5/1/03 7	C	17.2		8.1	7.8	25	KG
5/2/03 8	D	18.9		8.1	8.7	25	RD
5/3/03 9	E	16.8		8.2	7.8	25	RD
5/4/03 10	A	17.5		8.2	8.6	26	RD
5/5/03 11	B	18.5		8.1	8.1	26	RD
5/6/03 12	C	19.4		8.1	8.0	26	JH
5/7/03 13	D	18.6		8.1	8.6	26	KG
5/8/03 14	E	17.3		8.1	8.2	26	KG
5/9/03 15	A	20.5		8.2	7.8	26	KG
5/10/03 16	B	19.1		8.1	7.9	26	JH
5/11/03 17	C	18.5		8.1	8.2	26	RD
5/12/03 18	D	19.0		8.1	7.6	26	CG
5/13/03 19	E	17.4		8.2	7.8	26	CG
5/14/03 20	A	18.1		8.1	7.6	26	JH
5/15/03 21	B	19.3		8.1	7.9	25	CC
5/16/03 22	C	19.9		8.1	8.2	26	KG
5/17/03 23	D	19.8		8.1	8.1	26	JH
5/18/03 24	E	16.0		8.2	8.2	26	KG
5/19/03 25	A	16.4		8.2	8.1	25	CG
5/20/03 26	B						
5/21/03 27	C	20.6		8.1	7.9	26	KG
5/22/03 28	D	17.3		8.2	8.3	27	JM

JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY

QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-17**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.0		8.1	6.0	26	KG
4/25/03	B	17.1		8.1	7.8	26	CG
4/26/03	C	17.1		8.0	7.7	26	KG
4/27/03 3	D	15.9		8.1	7.7	26	KG
4/28/03 4	E	20.5		8.1	7.2	25	RD
4/29/03 5	A	16.7		~~8.5~~ CG 8.1	8.5	25	CG
4/30/03 6	B	17.9		8.1	7.9	25	RD
5/1/03 7	C	17.0		8.0	8.0	25	KG
5/2/03 8	D	18.3		8.1	8.8	25	RD
5/3/03 9	E	19.0		8.1	7.3	25	JD
5/4/03 10	A	16.7		8.1	8.8	25	RD
5/5/03 11	B	18.0		8.1	7.9	25	RD
5/6/03 12	C	18.4		8.1	8.0	26	JH
5/7/03 13	D	17.6		8.1	8.5	26	KG
5/8/03 14	E	18.0		8.1	8.2	26	KG
5/9/03 15	A	20.0		8.2	7.8	26	KG
5/10/03 16	B	19.1		8.1	7.6	26	JH
5/11/03 17	C	18.6		8.1	7.9	26	RD
5/12/03 18	D	18.2		8.1	7.8	26	CG
5/13/03 19	E	16.8		8.2	7.9	26	CG
5/14/03 20	A	19.0		8.1	7.6	26	JH
5/15/03 21	B	18.7		8.1	8.0	25	CG
5/16/03 22	C	19.3		8.1	7.8	26	KG
5/17/03 23	D	19.1		8.1	7.5	26	JH
5/18/03 24	E	16.6		8.0	7.8	26	KG
5/19/03 25	A	16.2		8.2	8.3	25	CG
5/20/03 26	B						
5/21/03 27	C	19.6		8.2	8.3	26	KG
5/22/03 28	D	17.2		8.2	8.3	27	JM

JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **RS-CH03**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/24/03 0	A	18.1		8.0	6.1	26	KG
4/25/03 1	B	19.1		8.1	7.0	27	CG
4/26/03 2	C	17.2		8.1	7.3	26	KG
4/27/03 3	D	20.1		8.0	7.0	25	KG
4/28/03 4	E	20.5		8.1	7.1	25	RD
4/29/03 5	A	18.8		8.0	7.9	27	CG
4/30/03 6	B	19.5		8.1	7.6	25	RD
5/1/03 7	C	19.2		8.0	7.3	25	KG
5/2/03 8	D	20.1		8.2	8.0	25	RD
5/3/03 9	E	18.9		8.1	7.3	25	[illegible]
5/4/03 10	A	19.4		8.1	8.1	26	RD
5/5/03 11	B	20.1		8.1	7.7	24	RD
5/6/03 12	C	18.4		8.1	8.0	26	JH
5/7/03 13	D	19.6		8.1	8.1	26	KG
5/8/03 14	E	19.3		8.1	8.0	26	KG
5/9/03 15	A	20.0		8.2	7.8	26	KG
5/10/03 16	B	19.1		8.1	7.6	26	JH
5/11/03 17	C	17.6		8.1	8.2	26	RD
5/12/03 18	D	19.2		8.1	7.5	25	CG
5/13/03 19	E	17.7		8.2	7.6	25	CG
5/14/03 20	A	18.1		8.1	7.9	26	JH
5/15/03 21	B	19.9		8.0	8.0	25	CG
5/16/03 22	C	19.4		8.1	8.2	25	KG
5/17/03 23	D	19.9		8.1	8.0	26	JH
5/18/03 24	E	16.4		7.9	7.9	26	KG
5/19/03 25	A	16.3		8.0	8.1	25	CG
5/20/03 26	B						
5/21/03 27	C	19.5		8.1	7.9	26	KG
5/22/03 28	D	17.9		8.2	8.1	27	[illegible]

[illegible]

MACTEC (formerly Harding ESE)

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Canaveral
SAMPLE ID: ctrl

PROJECT NUMBER:
TEST SPECIES: M. nasuta

DATE-DAY	REP A	REP B	REP C	REPD	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	N	N	HEB
5/3/03 9	N	N	N	N	N	[illegible]
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	N	N	N	N	JA
5/7/03 ~~5/7/03~~ JA 13	N	N	N	N	1d	KG
5/8/03 ~~5/8/03~~ JA 14	N	N	N	N	N	KG
5/9/03 ~~5/9/03~~ JA 15	N	N	N	N	2d	KG
5/10/03 16	N	N	N	N	N	JA
5/11/03 ~~5/10/03~~ JA 17	N	N	N	N	N	RD
5/12/03 18	N	N	N	N	1D/N	JA
5/13/03 19	N	N	N	N	1D	KG
5/14/03 20	N	N	N	N	N	[illegible]
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	JA
5/17/03 23	N	N	N	N	N	JA
5/18/03 24	1d ~~1d~~ N	N	N	N	N	KG
5/19/03 25	N	N	N	N	N	CG
5/20/03 26	N	N	N	N	N	JA
5/21/03 27	N	N	N	N	[illegible]	KG
5/22/03 28	19A	20A	20A	20A	13A 2NR	KG

JMR

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-9**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	N	N	HEB
5/3/03 9	N	N	N	N	N	DD
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	N	N	N	N	JA
5/7/03 13	N	N	N	N	N	RD
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	N	KG
5/10/03 16	N	N	N	N	N	JA
5/11/03 17	N	N	N	N	N	RD
5/12/03 18	N	N	N	N	N	JA
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	N	N	N	N	N	DD
5/15/03 21	CG ~~N~~ N	22 ~~KG~~	N	N	N	CG
5/16/03 22	N	N	N	N	N	JA
5/17/03 23	N	N	N	N	N	JA
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	CG ~~N~~	18	N	N	N	CG
5/20/03 26	N	N	22	N	N	JA
5/21/03 27	N	N	N	N	N	KG
5/22/03 28	20	17	18	18	17/18	G

MACTEC Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-10**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded				→	HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	~~N~~	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	1d	N	1d	HEB
5/3/03 9	N	N	N	N	N	DD
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	N	N	N	N	JH
5/7/03 13	N	N	N	N	1d	KG
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	1d	KG
5/10/03 16	N	N	N	N	N	JH
5/11/03 17	N	N	N	N	1d	RD
5/12/03 18	N	N	N	N	N	JH
5/13/03 19	N	~~1d~~ 15 N	N	N	N	KG
5/14/03 20	N	2d	N	2d	N	DD
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	JH
5/17/03 23	N	N	N	N	N	JH
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	N	N	N	N	N	CG
5/20/03 26	N	N	N	N	N	JH
5/21/03 27	N	N	N	N	N	KG
5/22/03 28	16/2d	18A	18A/~~1d~~	17A/1d	15/1d	CG

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MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-11**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	Id	N	N	HEB
5/3/03 9	N	N	N	N	N	DJD
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	N	N	N	~~Id~~	JH
5/7/03 13	N	Id	N	N	N	RD
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	N	KG
5/10/03 16	N	~~Id~~	N	N	N	JH
5/11/03 17	N	N	N	N	N	RD
5/12/03 18	N	~~Id~~	N	N	~~Id~~	JH
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	N	N	N	N	N	DJD
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	JH
5/17/03 23	N	N	N	N	N	JH
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	Id	N	N	N	N	CG
5/20/03 26	N	N	N	N	Id	JH
5/21/03 27	N	N	N	N	N	KG
5/22/03 28	19	~~16~~ 15/Id	19	19/10	~~16~~ 17	RD

X07

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-12**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	1d	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	N	N	HEB
5/3/03 9	N	N	N	N	N	DD
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	1d	N	1d	N	JH
5/7/03 13	N	N	N	N	N	KG
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	N	KG
5/10/03 16	N	N	N	N	1d	JH
5/11/03 17	N	N	N	N	N	RD
5/12/03 18	1d	N	2d	N	N	JH
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	N	N	N	N	N	DD
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	JH
5/17/03 23	N	N	N	N	N	JH
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	N	1d	N	N	N	CG
5/20/03 26	N	N	N	N	N	JH
5/21/03 27	N	N	N	N	N	KG
28	19	16	17	20 - 16	18	CG
		2d	1d		1d	

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-13**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	N	N	HEB
5/3/03 9	N	N	N	N	N	DD
5/4/03 10	1d	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	N	N	N	N	JH
5/7/03 13	N	N	N	N	N	KG
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	1d	N	N	N	KG
5/10/03 16	N	N	N	N	N	JH
5/11/03 17	N	N	N	N	N	RD
5/12/03 18	~~1d~~	N	N	N	N	JA
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	N	N	N	N	N	DD
5/15/03 21	N	1d	1d	N	1d	CG
5/16/03 22	N	N	N	N	N	JH
5/17/03 23	N	N	N	N	N	JH
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	N	N	N	N	1d	CG
5/20/03 26	N	N	N	N	N	JH
5/21/03 27	N	N	N	N	N	KG
5/22/03 28	3d/15A	4d/14A	1d/17A	3d/17A	1d/17A	RD

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-14**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/~~30~~ 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	N	1d	HEB
5/3/03 9	N	N	N	N	N	[illegible]
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	1d	N	RD
5/6/03 12	N	N	N	N	~~1d~~	JA
5/7/03 13	N	N	N	N	N	KG
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	N	KG
5/10/03 16	N	N	N	N	~~1d~~	JA
5/11/03 17	N	N	N	N	N	RD
5/12/03 18	1d	1d	1d	N	N	JA
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	2d	N	N	N	N	JA
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	1d	N	N	N	JA
5/17/03 23	N	N	N	N	N	JA
5/18/03 24	N	N	N	~~1d~~ N	N	KG
5/19/03 25	2d	N	N	N	N	CG
5/20/03 26	N	N	N	N	N	JA
5/21/03 27	N	N	N	N	N	KG
5/22/03 28	14A/5d	13A/5d	16A/3d	17A/4d	~~17A/2d~~ CG/5A	G

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-~~16~~15**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	N	N	HEB
5/3/03 9	N	N	N	N	N	DD
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	1d	N	N	N	RD
5/6/03 12	N	N	N	N	N	JA
5/7/03 13	N	~~N 1d~~	1d	N	N	KG
5/8/03 14	N	1d	N	N	N	KG
5/9/03 ~~5/9/03~~ 15	N	1d	1d	N	N	KG
5/10/03 16	N	N	N	N	N	JA
5/11/03 17	N	N	N	N	N	RD
5/12/03 18	N	N	2d	N	1d ~~N~~	JA
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	1d	N	N	1d	1d	JA
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	DD
5/17/03 23	N	N	N	N	N	JA
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	N	N	1d	N	N	CG
5/20/03 26	N	N	N	N	N	JA
5/21/03 27	N	N	N	N	N	KG
28	17A 2d	17A/2d	15A	18A 1d	18A 2d	RD

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-~~15~~16**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	ld	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	ld	N	N	N	HEB
5/3/03 9	N	N	N	N	N	DD
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	N	N	N	N	JA
5/7/03 13	ld	N	ld	~~ld~~	ld	KG
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	N	KG
5/10/03 16	N	N	N	N	N	JA
5/11/03 17	ld	N	N	N	N	RD
5/12/03 18	N	N	ld	N	N	JA
5/13/03 19	N	N	N	N	ld	KG
5/14/03 20	N	N	N	N	N	JA
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	JA
5/17/03 23	N	N	N	N	N	JA
5/18/03 24	~~ld~~ N	N	N	N	N	KG
5/19/03 25	N	N	N	N	N	CG
5/20/03 26	N	N	N	N	N	JA
5/21/03 27	N	N	N	N	N	KG
28	18A/0d	19A/0d	16A/0d	19A	16A/0d	CG
			18	19	20	

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 10[illegible]

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-17**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded →					HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	N	N	N	N	N	HEB
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	3d	N	HEB
5/3/03 9	N	N	N	N	N	DD
5/4/03 10	N	N	N	~~1d~~ N	N	RD
5/5/03 11	N	N	1d	N	N	RD
5/6/03 12	N	N	N	N	~~1d~~	JA
5/7/03 13	N	N	N	N	N	KG
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	N	KG
5/10/03 16	N	N	N	N	~~1d~~	JA
5/11/03 17	N	N	N	N	N	RD
5/12/03 18	N	N	N	N	N	JA
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	N	N	N	N	N	JA
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	DD
5/17/03 23	N	N	N	N	N	JA
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	N	N	N	N	N	CG
5/20/03 26	N	N	N	N	N	JA
5/21/03 27	N	N	(17) N	N	N	KG
5/22/03 28	18A/2d	19A/1d	17 2d	17	16A 2d	DD

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **RS-CH03**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/24/03 0	20 loaded	→				HEB
4/25/03 1	N	N	N	N	N	CG
4/26/03 2	N	N	N	N	N	HEB
4/27/03 3	N	N	N	N	N	KG
4/28/03 4	2d	2d	1d	N	N	~~CG~~ CG
4/29/03 5	N	N	N	N	N	CG
4/30/03 6	N	N	N	N	N	CG
5/1/03 7	N	N	N	N	N	KG
5/2/03 8	N	N	N	N	N	HEB
5/3/03 9	N	N	N	N	N	[illegible]
5/4/03 10	N	N	N	N	N	RD
5/5/03 11	N	N	N	N	N	RD
5/6/03 12	N	1d	N	N	N	JA
5/7/03 13	N	1d	N	2d	N	KG
5/8/03 14	N	N	N	N	N	KG
5/9/03 15	N	N	N	N	N	KG
5/10/03 16	N	N	~~1d~~ 1d	N	N	JA
5/11/03 17	N	N	N	N	N	RA
5/12/03 18	N	N	N	N	N	JA
5/13/03 19	N	N	N	N	N	KG
5/14/03 20	N	N	N	N	N	[illegible]
5/15/03 21	N	N	N	N	N	CG
5/16/03 22	N	N	N	N	N	[illegible]
5/17/03 23	N	N	N	N	N	JA
5/18/03 24	N	N	N	N	N	KG
5/19/03 25	N	N	N	N	N	CG
5/20/03 26	N	N	N	N	N	JA
5/21/03 27	N	N	N	N	N	KG
5/22/03 28	18	16	18	18	20	RD

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of CuSO4 : 0.1 (g) Volume of Milli-Q Water: 1000 (mL) Date Prepared: 4/22/03	[X] Definitive [x] Static [ ] Screening Duration: 96 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: Macoma nasuta Batch Number: 2003-30 Age/Life Stage: Adult Date of Acclimation/Maintenance: See Page 107 of Organism Receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 2 No. Of Organisms/Replicate: 5	Lighting: [x] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 10 L X 10 W 15 H Test Solution Height: 12 (cm) Test Vessel Volume: 1.0 (L) Test Solution Volume: 0.9 (L) Test Temperature: ~~17~~ 15 ± 2 °C Test Salinity: ~~30~~ 25 ± 2 ppt
Test Area Used: waterbath, Rm. 2407	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed:

Test Concentrations: (Units: µg/L)	Control	312	624	1248	2496	4992	9884
Amount Dilution Water Added (mL)	1800	1794.4	1788.8	1777.6	1755.0	1710.2	1622.0
Amount of Stock Added (mL)	0	5.6	11.2	22.4	45	89.8	178

Additional Observations: Airlines started and vessels covered on day zero.

Data By: CG Date: 4/22/03

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: *Macoma nasuta*

DAY 0 — REF TOXICANT: CuSO4

Nominal Concentration (mg/L)	Date: 4/24/03				Time: 1130		Analyst: CG	
	A # Alive	B	A Observ.	B	A Temp. (°C)	A Sal (ppt)	A DO (mg/L)	A pH
Control	5	5	loaded		19.7	26	7.3	8.1
312					19.8	26	7.3	8.1
624					19.7	26	7.3	8.1
1248					20.0	24	7.2	8.0
2496					20.0	24	7.2	8.0
4992					20.0	24	7.3	8.0
9884					20.0	24	7.3	7.9

DAY 1	Date: 4/25/03				Time: 0910		Analyst: CG	
Nominal Concentration	A # Alive	B	A Observ.	B	B Temp. (°C)	B Sal (ppt)	B DO (mg/L)	B pH
Control	5	5	N	N	18.9	26	7.6	7.9
312	5	5	N	N	18.5	26	6.7	7.6
624	5	5	N	N	18.8	26	7.4	7.9
1248	5	5	N	N	18.7	26	7.1	7.8
2496	5	5	N	N	18.6	25	5.0	7.3
4992	5	5	N	N	18.4	25	7.3	8.0
9884	5	5	N	N	18.7	25	7.0	7.9

DAY 2	Date: 4/26/03				Time: 1115		Analyst: KG	
Nominal Concentration	A # Alive	B	A Observ.	B	A Temp. (°C)	A Sal (ppt)	A DO (mg/L)	A pH
Control	5	5	N	N	19.8	27	7.0	7.8
312	5	5	N	N	19.7	27	7.0	7.7
624	5	5	N	N	20.2	25	6.2	7.5
1248	5	5	N	N	19.9	27	7.0	7.9
2496	5	5	N	N	20.0	26	7.0	7.9
4992	5	4	N	1d	20.2	25	6.9	7.8
9884	5	4	N	1d	20.2	25	6.9	7.7

MACTEC Engineering and Consulting, Inc.
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

QA FORM NO: 097RT REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 3 AND 4

Client: Misc.	Project Number: Ref Tox	Species: *Macoma nasuta*

DAY 3

Nominal Concentration	Date: 4/27/03				Time: 1800		Analyst: KC	
	A # Alive	B	A Observ.	B	B Temp. (°C)	B Sal (ppt)	B DO (mg/L)	B pH
Control	5	5	N	N	20.4	27	6.5	7.8
312	2	2	3d	3d	21.0	27	6.4	~~6.9~~ 7.5
624	3	4	2d	1d	21.2	26	6.3	~~6.1~~ 7.8
1248	1	2	4d	3d	21.1	26	6.1	~~6.2~~ 7.4
2496	1	1	4d	4d	21.2	26	6.0	~~6.1~~ 7.5
4992	0	0	5d	~~5d~~ 4d	20.7	26	5.6	~~5.6~~ 7.7
9884	0	0	5d	~~5d~~ 4d	21.2	25	5.4	~~5.4~~ 7.7

DAY 4	Date: 04/28/03				Time: 0900		Analyst: DD	
Nominal Concentration	A # Alive	B	A Observ.	B	Temp. (°C) A	A Sal (ppt)	A DO (mg/L)	A pH
Control	5	5	N	N	20.0	27	7.6	7.8
312	0	0	2D	2D	20.2	27	5.0	7.8
624	0	0	3D	4D	19.8	28	3.2	7.8
1248	0	0	1D	2D	20.2	29	6.0	7.8
2496	0	0	1D	1D	20.7	29	5.8	7.9
4992	~~0~~	~~0~~						
9884	~~0~~	~~0~~						

SUMMARY – Ref Tox, *Macoma nasuta,*

COMMENTS:

Nominal Concentration	Number Dead
Control	0
312	10
624	10
1248	10
2496	10
4992	10
9884	10

Harding ESE
Toxicology Laboratory
Gainesville, Florida

Page: 1 of 2
QA Form No. 018
Revised: March 2001

Project No: 606303 0002.0400 Client: Anamar Test: 28-day Bioacc test M. nasuta, N. virens

DAILY LOG

5/21/03. Sediments loaded + allowed to settle and aerate overnight.

5/22/03. Water quality monitored. Organisms loaded into vessels. Airlines checked.

5/23/03 water renewed, water qualities taken, organisms observed, airlines checked.

5/24/03 WQ taken. Organisms observed. airlines checked

5/25/03 WQ taken Organisms observed airlines Checked

5/26/03 Water renewed, organisms observed, airlines checked WQ taken, Ref Tox Test M. nasuta, N. virens Taken down

5/27/03 WQ taken. Organisms observed, airlines checked.

5/28/03 - WQ Taken, water renewed, organisms observed and airlines checked.

5/29/03 - WQ Taken on M.N/NV each room. Organisms observed. Airlines checked. (data reviewed JMR)

5/30/03 water renewed, organisms observed, WQ taken, airlines checked

5/31/03 WQ taken. Organisms observed. airlines checked

6/1/03 WQ taken. Organisms observed. airlines checked

6/2/03 Renewed, organisms observed WQ Taken, (data reviewed JM). Airlines checked

6/3/03 WQ taken organisms observed, airlines checked (data reviewed, JMR)

JMR

Harding ESE
Toxicology Laboratory
Gainesville, Florida

Page: 2. of 2
QA Form No. 018
Revised: March 2001

Project No: 06030002.0400 Client: Anamar Test: N. virens, M. nasuta 28-day bioacc.

DAILY LOG

6/4/03 WQ taken, 1st test renewed, airline checked, organisms observed.

6/5/03 WQ taken, Airline checked, Organisms Observed. (data reviewed) JMR

6/6/03 WQ taken, Airlines Checked Organisms, Observed, Renewed.

6/7/03 WQ taken, Airlines checked, Organisms observed

6/8/03 WQ taken, Airlines checked, Organisms observed

6/9/03 Organisms observed, Airlines checked, Renewed, WQ Taken.

6/10/03 WQ Taken, Airlines checked, organisms observed (data reviewed) JMR

6/11/03 WQ Taken, Airlines checked, Organisms observered, Water renewed.

6/12/03 WQ Taken, Airlines checked, Organisms observed

6/13/03 Renewed, Airlines Checked, Organisms Observed, WQ Taken

6/14/03 WQ Taken, Airlines checked organisms observed

6/15/03 WQ Taken, airlines checked, Organisms observed

6/16/03 WQ Taken, airlines checked, Renewed Organisms observed

6/17/03 WQ Taken, airlines checked, and organisms observed.

6/18/03 Water Renewed, organisms observed, wq taken, airlines checked.

6/19/03 Water Qualities taken, airlines checked, organisms counted and test taken down. JMR

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002.0400

TEST MATERIAL

Test Material: Sediment

See Page 1 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Macoma nasuta

Lot Number: 2003-44

Age/ Life Stage: Adult

Date Acclimation/ Maintenance Began: 5/22/03

See Page 108 of Organism Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <1%

TEST CONDITIONS

( ) Range Finder
(X) Screening
( ) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 28 days

Test Area Used: bioacc. Lab

Test Temperature (°C): 18 +/- 2

Test Salinity (ppt): 25 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 20

Dilution Water: natural filtered seawater

TEST VESSELS

Dimensions (cm): Length x Width x Height

Test Solution Height (cm) :

Test Vessels: (x) Open ( ) Covered

Test Container Volume: 38 L (10 gallons)

Test Solution Volume: 30 L

TEST SOLUTION PREPARATION

Test Concentration % mg/L									
Volume of Dilution Water Added (mL)									
Volume of Effluent/ Stock Added (mL)									

ADDITIONAL OBSERVATIONS:

DATA BY: 5/22/03 DATE: [illegible]

cb

MACTEC Engineering and Consulting (formerly Harding ESE) Revised: Oct 2002

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: CH-Control-2

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: .M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
5/22/03 0	A	18.4		8.0	8.1	24	KG
5/23/03 1	B	20.0		8.2	7.5	25	CG
5/24/03 2	C	17.6		8.2	7.6	25	KG
5/25/03 ~~5/25/03~~ JA 3	D	17.2		8.1	* 7.7 JA	25	DD
5/26/03 4	E	17.5		8.2	7.8	26	JA
5/27/03 5	A	17.5		8.1	8.8	26	KG
5/28/03 6	B	19.9		8.3	8.1	26	CG
5/29/03 7	C	16.8		8.3	8.3	26	JA
5/30/03 8	D	17.8		8.3	8.1	25	JA
5/31/03 9	E	17.3		8.2	8.7	26	KG
6/1/03 10	A	16.9		8.2	8.4	26	RD
6/2/03 11	B	19.1		8.3	9.0	25	KG
6/3/03 12	C	17.3		8.3	8.8	25	JA
6/4/03 13	D	18.3		8.3	8.3	25	JA
6/5/03 14	E	17.4		8.2	9.1	26	DD
6/6/03 15	A	16.7		8.2	8.3	26	DD
6/7/03 16	B	17.6		8.1	8.0	26	RD
6/8/03 17	C	17.2		8.1	8.1	26	RD
6/9/03 18	D	20.4		8.0	7.7	25	DD
6/10/03 19	E	17.4		8.0	8.3	26	CG
6/11/03 20	A	20.0		8.1	8.0	25	DD
6/12/03 21	B	17.2		8.3	8.1	27	RD
6/13/03 22	C	19.3		8.3	7.8	27	RD
6/14/03 23	D	18.0		8.2	7.9	28	JA
6/15/03 24	E	18.4		8.2	8.1	~~28~~ 27	DD
6/16/03 25	A	19.5		8.3	8.0	26	DD
6/17/03 26	B	17.7		8.0	8.0	26	CG
6/18/03 27	C	19.3		8.2	8.1	26	CG
6/19/03 28	D	17.8		8.3	8.3	27	CG

* average of 2 day taken here missing

MACTEC Engineering and Consulting (formerly Harding ESE) Revised: Oct 2002

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: E-CH03-20

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: .M. nasuta

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
5/22/03 0	A	17.8		8.1	8.1	24	KG
5/23/03 1	B	20.0		8.2	7.6	25	CG
5/24/03 2	C	17.4		8.2	7.7	25	KG
5/25/03 3	D	17.0		8.1	* 7.7 JH	25	DD
5/26/03 4	E	17.5		8.2	7.8	26	JH
5/27/03 5	A	16.9		8.1	8.7	26	KG
5/28/03 6	B	20.0		8.3	8.1	26	CG
5/29/03 7	C	17.0		8.2	8.2	26	JH
5/30/03 8	D	17.5		8.2	8.2	25	JH
5/31/03 9	E	17.0		8.3	8.7	26	KG
6/1/03 10	A	17.2		8.1	8.0	26	RD
6/2/03 11	B	19.2		8.3	8.9	25	KG
6/3/03 12	C	17.3		8.3	8.9	25	JH
6/4/03 13	D	18.4		8.3	8.3	25	JH
6/5/03 14	E	17.2		8.2	8.9	25	DD
6/6/03 15	A	16.9		8.2	8.4	26	DD
6/7/03 16	B	17.2		8.1	7.9	26	RD
6/8/03 17	C	17.1		8.0	8.2	26	RD
6/9/03 18	D	20.4		8.1	7.8	25	DD
6/10/03 19	E	16.8		8.0	8.3	27	CG
6/11/03 20	A	19.6		8.2	7.9	25	DD
6/12/03 21	B	16.5		8.3	8.3	27	RD
6/13/03 22	C	18.8		8.3	7.9	26	RD
6/14/03 23	D	18.0		8.2	7.6	28	JH
6/15/03 24	E	17.9		8.2	8.2	27	DD
6/16/03 25	A	19.2		8.3	8.1	26	DD
6/17/03 26	B	17.2		8.1	8.0	27	CG
6/18/03 27	C	19.2		8.3	8.2	26	CG
6/19/03 28	D	17.6		8.3	8.3	27	CG

MACTEC Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **CH-Control-2**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
5/22/03 0	Loaded 20					KG
5/23/03 1	N	N	N	N	N	CG
5/24/03 2	N	N	N	N	N	KG
5/25/03 3	N	N	N	N	N	DD
5/26/03 4	N	N	1d	N	N	JA
5/27/03 5	N	N	N	N	N	KG
5/28/03 6	N	N	N	N	N	CG
5/29/03 7	N	N	N	N	N	JA
5/30/03 8	N	N	N	N	N	JA
5/31/03 9	N	N	~~1d~~ N	N	N	KG
6/1/03 10	N	N	N	N	N	RD
6/2/03 11	N	N	N	N	N	DD
6/3/03 12	N	N	N	N	N	JA
6/4/03 13	N	N	2d	N	N	JA
6/5/03 14	N	N	N	N	N	DD
6/6/03 15	~~1d~~ 1d	N	N	N	N	DD
6/7/03 16	N	N	N	1d	N	RD
6/8/03 17	N	N	N	N	N	RD
6/9/03 18	N	N	N	N	N	DD
6/10/03 19	N	N	N	N	N	CG
6/11/03 20	N	N	N	N	N	DD
6/12/03 21	N	N	N	1d	N	RD
6/13/03 22	N	N	N	N	N	DD
6/14/03 23	N	N	N	N	N	JA
6/15/03 24	N	2d	N	N	2d	DD
6/16/03 25	N	N	N	N	N	DD
6/17/03 26	N	N	N	N	N	CG
6/18/03 27	~~1d~~ N	N	N	N	N	CG
6/19/03 28	19 A	18A	17A	18A	18A	KL

MACTEC Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: E **-CH03-20**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *M. nasuta*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
5/22/03 0	loaded 20	→				KG
5/23/03 1	N	N	N	N	N	CG
5/24/03 2	N	N	N	N	N	KG
5/25/03 3	N	N	N	N	N	DD
5/26/03 4	N	N	N	N	N	JA
5/27/03 5	N	N	N	N	N	KG
5/28/03 6	N	N	N	N	N	CG
5/29/03 7	N	N	N	N	N	JA
5/30/03 8	N	N	N	N	N	JA
5/31/03 9	N	N	N	N	N	KG
6/1/03 10	N	N	N	N	N	RD
6/2/03 11	N	N	N	N	N	DD
6/3/03 12	N	N	N	N	N	JA
6/4/03 13	~~2d~~ Nd	N	N	N	N	JA
6/5/03 14	N	N	N	N	N	DD
6/6/03 15	N	N	N	~~1d~~ N	~~1d~~ 3d	DD
6/7/03 16	N	N	N	N	N	RD
6/8/03 17	1d	N	N	N	N	RD
6/9/03 18	N	N	N	N ~~2d~~	N	DD
6/10/03 19	N	N	N ~~A~~	N	N	CG
6/11/03 20	~~3d~~ N	N	N	N	N	DD
6/12/03 21	N	N	N	N	N	RD
6/13/03 22	N	~~1d~~ N	N	N	N	DD
6/14/03 23	N	N	N	N	N	JA
6/15/03 24	N	N	N	N	N	DD
6/16/03 25	N	N	N	N	N	DD
6/17/03 26	N	1d	1d	N	N	CG
6/18/03 27	1d	N	N	N	N	CG
6/19/03 28	17A	19A	19A	20A	19	KG

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of CuSO4 : 0.1 (g) Volume of Milli-Q Water: 1000 (mL) Date Prepared: 5/22/03	[X] Definitive [x] Static [ ] Screening Duration: 96 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: Macoma nasuta Batch Number: 2003-44 Age/Life Stage: Adult Date of Acclimation/Maintenance: 5/22/03 See Page 108 of Organism Receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 2 No. Of Organisms/Replicate: 5	Lighting: [x] Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 10 L X 10 W 15 H Test Solution Height: 12 (cm) Test Vessel Volume: 1.0 (L) Test Solution Volume: 0.9 (L) Test Temperature: 18 ~~14~~ ± 2 °C Test Salinity: 30 ± 2 ppt
Test Area Used: waterbath, Rm. 2407	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed:

Test Concentrations: (Units: µg/L)	Control	312	624	1248	2496	4992	9884
Amount Dilution Water Added (mL)	1800	1794.4	1788.8	1777.6	1755.0	1710.2	1622.0
Amount of Stock Added (mL)	0	5.6	11.2	22.4	45	89.8	178

Additional Observations:

Data By: Date: 5/22/03

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox 1650	Species: *Macoma nasuta*

DAY 0 — REF TOXICANT: CuSO4

Nominal Concentration (mg/L)	Date: 5/22/03 # Alive	Observ.	Time: 1000 Temp. (°C) A	Sal (ppt) A	Analyst: Jm DO (mg/L) A	pH A
Control	Loaded 5	(2 replicates) N	19.3	30	8.0	8.1
312	↓	↓	19.2	30	8.0	8.1
624			19.2	30	8.0	8.1
1248			19.1	29	8.1	8.1
2496			19.1	28	8.1	8.1
4992			19.2	28	8.0	8.1
9884			19.2	28	8.0	8.0

DAY 1 — Date: 5/23/03 — Time: 1000 — Analyst: CG

Nominal Concentration	A # Alive	B	A Observ.	B	Temp. (°C) B	Sal (ppt) B	DO (mg/L) B	pH B
Control	5 CG ~~40~~	5	N	N	17.7	28	8.5	8.0
312	5 CG ~~40~~	5	N	N	17.8	28	8.5	8.1
624	5	5	N	N	17.8	28	8.5	8.1
1248	5	5	N	N	17.9	28	8.4	8.1
2496	5	5	N	N	17.9	28	8.4	8.1
4992	5	5	N	N	17.7	28	8.4	8.1
9884	5	5	N	N	17.7	25	8.4	8.1

DAY 2 — Date: 5/24/03 — Time: 0910 — Analyst: CG

Nominal Concentration	A # Alive	B	A Observ.	B	Temp. (°C) A	Sal (ppt) A	DO (mg/L) A	pH A
Control	5	5	N	N	17.6	29	8.1	7.9
312	5	5	N	N	17.5	30	7.9	8.0
624	5	5	N	N	17.5	30	7.9	8.1
1248	5	5	N	N	17.5	29	7.8	8.1
2496	5	5	N	N	17.6	29	7.8	7.8
4992	5	5	N	N	17.4	29	7.5	8.1
9884	5	5	N	N	17.5	29	7.5	8.1

MACTEC Engineering and Consulting, Inc.
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

QA FORM NO: 097RT REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 3 AND 4

Client: Misc.	Project Number: Ref Tox	Species: *Macoma nasuta*

DAY 3

Nominal Concentration	Date: 5/25/03				Time: 1030		Analyst: [illegible]	
	A # Alive	B	A Observ.	B	Temp. (°C) B	Sal (ppt) B	DO (mg/L) B	pH B
Control	5	5	N	N	17.8	30	7.4	8.1
312	5	5	N	N	18.1	29	7.4	8.1
624	5	5	N	N	17.9	30	7.4	8.1
1248	5	5	N	N	18.1	29	7.5	8.2
2496	5	5	N	N	18.1	29	7.4	8.2
4992	5	5	N	N	18.0	28	7.3	8.1
9884	5	5	N	N	17.9	28	6.1	7.6

DAY 4	Date: 5/26/03				Time: 1400		Analyst: CG	
Nominal Concentration	A # Alive	B	A Observ.	B	Temp. (°C) A	Sal (ppt) A	DO (mg/L) A	pH A
Control	5	5	N	N	17.5	29	7.3	8.2
312	4	1	1d	4d	17.5	30	7.4	8.3
624	4	1	1d	4d	17.3	30	7.4	8.3
1248	2	0	3d	5d	17.5	29	7.3	8.2
2496	0	1	5d	4d	17.6	30	7.2	6.6
4992	0	0	5d	5d	17.5	29	6.9	8.14
9884	0	0	5d	5d	17.5	30	5.4	8.1

SUMMARY – Ref Tox, *Macoma nasuta,*

COMMENTS:

Nominal Concentration	Number Dead
Control	0
312	5
624	5
1248	8
2496	9
4992	10
9884	10

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DA May 03 TEST NUMBER: Ref Tox DURATION: 96 H
TO. ANT : CuSO4
SPECIES: M. nasuta

RAW DATA: --- ----	Concentration (mg/L)	Number Exposed	Mortalities
	.00	10	0
	312.00	10	5
	624.00	10	5
	1248.00	10	8
	2496.00	10	9
	4992.00	10	10
	9884.00	10	10

SPEARMAN-KARBER TRIM: 50.00%

SPEARMAN-KARBER ESTIMATES: LC50: 441.23
95% CONFIDENCE LIMITS
ARE NOT RELIABLE.

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002.0400

TEST MATERIAL

Test Material: Sediment

See Page 658 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Nereis virens

Lot Number: 2003 - 29

Age/ Life Stage: adult

Date Acclimation/ Maintenance Began: 4/18/03

See Page 107 of organism Receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <1%

( ) Range Finder
(X) Screening
( ) Definitive

( ) Static
(X) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 28 days

Test Area Used: Bioaccumulation Rm.

Test Temperature (°C): 18 +/- 2

Test Salinity (ppt): 25 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 20

Dilution Water: natural filtered seawater

TEST VESSELS

Dimensions (cm): 49 Length x 25 Width x 32 Height

Test Solution Height (cm) : 27

Test Vessels: (x) Open ( ) Covered

Test Container Volume: 38 L (10 gallons)

Test Solution Volume: 30 L (~8 gal)

TEST SOLUTION PREPARATION

Test Concentration % mg/L									
Volume of Dilution Water Added (mL)									
Volume of Effluent/ Stock Added (mL)									

ADDITIONAL OBSERVATIONS:

5 cm minimum sediment per tank

DATA BY: JM

DATE: 4/18/03

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: October 2002

Project No: 608030 3 0002 Client: Anaman Test: B. roce. N. virens

DAILY LOG

4/17/03 Sediments loaded, saltwater added, airlines started. Allowed to acclimate overnight

4/18/03 - Organisms loaded. WQ monitored. Airlines checked.

4/18/03 Water qualities monitored, airlines checked. Water renewed

4/19/03 Water qualities monitored, airlines checked Organisms Observed

4/20/03 Water qualities monitored, airlines checked Organisms Observed

~~4/21/03 - Water renewed. WQ monitored. Organisms observed.~~

4/22/03 - Water qualities monitored, airlines checked, organisms observed.

4/23/03 Water qualities monitored. Airlines checked. Organisms observed. Water renewed

~~Water renewed.~~ JMW

4/24/03 water qualities monitored, airlines checked, organisms observed. (data reviewed. Some temps below range - adjusted room thermostat, increased aeration flow JMW)

4/25/03 - water qualities monitored, airlines checked organisms observed. Water renewed.

4/26/03 - water qualities monitored Airlines checked organisms observed

4/27/03 Water qualities monitored. Airlines checked. organisms observed

4/28/03 Water qualities monitored. Water renewed organisms observed and airlines checked

4/29/03 Water qualities taken, airlines checked, and organisms observed.

JMW

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

Page: 2 of 3
QA Form No. 018
Revised: October 2002

Project No: 6063030002.0400

Client: Canaveral Test: Bioaccumulation, N. virens

DAILY LOG

4/30/03 Water qualities taken, airlines checked and organisms observed. Water renewed

5/1/03 water qualities taken. Organisms observed airlines checked

5/2/03 water renewed, water qualities taken, airlines and tubes checked, organisms observed JM (data reviewed, JMM)

5/3/03 water qualities taken. Organisms Observed Airlines checked

5/4/03 Water qualities taken, organisms observed, airlines checked

5/5/03 Water qualities taken, airlines checked, organisms observed. Water renewed.

5/6/03 water qualities taken, airlines checked, organism observed

5/7/03 Water qualities taken, airlines checked organisms observed. Water renewed

5/8/03 Water qualities taken, airlines checked organisms observed.

5/9/03 Water qualities taken, airlines checked. Water renewed. organisms observed.

5/10/03 water qualities taken, organism observed airlines checked

5/11/03 Water qualities taken, airlines checked organisms observed

5/12/03 - Water qualities taken, water renewed, airlines checked, organisms observed

MACTEC Engineering & Consulting, Inc.
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: October 2002

Project No: 6063030002.0400 Client: Anaman / Conaway Hall Test: 28-day bioacc. N. virens

DAILY LOG

5/13/03 WQ taken. Airlines checked. Organisms observed.

5/14/03 Water renewed. Organisms observed. WQ monitored. Airlines checked.

5/15/03 Water quality monitored. Organisms observed. Airlines checked.

5/16/03 WQ monitored. Organisms counted. Test terminated. Organisms placed in ziploc bags (covered with saltwater) to allow depuration overnight.

5/17/03 Depurated organisms: saltwater drained, organisms rinsed with fresh water. Organisms frozen (by replicate).

MACTEC Engineering and Consulting (formerly Harding ESE) Revised: Oct 2002

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar / Canaveral Harbor
SAMPLE ID: ctrl

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	16.0		8.4	8.3	25	HEB
4/19/03 1	B	16.3		8.2	8.6	25	DD
4/20/03 2	C	18.6		8.2	8.2	25	DD
4/20/03 3	D	17.7		8.3	8.4	25	DD
4/22/03 4	E	17.6		8.2	8.9	26	CG
4/23/03 5	A	16.1		8.0	8.2	26	RD
4/24/03 6	B	18.8		8.0	7.6	26	RD
4/25/03 7	C	17.2		8.1	8.0	27	CG
4/26/03 8	D	17.6		8.2	8.4	26	KG
4/27/03 9	E	17.4		8.0	7.4	27	HEB
4/28/03 10	A	17.6		8.1	8.0	26	RD
4/29/03 11	B	16.8		8.1	9.2	25	CG
4/30/03 12	C	18.4		8.1	9.8	25	RD
5/1/03 13	D	17.1		8.1	8.6	25	KG
5/2/03 14	E	19.6		8.2	8.5	25	JH
5/3/03 15	A	16.6		8.1	8.4	25	DD
5/4/03 16	B	16.4		8.0	8.8	25	RD
5/5/03 17	C	18.1		8.1	8.0	26	RD
5/6/03 18	D	17.2		8.1	7.9	26	JH
5/7/03 19	E	18.4		8.1	8.5	26	KG
5/8/03 20	A	17.2		8.1	8.7	26	KG
5/9/03 21	B	19.7		8.0	7.9	25	KG
5/10/03 22	C	19.6		8.1	7.7	26	JH
5/11/03 23	D	17.3		8.2	8.3	25	RD
5/12/03 24	E	19.4		8.0	7.8	27	CG
5/13/03 25	A	16.9		8.0	8.6	27	CG
5/14/03 26	B	16.8		7.8	7.3	27	DD
5/15/03 27	C	18.7		8.3	8.3	25	CG
5/16/03 28	D	18.1		8.1	8.5	25	DD

JMC

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-9**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.4		8.4	7.7	25	HEB
4/19/03	B	17.1		8.1	8.5	25	DD
4/19/03	C	18.4		8.0	8.1	25	DD
4/21/03	D	18.4		8.3	8.1	25	DD
4/22/03 4	E	18.2		8.3	8.8	26	CG
4/23/03 5	A	17.3		8.1	8.0	26	RD
4/24/03 6	B	18.2		8.0	6.5	27	RD
4/25/03 7	C	18.0		7.5	8.1	27	CG
4/26/03 8	D	17.5		8.2	7.9	26	KG
4/27/03 9	E	17.3		8.0	7.6	27	HEB
4/28/03 10	A	18.4		8.1	7.8	25	RD
4/29/03 11	B	17.3		8.0	8.5	24	CG
4/30/03 12	C	18.6		8.1	7.6	25	RD
5/1/03 13	D	17.9		8.1	7.7	25	KG
5/2/03 14	E	19.2		8.2	8.1	25	RD
5/3/03 15	A	17.9		8.2	7.7	25	DD
5/4/03 16	B	17.2		8.2	8.5	25	RD
5/5/03 17	C	18.7		8.1	7.8	27	RD
5/6/03 18	D	18.4		8.1	8.0	26	JH
5/7/03 19	E	19.3		8.1	8.1	26	KG
5/8/03 20	A	17.8		8.2	8.2	26	KG
5/9/03 21	B	20.2		8.2	7.9	26	KG
5/10/03 22	C	18.9		8.2	7.8	26	JH
5/11/03 23	D	18.0		8.2	7.5	26	RD
5/12/03 24	E	19.6		8.1	7.7	26	CG
5/13/03 25	A	17.9		8.2	7.8	26	CG
5/14/03 26	B	17.4		7.9	7.8	26	DD
5/15/03 27	C	18.9		8.2	8.2	26	CG
5/16/03 28	D	18.4		8.2	8.3	26	DD

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-10**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.3		8.4	7.6	25	HEB
4/19/03 1	B	17.2		8.2	8.4	25	DD
4/20/03 2	C	18.4		8.1	8.0	25	DD
4/21/03 3	D	17.9		8.5	8.2	25	DD
4/22/03 4	E	18.1		8.1	8.2	26	CG
4/23/03 5	A	17.7		8.1	7.7	26	RD
4/24/03 6	B	18.5		8.1	6.8	25	RD
4/25/03 7	C	17.5		8.0	7.6	27	CG
4/26/03 8	D	17.5		8.2	8.1	26	KG
4/27/03 9	E	16.9		8.0	7.6	27	HEB
4/28/03 10	A	18.3		8.1	7.6	25	RD
4/29/03 11	B	17.5		8.0	8.4	24	CG
4/30/03 12	C	18.7		8.1	7.7	25	RD
5/1/03 13	D	17.5		8.0	7.8	25	KG
5/2/03 14	E	19.1		8.1	8.8	25	RD
5/3/03 15	A	17.9		8.1	7.7	25	DD
5/4/03 16	B	17.5		8.2	8.2	25	RD
5/5/03 17	C	18.7		8.1	8.0	26	RD
5/6/03 18	D	18.4		8.1	8.1	26	JM
5/7/03 19	E	18.6		8.0	8.1	26	KG
5/8/03 20	A	18.0		8.1	8.1	26	KG
5/9/03 21	B	20.8		8.2	7.8	26	KG
5/10/03 22	C	19.1		8.1	7.6	26	JM
5/11/03 23	D	18.4		8.1	7.8	26	RD
5/12/03 24	E	19.3		8.1	7.8	26	CG
5/13/03 25	A	18.0		8.2	7.9	26	CG
5/14/03 26	B	17.5		7.9	7.3	26	DD
5/15/03 27	C	18.9		8.1	7.5	26	CG
5/16/03 28	D	18.1		7.8	5.7	26	DD

JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-11**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.0		8.4	7.7	25	HEB
4/19/03 1	B	17.2		8.2	8.5	25	DD
4/20/03 2	C	18.3		8.0	8.1	25	DD
4/21/03 3	D	17.8		8.5	8.1	25	DD
4/22/03 4	E	18.0		6.5	8.7	25	CG
4/23/03 5	A	17.2		8.0	7.9	26	RD
4/24/03 6	B	18.1		8.1	6.3	26	RD
4/25/03 7	C	17.9		8.1	7.5	26	CG
4/26/03 ~~4/26/03~~	D	~~17.6~~ 17.3		~~8.1~~ 8.2	~~7.5~~ 8.1 CG	~~27~~ 26 CG	~~CG~~ CG
4/27/03 9	E	16.8		8.0	7.5	27	HEB
4/28/03 10	A	18.2		8.1	7.6	25	RD
4/29/03 11	B	17.3		8.0	8.2	25	CG
4/30/03 12	C	18.7		8.1	7.7	25	RD
5/1/03 13	D	17.6		7.9	7.7	25	KG
5/2/03 14	E	18.9		8.1	8.7	25	RD
5/3/03 15	A	17.4		8.1	7.8	25	DD
5/4/03 16	B	17.1		8.2	8.3	26	RD
5/5/03 17	C	18.8		8.1	7.9	26	RD
5/6/03 18	D	16.3		8.1	8.0	26	JH
5/7/03 19	E	18.5		8.1	8.5	26	KG
5/8/03 20	A	17.7		8.1	7.9	26	KG
5/9/03 21	B	19.8		8.1	7.6	26	KG
5/10/03 22	C	19.1		8.1	7.5	26	JH
5/11/03 23	D	18.1		8.1	7.7	25	RD
5/12/03 24	E	19.5		8.1	7.6	25	CG
5/13/03 25	A	18.0		8.1	7.8	26	CG
5/14/03 26	B	17.3		7.7	7.4	26	DD
5/15/03 27	C	19.0		8.1	8.0	26	CG
5/16/03 28	D	18.3		8.1	8.0	26	DD

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-12**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	16.9		8.4	7.6	25	HEB
4/19/03 1	B	17.2		8.1	8.4	25	DD
4/20/03 2	C	18.5		8.0	8.0	25	DD
4/21/03 3	D	17.9		8.3	8.0	25	DD
4/22/03 4	E	18.0		8.1	9.0	27	CG
4/23/03 5	A	16.9		8.0	8.0	26	RD
4/24/03 6	B	18.4		8.0	6.4	25	RD
4/25/03 7	C	17.7		8.1	7.5	27	CG
4/26/03 8	D	17.2		8.2	8.0	26	KG
4/27/03 9	E	17.9		8.1	7.7	27	HEB
4/28/03 10	A	17.9		8.1	7.8	25	RD
4/29/03 11	B	17.3		8.1	8.6	24	CG
4/30/03 12	C	18.9		8.1	7.3	25	RD
5/1/03 13	D	17.4		8.0	7.8	25	KG
5/2/03 14	E	18.9		8.1	8.5	24	RD
5/3/03 15	A	17.4		8.2	7.8	25	DD
5/4/03 16	B	17.4		8.1	7.7	26	RD
5/5/03 17	C	18.9		8.1	7.6	26	RD
5/6/03 18	D	18.4		8.1	8.0	26	JH
5/7/03 19	E	18.4		8.1	8.6	27	KG
5/8/03 20	A	17.5		8.1	7.8	26	KG
5/9/03 21	B	20.2		8.1	7.5	26	KG
5/10/03 22	C	18.1		8.1	7.8	26	JH
5/11/03 23	D	18.2		8.1	7.9	26	RD
5/12/03 24	E	19.0		8.1	7.7	26	CG
5/13/03 25	A	17.8		8.1	7.9	24	CG
5/14/03 26	B	17.7		7.8	8.1	26	DD
5/15/03 27	C	19.1		8.1	8.0	26	CG
5/16/03 28	D	18.2		8.1	8.0	26	DD

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-13**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	16.9		8.4	7.6	25	HEB
4/19/03 1	B	17.5		8.2	8.3	25	DD
4/20/03 2	C	18.8		8.1	7.9	25	DD
4/21/03 3	D	18.4		8.5	7.9	25	DD
4/22/03 4	E	18.3		8.1	8.6	26	CG
4/23/03 5	A	17.3		8.0	7.8	26	RD
4/24/03 6	B	18.8		8.0	6.6	25	RD
4/25/03	C	18.2		8.1	7.5	26	CG
4/26/03 8	D	17.2		8.2	8.1	26	KG
4/27/03 9	E	17.3		8.1	7.6	27	HEB
4/28/03	A	18.0		8.1	7.8	25	RD
4/29/03 11	B	17.6		8.1	8.5	26	CG
4/30/03 12	C	18.9		8.0	7.3	24	RD
5/1/03 13	D	18.0		8.1	7.7	25	KG
5/2/03 14	E	19.1		8.1	8.5	25	RD
5/3/03 15	A	17.6		8.2	7.8	25	DD
5/4/03 16	B	17.5		8.2	8.1	25	RD
5/5/03 17	C	18.9		8.0	7.5	25	RD
5/6/03 18	D	18.4		8.1	7.9	26	JA
5/7/03 19	E	19.0		8.1	8.3	26	KG
5/8/03 20	A	18.1		8.1	8.0	26	KG
5/9/03 21	B	19.9		8.2	7.6	26	KG
5/10/03 22	C	19.1		8.2	7.5	26	JA
5/11/03 23	D	18.7		8.1	7.8	26	RD
5/12/03 24	E	19.8		8.1	7.6	26	CG
5/13/03 25	A	18.1		8.1	7.6	26	CG
5/14/03 26	B	18.2		7.7	7.3	26	DD
5/15/03 27	C	19.6		8.1	8.0	26	CG
5/16/03 28	D	18.8		8.1	8.1	25	DD

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-14**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.1		8.4	7.6	25	HEB
4/19/03 1	B	17.6		8.1	8.3	25	DD
4/20/03	C	18.7		8.1	7.7	25	DD
4/21/03	D	18.4		8.4	7.9	25	DD
4/22/03 4	E	18.1		8.1	8.8	25	CG
4/23/03	A	17.5		8.0	7.9	26	RD
4/24/03 6	B	18.4		8.0	6.4	25	RD
4/25/03	C	18.1		8.1	7.5	25	CG
4/26/03 8	D	17.4		8.2	8.0	25	KG
4/27/03 9	E	17.3		8.1	7.7	27	HEB
4/28/03 10	A	18.1		8.1	7.6	24	RD
4/29/03 11	B	17.5		8.0	8.4	25	CG
4/30/03 12	C	18.8		8.1	7.5	25	RD
5/1/03 13	D	18.0		8.0	7.6	25	KG
5/2/03 14	E	19.2		8.1	8.5	24	RD
5/3/03 15	A	17.5		8.2	7.8	25	DD
5/4/03 16	B	17.3		8.1	8.4	25	RD
5/5/03 17	C	19.1		8.1	8.0	25	RD
5/6/03 18	D	18.5		8.1	8.1	26	JH
5/7/03 19	E	18.7		8.1	8.2	26	KG
5/8/03 20	A	18.1		8.1	8.1	26	KG
5/9/03 21	B	20.1		8.2	7.7	26	KG
5/10/03 22	C	18.1		8.1	7.4	26	JH
5/11/03 23	D	18.7		8.1	7.5	26	RD
5/12/03 24	E	20.0		8.1	7.4	26	CG
5/13/03 25	A	18.2		8.1	7.6	26	CG
5/14/03 26	B	17.9		7.8	8.1	26	DD
5/15/03 27	C	19.7		8.1	8.0	26	CG
5/16/03 28	D	18.9		8.1	8.1	25	DD

Jhm

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-15**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.2		8.4	7.6	25	HEB
4/19/03 1	B	17.4		8.2	8.3	25	DS
4/20/03 2	C	18.7		8.0	8.0	25	DS
4/21/03 3	D	18.2		8.4	7.9	25	DS
4/22/03 4	E	18.0		8.2	9.0	25	CG
4/23/03 5	A	17.0		8.1	7.9	26	RD
4/24/03 6	B	18.1		8.0	6.6	26	RD
4/25/03 7	C	17.8		8.1	7.6	26	CG
4/26/03 8	D	17.4		8.0	7.9	26	KG
4/27/03 9	E	17.0		8.0	7.8	27	HEB
4/28/03 10	A	18.2		8.1	8.0	25	RD
4/29/03 11	B	17.4		8.0	7.0	26	CG
4/30/03 12	C	18.7		8.1	7.6	25	RD
5/1/03 13	D	17.7		8.0	7.7	25	KG
5/2/03 14	E	19.7		8.0	8.4	25	RD
5/3/03 15	A	17.7		8.1	7.7	25	DS
5/4/03 16	B	17.4		8.1	8.1	25	RD
5/5/03 17	C	18.8		8.1	7.9	25	RD
5/6/03 18	D	18.6		8.1	8.0	26	JH
5/7/03 19	E	18.7		8.1	7.9	26	KG
5/8/03 20	A	18.1		8.1	8.0	26	KG
5/9/03 21	B	20.5		8.1	7.5	26	KG
5/10/03 22	C	20.1		8.1	7.5	26	JH
5/11/03 23	D	18.2		8.1	7.8	26	RD
5/12/03 24	E	19.8		8.1	7.9	27	CG
5/13/03 25	A	18.3		8.1	7.7	27	CG
5/14/03 26	B	17.4		7.8	7.4	26	DS
5/15/03 27	C	19.3		8.1	8.1	26	CG
5/16/03 28	D	18.8		8.1	8.2	25	DS

JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-16**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.5		8.4	7.5	25	HEB
4/19/03 1	B	17.5		8.1	8.2	25	DD
4/20/03 2	C	18.4		7.7	8.1	25	DD
4/21/03 3	D	19.0		8.4	7.9	25	DD
4/22/03 4	E	18.0		8.2	8.8	25	CG
4/23/03 5	A	17.3		8.0	7.9	26	RD
4/24/03 6	B	18.3		8.0	5.6	26	RD
4/25/03 7	C	18.1		8.1	7.5	25	CG
4/26/03 8	D	16.9		8.2	8.1	26	KG
4/27/03 9	E	17.1		8.0	7.4	27	HEB
4/28/03 10	A	18.1		8.1	7.7	24	RD
4/29/03 11	B	17.4		8.0	8.4	25	CG
4/30/03 12	C	18.7		8.1	7.6	25	RD
5/1/03 13	D	17.7		8.1	7.8	25	KG
5/2/03 14	E	19.4		8.2	8.5	25	RD
5/3/03 15	A	17.7		8.2	7.7	25	DD
5/4/03 16	B	17.3		8.1	8.0	26	RD
5/5/03 17	C	18.7		8.1	7.7	26	RD
5/6/03 18	D	18.4		8.1	7.9	26	JH
5/7/03 19	E	18.5		8.1	8.3	27	KG
5/8/03 20	A	18.1		8.1	8.1	26	KG
5/9/03 21	B	20.2		8.1	7.6	26	KG
5/10/03 22	C	20.1		8.1	7.4	26	JH
5/11/03 23	D	18.2		8.1	8.2	26	RD
5/12/03 24	E	19.8		8.1	7.7	26	CG
5/13/03 25	A	18.3		8.1	7.9	25	CG
5/14/03 26	B	17.6		7.9	7.3	26	DD
5/15/03 27	C	18.9		8.1	8.0	26	CG
5/16/03 28	D	18.7		8.1	8.2	25	DD

JM

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-17**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.6		8.4	7.4	25	HEB
4/19/03 1	B	17.7		8.1	8.3	25	DD
4/20/03 2	C	18.3		8.1	8.0	25	DD
4/21/03 3	D	18.0		8.5	7.9	25	DD
4/22/03 4	E	18.1		8.1	8.3	26	CG
4/23/03 5	A	17.7		8.0	7.6	26	RD
4/24/03 6	B	18.3		8.0	6.6	26	RD
4/25/03 7	C	17.8		8.1	7.6	26	CG
4/26/03 8	D	16.7		7.8	7.8	26	KG
4/27/03 9	E	16.9		8.0	7.5	27	HEB
4/28/03 10	A	18.4		8.1	7.9	24	RD
4/29/03 11	B	17.4		8.0	8.4	25	CG
4/30/03 12	C	18.5		8.1	7.4	25	RD
5/1/03 13	D	17.7		8.0	7.9	24	KG
5/2/03 14	E	19.3		8.2	8.8	25	RD
5/3/03 15	A	17.7		8.1	7.7	25	DD
5/4/03 16	B	17.2		8.2	7.7	25	RD
5/5/03 17	C	18.7		8.1	7.4	26	RD
5/6/03 18	D	16.4		8.1	7.6	26	JM
5/7/03 19	E	18.5		8.1	8.2	26	KG
5/8/03 20	A	18.3		8.1	7.9	26	KG
5/9/03 21	B	20.6		8.1	7.6	26	KG
5/10/03 22	C	20.1		8.1	7.8	26	JM
5/11/03 23	D	18.3		8.1	8.0	26	RD
5/12/03 24	E	19.8		8.1	7.8	25	CG
5/13/03 25	A	18.2		8.1	7.7	26	CG
5/14/03 26	B	19.7		7.9	7.4	25	DD
5/15/03 27	C	19.0		8.1	8.2	26	CG
5/16/03 28	D	18.6		8.1	8.0	25	DD

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **RS-CH03**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
4/18/03 0	A	17.3		8.4	7.7	25	HEB
4/19/03 1	B	17.5		8.3	8.4	25	DD
4/20/03 2	C	18.3		8.2	8.0	25	DD
4/21/03 3	D	17.9		8.5	7.9	25	DD
4/22/03 4	E	17.9		8.1	9.0	25	CG
4/23/03 5	A	17.7		8.0	7.4	26	RD
4/24/03 6	B	18.4		8.0	6.8	25	RD
4/25/03	C	18.0		8.1	7.5	26	CG
4/26/03 8	D	18.1		8.0	7.8	26	KG
4/27/03 9	E	17.4		8.0	7.4	27	HEB
4/28/03 10	A	18.4		8.1	8.0	25	RD
4/29/03 11	B	17.4		8.1	8.5	25	CG
4/30/03 12	C	18.9		8.1	7.9	24	RD
5/1/03 13	D	17.5		8.0	7.8	25	KG
5/2/03 14	E	19.0		8.2	8.9	24	RD
5/3/03 15	A	17.6		8.2	7.7	25	DD
5/4/03 6	B	17.2		8.2	8.1	25	RD
5/5/03 7	C	18.4		8.1	7.8	27	RD
5/6/03 18	D	18.4		8.1	* 6.5	26	JH
5/7/03 19	E	18.7		8.1	8.0	26	KG
5/8/03 20	A	18.1		8.1	8.2	26	KG
5/9/03 21	B	20.4		8.2	7.7	26	KG
5/10/03 22	C	19.1		8.1	2.6	26	JH
5/11/03 23	D	17.9		8.1	7.8	26	RD
5/12/03 24	E	19.5		8.1	7.7	25	CG
5/13/03 25	A	18.0		8.2	7.7	25	CG
5/14/03 26	B	17.7		8.0	7.2	25	DD
5/15/03 27	C	19.0		8.1	8.1	26	CG
5/16/03 28	D	19.5		8.1	8.2	25	DD

* aerators out of water

MACTEC (formerly Harding ESE) Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL QA FORM NO: 108E

SPONSOR: Canaveral
SAMPLE ID: ctrl

PROJECT NUMBER:
TEST SPECIES: N. virens

DATE-DAY	REP A	REP B	REP C	REPD	REP E	INITIAL
4/18/03 0	20 loaded					JM
4/19/03 1	N	N	N	N	N	JMM
4/20/03 2	N	N	N	N	N	JMM
4/21/03 3	N	N	N	N	N	JMM
4/22/03 4	N	N	N	N	N	JMM
4/23/03 5	N	N	N	N	N	HEB
4/24/03 6	N	N	N	N	N	HEB
4/25/03 7	N	N	N	N	N	JMM
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	D/N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N/D	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JH
5/7/03 19	~~1d~~ N	~~1d~~ N	~~1d~~ N	~~N~~ N	~~N~~ N	~~JH~~ KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JH
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	~~1d~~	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	20 A	20 A	20 A	17 A	20 A	JH

5/4 JH

JM

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-9**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JH
4/19/03 1	N	N	N	N	N	DD
4/20/03 2	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	HEB
4/24/03 6	N	N	N	N	N	HEB
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JH
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JH
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	20A	20A	19A INF	18A INF	19 ~~20~~A INF	DD

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-10**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JH
4/19/03 1	N	N	N	N	N	DD
4/20/03 2	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	HEB
4/24/03 6	N	N	N	N	N	RD
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JH
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JH
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	2NF/18A	~~19 X~~ 1NF 3NF	20A	20A	18A 2NF	JH

AMR

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-11**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JA
4/19/03 1	N	N	N	N	N	DD
4/20/03 2	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	Id	Id	HEB
4/24/03 6	N	N	N	N	N	HEB
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JA
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JA
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	20A	17A	20A	19A	19A	KSB/JM

13NF

SMW

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-12**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JA
4/19/03 1	N	N	N	N	N	DD
4/20/03	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	HEB
4/24/03 6	id	N	N	N	N	HEB
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
~~4/5~~ 5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JA
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JA
5/11/03 23	N	N	N	N	N	RO
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	18A	19A	18A	19A	20A	DD
	1NF	1NF	2NF	1NF		

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-13**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JA
4/19/03 1	N	N	N	N	N	DD
4/20/03 2	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	HEB
4/24/03	N	N	N	1d	N	KG
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JA
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JA
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	20A	20A	18A	18A	18	JA
			2NF	2NF	2NF	

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-14**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JH
4/19/03 1	N	N	N	N	N	DD
4/20/03 2	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	KG
4/24/03 6	N	N	N	N	id	KG
4/25/03	N	N	id.	N	id.	CG
4/26/03 8	id.	N	N	N	N	HEB
4/27/03 9	N	N	id.	id.	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JH
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JH
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	18A	17A	19A	17A	18A	KSB
		3NF		2NF		

JMC

JMC

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-15**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JA
4/19/03 1	N	N	N	N	N	DD
4/20/03	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	KG
4/24/04 6	N	N	N	N	N	KG
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	2 bd.	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JA
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JA
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	18	17	19	20	20	JA

3NF 1NF

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-16**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JA
4/19/03 1	N	N	N	N	N	DD
4/20/03 2	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	KG
4/24/03 6	id	N	N	N	N	KG
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	id	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JA
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JA
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	18A	19A	20A	19A	20A	DD

JM 1NF 3NF JM

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **E-CH03-17**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JH
4/19/03 1	N	N	N	N	N	DD
4/20/03 2	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	KG
4/24/03 6	N	N	N	2d	N	KG
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	1d	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KG
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JH
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KG
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JH
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	19A	19A	20A	18A	18A	KSB
	1NF			3NF	12NF	

MACTEC

Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: **RS-CH03**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
4/18/03 0	20	20	20	20	20	JA
4/19/03 1	N	N	N	N	N	DD
4/20/03	N	N	N	N	N	DD
4/21/03 3	N	N	N	N	N	KG
4/22/03 4	N	N	N	N	N	CG
4/23/03 5	N	N	N	N	N	KG
4/24/03 6	N	N	N	N	N	KG
4/25/03 7	N	N	N	N	N	CG
4/26/03 8	N	N	N	N	N	HEB
4/27/03 9	N	N	N	N	N	HEB
4/28/03 10	N	N	N	N	N	HEB
4/29/03 11	N	N	N	N	N	CG
4/30/03 12	N	N	N	N	N	CG
5/1/03 13	N	N	N	N	N	KC
5/2/03 14	N	N	N	N	N	RD
5/3/03 15	N	N	N	N	N	DD
5/4/03 16	N	N	N	N	N	RD
5/5/03 17	N	N	N	N	N	RD
5/6/03 18	N	N	N	N	N	JA
5/7/03 19	N	N	N	N	N	KG
5/8/03 20	N	N	N	N	N	KC
5/9/03 21	N	N	N	N	N	KG
5/10/03 22	N	N	N	N	N	JA
5/11/03 23	N	N	N	N	N	RD
5/12/03 24	N	N	N	N	N	CG
5/13/03 25	N	N	N	N	N	CG
5/14/03 26	N	N	N	N	N	DD
5/15/03 27	N	N	N	N	N	CG
5/16/03 28	19A	18A	17A	17A	19	JA
	1NF	2NF	3NF	3NF	1NF	

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of CuSO4 : 0.1 (g) Volume of Milli-Q Water: 1000 (mL) Date Prepared: 4/18/03	[ ] Definitive [x] Static [X] Screening Duration: 96 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: N. virens Batch Number: 2003- 29 Age/Life Stage: Adult Date of Acclimation/Maintenance: 4/18/03 See Page 107 of Organism Receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 2 No. Of Organisms/Replicate: 5	Lighting: [x Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 10 L X 10 W 15 H Test Solution Height: 12 (cm) Test Vessel Volume: 1.0 (L) Test Solution Volume: 0.9 (L) Test Temperature: 20 ± 2 °C Test Salinity: 30 ± 2 ppt
Test Area Used: Water bath	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed:

Test Concentrations: (Units: µg/L)	Control	156	312	624	1248	2496	4992
Amount Dilution Water Added (mL)	1800	1797.2	1794.4	1788.8	1778	1755	1710.2
Amount of Stock Added (mL)	0	2.8	5.6	11.2	22	45	89.8

Additional Observations:

Data By: JMM Date: 4/18/03

MACTEC Engineering and Consulting
TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
QA FORM NO: 097RTNV REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 0 – 1

Client: Misc.	Project Number: Ref Tox	Species: Nereis virens

DAY 0 REF TOXICANT: $CuSO_4$ tm

Nominal Concentration (mg/L)	Date: 4/18/03				Time: 1500		Analyst:	
	A # Alive	B	Observ.		Temp. (°C)	Sal (ppt)	DO (mg/L)	pH
Control	5	5	loaded		21.1	30	7.5	8.2
156	↓	↓	↓		21.0	30	7.5	8.2
312					20.9	30	7.6	8.2
624					20.8	30	7.5	8.2
1248					20.6	30	7.6	8.1
2496					20.6	30	7.5	8.1
4992	✓	✓	✓		20.8	30	7.5	8.1

DAY 1	Date: 4/19/03				Time: 0900		Analyst: DD	
Nominal Concentration	# Alive		Observ.		Temp. (°C) B	Sal (ppt) B	DO (mg/L) B	pH B
Control	5	5	N	N	19.6	30	7.8	8.1
156	5	5	N	N	19.6	30	7.3	7.4
312	5	5	N	N	19.6	30	7.0	7.9
624	5	5	N	N	18.9	30	6.1	8.1
1248	5	5	N	N	19.5	30	6.5	7.9
2496	5	5	N	N	19.6	30	6.7	7.4
4992	5	5	N	N	19.6	30	7.0	7.8

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PAGE:
QA FORM NO: 097RTNV REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 2 – 3

Client: Misc.	Project Number: Ref Tox	Species: Nereis virens

REF TOXICANT: $CuSO_4$

DAY 2	**Date:** 4/20/03		**Time:** 0700		**Analyst:** DD	
Nominal Concentration	# Alive		Observ.		Temp. (°C) A	Sal (ppt) A	DO (mg/L) A	pH A
Control	5	5	N	N	19.5	30	7.6	8.0
156	5	5	N	N	19.5	30	7.3	7.9
312	5	5	N	N	19.5	30	7.7	8.1
624	5	5	N	N	19.3	30	7.6	8.1
1248	5	5	N	N	19.5	30	7.3	7.9
2496	3	0	2d	5d	19.3	30	3.2	7.5
4992	0	0	5d	5d	19.4	30	4.9	7.6
DAY 3	**Date:** 4/21/03		**Time:** 13:40		**Analyst:** DD	
Nominal Concentration	# Alive		Observ.		Temp. (°C) B	Sal (ppt) B	DO (mg/L) B	pH B
Control	5	5	N	N	20.7	30	7.4	8.1
156	5	5	N	N	20.4	30	5.1	7.6
312	5	5	N	N	20.3	30	6.5	8.0
624	5	5	N	N	20.3	30	7.2	8.0
1248	5	0	N	5d	20.6	30	1.6	7.5
2496	0	0	3d	/	20.2	30	2.4	7.7
4992								

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TOXICOLOGY LABORATORY
GAINESVILLE, FLORIDA

PAGE:
QA FORM NO: 097RTNV REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 4 and Summary

Client: Misc.	Project Number: Ref Tox	Species: Nereis virens

REF TOXICANT: $CuSO_4$

DAY 4	**Date:** 4/22/03	**Time:** 1500	**Analyst:** CG

Nominal Concentration	# Alive		Observ.		Temp. (°C) A	Sal (ppt) A	DO (mg/L) A	pH A
Control	5	4	N	1d	19.6	31	8.1	8.1
156	5	4	N	1d	19.6	30	4.3	7.6
312	5	5	N	N	19.7	30	8.2	8.0
624	5	2	N	3d	19.8	30	7.8	8.0
1248	2	0	3d	0	20.2	31	4.7	7.9
2496								
4992								

SUMMARY

Nominal Concentration	Total Number Dead	
Control		1
156		1
312		0
624		3
1248		8
2496		10
4992		10

COMMENTS:

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: 04/18/03 TEST NUMBER: Canav DURATION: 96 h
TOXICANT : CuSO4
SPECIES: N. virens

RAW DATA: --- ----	Concentration (ug/L)	Number Exposed	Mortalities
	.00	10	1
	156.00	10	1
	312.00	10	0
	624.00	10	3
	1248.00	10	8
	2496.00	10	10
	4992.00	10	10

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 860.89
95% LOWER CONFIDENCE: 662.79
95% UPPER CONFIDENCE: 1118.21

NOTE: MORTALITY PROPORTIONS WERE NOT MONOTONICALLY INCREASING.
ADJUSTMENTS WERE MADE PRIOR TO SPEARMAN-KARBER ESTIMATION.

Harding ESE
Toxicology Laboratory
Gainesville, Florida

Page: 1 of 2
QA Form No. 018
Revised: March 2001

Project No: 606303 0002.0400 Client: Anamar Test: 28-day Bioacc Test M. nasuta, N. virens

DAILY LOG

5/21/03. Sediments loaded + allowed to settle and aerate overnight.

5/22/03. Water quality monitored. Organisms Airlines checked loaded into vessels.

5/23/03 water renewed, water qualities taken, organisms observed, airlines checked.

5/24/03 WQ taken. Organisms observed. airlines checked

5/25/03 WQ taken Organisms observed airlines Checked

5/26/03 Water renewed, organisms observed, airlines checked WQ taken, Ref Tox Test M. nasuta, N. virens Taken down

5/27/03 WQ taken. Organisms observed, airlines checked.

5/28/03 - WQ Taken, water renewed, organisms observed and airlines checked.

5/29/03 - WQ Taken on M.N/NV each room. Organisms observed. Airlines checked. (data reviewed JMR)

5/30/03 water renewed, organisms observed, WQ taken, airlines checked

5/31/03 WQ taken. Organisms observed. airlines checked

6/1/03 WQ taken. Organisms observed. airlines checked

6/2/03 Renewed, organisms observed WQ Taken, (data reviewed JM). Airlines checked

6/3/03 WQ taken organisms observed, airlines checked (data reviewed. JMR)

JMR

Harding ESE
Toxicology Laboratory
Gainesville, Florida

QA Form No. 018
Revised: March 2001

Project No: 06630300002.0400 Client: Anamar Test: N. virens, M. nasuta 28-day bioacc.

DAILY LOG

6/4/03 WQ take, 1st test renewed, airline checked, organisms observed.

6/5/03 WQ taken, Airline checked, Organisms Observed. (data reviewed) JMR

6/6/03 WQ taken, Airlines Checked Organisms, Observed, Renewed.

6/7/03 WQ taken, Airlines checked, Organisms observed

6/8/03 WQ taken, Airlines checked, Organisms observed

6/9/03 Organisms observed, Airlines checked, Renewed, WQ Taken.

6/10/03 WQ Taken, Airlines checked, organisms observed (data reviewed) JMR

6/11/03 WQ Taken, Airlines checked, Organisms observered, Water renewed.

6/12/03 WQ Taken, Airlines checked, Organisms observed

6/13/03 Renewed, Airlines Checked, Organisms Observed, WQ Taken

6/14/03 WQ Taken, Airlines checked organisms observed

6/15/03 WQ Taken, airlines checked, Organisms observed

6/16/03 WQ Taken, airlines checked, Renewed Organisms observed

6/17/03 WQ Taken, airlines checked, and organisms observed.

6/18/03 Water Renewed, organisms observed, wq taken, airlines checked.

6/19/03 Water Qualities taken, airlines checked, organisms counted and test taken down. JMR

MACTEC Engineering and Consulting, Inc.
Gainesville, Florida

QA Form No.: 097
Revised: March 2001

SUBJECT: TOXICITY TEST SYSTEM DESCRIPTION SHEET

Sponsor: Anamar/Canaveral Harbor

Project No.: 6063030002.0400

TEST MATERIAL

Test Material: Sediment

See Page 1 of Effluent Log for Test Material Information.

PROTOCOL/ GUIDELINES FOLLOWED:

Test Concentrations Based on: ( ) Active Ingredient
(x) Whole Material

TEST ORGANISM HISTORY

Test Species: Nereis virens

Lot Number: 2003-43

Age/ Life Stage: adult

Date Acclimation/ Maintenance Began: 5/22/03

See Page 108 of Organism Receipt Log for Data.

Mortality (%) During 48 Hours Prior to Test Initiation: <1%

( ) Range Finder
(X) Screening
( ) Definitive

(X) Static
( ) Flow-Through

Lighting: (x) Fluorescent ( ) Incandescent

Photoperiod: 16 Hours Light
8 Hours Dark

Test Duration: 28 days

Test Area Used: Bioacc. Lab

Test Temperature (°C): 18 +/- 2

Test Salinity (ppt): 25 +/- 2

Replicates Per Concentration: 5

Organisms Per Replicate: 20

Dilution Water: natural filtered seawater

TEST VESSELS

Dimensions (cm): Length x Width x Height

Test Solution Height (cm) :

Test Vessels: (x) Open ( ) Covered

Test Container Volume: 38 L (10 gallons)

Test Solution Volume: 30 L

TEST SOLUTION PREPARATION

Test Concentration % mg/L									
Volume of Dilution Water Added (mL)									
Volume of Effluent/ Stock Added (mL)									

ADDITIONAL OBSERVATIONS:

5 cm minimum sediment per tank

DATA BY: SMR

DATE: 5/22/03

MACTEC Engineering and Consulting (formerly Harding ESE) Revised: Oct 2002

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: CH-Control 2

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
5/22/03 0	A	18.2		8.1	8.0	27	KG
5/23/03 1	B	19.6		8.1	7.8	25	CG
5/24/03 2	C	17.3		8.2	7.8	25	KG
5/25/03 3	D	17.0		8.1	* 7.7 JH	26	DD
5/26/03 4	E	17.3		8.2	7.5	26	JH
5/27/03 5	A	16.8		8.1	8.3	27	KG
5/28/03 6	B	19.8		8.2	8.2	26	CG
5/29/03 7	C	17.1		8.2	8.5	26	JH
5/30/03 8	D	17.8		8.2	8.9	25	JH
5/31/03 9	E	17.1		8.2	8.4	25	KG
6/1/03 10	A	16.7		8.3	8.4	26	RD
6/2/03 11	B	19.2		8.3	8.8	25	KG
6/3/03 12	C	17.2		8.3	8.9	25	JH
6/4/03 13	D	17.3		8.3	8.4	25	JH
6/5/03 14	E	17.0		8.2	8.8	25	DD
6/6/03 15	A	16.7		8.2	8.3	26	DD
6/7/03 16	B	17.6		8.1	8.0	25	RD
6/8/03 17	C	17.4		8.0	8.1	26	RD
6/9/03 18	D	20.4		8.2	7.6	26	DD
6/10/03 19	E	16.7		8.2	8.4	27	CG
6/11/03 20	A	19.7		8.2	7.9	25	DD
6/12/03 21	B	17.3		8.3	8.1	27	RD
6/13/03 22	C	19.1		8.3	7.8	26	RD
6/14/03 23	D	14.2		8.3	7.6	24	JH
6/15/03 24	E	17.5		8.3	8.2	27	DD
6/16/03 25	A	19.5		8.3	8.0	26	DD
6/17/03 26	B	17.7		8.1	8.0	27	CG
6/18/03 27	C	19.6		8.3	8.1	26	CG
6/19/03 28	D	~~17.7~~ CG 17.7		8.3	8.3	27	CG

JM

MACTEC Engineering and Consulting (formerly Harding ESE) Revised: Oct 2002

SUBJECT: SEDIMENT TOXICITY DATA SHEET - WATER QUALITY QA FORM NO: 108

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: E-CH03-20

PROJECT NUMBER: : 6063030002.0400
TEST SPECIES: N. virens

DATE-DAY	REP	Temp (°C)	NH_3 (ppm)	pH (s.u.)	DO (mg/L)	Salinity (ppt)	INITIAL
5/22/03 0	A	17.6		8.1	8.0	25	KG
5/23/03 1	B	20.0		8.1	7.9	25	CG
5/24/03 2	C	17.7		8.2	7.8	25	KG
5/25/03 3	D	16.9		8.1	7.7	25	DD
5/26/03 4	E	17.3		8.1	7.6	26	JH
5/27/03 5	A	17.2		8.1	8.5	27	KG
5/28/03 6	B	20.0		8.2	8.0	26	CG
5/29/03 7	C	16.7		~~8.2~~ 8.2	8.1	26	JH
5/30/03 8	D	17.9		8.1	8.6	25	JH
5/31/03 9	E	16.8		8.2	8.5	26	KG
6/1/03 10	A	16.6		8.3	8.4	26	RD
6/2/03 11	B	18.8		8.3	8.9	25	KG
6/3/03 12	C	17.4		8.3	8.8	25	JH
6/4/03 13	D	17.5		8.3	8.4	25	JH
6/5/03 14	E	16.9		8.2	8.8	25	DD
6/6/03 15	A	16.5		8.2	8.4	26	DD
6/7/03 16	B	17.0		8.1	8.2	26	RD
6/8/03 17	C	17.1		8.0	8.1	27	RD
6/9/03 18	D	20.4		8.2	7.6	25	DD
6/10/03 19	E	16.7		8.1	8.3	25	CG
6/11/03 20	A	19.5		8.2	8.1	25	DD
6/12/03 21	B	16.5		8.3	8.2	27	RD
6/13/03 22	C	18.9		8.3	7.9	27	RD
6/14/03 23	D	18.0		8.3	7.5	28	JH
6/15/03 24	E	17.5		8.2	8.1	25	DD
6/16/03 25	A	19.1		8.2	8.0	26	DD
6/17/03 26	B	17.1		8.1	8.1	27	CG
6/18/03 27	C	19.4		8.2	8.1	26	CG
6/19/03 28	D	17.4		8.3	8.3	27	CG

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: CH-Control-2

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
5/22/03 0	Loaded 20					KG
5/23/03 1	N	N	N	N	N	CG
5/24/03 2	N	N	N	N	N	KG
5/25/03 3	N	N	N	N	N	DD
5/26/03 4	N	N	N	N	N	JH
5/27/03 5	N	N	N	N	N	KG
5/28/03 6	N	N	N	N	N	CG
5/29/03 7	N	N	N	N	N	JH
5/30/03 8	N	N	N	N	N	JH
5/31/03 9	N	N	N	N	N	KG
6/1/03 10	N	N	N	N	N	RD
6/2/03 11	N	N	N	N	N	DD
6/3/03 12	N	N	N	N	N	JH
6/4/03 13	N	N	N	N	N	JH
6/5/03 14	N	N	N	N	N	DD
6/6/03 15	N	N	N	N	N	DD
6/7/03 16	N	N	N	N	N	RD
6/8/03 17	N	N	N	N	N	RD
6/9/03 18	N	N	N	N	N	DD
6/10/03 19	N	N	N	N	N	CG
6/11/03 20	N	N	N	N	N	DD
6/12/03 21	N	N	N	N	N	RD
6/13/03 22	N	N	N	N	N	DD
6/14/03 23	N	N	N	N	N	JH
6/15/03 24	N	N	N	N	N	DD
6/16/03 25	N	N	N	N	N	DD
6/17/03 26	N	N	N	N	N	CG
6/18/03 27	N	N	N	N	N	CG
6/19/03 28	20A	20A INF	17A 1 DJ INF	19A INF	19A INP	RP

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Revised: March 2001

SUBJECT: SEDIMENT TOXICITY DATA SHEET - SURVIVAL

QA FORM NO: 108E

SPONSOR: Anamar/Canaveral Harbor
SAMPLE ID: E -**CH03-20**

PROJECT NUMBER: 6063030002.0400
TEST SPECIES: *N. virens*

DATE-DAY	REP A	REP B	REP C	REP D	REP E	INITIAL
5/22/03 loaded 0	20				7	KG
5/23/03 1	N	N	N	N	N	CG
5/24/03 2	N	N	N	N	N	KG
5/25/03 3	N	N	N	N	N	DD
5/26/03 4	N	N	N	N	N	JA
5/27/03 5	N	N	N	N	N	KG
5/28/03 6	N	N	N	N	N	CG
5/29/03 7	N	N	N	N	N	JA
5/30/03 8	N	N	N	N	N	JA
5/31/03 9	N	N	N	N	N	KG
6/1/03 10	N	N	N	N	N	RD
6/2/03 11	N	N	N	N	N	DD
6/3/03 12	N	N	N	N	N	JA
6/4/03 13	N	N	N	N	N	JA
6/5/03 14	N	N	N	N	N	DD
6/6/03 15	N	N	N	N	N	DD
6/7/03 16	N	N	N	N	N	RD
6/8/03 17	N	N	N	N	N	RD
6/9/03 18	N	N	N	N	N	DD
6/10/03 19	N	N	N	N	N	CG
6/11/03 20	N	N	N	N	N	DD
6/12/03 21	N	N	N	N	N	RD
6/13/03 22	N	N	N	N	N	DD
6/14/03 23	N	N	N	N	N	JA
6/15/03 24	N	N	N	N	N	DD
6/16/03 25	N	N	N	N	N	DD
6/17/03 26	N	N	N	N	N	CG
6/18/03 27	N	N	N	N	N	CG
6/19/03 28	19A 1NF	18A	19A	20A	20A	RD
	1NF	2NF	1NF			

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PAGE:
FORM NO: 097A REFTOX
REVISED: MARCH 2001

REFERENCE TOXICANT TEST DATA SHEET

Sponsor: Misc.	Project Number: Ref Tox
Test Material	**Test Conditions**
Amount of CuSO4 : 0.1 (g) Volume of Milli-Q Water: 1000 (mL) Date Prepared: 5/22/03	[X] Definitive [x] Static ~~[X] Screening~~ JMR Duration: 96 Hours
Test Organism History	Dilution Water: natural filtered seawater
Species: N. virens Batch Number: 2003- 43 Age/Life Stage: Adult Date of Acclimation/Maintenance: 5/22/03 See Page 108 of Organism Receipt Log Mortality 48 hours prior to test: <1 (%) Replicates/Concentration: 2 No. Of Organisms/Replicate: 5	Lighting: [x Fluorescent [ ] Incandescent Photoperiod: 16 Hr Light 8 Hr Dark Test Vessel Dimensions: 10 L X 10 W 15 H Test Solution Height: 12 (cm) Test Vessel Volume: 1.0 (L) Test Solution Volume: 0.9 (L) Test Temperature: 20 ± 2 °C Test Salinity: 30 ± 2 ppt
Test Area Used: Water bath	Test Vessel Composition: [x] Glass [ ] Plastic
Test Concentrations Based on: [x] Whole Material [ ] Active Ingredient	Test Protocol/Guideline Followed:

Test Concentrations: (Units: µg/L)	Control	156	312	624	1248	2496	4992
Amount Dilution Water Added (mL)	1800	1797.2	1794.4	1788.8	1778	1755	1710.2
Amount of Stock Added (mL)	0	2.8	5.6	11.2	22	45	89.8

Additional Observations:

Data By: JMR Date: 5/22/03

JMR

REFERENCE TOXICANT TEST DATA: DAY 0 – 2

Client: Misc.	Project Number: Ref Tox	Species: *Nereis virens*

DAY 0 — REF TOXICANT: CuSO4

Nominal Concentration (mg/L)	Date: 5/22/03		Time: 1740		Analyst: RD	
	# Alive	Observ.	Temp. (°C) A	Sal (ppt) A	DO (mg/L) A	pH A
Control	~~10~~ 5 loaded (2 replicates)		19.3	30	8.0	8.1
156			19.2	28	8.1	8.1
312			19.2	28	8.1	8.1
624			19.1	28	8.1	8.1
1248			19.0	28	8.2	8.0
2496			19.2	28	8.0	8.0
4992			19.1	28	8.1	8.0

DAY 1 — Date: 5/23/03 — Time: 0945 — Analyst: CG

Nominal Concentration	A # Alive	B # Alive	A Observ.	B Observ.	Temp. (°C) B	Sal (ppt) B	DO (mg/L) B	pH B
Control	~~5~~ 6 ~~10~~	5	N	N	18.5	29	8.1	7.9
156	5 ~~6~~ ~~10~~	5	N	N	18.5	28	7.6	7.8
312	5 ~~6~~ ~~10~~	5	N	N	18.2	28	7.6	7.8
624	5 ~~6~~ ~~10~~	5	N	N	18.3	29	7.6	7.8
1248	5 ~~6~~ ~~10~~	5	N	N	18.3	28	7.6	7.8
2496	5 ~~6~~ ~~10~~	5	N	N	18.4	28	7.7	7.8
4992	5 ~~6~~ ~~10~~	5	N	N	18.8	28	7.5	7.8

DAY 2 — Date: 5/24/03 — Time: 0845 — Analyst: KG

Nominal Concentration	A # Alive	B # Alive	A Observ.	B Observ.	Temp. (°C) A	Sal (ppt) A	DO (mg/L) A	pH A
Control	5	5	N	N	18.4	29	8.1	7.8
156	5	5	N	N	18.4	29	7.9	7.9
312	5	5	N	N	18.5	29	8.0	7.8
624	5	5	N	N	18.6	29	7.9	7.9
1248	5	5	N	N	18.5	29	7.8	7.4
2496	0	0	Sd	Sd	18.6	29	7.5	7.1
4992	0	0	Sd	Sd	18.8	29	7.5	6.5

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QA FORM NO: 097RT REFTOX
Revised: March 2001

REFERENCE TOXICANT TEST DATA: DAY 3 AND 4

Client: Misc.	Project Number: Ref Tox	Species: *Nereis virens*

DAY 3

Nominal Concentration	Date: 05/25/03				Time: 1240		Analyst: [illegible]	
	A # Alive	B	A Observ.	B	Temp. (°C) B	Sal (ppt) B	DO (mg/L) B	pH B
Control	5	5	N	N	18.7	30	7.0	7.9
156	5	5	N	N	19.0	30	7.0	7.9
312	5	5	N	N	19.0	29	6.5	7.5
624	5	5	N	N	19.1	29	6.9	7.9
1248	5	5	N	N	19.3	29	3.6	7.1
2496								
4992								

DAY 4	Date: 05/26/03				Time: 1630		Analyst: JA	
Nominal Concentration	A # Alive	B	A Observ.	B	Temp. (°C) A	Sal (ppt) A	DO (mg/L) A	pH A
Control	5	5	N	N	19.3	30	7.0	7.8
156	5	5	N	N	19.1	29	7.2	7.6
312	5	4	N	1d	19.2	29	6.3	7.9
624	5	5	N	N	19.4	30	6.9	7.8
1248	0	0	5d	5d	19.3	29	6.5	7.1
2496					~~19.3 B~~	~~30 B~~		
4992					~~19.4 B~~	~~29 B~~		

[illegible]

SUMMARY – Ref Tox, *Nereis virens,*

Nominal Concentration	Number Dead A	Number Dead B	
Control	0	0	0
156	0	0	0
312	0	1	1
624	0	0	0
1248	5	5	10
2496	5	5	10
4992	5	5	10

COMMENTS:

TRIMMED SPEARMAN-KARBER METHOD. VERSION 1.5

DATE: May 03 TEST NUMBER: Ref Tox DURATION: 96 H
TOXICANT : CuSO4
SPECIES: N. virens

RAW DATA:	Concentration (mg/L)	Number Exposed	Mortalities
	.00	10	0
	156.00	10	0
	312.00	10	1
	624.00	10	0
	1248.00	10	10
	2496.00	10	10
	4992.00	10	10

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 823.37
95% LOWER CONFIDENCE: 719.31
95% UPPER CONFIDENCE: 942.49

NOTE: MORTALITY PROPORTIONS WERE NOT MONOTONICALLY INCREASING.
ADJUSTMENTS WERE MADE PRIOR TO SPEARMAN-KARBER ESTIMATION.

Appendix E

Statistical Analysis

E 1

N. virens **Wet Weight**

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280DNBwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Di-n-butyltin, µg/Kg				

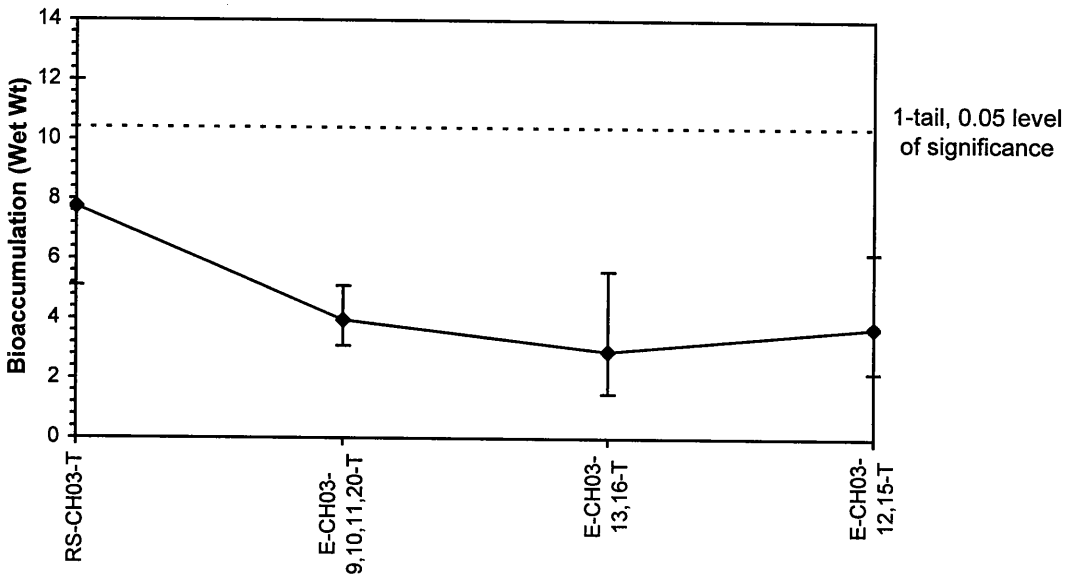
Conc-ppb	1	2	3	4	5
RS-CH03-T	12.0000	5.1000	7.1000	5.5000	9.0000
3-9,10,11,20-T	5.1000	3.5000	3.3000	4.8000	3.1000
CH03-13,16-T	2.1000	1.5000	3.8000	5.6000	1.6000
CH03-12,15-T	2.2000	3.2000	6.2000	3.6000	3.4000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	7.7400	0.0000	7.7400	5.1000	12.0000	36.618	5			
3-9,10,11,20-T	3.9600	0.5608	3.9600	3.1000	5.1000	23.254	5	-3.173	2.230	2.6564
CH03-13,16-T	2.9200	0.7151	2.9200	1.5000	5.6000	60.268	5	-4.046	2.230	2.6564
CH03-12,15-T	3.7200	0.5964	3.7200	2.2000	6.2000	39.981	5	-3.375	2.230	2.6564

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93856	0.868	0.86352	0.60307
Bartlett's Test indicates equal variances (p = 0.22)	4.42672	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	2.65642	0	23.1085	3.5475	0.00436	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280nBTwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	n-Butyltin, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	3.5000	2.6000	3.3000	2.6000	3.1000
3-9,10,11,20-T	1.9000	1.6000	1.2000	1.5000	0.9200
CH03-13,16-T	1.3000	2.1000	1.6000	2.2000	1.3000
CH03-12,15-T	0.5600	1.1000	12.0000	1.7000	1.4000

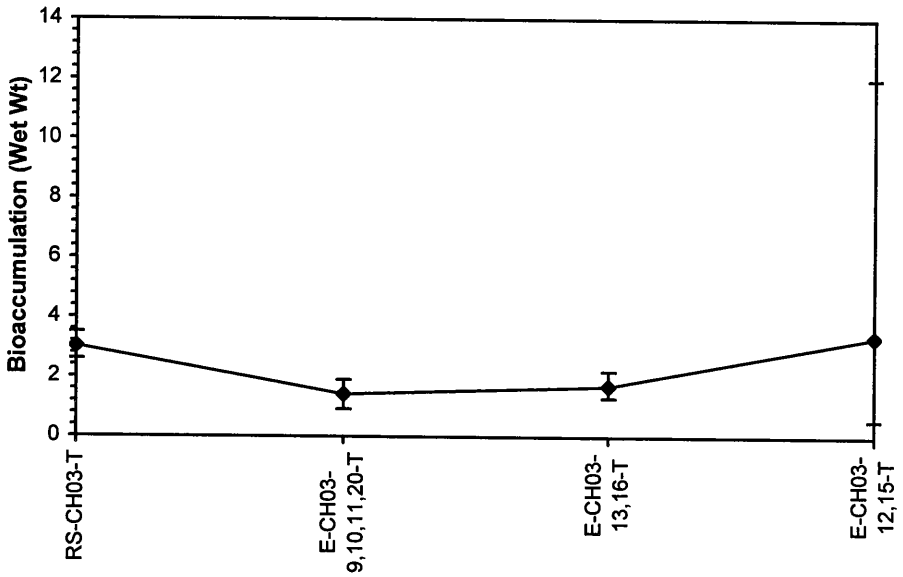
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	3.0200	0.0000	3.0200	2.6000	3.5000	13.532	5		
3-9,10,11,20-T	1.4240	0.7901	1.4240	0.9200	1.9000	26.452	5	40.00	17.00
CH03-13,16-T	1.7000	0.6535	1.7000	1.3000	2.2000	25.301	5	40.00	17.00
CH03-12,15-T	3.3520	-0.1644	3.3520	0.5600	12.0000	144.770	5	35.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.62116	0.868	3.08976	12.539
Bartlett's Test indicates unequal variances (p = 1.78E-07)	34.2157	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	2804BTwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens
Comments:	Tetra-n-butyltin, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.3800	0.3800	0.3800	0.3800	0.3800
3-9,10,11,20-T	0.3800	0.3800	0.3800	0.3800	0.3800
CH03-13,16-T	0.3800	0.3800	0.3800	0.3800	0.3800
CH03-12,15-T	0.3800	0.3800	0.3800	0.3800	0.3800

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5		
3-9,10,11,20-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5	27.50	17.00
CH03-13,16-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5	27.50	17.00
CH03-12,15-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5	27.50	17.00

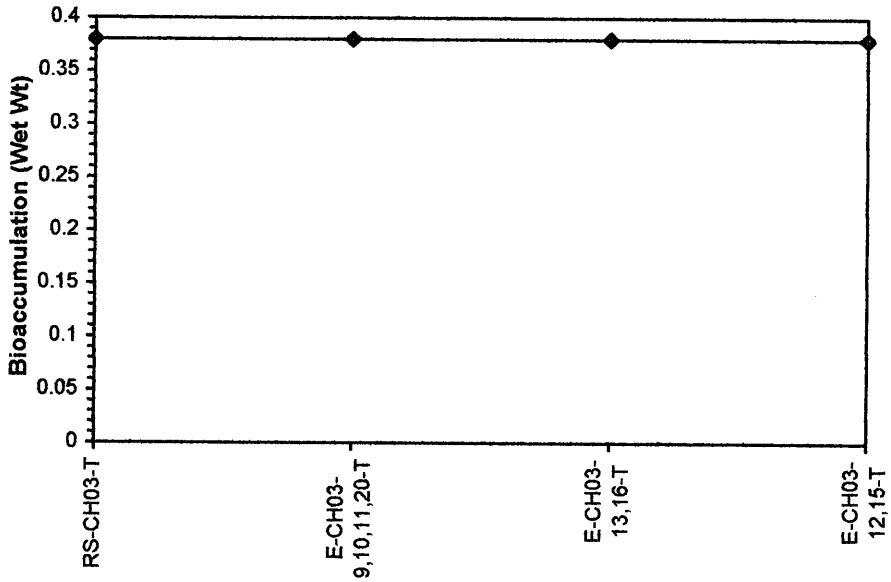
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	1	0.868		
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: _____

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	2803BTwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Tri-n-butyltin, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.7400	0.4800	0.8300	0.7500	0.5900
3-9,10,11,20-T	0.3300	0.3300	0.3300	0.3600	0.3300
CH03-13,16-T	0.3300	0.3300	0.3300	0.3300	0.3300
CH03-12,15-T	0.3300	0.3300	0.3300	0.3300	0.3300

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.6780	0.0000	0.6780	0.4800	0.8300	20.738	5		
3-9,10,11,20-T	0.3360	-1.0621	0.3360	0.3300	0.3600	3.993	5	40.00	17.00
CH03-13,16-T	0.3300	-1.0807	0.3300	0.3300	0.3300	0.000	5	40.00	17.00
CH03-12,15-T	0.3300	-1.0807	0.3300	0.3300	0.3300	0.000	5	40.00	17.00

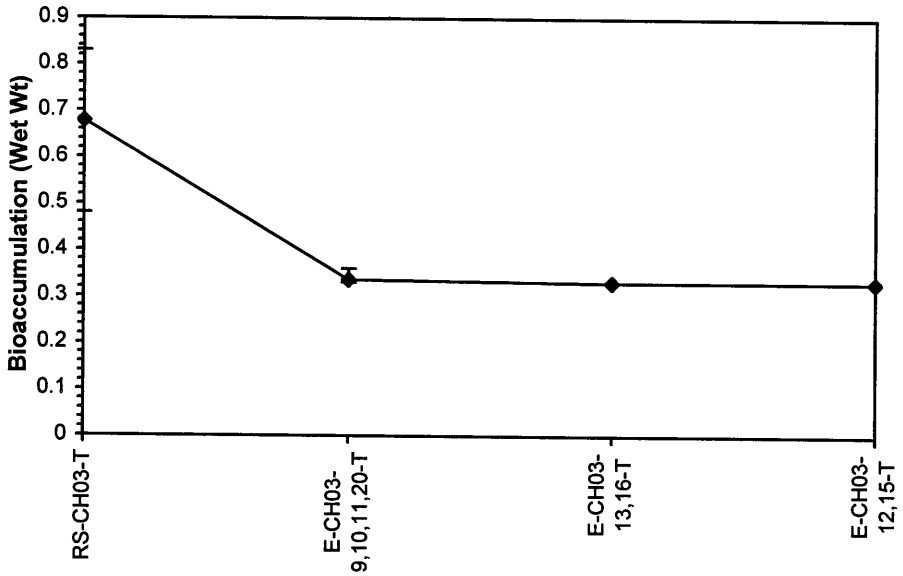
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.73738	0.868	-0.9255	5.35846
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280AlwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Aluminum, mg/Kg				

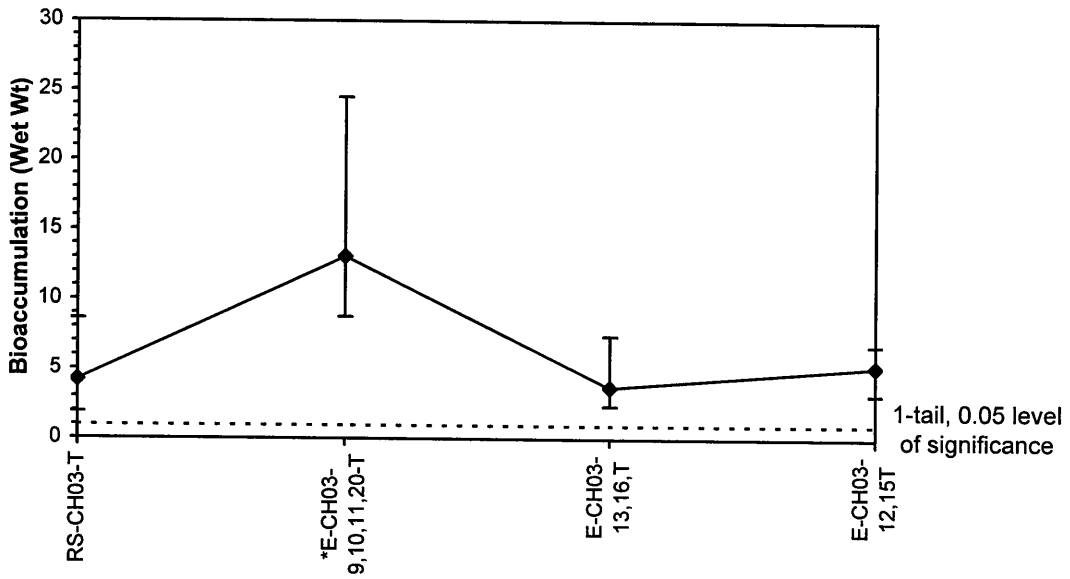
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	4.100	3.800	8.600	2.600	1.900
3-9,10,11,20-T	9.660	10.000	12.700	24.500	8.790
·CH03-13,16,T	2.480	7.410	3.640	2.640	2.390
-CH03-12,15T	3.560	6.730	5.810	3.180	6.660

			Transform: Arcsin Square Root						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	4.200	0.0000	1.2975	1.1996	1.3995	5.781	5			
3-9,10,11,20-T	13.130	-2.7906	1.4244	1.4013	1.4696	1.920	5	3.686	2.230	0.0768
·CH03-13,16,T	3.712	0.1525	1.2878	1.2415	1.3861	4.694	5	-0.281	2.230	0.0768
-CH03-12,15T	5.188	-0.3088	1.3407	1.2866	1.3768	3.201	5	1.257	2.230	0.0768

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96266	0.868	0.37092	0.20344
Bartlett's Test indicates equal variances (p = 0.30)	3.65008	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.03475	0	0.01941	0.00297	0.00428	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280SbwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Antimony, mg/kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0020	0.0020	0.0020	0.0010	0.0020
3-9,10,11,20-T	0.0010	0.0010	0.0020	0.0010	0.0020
·CH03-13,16,T	0.0010	0.0010	0.0010	0.0010	0.0010
-CH03-12,15T	0.0010	0.0010	0.0010	0.0020	0.0010

			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.0018	0.0000	0.0018	0.0010	0.0020	24.845	5		
3-9,10,11,20-T	0.0014	-0.0004	0.0014	0.0010	0.0020	39.123	5	32.50	17.00
·CH03-13,16,T	0.0010	-0.0008	0.0010	0.0010	0.0010	0.000	5	37.50	17.00
-CH03-12,15T	0.0012	-0.0006	0.0012	0.0010	0.0020	37.268	5	35.00	17.00

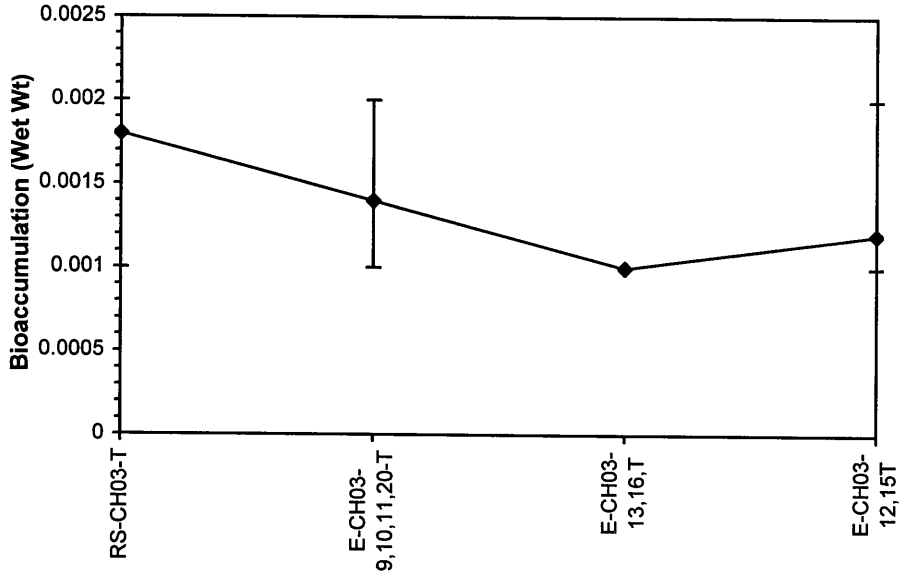
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95552	0.868	0.24809	0.34594
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280AswwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Arsenic, mg/Kg				

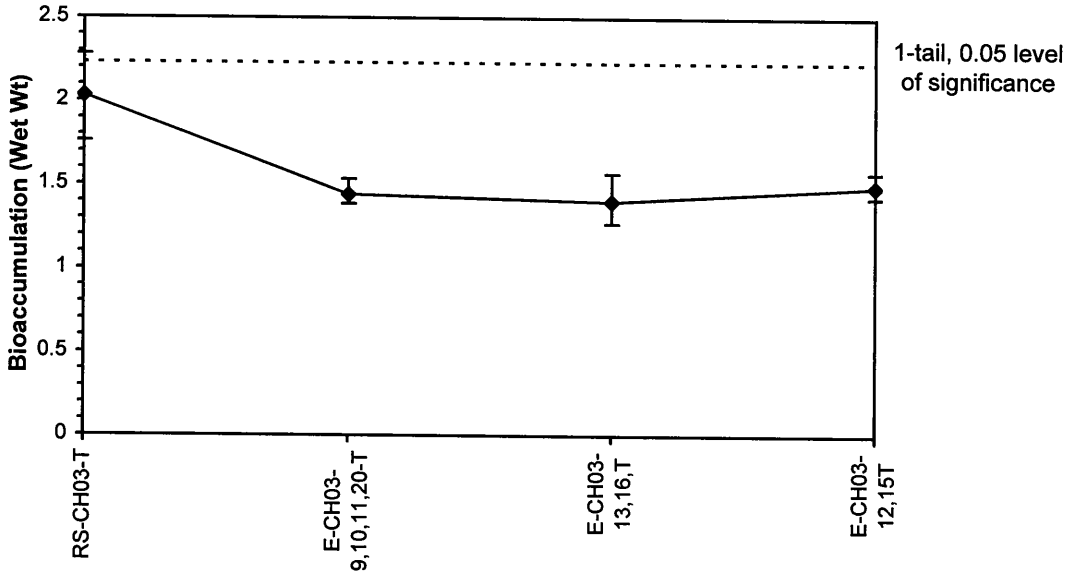
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	2.2700	1.7600	1.9400	2.2800	1.9000
3-9,10,11,20-T	1.4500	1.4200	1.3800	1.5300	1.4000
CH03-13,16,T	1.5700	1.4600	1.3200	1.3900	1.2700
-CH03-12,15T	1.5700	1.5600	1.4400	1.4500	1.4200

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.0300	0.0000	2.0300	1.7600	2.2800	11.500	5			
3-9,10,11,20-T	1.4360	0.5767	1.4360	1.3800	1.5300	4.078	5	-6.771	2.230	0.1956
CH03-13,16,T	1.4020	0.6097	1.4020	1.2700	1.5700	8.430	5	-7.158	2.230	0.1956
-CH03-12,15T	1.4880	0.5262	1.4880	1.4200	1.5700	4.785	5	-6.178	2.230	0.1956

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96148	0.868	0.28281	0.37762
Bartlett's Test indicates equal variances (p = 0.04)	8.46782	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.19564	0	0.43843	0.01924	5.1E-06	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CdwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Cadmium, mg/Kg				

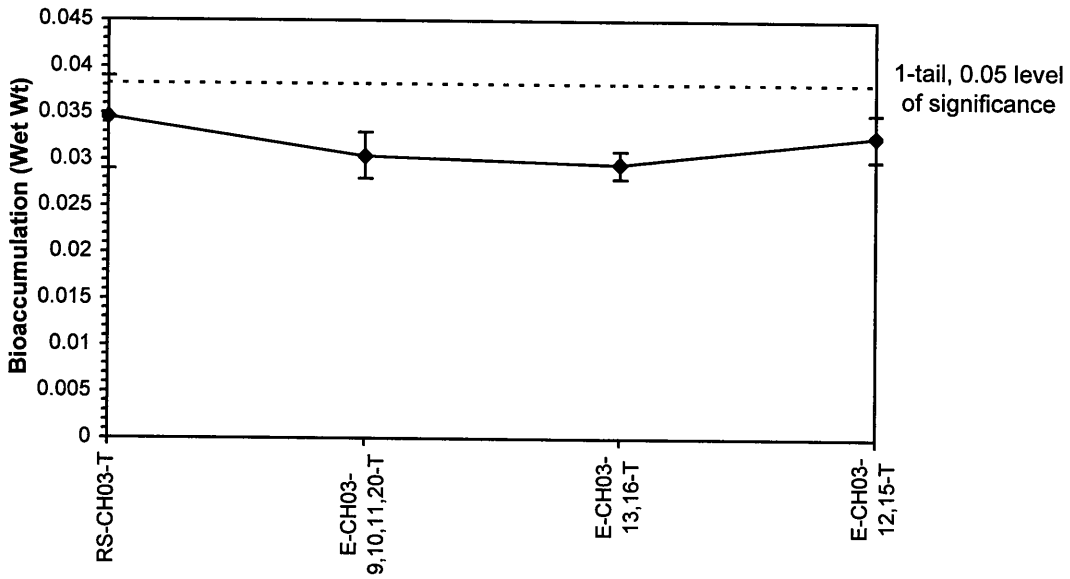
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0370	0.0290	0.0340	0.0390	0.0340
3-9,10,11,20-T	0.0320	0.0310	0.0280	0.0330	0.0280
CH03-13,16-T	0.0310	0.0300	0.0280	0.0310	0.0280
CH03-12,15-T	0.0340	0.0330	0.0350	0.0310	0.0300

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0346	0.0000	0.0346	0.0290	0.0390	10.929	5			
3-9,10,11,20-T	0.0304	-0.0044	0.0304	0.0280	0.0330	7.573	5	-2.595	2.230	0.0036
CH03-13,16-T	0.0296	-0.0052	0.0296	0.0280	0.0310	5.124	5	-3.089	2.230	0.0036
CH03-12,15-T	0.0326	-0.0021	0.0326	0.0300	0.0350	6.361	5	-1.236	2.230	0.0036

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96802	0.868	-0.4085	0.30865
Bartlett's Test indicates equal variances (p = 0.35)	3.25447	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.00361	0	2.5E-05	6.6E-06	0.02909	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CrwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Chromium, mg/Kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0400	0.0500	0.2100	0.0400	0.0400
3-9,10,11,20-T	0.0500	0.0400	0.0400	0.0500	0.0400
CH03-13,16-T	0.0400	0.0400	0.0400	0.0400	0.0400
CH03-12,15-T	0.0400	0.0300	0.0400	0.0400	0.0600

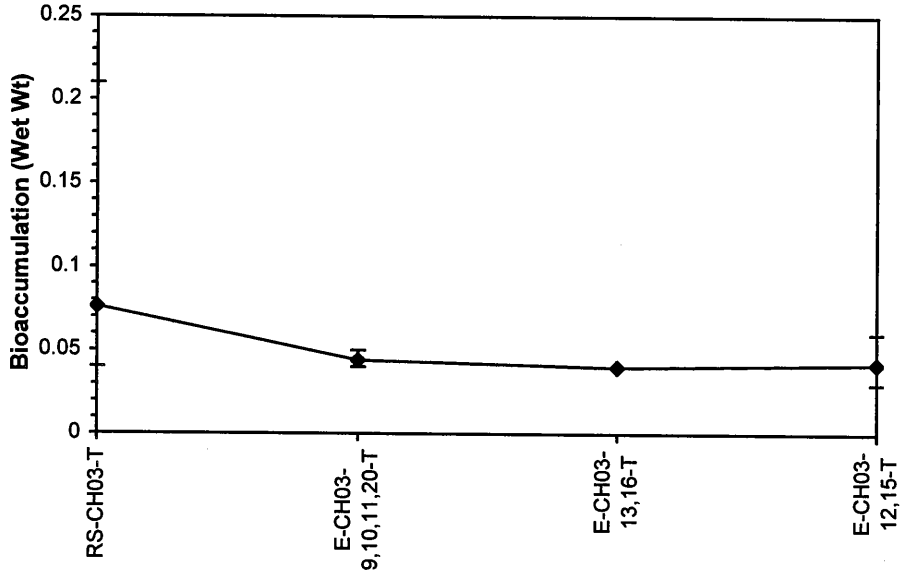
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.0760	0.0000	0.0760	0.0400	0.2100	98.728	5		
3-9,10,11,20-T	0.0440	-0.0346	0.0440	0.0400	0.0500	12.448	5	28.50	17.00
CH03-13,16-T	0.0400	-0.0390	0.0400	0.0400	0.0400	0.000	5	32.50	17.00
CH03-12,15-T	0.0420	-0.0368	0.0420	0.0300	0.0600	26.082	5	31.50	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.60832	0.868	3.10378	12.4651
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CuwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Copper, mg/Kg				

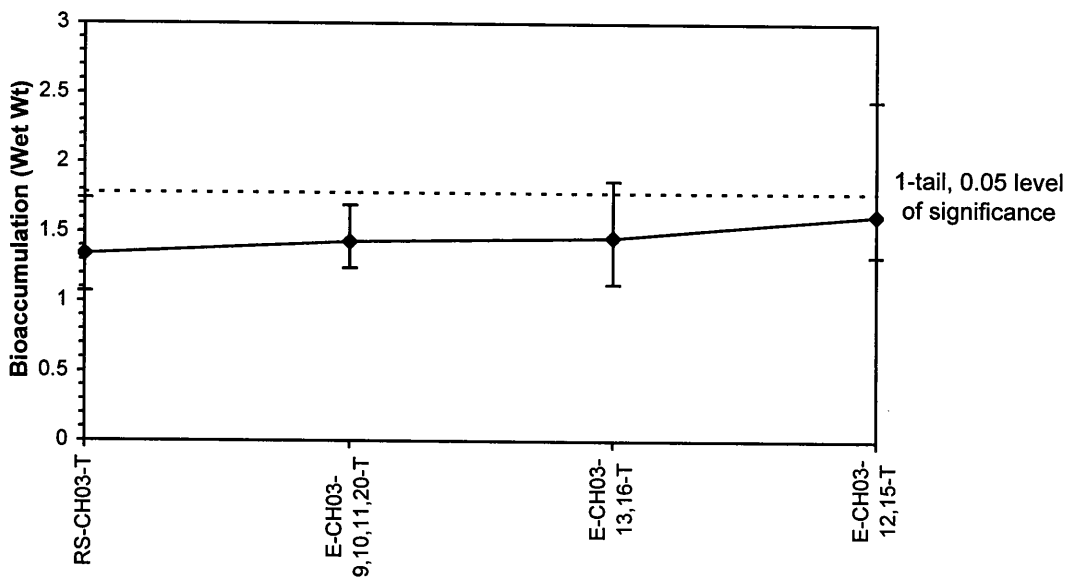
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	1.0700	1.3600	1.7400	1.1300	1.3900
3-9,10,11,20-T	1.4600	1.4800	1.2400	1.6900	1.2800
CH03-13,16-T	1.8600	1.5700	1.3900	1.3400	1.1200
CH03-12,15-T	2.4400	1.3200	1.5200	1.3900	1.4100

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.3380	0.0000	1.3380	1.0700	1.7400	19.770	5			
3-9,10,11,20-T	1.4300	-0.2722	1.4300	1.2400	1.6900	12.587	5	0.462	2.230	0.4440
CH03-13,16-T	1.4560	-0.3491	1.4560	1.1200	1.8600	19.025	5	0.593	2.230	0.4440
CH03-12,15-T	1.6160	-0.8225	1.6160	1.3200	2.4400	28.848	5	1.396	2.230	0.4440

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.87684	0.868	1.41738	2.19059
Bartlett's Test indicates equal variances (p = 0.33)	3.394	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.44401	0	0.06689	0.09911	0.57989	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280PbwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Lead, mg/Kg				

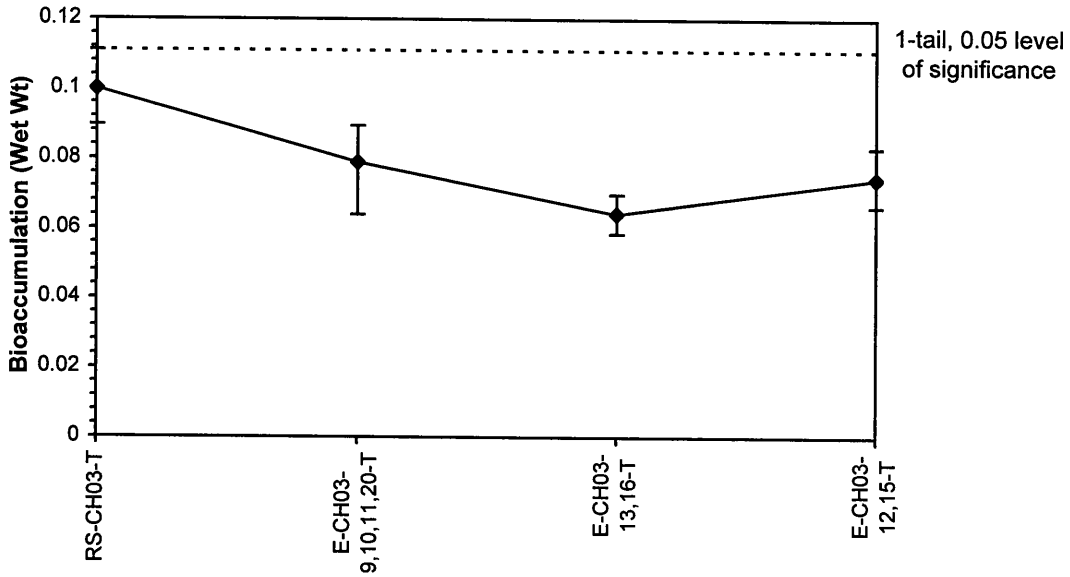
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.1110	0.0895	0.0956	0.1070	0.0966
3-9,10,11,20-T	0.0893	0.0809	0.0727	0.0879	0.0639
CH03-13,16-T	0.0661	0.0698	0.0609	0.0659	0.0585
CH03-12,15-T	0.0790	0.0727	0.0831	0.0704	0.0663

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0999	0.0000	0.0999	0.0895	0.1110	8.825	5			
3-9,10,11,20-T	0.0789	-0.0233	0.0789	0.0639	0.0893	13.534	5	-4.138	2.230	0.0113
CH03-13,16-T	0.0642	-0.0397	0.0642	0.0585	0.0698	7.015	5	-7.034	2.230	0.0113
CH03-12,15-T	0.0743	-0.0285	0.0743	0.0663	0.0831	9.061	5	-5.052	2.230	0.0113

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96386	0.868	-0.1746	-0.7514
Bartlett's Test indicates equal variances (p = 0.44)	2.69386	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.01132	0	0.00113	6.4E-05	2.6E-05	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280HgwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Mercury, mg/Kg				

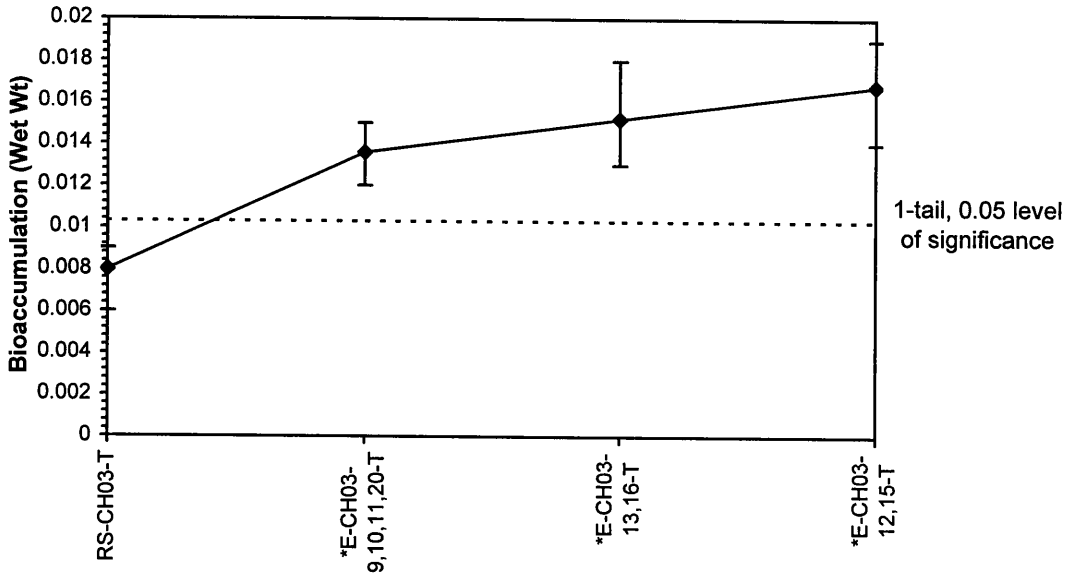
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0090	0.0080	0.0090	0.0060	0.0080
3-9,10,11,20-T	0.0140	0.0120	0.0130	0.0150	0.0140
CH03-13,16-T	0.0130	0.0150	0.0140	0.0160	0.0180
CH03-12,15-T	0.0170	0.0190	0.0180	0.0160	0.0140

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0080	0.0000	0.0080	0.0060	0.0090	15.309	5			
3-9,10,11,20-T	0.0136	0.0056	0.0136	0.0120	0.0150	8.384	5	5.545	2.230	0.0023
CH03-13,16-T	0.0152	0.0073	0.0152	0.0130	0.0180	12.655	5	7.129	2.230	0.0023
CH03-12,15-T	0.0168	0.0089	0.0168	0.0140	0.0190	11.450	5	8.713	2.230	0.0023

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.98363	0.868	-0.1383	-0.3539
Bartlett's Test indicates equal variances (p = 0.64)	1.66597	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.00225	0	7.3E-05	2.6E-06	1.1E-06	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280NiwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Nickel, mg/Kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0660	0.1040	0.2380	0.0730	0.0680
3-9,10,11,20-T	0.0940	0.1120	0.0970	0.1070	0.0790
CH03-13,16-T	0.1560	0.1390	0.1450	0.1360	0.1040
CH03-12,15-T	0.1800	0.1710	0.1820	0.1150	0.1750

			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.1098	0.0000	0.1098	0.0660	0.2380	66.753	5		
3-9,10,11,20-T	0.0978	-0.0135	0.0978	0.0790	0.1120	13.082	5	23.00	17.00
CH03-13,16-T	0.1360	0.0294	0.1360	0.1040	0.1560	14.305	5	20.50	17.00
CH03-12,15-T	0.1646	0.0616	0.1646	0.1150	0.1820	17.047	5	20.00	17.00

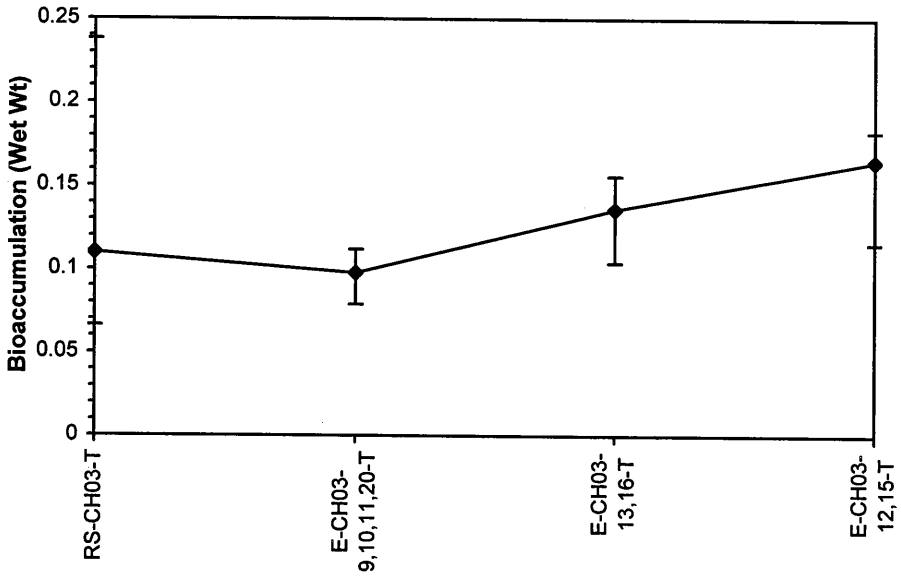
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.78632	0.868	1.94337	6.85026
Bartlett's Test indicates unequal variances (p = 6.34E-03)	12.3294	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280AgwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Silver, mg/Kg				

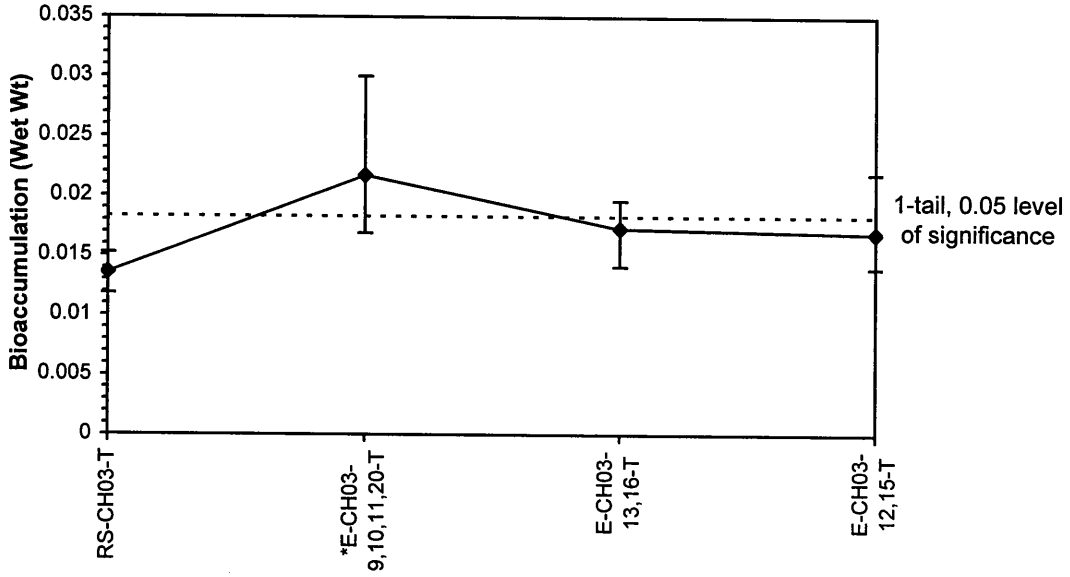
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0143	0.0152	0.0134	0.0131	0.0118
3-9,10,11,20-T	0.0219	0.0224	0.0169	0.0173	0.0300
CH03-13,16-T	0.0158	0.0196	0.0141	0.0179	0.0191
CH03-12,15-T	0.0167	0.0140	0.0143	0.0219	0.0178

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0136	0.0000	0.0136	0.0118	0.0152	9.453	5			
3-9,10,11,20-T	0.0217	0.0083	0.0217	0.0169	0.0300	24.365	5	3.829	2.230	0.0047
CH03-13,16-T	0.0173	0.0038	0.0173	0.0141	0.0196	13.364	5	1.759	2.230	0.0047
CH03-12,15-T	0.0169	0.0034	0.0169	0.0140	0.0219	18.902	5	1.590	2.230	0.0047

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93871	0.868	0.86978	1.6844
Bartlett's Test indicates equal variances (p = 0.08)	6.76711	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.00474	0	5.6E-05	1.1E-05	0.01296	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ZnwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Zinc, mg/Kg				

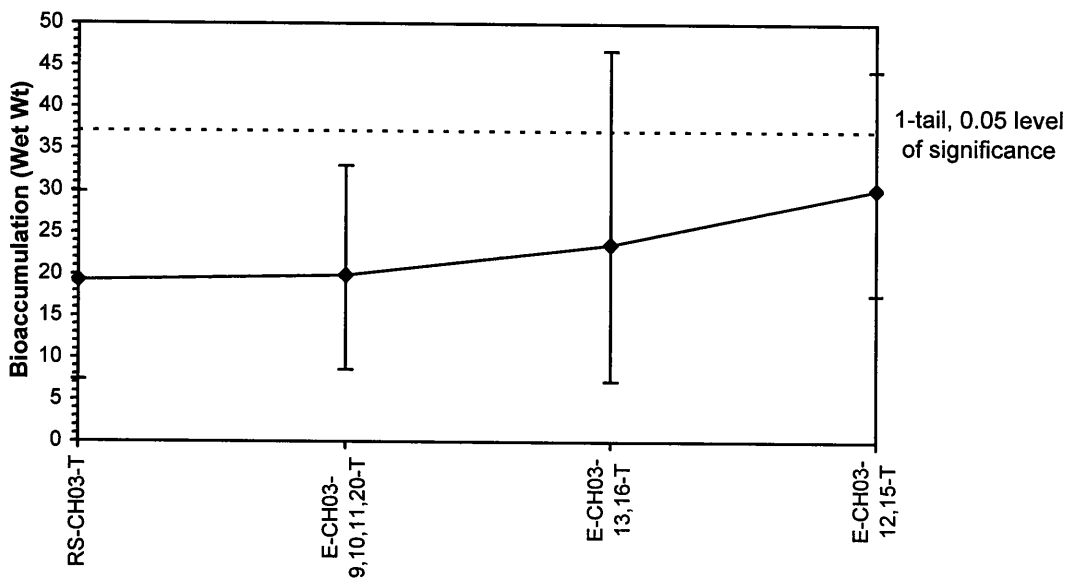
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	29.900	8.250	24.900	26.200	7.450
3-9,10,11,20-T	8.590	17.700	13.800	33.000	26.500
CH03-13,16-T	46.800	9.300	32.900	21.900	7.190
CH03-12,15-T	17.600	44.400	17.900	31.300	39.900

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	19.340	0.0000	19.340	7.450	29.900	55.077	5			
3-9,10,11,20-T	19.918	-0.0315	19.918	8.590	33.000	49.264	5	0.072	2.230	17.796
CH03-13,16-T	23.618	-0.2333	23.618	7.190	46.800	70.258	5	0.536	2.230	17.796
CH03-12,15-T	30.220	-0.5932	30.220	17.600	44.400	40.763	5	1.363	2.230	17.796

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93256	0.868	0.19669	-1.0938
Bartlett's Test indicates equal variances (p = 0.74)	1.23853	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	17.7959	0	125.174	159.21	0.51898	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	2802MNwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	2-Methylnaphthalene, µg/Kg				

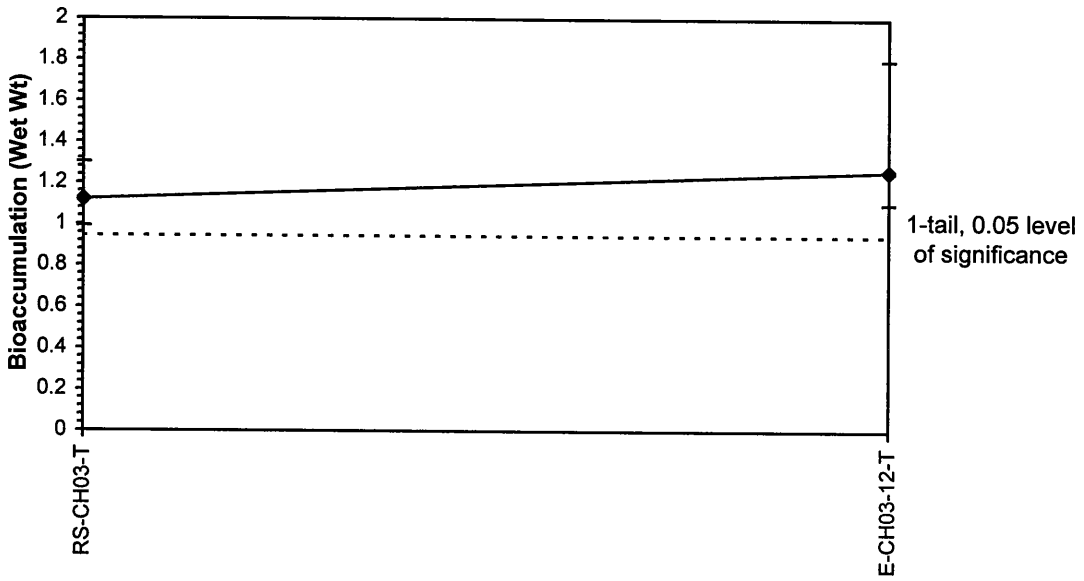
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.3000	0.9900	1.0000	1.2000	1.1000
E-CH03-12-T	1.1000	1.1000	1.1000	1.2000	1.8000

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.1180	0.0000	0.9044	0.7692	1.0101	11.552	5			
E-CH03-12-T	1.2600	-1.2034	0.8232	0.5556	0.9091	18.608	5	0.978	1.860	0.1542

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.82481	0.781	-1.327	1.14247
F-Test indicates equal variances (p = 0.48)	2.15021	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	-0.1611	0	0.01645	0.01719	0.3566	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ACEwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Acenaphthene, µg/Kg				

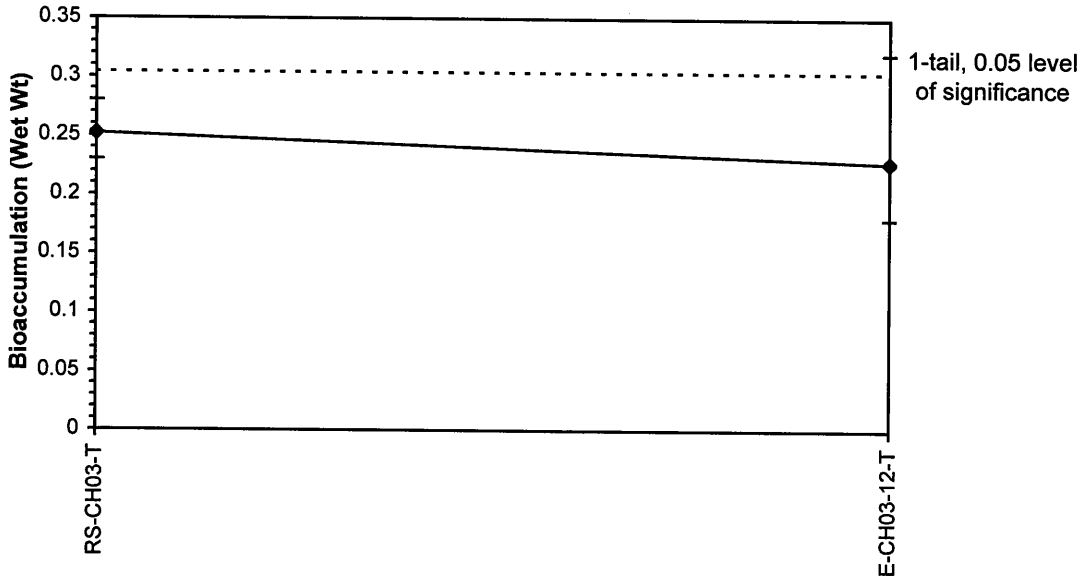
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.2800	0.2400	0.2500	0.2300	0.2600
E-CH03-12-T	0.1800	0.2500	0.2100	0.1800	0.3200

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2520	0.0000	0.2520	0.2300	0.2800	7.633	5			
E-CH03-12-T	0.2280	-0.0321	0.2280	0.1800	0.3200	25.836	5	-0.866	1.860	0.0515

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.91204	0.781	1.12757	1.91519
F-Test indicates equal variances (p = 0.05)	9.37838	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.05153	0	0.00144	0.00192	0.41169	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ACLwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Acenaphthylene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.3300	0.3000	0.3000	0.3000	0.2900
E-CH03-12-T	0.2600	0.2700	0.2600	0.1200	0.2900

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.3040	0.0000	0.3040	0.2900	0.3300	4.989	5		
E-CH03-12-T	0.2400	-0.0920	0.2400	0.1200	0.2900	28.413	5	39.50	19.00

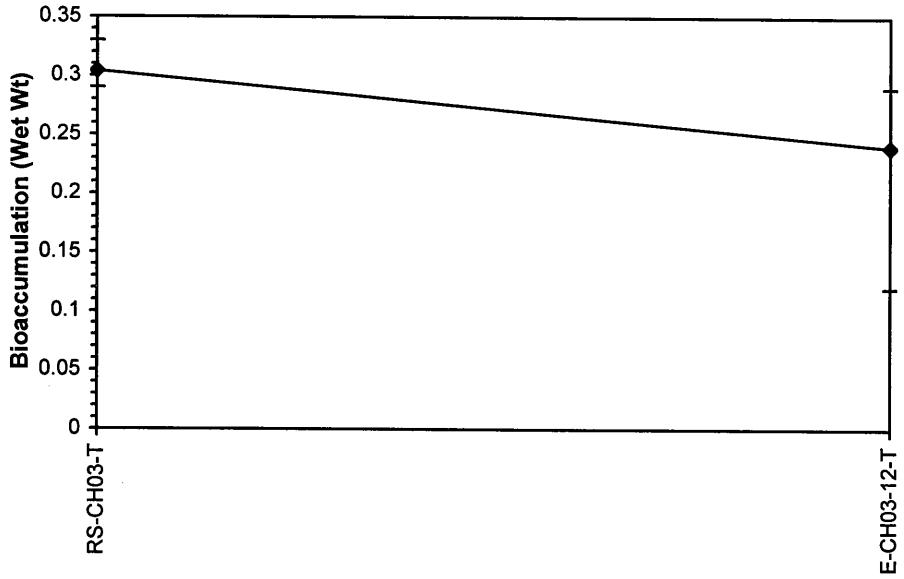
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.76703	0.781	-2.1249	5.64697
F-Test indicates equal variances (p = 0.01)	20.2174	23.1539		

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ANTwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Anthracene, µg/kg				

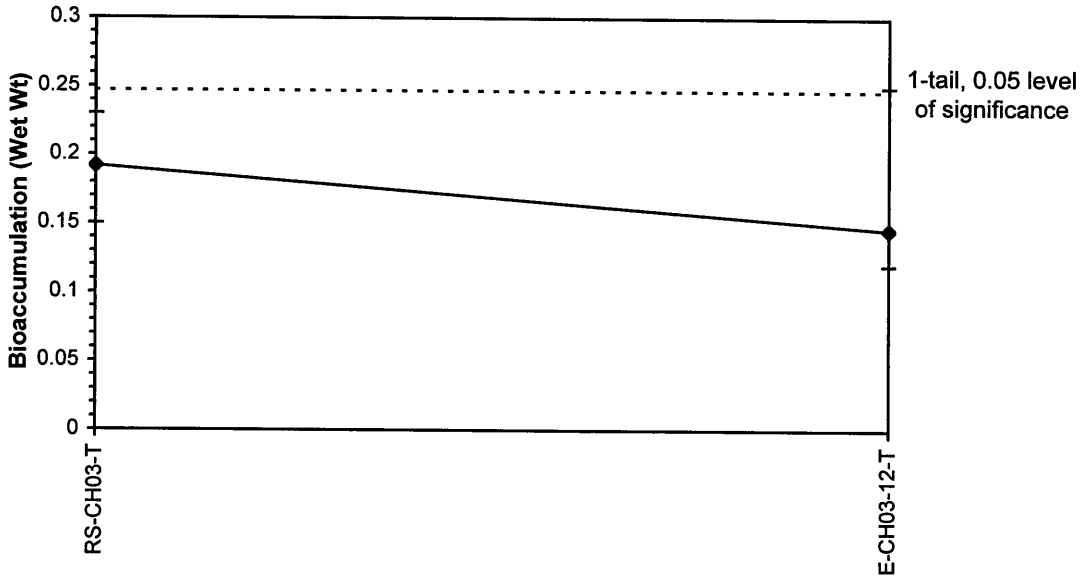
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.2000	0.2300	0.2100	0.1700	0.1500
E-CH03-12-T	0.1200	0.1200	0.1200	0.2500	0.1200

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1920	0.0000	0.1920	0.1500	0.2300	16.634	5			
E-CH03-12-T	0.1460	-0.0569	0.1460	0.1200	0.2500	39.820	5	-1.551	1.860	0.0552

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.79911	0.781	1.65591	2.75782
F-Test indicates equal variances (p = 0.27)	3.31373	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.05516	0	0.00529	0.0022	0.15958	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BAAwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benz(a)anthracene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1700	0.1700	0.1700	0.1700	0.1700
E-CH03-12-T	0.1700	0.1700	0.1700	0.7400	0.1700

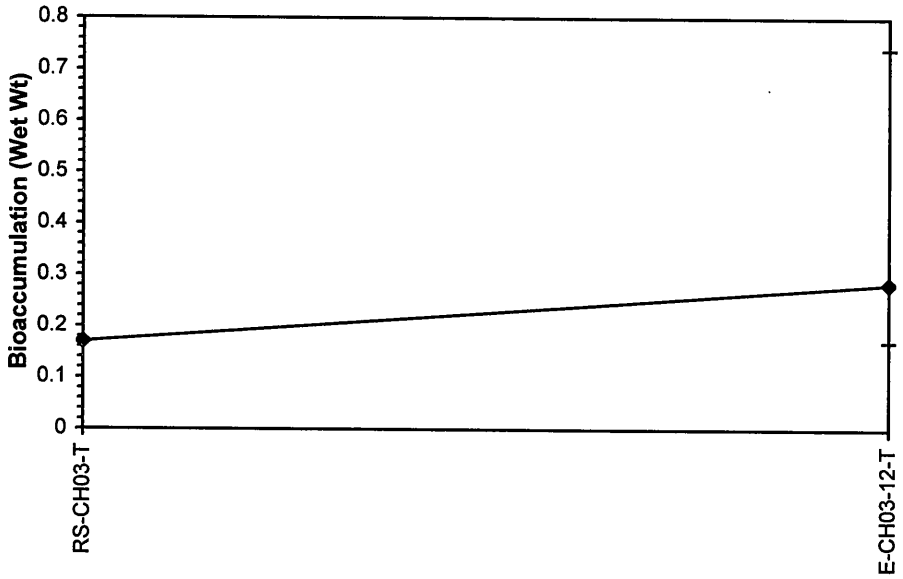
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.1700	0.0000	0.1700	0.1700	0.1700	0.000	5		
E-CH03-12-T	0.2840	0.1373	0.2840	0.1700	0.7400	89.758	5	25.00	19.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.62485	0.781	2.51558	7.15179
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BAPwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benzo(a)pyrene, µg/Kg				

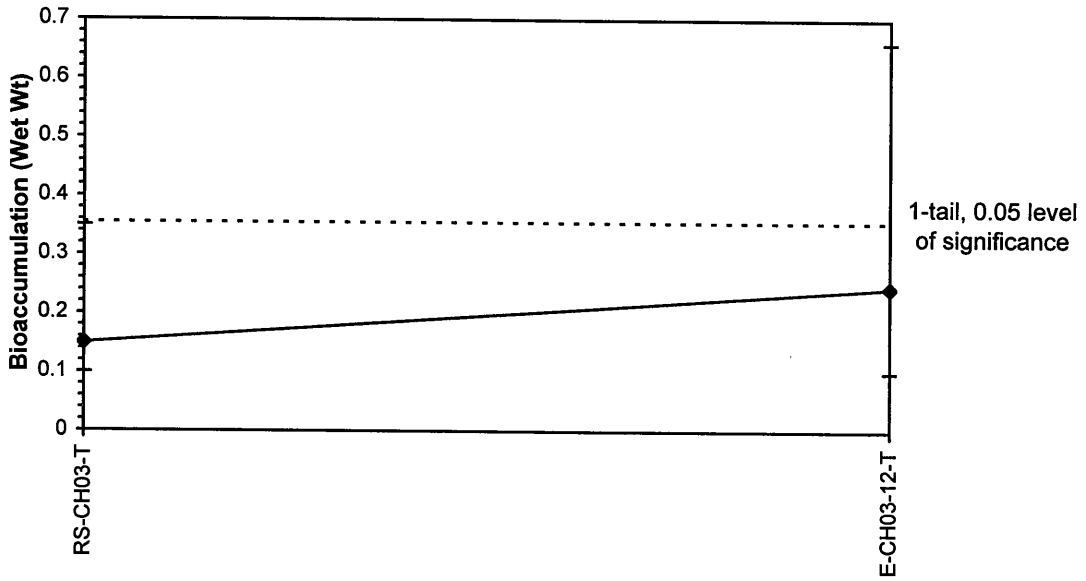
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1000	0.1000	0.1000	0.1000	0.3500
E-CH03-12-T	0.6600	0.1000	0.1000	0.2600	0.1000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1500	0.0000	0.3840	0.3218	0.6331	36.254	5			
E-CH03-12-T	0.2440	0.1106	0.4897	0.3218	0.9483	55.638	5	0.772	1.860	0.2545

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.78579	0.781	-1.58355	2.02797
F-Test indicates equal variances (p = 0.22)	3.83041	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.21482	0	0.02793	0.04681	0.46203	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BBFwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benzo(b)fluoranthene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1500	0.1500	0.1500	0.1500	0.1500
E-CH03-12-T	0.1500	0.1500	0.1500	0.6600	0.1500

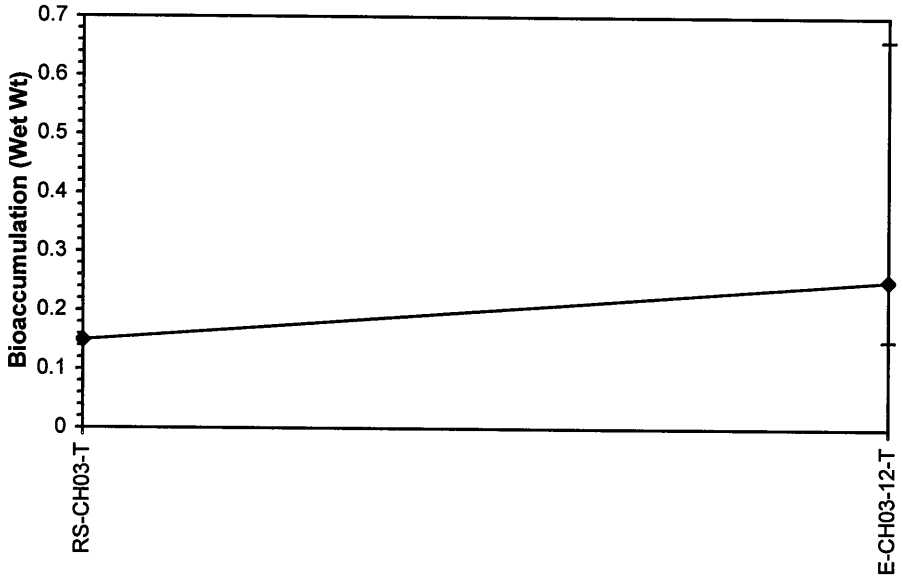
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.1500	0.0000	0.1500	0.1500	0.1500	0.000	5		
E-CH03-12-T	0.2520	0.1200	0.2520	0.1500	0.6600	90.508	5	25.00	19.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.62485	0.781	2.51558	7.15179
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BXPwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens

Comments: Benzo(g,h,i)perylene, µg/Kg

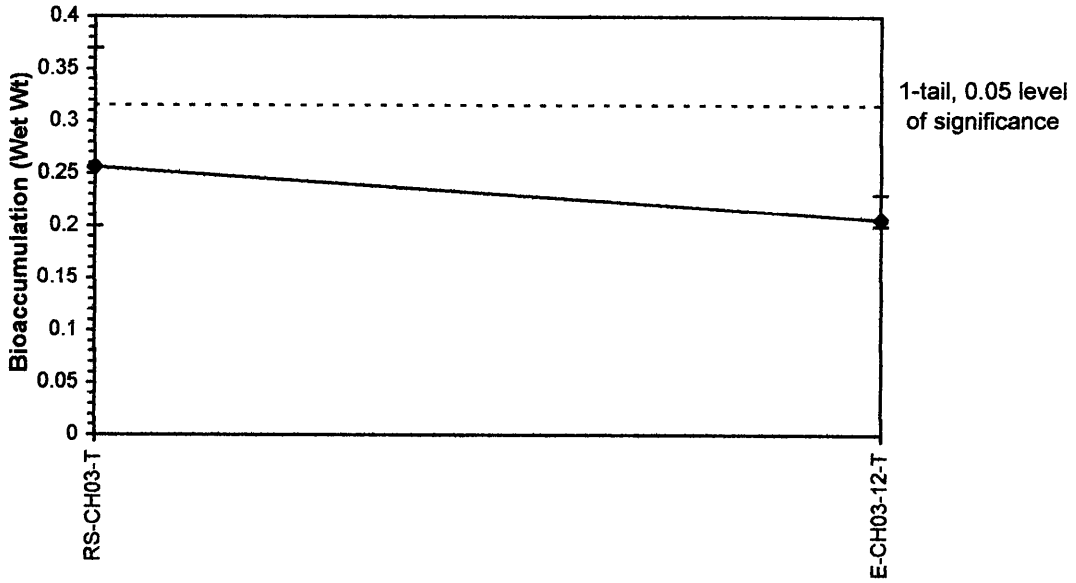
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.3700	0.2700	0.2000	0.2400	0.2000
E-CH03-12-T	0.2000	0.2000	0.2000	0.2300	0.2000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2560	0.0000	0.2560	0.2000	0.3700	27.427	5			
E-CH03-12-T	0.2060	-0.0672	0.2060	0.2000	0.2300	6.513	5	-1.564	1.860	0.0594

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.83081	0.781	1.46536	3.65833
F-Test indicates unequal variances (p = 7.27E-03)	27.3889	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.05945	0	0.00625	0.00256	0.15644	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BKFwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benzo(k)fluoranthene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1700	0.1700	0.1700	0.1700	0.1700
E-CH03-12-T	0.1700	0.1700	0.1700	0.5200	0.1700

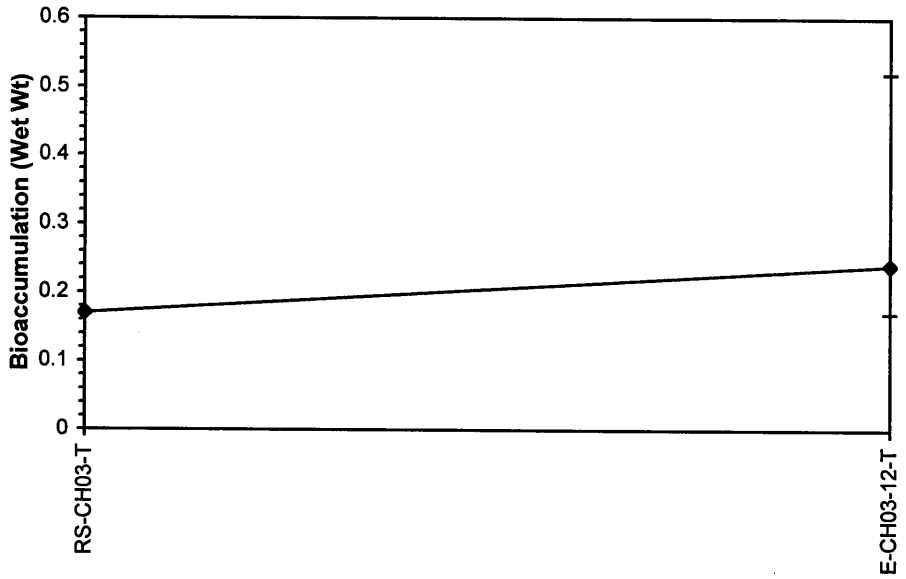
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.1700	0.0000	0.1700	0.1700	0.1700	0.000	5		
E-CH03-12-T	0.2400	0.0843	0.2400	0.1700	0.5200	65.219	5	25.00	19.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.62485	0.781	2.51558	7.15179
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CHRwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Chrysene, µg/Kg				

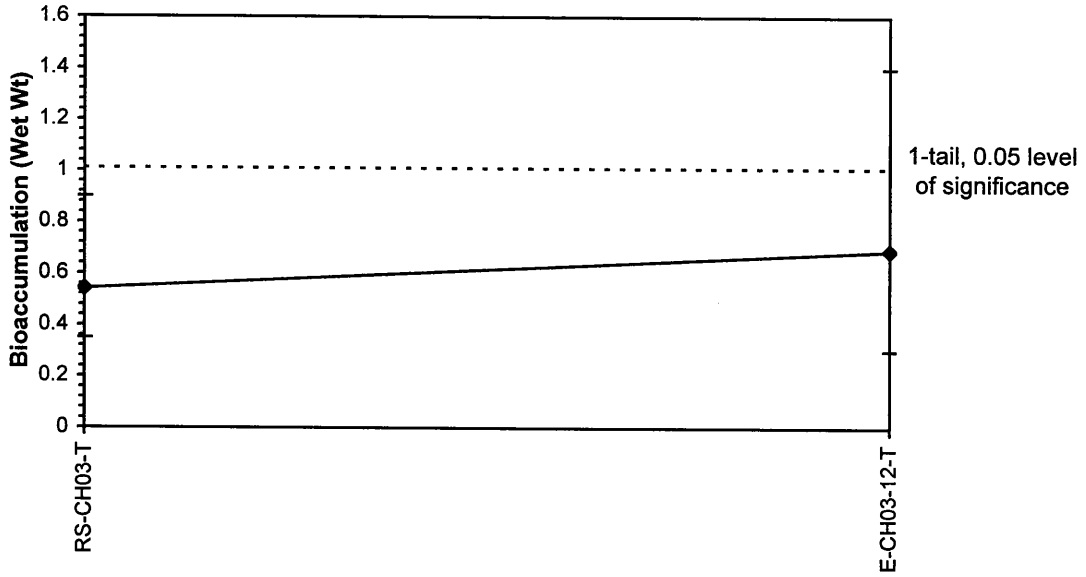
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.5300	0.5100	0.3500	0.9000	0.4200
E-CH03-12-T	0.3000	0.3000	1.1000	1.4000	0.3500

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.5420	0.0000	0.5420	0.3500	0.9000	39.256	5			
E-CH03-12-T	0.6900	0.3231	0.6900	0.3000	1.4000	75.724	5	0.587	1.860	0.4692

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.8987	0.781	0.79845	-0.4123
F-Test indicates equal variances (p = 0.11)	6.03048	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.46916	0	0.05476	0.15914	0.57364	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280DBAwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Dibenz(a,h)anthracene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1500	0.1500	0.5400	0.1500	0.1500
E-CH03-12-T	0.1500	0.1500	0.1500	0.1500	0.1500

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.2280	0.0000	0.2280	0.1500	0.5400	76.497	5		
E-CH03-12-T	0.1500	-0.1010	0.1500	0.1500	0.1500	0.000	5	30.00	19.00

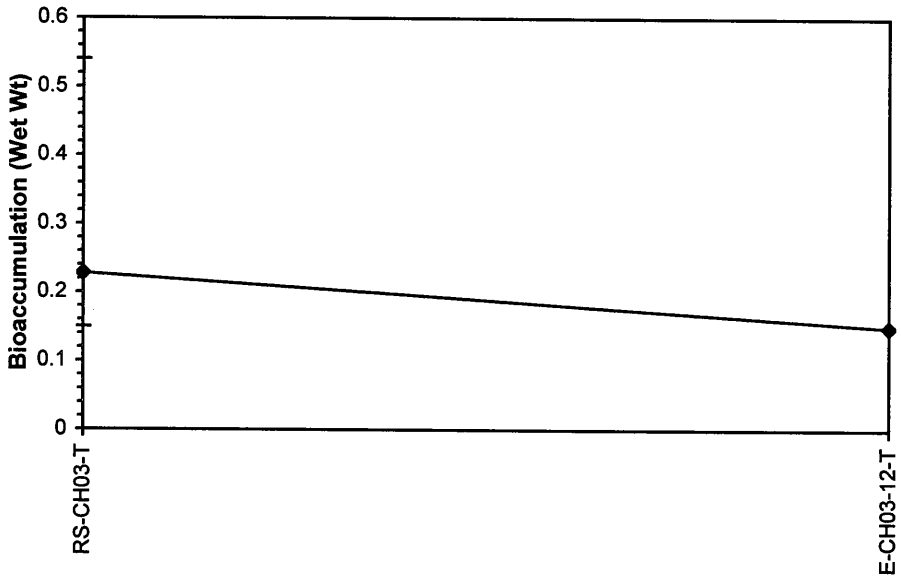
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.62485	0.781	2.51558	7.15179
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

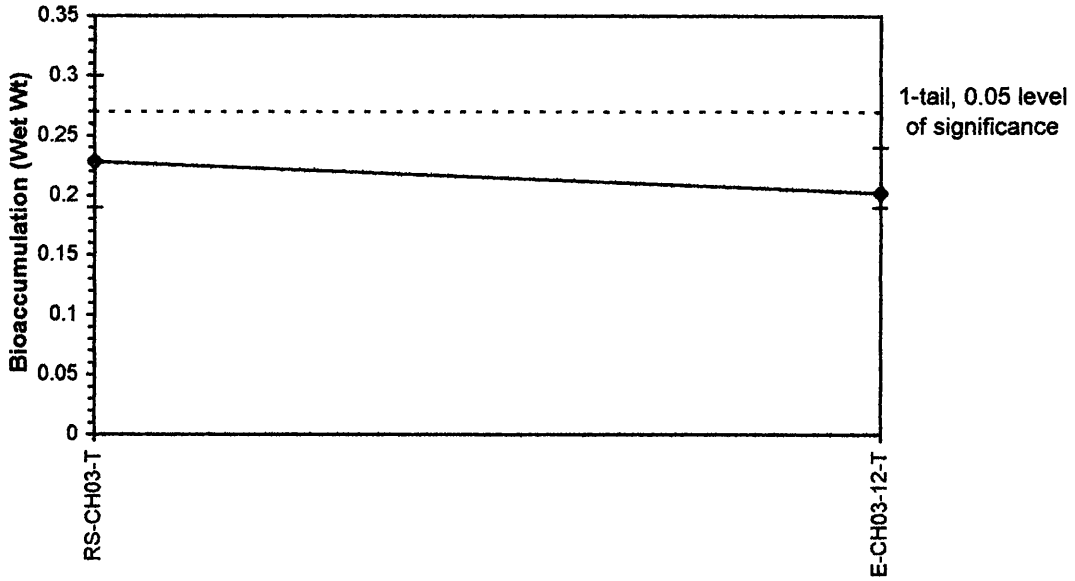
Start Date:	4/18/2003	Test ID:	280DBFwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens
Comments:	Dibenzofuran, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.2400	0.2200	0.3000	0.1900	0.1900
E-CH03-12-T	0.1900	0.1900	0.1900	0.2400	0.2000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2280	0.0000	0.2280	0.1900	0.3000	19.955	5			
E-CH03-12-T	0.2020	-0.0337	0.2020	0.1900	0.2400	10.732	5	-1.154	1.860	0.0419

Auxiliary Tests	Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.88199		0.781		1.15126	1.34939
F-Test indicates equal variances (p = 0.18)	4.40426		23.1539			
Hypothesis Test (1-tail, 0.05)	**MSDu**	**MSDp**	**MSB**	**MSE**	**F-Prob**	**df**
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.04191	0	0.00169	0.00127	0.28198	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: JM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280FLAwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Fluoranthene, µg/Kg				

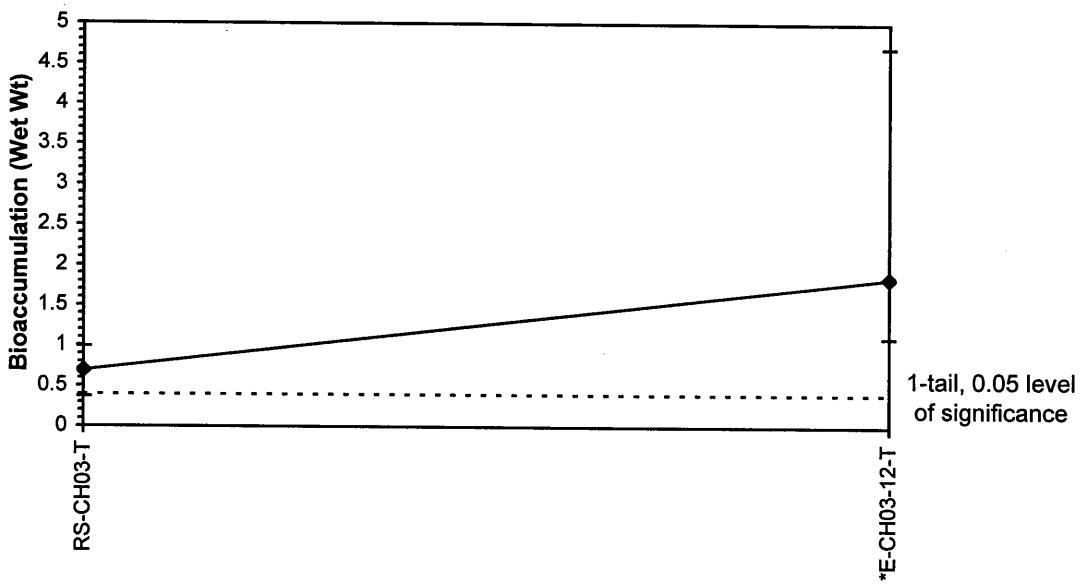
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.9100	0.3700	0.3700	0.9900	0.8300
E-CH03-12-T	1.1000	1.1000	1.2000	4.7000	1.1000

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.6940	0.0000	1.7438	1.0101	2.7027	50.350	5			
*E-CH03-12-T	1.8400	3.7451	0.7547	0.2128	0.9091	40.376	5	2.380	1.860	0.7729

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.87243	0.781	0.46458	-0.8948
F-Test indicates equal variances (p = 0.06)	8.30323	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	-0.1761	0	2.44615	0.43189	0.04455	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280FwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Fluorene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.3700	0.3800	0.4800	0.3700	0.3700
E-CH03-12-T	0.3700	0.3700	0.3700	0.3700	0.3700

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.3940	0.0000	0.3940	0.3700	0.4800	12.251	5		
E-CH03-12-T	0.3700	-0.0396	0.3700	0.3700	0.3700	0.000	5	32.50	19.00

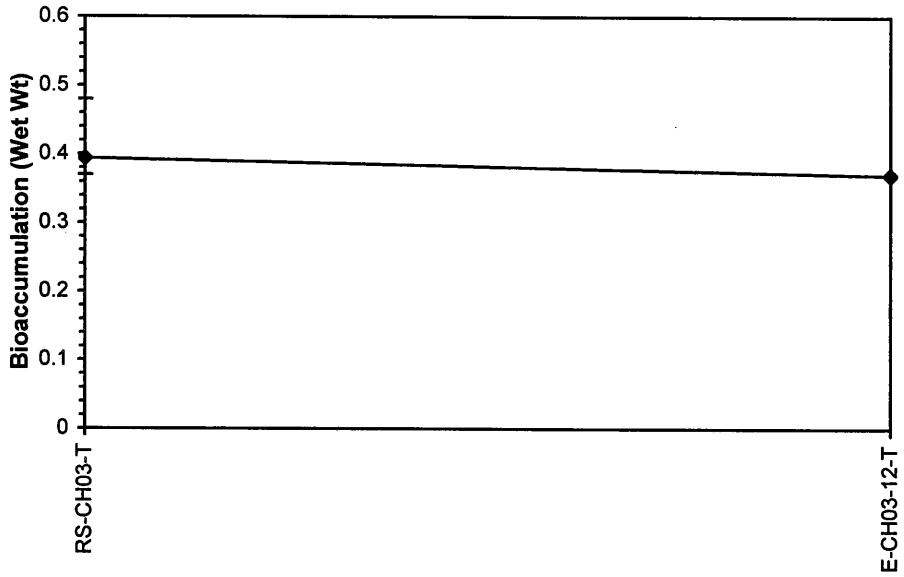
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.65077	0.781	2.46667	7.00403
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280INPwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens
Comments:	Indeno(1,2,3-cd)pyrene, µg/Kg				

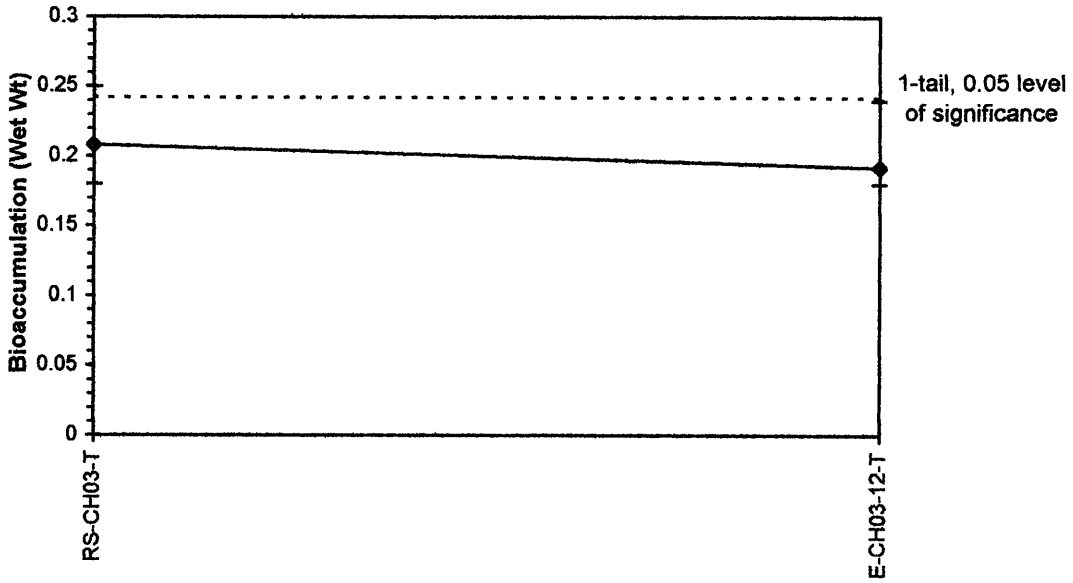
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1800	0.2300	0.2000	0.2500	0.1800
E-CH03-12-T	0.1800	0.1800	0.1800	0.2400	0.1800

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2080	0.0000	0.2080	0.1800	0.2500	14.973	5			
E-CH03-12-T	0.1920	-0.0202	0.1920	0.1800	0.2400	13.975	5	-0.870	1.860	0.0342

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.81933	0.781	0.97157	-0.482
F-Test indicates equal variances (p = 0.78)	1.34722	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.03419	0	0.00064	0.00084	0.4095	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280NAPwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Naphthalene, µg/Kg				

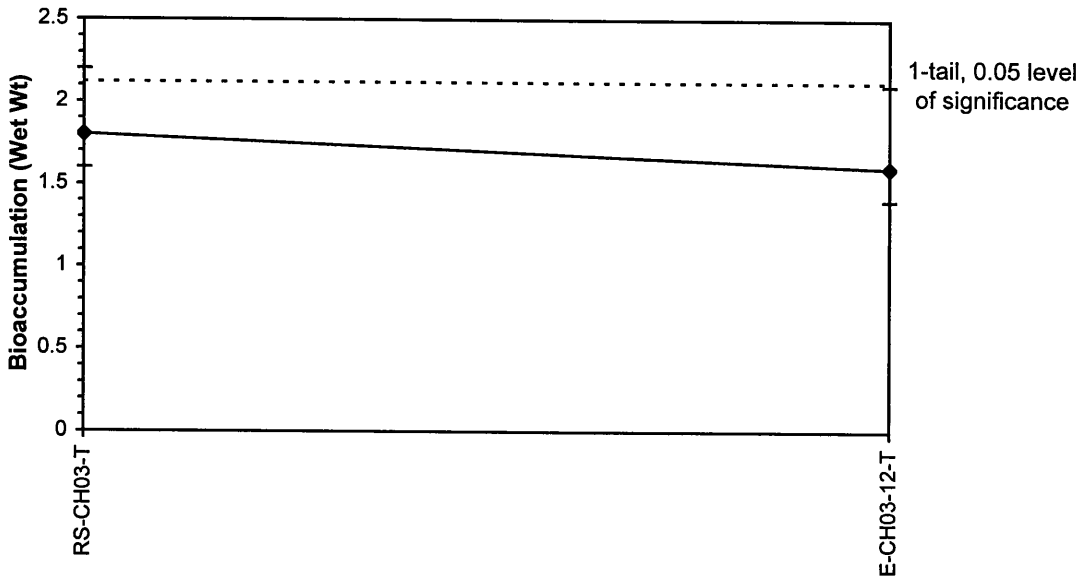
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.2000	1.6000	1.6000	1.8000	1.8000
E-CH03-12-T	1.5000	1.4000	1.5000	1.5000	2.1000

			Transform: Log						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.8000	0.0000	0.2522	0.2041	0.3424	22.411	5			
E-CH03-12-T	1.6000	0.2500	0.1993	0.1461	0.3222	35.076	5	-1.316	1.860	0.0748

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.79907	0.781	1.40506	0.96755
F-Test indicates equal variances (p = 0.69)	1.52963	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.33582	0	0.007	0.00404	0.22461	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280PANwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Phenanthrene, µg/Kg				

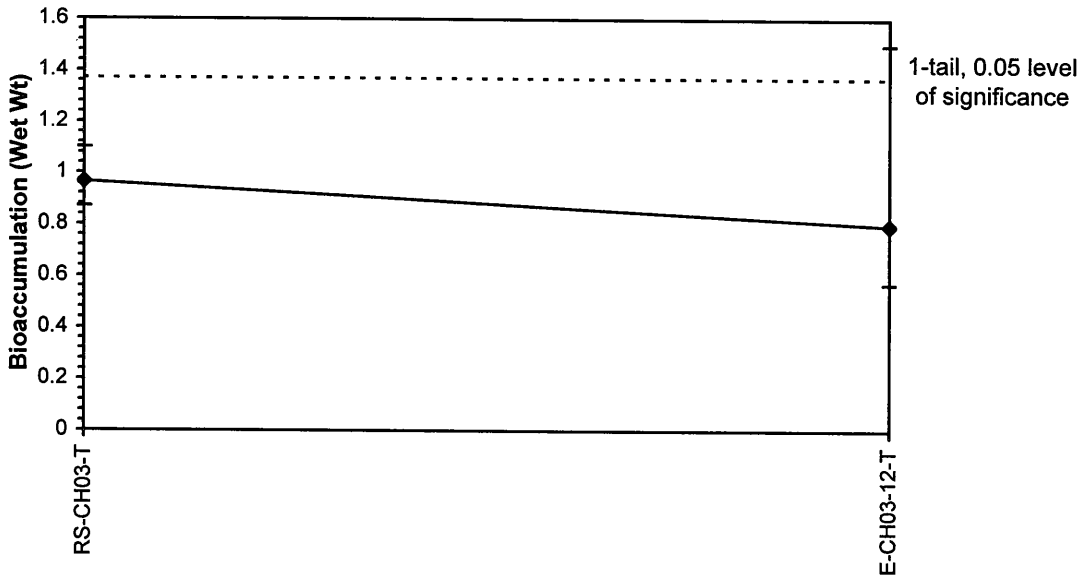
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.0000	0.9800	1.1000	0.8800	0.8700
E-CH03-12-T	0.6000	0.5800	0.5700	1.5000	0.7400

			Transform: Log						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.9660	0.0000	-0.0167	-0.0605	0.0414	-253.356	5			
E-CH03-12-T	0.7980	-4.9412	-0.1314	-0.2441	0.1761	-135.292	5	-1.404	1.860	0.1520

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.79378	0.781	1.98137	4.87886
F-Test indicates equal variances (p = 0.02)	17.7171	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.40329	0	0.03293	0.01671	0.19793	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280PYRwwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Pyrene, µg/Kg				

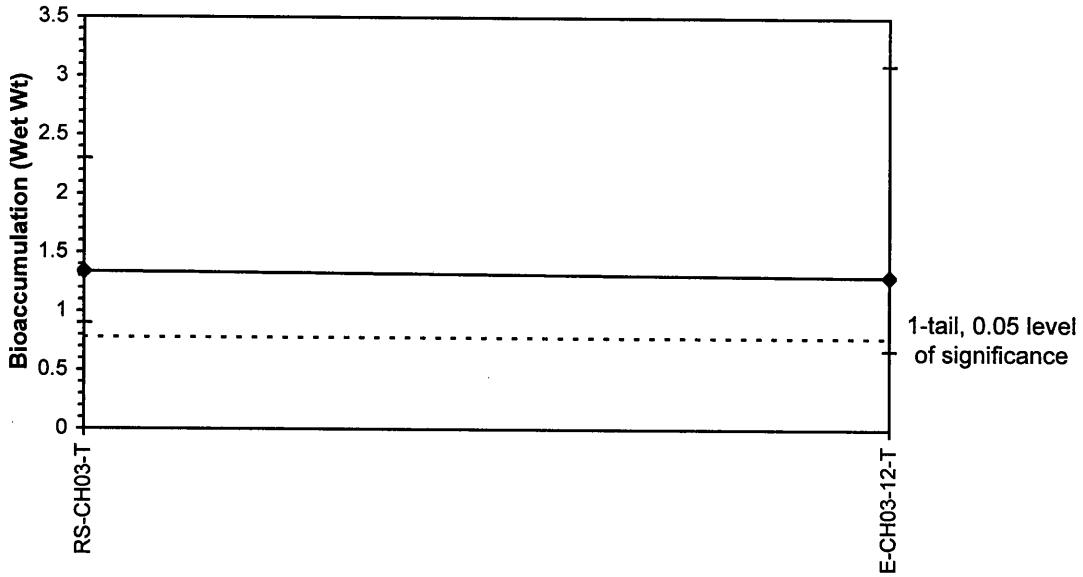
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.2000	1.3000	2.3000	1.0000	0.9000
E-CH03-12-T	0.7700	0.7400	1.2000	3.1000	0.6700

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.3400	0.0000	0.8297	0.4348	1.1111	31.187	5			
E-CH03-12-T	1.2960	0.1294	1.0597	0.3226	1.4925	45.358	5	-0.942	1.860	0.4540

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.92392	0.781	-0.9427	0.32568
F-Test indicates equal variances (p = 0.26)	3.45047	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	-0.4262	0	0.13226	0.14899	0.37368	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

E 2

N. virens **Dry Weight**

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280DNBdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Di-n-butyltin, µg/Kg				

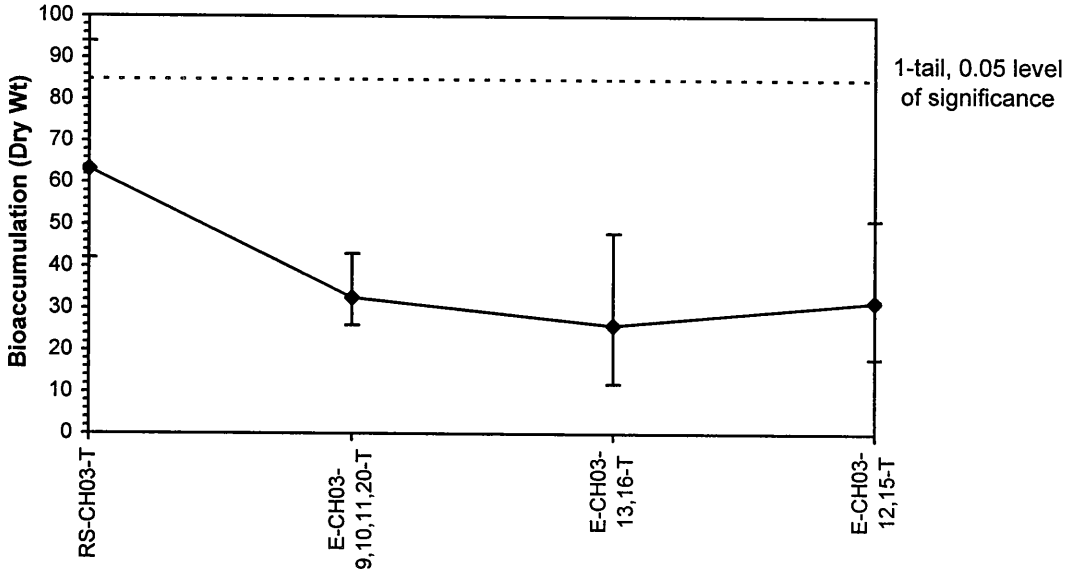
Conc-ppb	1	2	3	4	5
RS-CH03-T	94.000	42.000	61.000	43.000	76.000
3-9,10,11,20-T	43.000	29.000	27.000	38.000	26.000
CH03-13,16-T	18.000	12.000	37.000	48.000	15.000
CH03-12,15-T	18.000	29.000	51.000	30.000	30.000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	63.200	0.0000	63.200	42.000	94.000	35.157	5			
3-9,10,11,20-T	32.600	0.4920	32.600	26.000	43.000	23.016	5	-3.156	2.230	21.618
CH03-13,16-T	26.000	0.5981	26.000	12.000	48.000	60.386	5	-3.837	2.230	21.618
CH03-12,15-T	31.600	0.5080	31.600	18.000	51.000	37.882	5	-3.260	2.230	21.618

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95741	0.868	0.55598	-0.2307
Bartlett's Test indicates equal variances (p = 0.25)	4.10288	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	21.6184	0	1414.45	234.95	0.00604	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280nBTdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	n-Butyltin, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	27.000	21.000	28.000	20.000	27.000
3-9,10,11,20-T	16.000	13.000	10.000	12.000	7.700
CH03-13,16-T	10.000	17.000	15.000	19.000	12.000
CH03-12,15-T	4.600	9.700	98.000	14.000	12.000

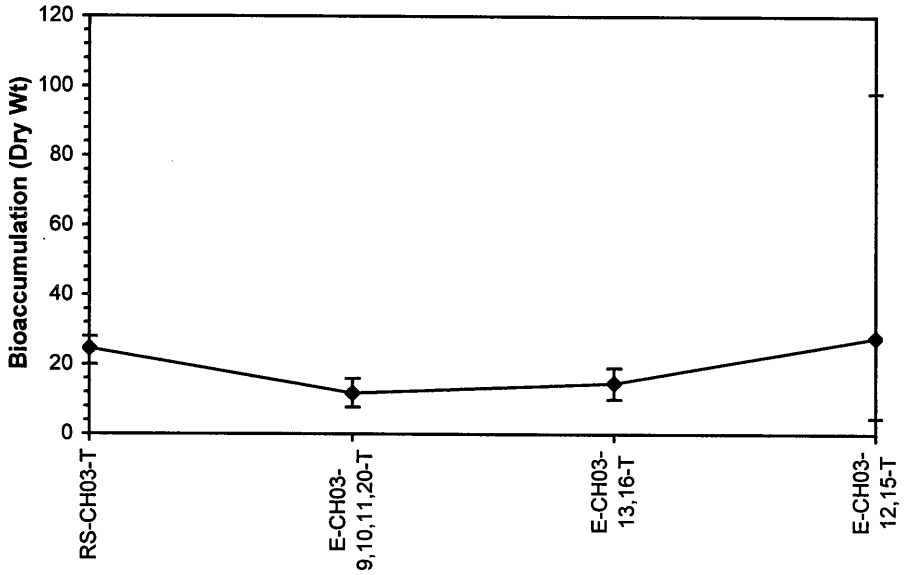
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	24.600	0.0000	24.600	20.000	28.000	15.372	5		
3-9,10,11,20-T	11.740	0.5449	11.740	7.700	16.000	26.649	5	40.00	17.00
CH03-13,16-T	14.600	0.4237	14.600	10.000	19.000	24.979	5	40.00	17.00
CH03-12,15-T	27.660	-0.1297	27.660	4.600	98.000	142.724	5	35.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.62826	0.868	3.07198	12.4375
Bartlett's Test indicates unequal variances (p = 3.42E-07)	32.8749	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	2804BTdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Tetra-n-butyltin, µg/Kg				

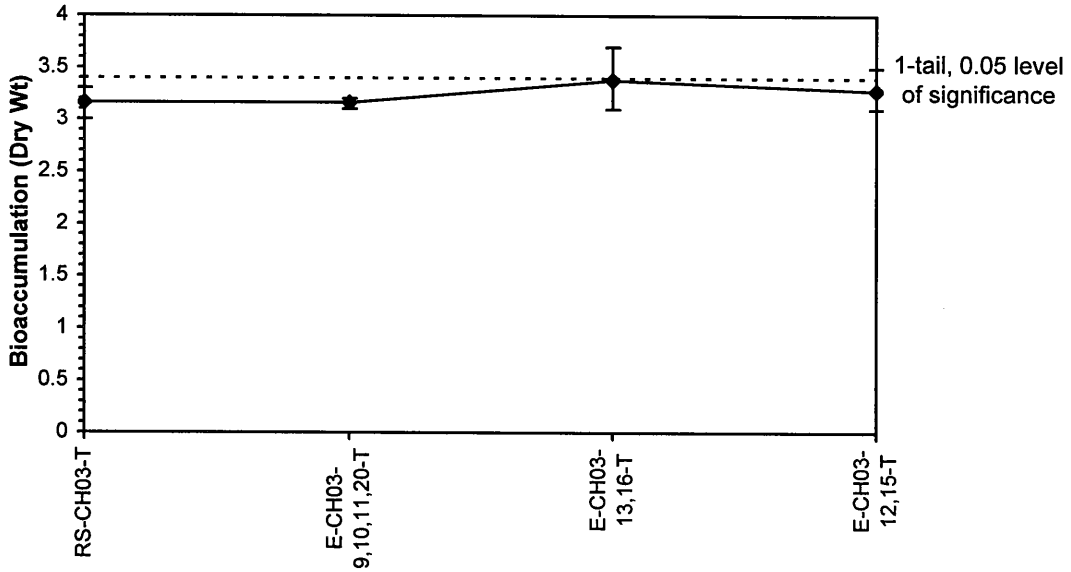
Conc-ppb	1	2	3	4	5
RS-CH03-T	3.0000	3.2000	3.3000	3.0000	3.3000
3-9,10,11,20-T	3.2000	3.2000	3.1000	3.1000	3.2000
CH03-13,16-T	3.2000	3.1000	3.7000	3.3000	3.6000
CH03-12,15-T	3.2000	3.5000	3.1000	3.2000	3.4000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	3.1600	0.0000	3.1600	3.0000	3.3000	4.799	5			
3-9,10,11,20-T	3.1600	0.0000	3.1600	3.1000	3.2000	1.733	5	0.000	2.230	0.2443
CH03-13,16-T	3.3800	-0.1019	3.3800	3.1000	3.7000	7.658	5	2.008	2.230	0.2443
CH03-12,15-T	3.2800	-0.0556	3.2800	3.1000	3.5000	5.010	5	1.095	2.230	0.2443

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96673	0.868	0.25865	-0.6119
Bartlett's Test indicates equal variances (p = 0.08)	6.7749	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences	0.24428	0	0.0565	0.03	0.1731	3, 16
Treatments vs RS-CH03-T						

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	2803BTdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Tri-n-butyltin, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	5.8000	3.9000	7.0000	5.8000	5.0000
3-9,10,11,20-T	2.8000	2.8000	2.7000	2.9000	2.8000
CH03-13,16-T	2.8000	2.7000	3.2000	2.9000	3.2000
CH03-12,15-T	2.8000	3.0000	2.7000	2.8000	3.0000

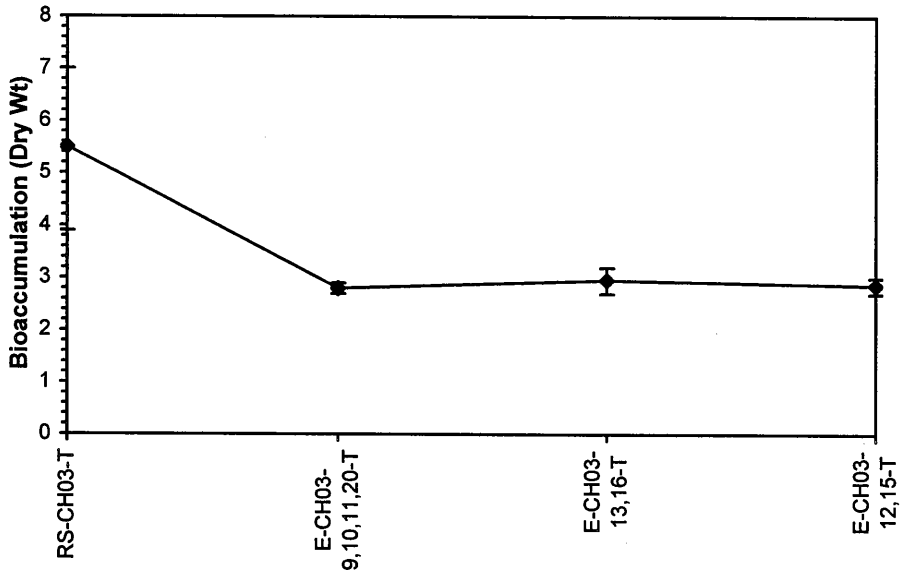
			Transform: Arcsin Square Root					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	5.5000	0.0000	1.3528	1.3148	1.3807	1.823	5		
3-9,10,11,20-T	2.8000	0.6000	1.2673	1.2616	1.2728	0.312	5	40.00	17.00
CH03-13,16-T	2.9600	0.5644	1.2754	1.2616	1.2875	0.924	5	40.00	17.00
CH03-12,15-T	2.8600	0.5867	1.2704	1.2616	1.2780	0.570	5	40.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.91791	0.868	-0.826	3.32786
Bartlett's Test indicates unequal variances (p = 8.74E-03)	11.6359	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280AldwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Aluminum, mg/Kg				

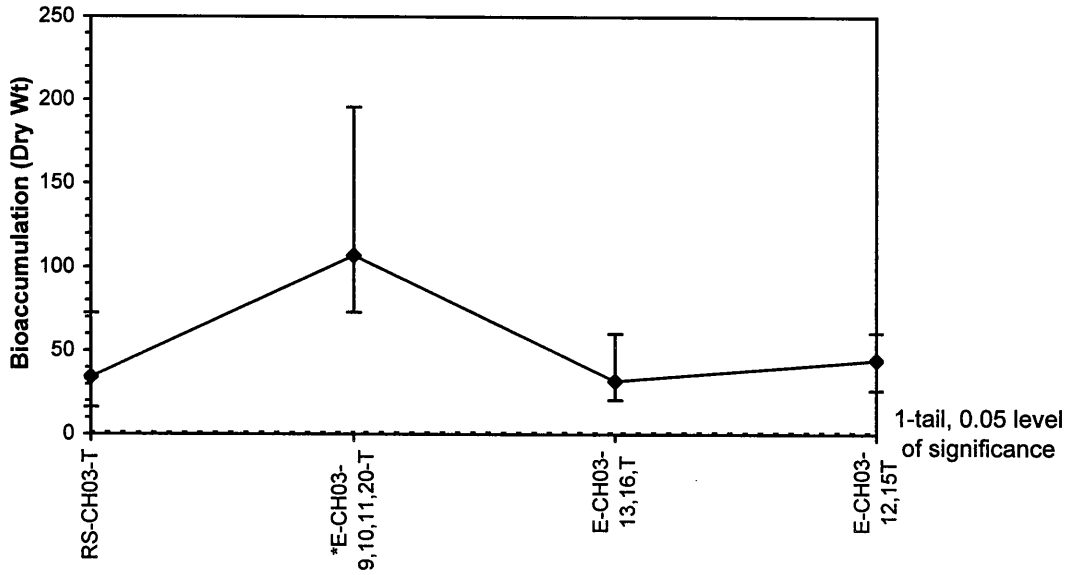
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	32.00	31.00	72.50	20.40	16.20
3-9,10,11,20-T	81.10	82.80	104.00	196.00	73.30
·CH03-13,16,T	20.50	60.30	34.70	22.60	22.50
-CH03-12,15T	29.20	60.70	47.20	26.30	59.00

			Transform: Arcsin Square Root						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	34.42	0.0000	1.4763	1.4462	1.5120	1.696	5			
3-9,10,11,20-T	107.44	-2.1849	1.5201	1.5124	1.5351	0.596	5	3.799	2.230	0.0257
·CH03-13,16,T	32.12	0.0688	1.4766	1.4601	1.5064	1.310	5	0.028	2.230	0.0257
-CH03-12,15T	44.48	-0.3010	1.4923	1.4731	1.5066	1.050	5	1.391	2.230	0.0257

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.97238	0.868	0.4113	-0.0976
Bartlett's Test indicates equal variances (p = 0.33)	3.42396	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.00418	0	0.00212	0.00033	0.00478	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280SbdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Antimony, mg/kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0120	0.0130	0.0140	0.0100	0.0130
3-9,10,11,20-T	0.0100	0.0100	0.0200	0.0100	0.0100
·CH03-13,16,T	0.0100	0.0100	0.0100	0.0100	0.0100
-CH03-12,15T	0.0100	0.0100	0.0100	0.0200	0.0100

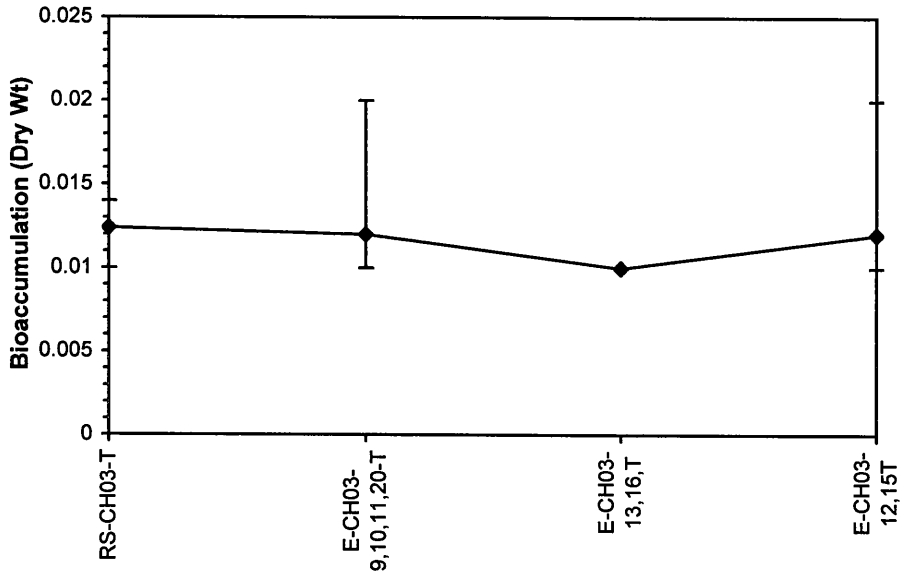
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.0124	0.0000	0.0124	0.0100	0.0140	12.230	5		
3-9,10,11,20-T	0.0120	-0.0004	0.0120	0.0100	0.0200	37.268	5	33.00	17.00
·CH03-13,16,T	0.0100	-0.0024	0.0100	0.0100	0.0100	0.000	5	37.50	17.00
-CH03-12,15T	0.0120	-0.0004	0.0120	0.0100	0.0200	37.268	5	33.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.6817	0.868	2.09194	4.0761
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280AsdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Arsenic, mg/Kg				

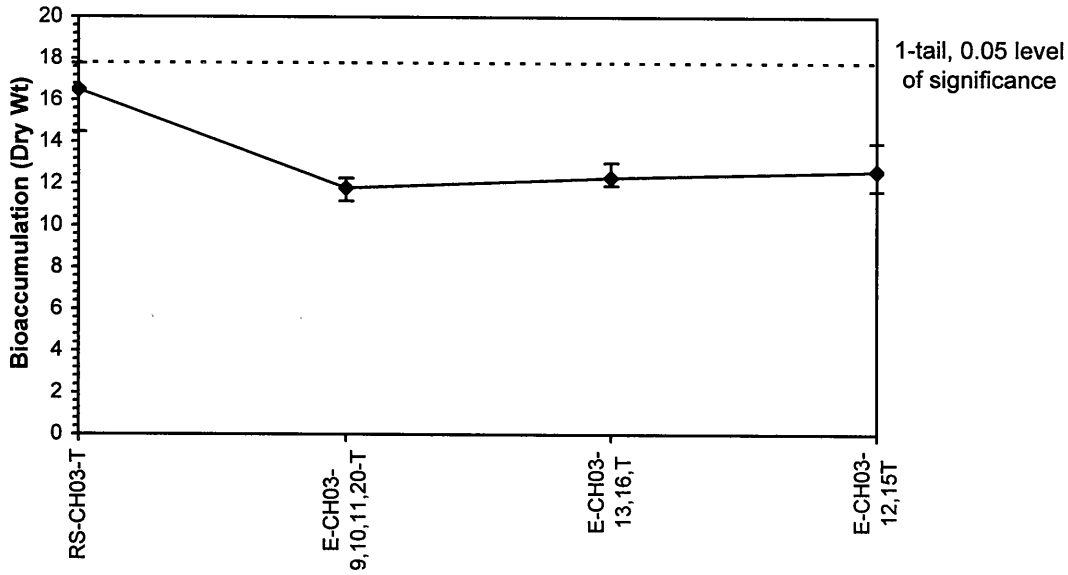
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	17.800	14.500	16.400	17.800	16.100
3-9,10,11,20-T	12.200	11.800	11.200	12.300	11.700
·CH03-13,16,T	13.000	11.900	12.600	11.900	12.000
-CH03-12,15T	12.900	14.000	11.700	12.000	12.600

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	16.520	0.0000	16.520	14.500	17.800	8.315	5			
3-9,10,11,20-T	11.840	0.3015	11.840	11.200	12.300	3.710	5	-8.365	2.230	1.248
·CH03-13,16,T	12.280	0.2732	12.280	11.900	13.000	4.047	5	-7.579	2.230	1.248
-CH03-12,15T	12.640	0.2500	12.640	11.700	14.000	7.089	5	-6.935	2.230	1.248

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95107	0.868	-0.2766	0.94953
Bartlett's Test indicates equal variances (p = 0.11)	5.96576	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences	1.2476	0	23.2907	0.7825	8.8E-07	3, 16
Treatments vs RS-CH03-T						

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CddwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Cadmium, mg/Kg				

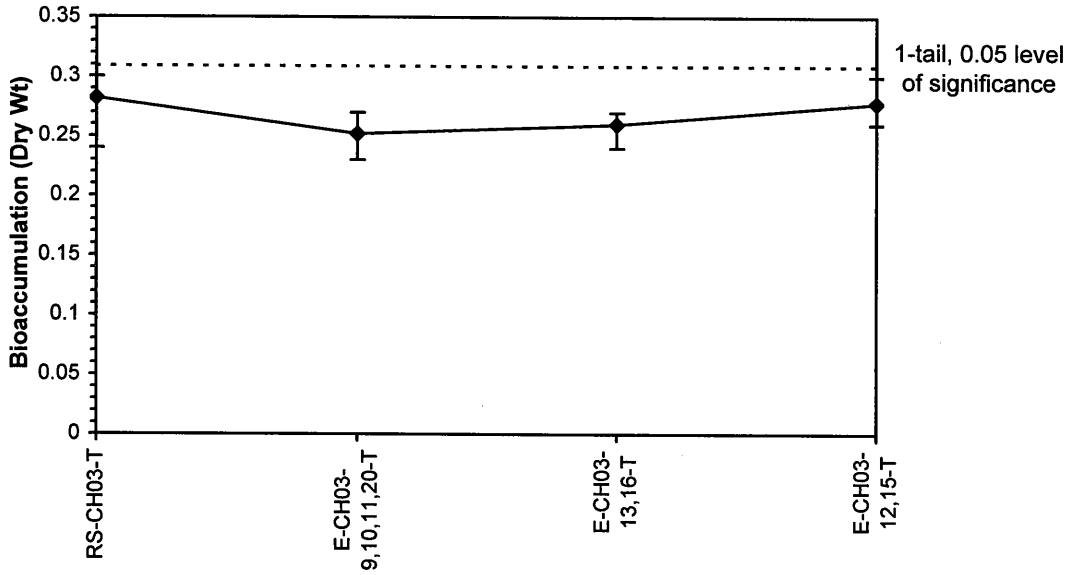
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.2900	0.2400	0.2900	0.3000	0.2900
3-9,10,11,20-T	0.2700	0.2600	0.2300	0.2700	0.2300
CH03-13,16-T	0.2600	0.2400	0.2700	0.2700	0.2600
CH03-12,15-T	0.2800	0.3000	0.2900	0.2600	0.2600

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2820	0.0000	0.2820	0.2400	0.3000	8.466	5			
3-9,10,11,20-T	0.2520	-0.0418	0.2520	0.2300	0.2700	8.133	5	-2.483	2.230	0.0269
CH03-13,16-T	0.2600	-0.0306	0.2600	0.2400	0.2700	4.711	5	-1.821	2.230	0.0269
CH03-12,15-T	0.2780	-0.0056	0.2780	0.2600	0.3000	6.435	5	-0.331	2.230	0.0269

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.88651	0.868	-0.8803	-0.0552
Bartlett's Test indicates equal variances (p = 0.67)	1.57491	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.02695	0	0.00103	0.00036	0.07267	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CrdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Chromium, mg/Kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.3000	0.4100	1.7600	0.3000	0.3000
3-9,10,11,20-T	0.4000	0.3000	0.3000	0.4000	0.4000
CH03-13,16-T	0.3000	0.3000	0.4000	0.4000	0.4000
CH03-12,15-T	0.3000	0.3000	0.3000	0.3000	0.5000

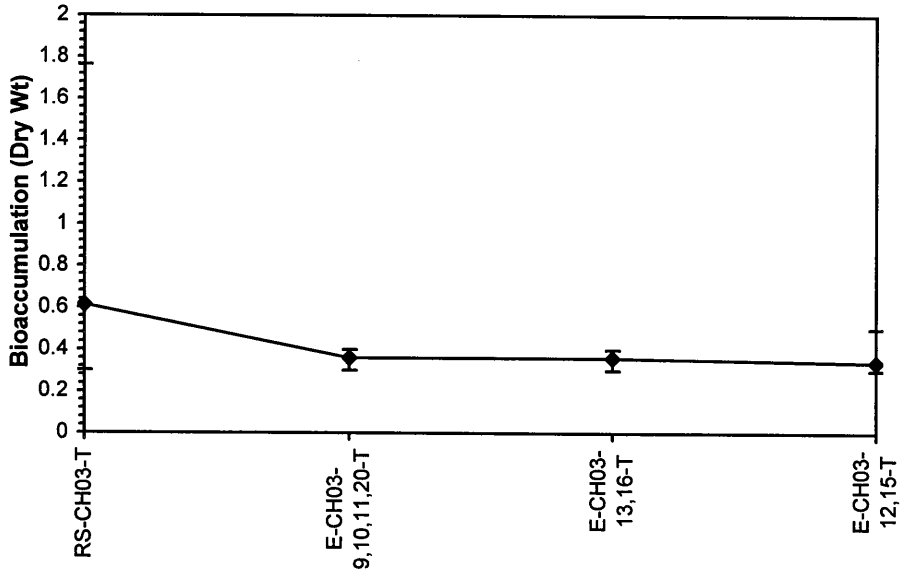
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.6140	0.0000	0.6140	0.3000	1.7600	104.626	5		
3-9,10,11,20-T	0.3600	-0.6580	0.3600	0.3000	0.4000	15.215	5	28.00	17.00
CH03-13,16-T	0.3600	-0.6580	0.3600	0.3000	0.4000	15.215	5	28.00	17.00
CH03-12,15-T	0.3400	-0.7098	0.3400	0.3000	0.5000	26.307	5	30.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.6246	0.868	3.05634	12.1857
Bartlett's Test indicates unequal variances (p = 1.16E-06)	30.3564	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CudwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Copper, mg/Kg				

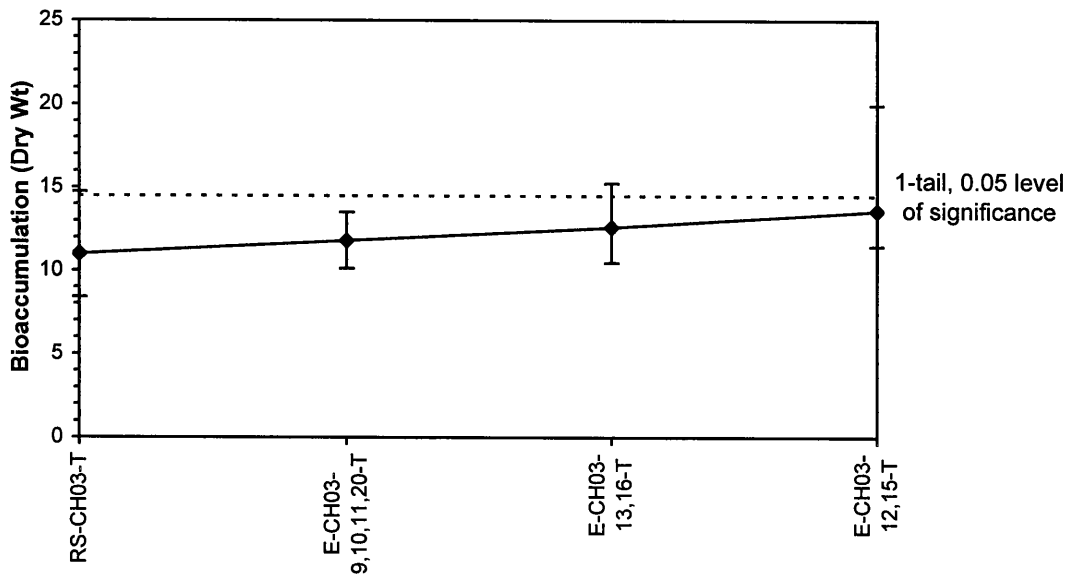
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	8.350	11.100	14.700	8.870	11.800
3-9,10,11,20-T	12.300	12.300	10.100	13.500	10.700
CH03-13,16-T	15.300	12.800	13.200	11.400	10.500
CH03-12,15-T	20.000	11.900	12.400	11.500	12.400

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	10.964	0.0000	10.964	8.350	14.700	23.206	5			
3-9,10,11,20-T	11.780	-0.0819	11.780	10.100	13.500	11.615	5	0.521	2.230	3.491
CH03-13,16-T	12.640	-0.1682	12.640	10.500	15.300	14.551	5	1.071	2.230	3.491
CH03-12,15-T	13.640	-0.2686	13.640	11.500	20.000	26.212	5	1.709	2.230	3.491

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.87725	0.868	1.35062	1.95162
Bartlett's Test indicates equal variances (p = 0.31)	3.58564	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	3.4913	0	6.59792	6.12781	0.38695	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280PbdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Lead, mg/Kg				

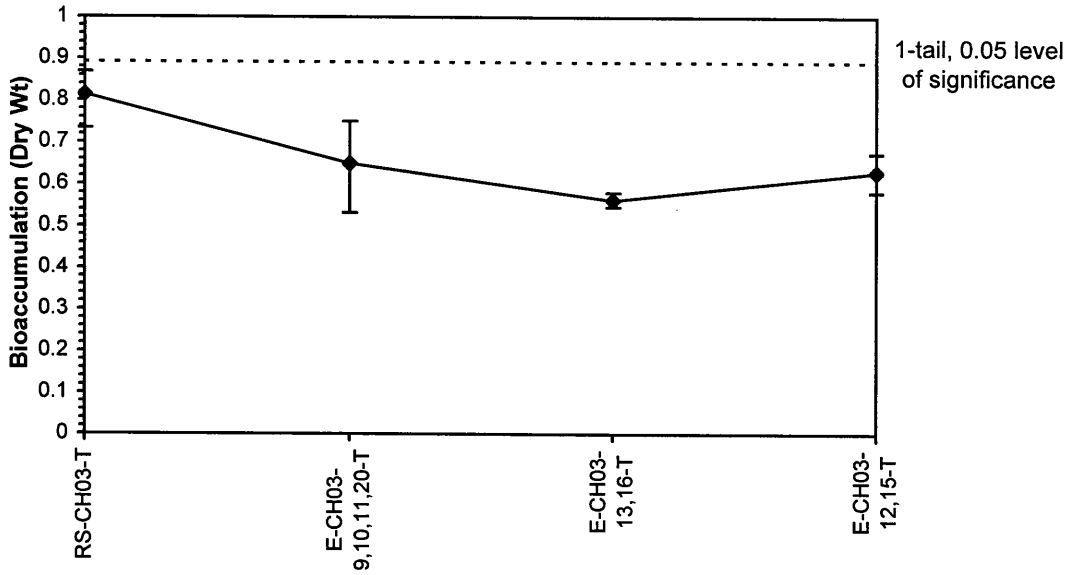
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.8680	0.7340	0.8100	0.8390	0.8190
3-9,10,11,20-T	0.7500	0.6680	0.5910	0.7030	0.5320
CH03-13,16-T	0.5460	0.5670	0.5800	0.5630	0.5520
CH03-12,15-T	0.6480	0.6550	0.6750	0.5820	0.5870

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.8140	0.0000	0.8140	0.7340	0.8680	6.137	5			
3-9,10,11,20-T	0.6488	-0.8882	0.6488	0.5320	0.7500	13.466	5	-4.752	2.230	0.0775
CH03-13,16-T	0.5616	-1.3570	0.5616	0.5460	0.5800	2.364	5	-7.260	2.230	0.0775
CH03-12,15-T	0.6294	-0.9925	0.6294	0.5820	0.6750	6.706	5	-5.310	2.230	0.0775

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96947	0.868	-0.4491	0.6354
Bartlett's Test indicates equal variances (p = 0.02)	9.54291	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.07753	0	0.05735	0.00302	1.6E-05	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280HgdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Mercury, mg/Kg				

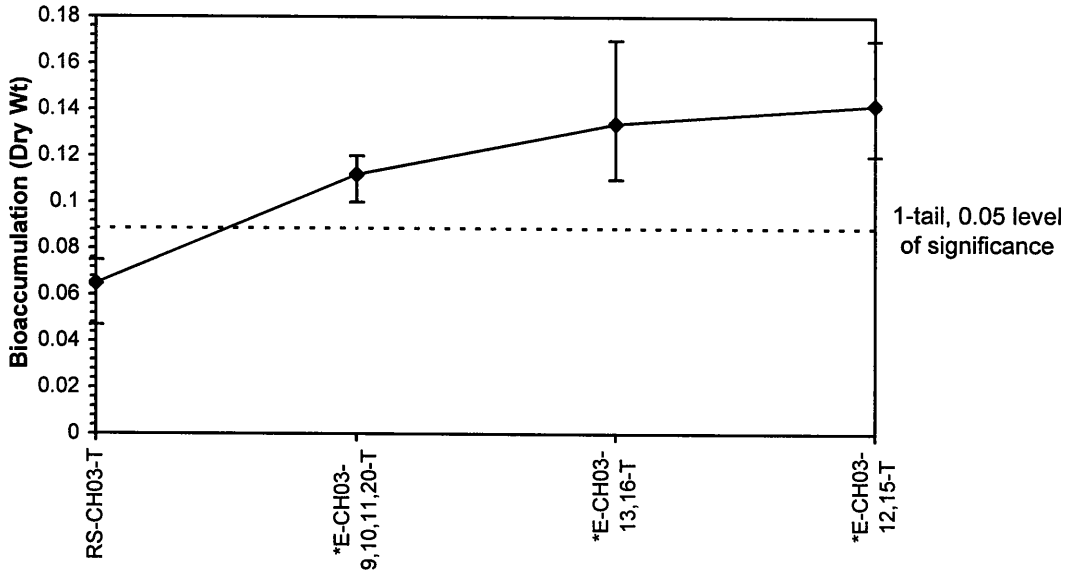
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0680	0.0670	0.0750	0.0470	0.0680
3-9,10,11,20-T	0.1200	0.1000	0.1000	0.1200	0.1200
CH03-13,16-T	0.1100	0.1200	0.1300	0.1400	0.1700
CH03-12,15-T	0.1400	0.1700	0.1500	0.1300	0.1200

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0650	0.0000	0.0650	0.0470	0.0750	16.245	5			
3-9,10,11,20-T	0.1120	0.0503	0.1120	0.1000	0.1200	9.781	5	4.418	2.230	0.0237
CH03-13,16-T	0.1340	0.0738	0.1340	0.1100	0.1700	17.180	5	6.487	2.230	0.0237
CH03-12,15-T	0.1420	0.0824	0.1420	0.1200	0.1700	13.546	5	7.239	2.230	0.0237

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94011	0.868	0.53492	0.39971
Bartlett's Test indicates equal variances (p = 0.36)	3.23185	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.02372	0	0.00598	0.00028	8.2E-06	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280NidwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Nickel, mg/Kg				

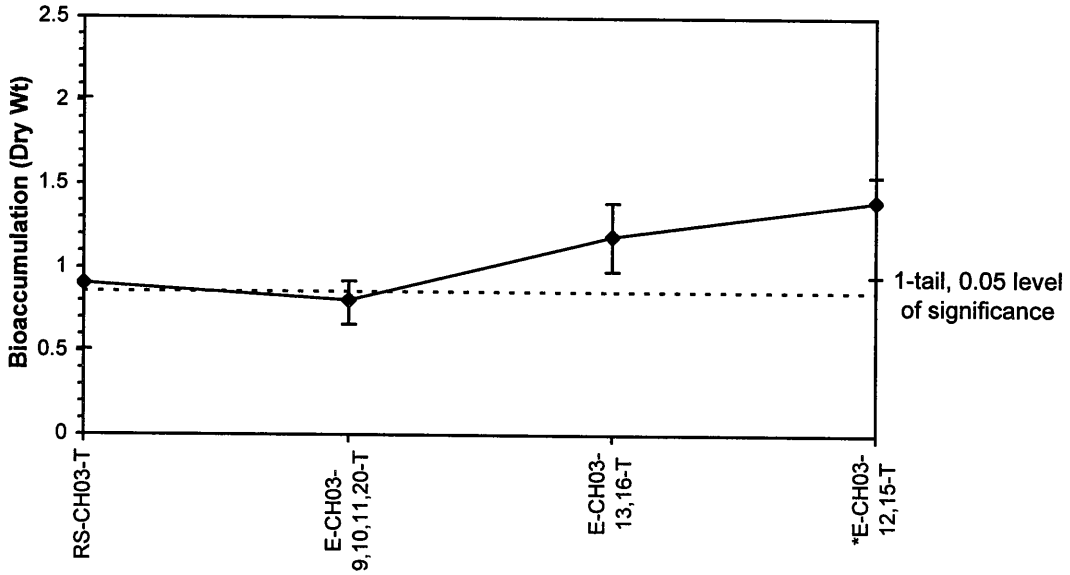
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.5100	0.8500	2.0200	0.5700	0.5800
3-9,10,11,20-T	0.7900	0.9200	0.7900	0.8600	0.6600
CH03-13,16-T	1.2900	1.1300	1.3900	1.1600	0.9800
CH03-12,15-T	1.4800	1.5400	1.4800	0.9500	1.5500

			Transform: Arcsin Square Root						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.9060	0.0000	0.9802	0.7954	1.2113	19.977	5			
3-9,10,11,20-T	0.8040	-1.0851	1.1218	0.9483	1.2840	11.115	5	1.555	2.230	0.2030
CH03-13,16-T	1.1900	3.0213	1.1692	1.0811	1.4289	12.546	5	2.075	2.230	0.2030
CH03-12,15-T	1.4000	5.2553	1.1907	1.1472	1.3453	7.270	5	2.311	2.230	0.2030

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.8936	0.868	0.72524	-0.5321
Bartlett's Test indicates equal variances (p = 0.50)	2.36283	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.16725	0	0.04478	0.02073	0.13261	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280AgdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Silver, mg/Kg				

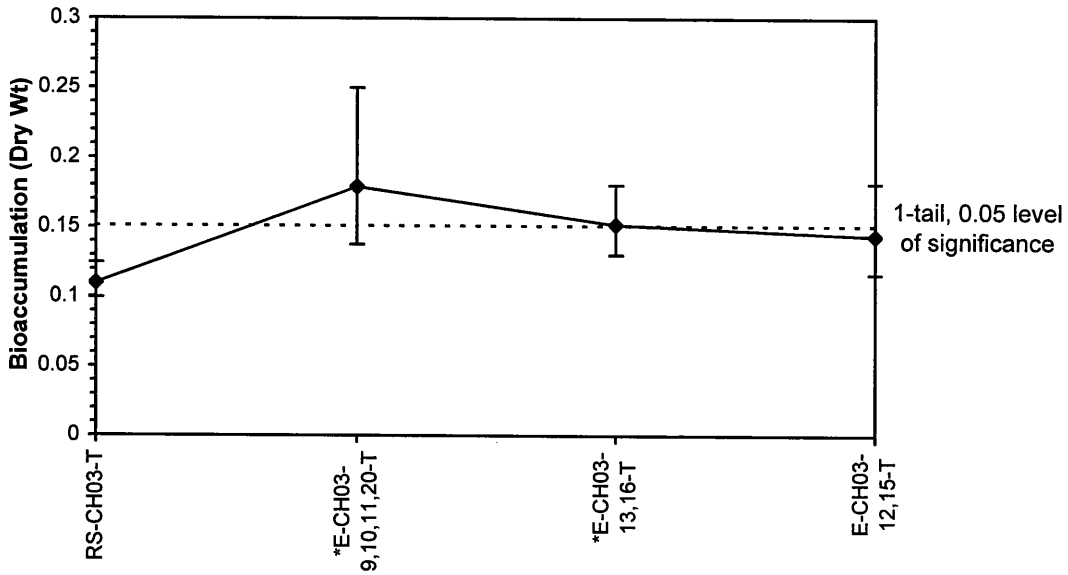
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.1120	0.1250	0.1130	0.1020	0.1000
3-9,10,11,20-T	0.1840	0.1850	0.1380	0.1390	0.2500
CH03-13,16-T	0.1300	0.1600	0.1350	0.1530	0.1800
CH03-12,15-T	0.1370	0.1260	0.1160	0.1810	0.1580

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1104	0.0000	0.1104	0.1000	0.1250	9.072	5			
3-9,10,11,20-T	0.1792	0.0773	0.1792	0.1380	0.2500	25.546	5	3.798	2.230	0.0404
CH03-13,16-T	0.1516	0.0463	0.1516	0.1300	0.1800	13.280	5	2.274	2.230	0.0404
CH03-12,15-T	0.1436	0.0373	0.1436	0.1160	0.1810	18.163	5	1.833	2.230	0.0404

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94798	0.868	0.83443	1.65371
Bartlett's Test indicates equal variances (p = 0.06)	7.44887	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.0404	0	0.00401	0.00082	0.01341	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ZndwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Zinc, mg/Kg				

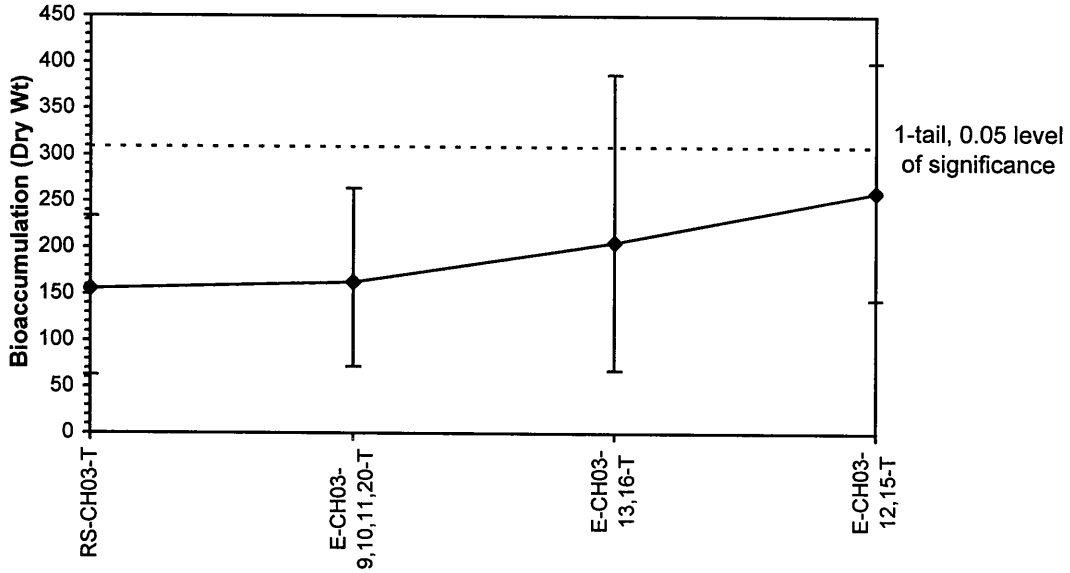
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	234.00	67.70	211.00	205.00	63.10
3-9,10,11,20-T	72.20	147.00	112.00	264.00	221.00
CH03-13,16-T	387.00	75.60	314.00	187.00	67.80
CH03-12,15-T	144.00	400.00	145.00	258.00	353.00

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	156.16	0.0000	156.16	63.10	234.00	53.517	5			
3-9,10,11,20-T	163.24	-0.0456	163.24	72.20	264.00	48.106	5	0.103	2.230	153.05
CH03-13,16-T	206.28	-0.3230	206.28	67.80	387.00	68.938	5	0.730	2.230	153.05
CH03-12,15-T	260.00	-0.6692	260.00	144.00	400.00	45.073	5	1.513	2.230	153.05

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93493	0.868	0.13629	-1.2965
Bartlett's Test indicates equal variances (p = 0.63)	1.72092	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences	153.054	0	11435.7	11776.7	0.43069	3, 16
Treatments vs RS-CH03-T						

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	2802MNdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	2-Methylnaphthalene, µg/Kg				

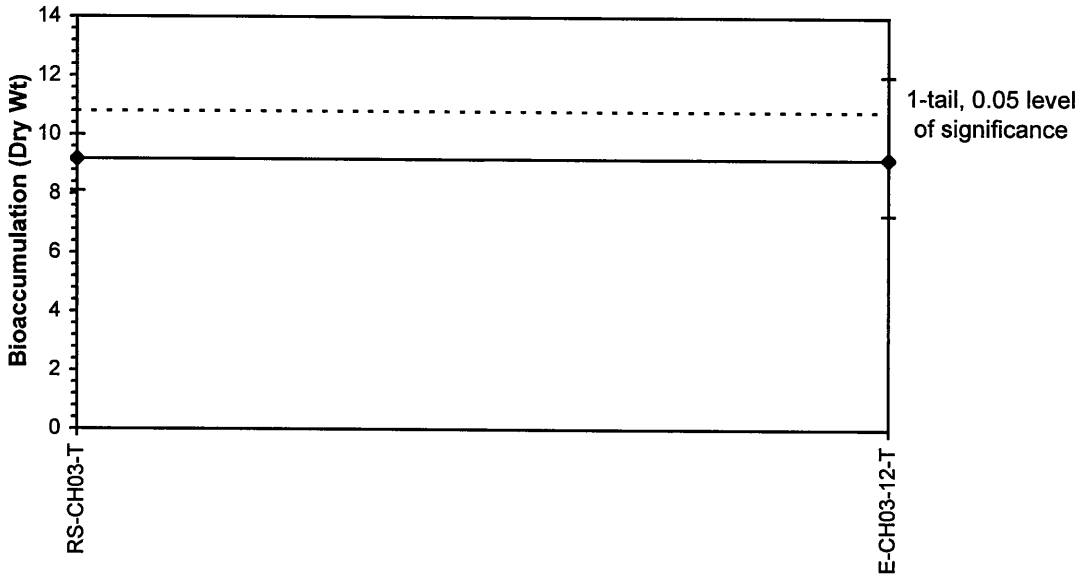
Conc-ppb	1	2	3	4	5
RS-CH03-T	10.0000	8.1000	8.7000	9.7000	9.4000
E-CH03-12-T	9.3000	7.3000	9.3000	8.1000	12.0000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	9.1800	0.0000	9.1800	8.1000	10.0000	8.417	5			
E-CH03-12-T	9.2000	-0.0024	9.2000	7.3000	12.0000	19.353	5	0.023	1.860	1.6141

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93698	0.781	0.83965	1.72655
F-Test indicates equal variances (p = 0.13)	5.30988	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	1.61406	0	0.001	1.8835	0.98218	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ACLdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Acenaphthylene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	2.6000	2.5000	2.6000	2.3000	2.5000
E-CH03-12-T	2.1000	1.8000	2.1000	0.3400	1.9000

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	2.5000	0.0000	2.5000	2.3000	2.6000	4.899	5	-	
E-CH03-12-T	1.6480	0.5680	1.6480	0.3400	2.1000	45.063	5	40.00	19.00

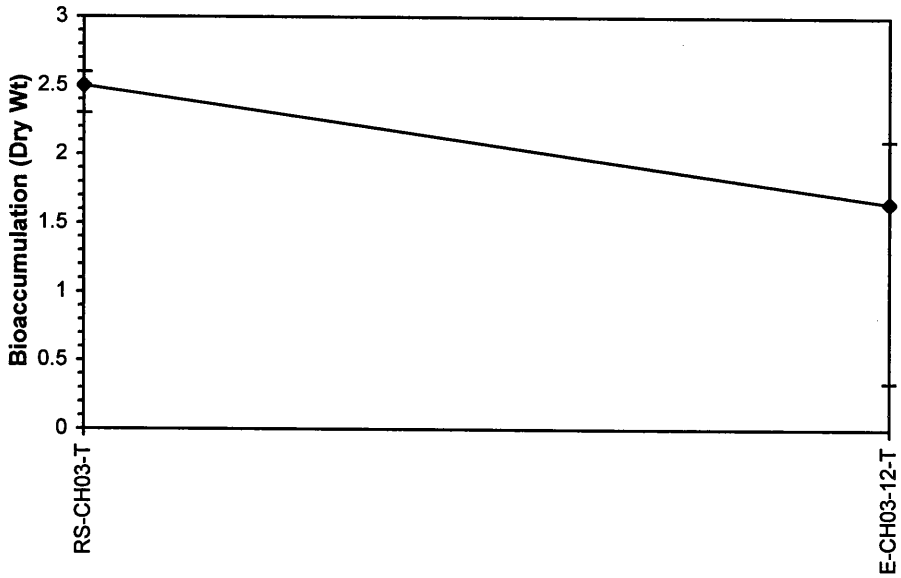
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.74257	0.781	-2.2421	6.04694
F-Test indicates unequal variances (p = 4.13E-03)	36.768	23.1539		

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ACEdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Acenaphthene, µg/Kg				

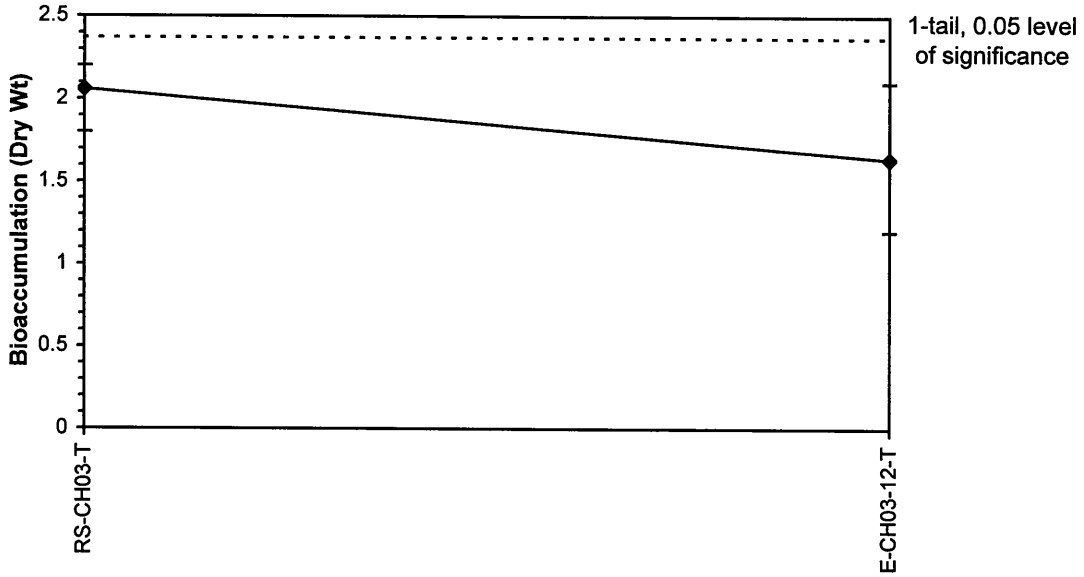
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.2000	2.0000	2.1000	1.8000	2.2000
E-CH03-12-T	1.5000	1.7000	1.7000	1.2000	2.1000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.0600	0.0000	2.0600	1.8000	2.2000	8.123	5			
E-CH03-12-T	1.6400	0.3962	1.6400	1.2000	2.1000	20.039	5	-2.547	1.860	0.3067

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96245	0.781	-0.0224	0.91879
F-Test indicates equal variances (p = 0.22)	3.85714	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.30668	0	0.441	0.068	0.03435	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ANTdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Anthracene, µg/kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	1.6000	1.8000	1.8000	1.4000	1.3000
E-CH03-12-T	0.4500	0.3600	0.4600	1.7000	0.3600

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	1.5800	0.0000	1.5800	1.3000	1.8000	14.433	5		
E-CH03-12-T	0.6660	1.5759	0.6660	0.3600	1.7000	87.084	5	37.00	19.00

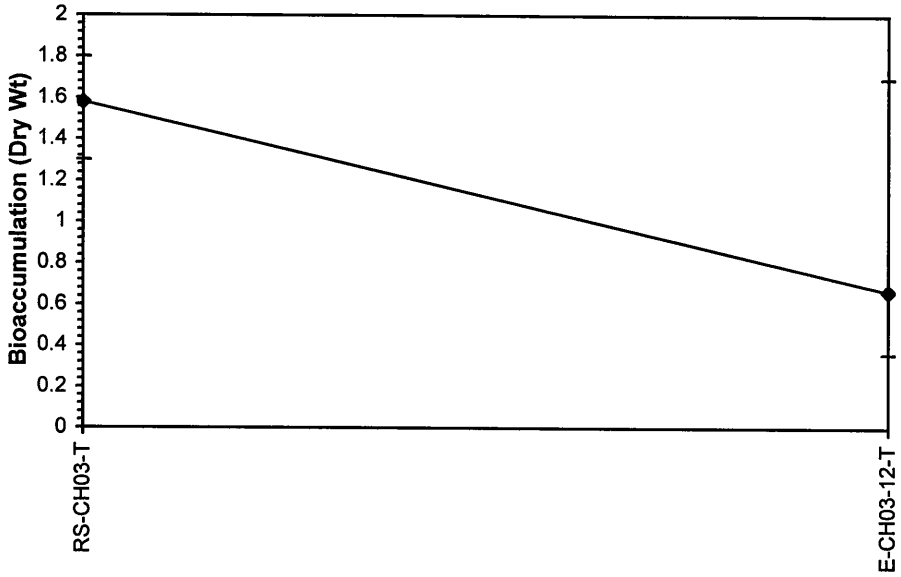
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.74957	0.781	1.98103	4.27861
F-Test indicates equal variances (p = 0.10)	6.46885	23.1539		

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BAAdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benz(a)anthracene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	1.4000	1.4000	1.5000	1.4000	1.5000
E-CH03-12-T	0.4400	0.3600	0.4500	4.9000	0.3500

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	1.4400	0.0000	1.4400	1.4000	1.5000	3.804	5		
E-CH03-12-T	1.3000	0.3182	1.3000	0.3500	4.9000	154.844	5	35.00	19.00

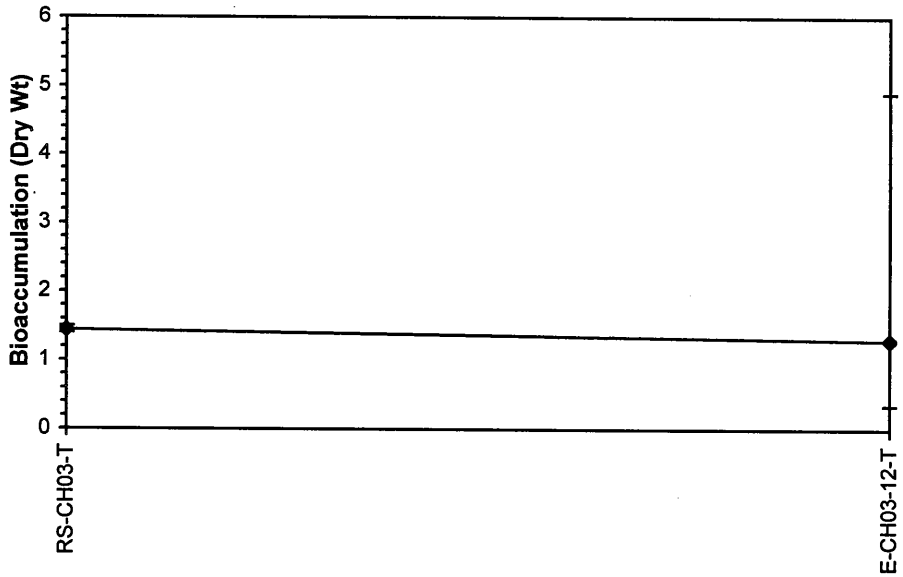
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.64578	0.781	2.50962	7.12586
F-Test indicates unequal variances (p = 3.28E-06)	1350.68	23.1539		

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BAPdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benzo(a)pyrene, µg/Kg				

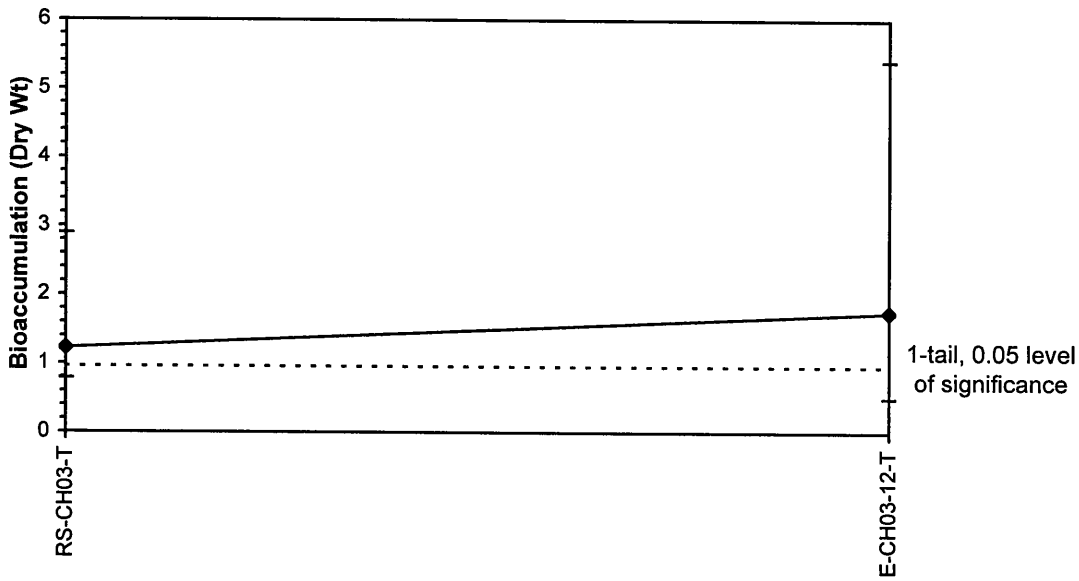
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.7900	0.8200	0.8500	0.7900	2.9000
E-CH03-12-T	5.4000	0.5000	0.6300	1.7000	0.5000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.2300	0.0000	1.1536	1.0948	1.2728	6.421	5			
E-CH03-12-T	1.7460	-2.2435	1.0038	0.7854	1.3539	25.184	5	-1.272	1.860	0.2191

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93871	0.781	0.71679	0.42656
F-Test indicates equal variances (p = 0.04)	11.6455	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.12544	0	0.05613	0.0347	0.23914	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BBFdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benzo(b)fluoranthene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	1.2000	1.3000	1.3000	1.2000	1.3000
E-CH03-12-T	0.3700	0.3000	0.3700	4.4000	0.3000

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	1.2600	0.0000	1.2600	1.2000	1.3000	4.347	5		
E-CH03-12-T	1.1480	0.4308	1.1480	0.3000	4.4000	158.385	5	35.00	19.00

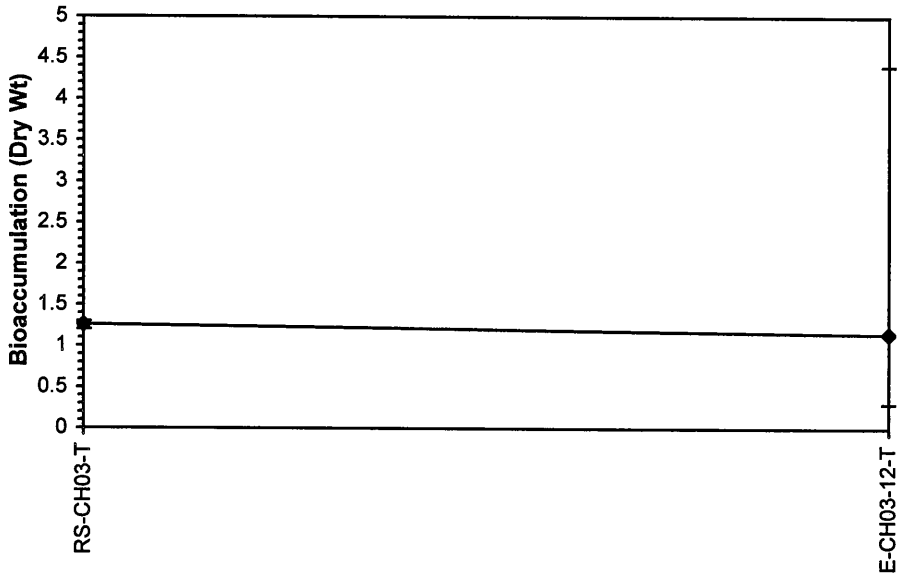
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.64438	0.781	2.50981	7.12443
F-Test indicates unequal variances (p = 4.93E-06)	1102.02	23.1539		

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BXPdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens
Comments:	Benzo(g,h,i)perylene, µg/Kg				

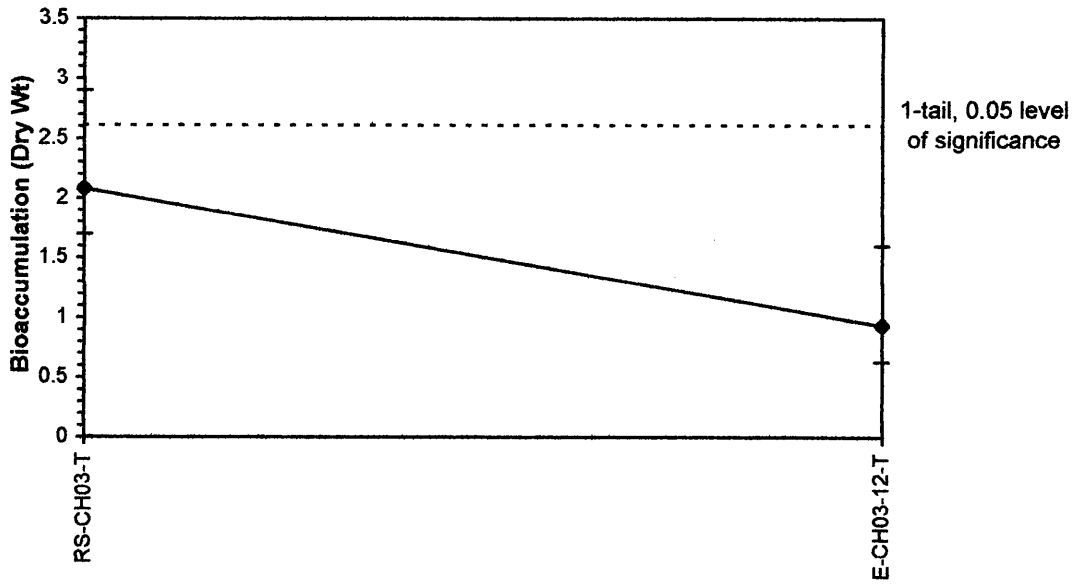
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.9000	2.2000	1.7000	1.9000	1.7000
E-CH03-12-T	0.8300	0.7100	0.9000	1.6000	0.6300

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.0800	0.0000	2.0800	1.7000	2.9000	24.134	5			
E-CH03-12-T	0.9340	1.0611	0.9340	0.6300	1.6000	41.402	5	-4.044	1.860	0.5270

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.82339	0.781	1.27568	0.47849
F-Test indicates equal variances (p = 0.63)	1.68528	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.52696	0	3.28329	0.20077	0.00372	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BKFdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Benzo(k)fluoranthene, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	1.4000	1.4000	1.5000	1.4000	1.5000
E-CH03-12-T	0.6600	0.5300	0.6700	3.5000	0.5300

			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	1.4400	0.0000	1.4400	1.4000	1.5000	3.804	5		
E-CH03-12-T	1.1780	0.5955	1.1780	0.5300	3.5000	110.339	5	35.00	19.00

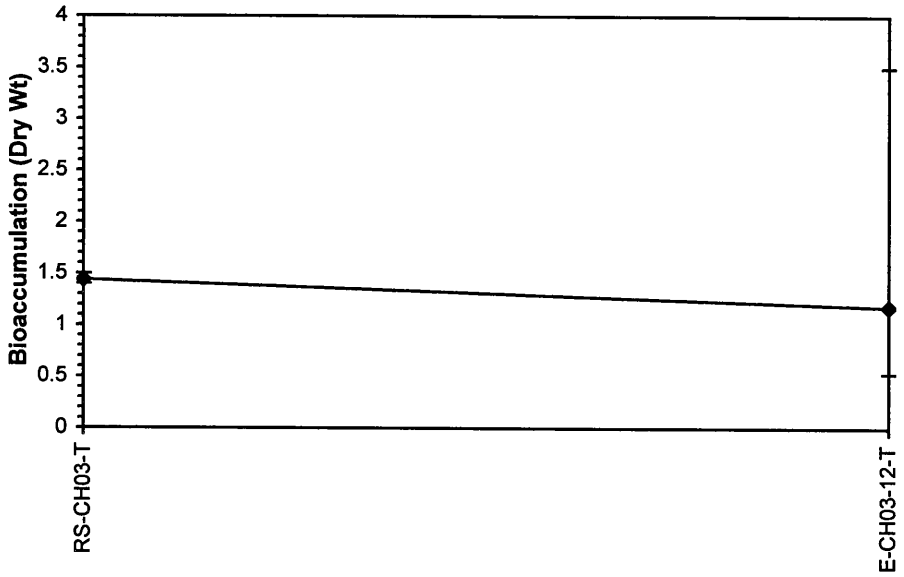
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.66295	0.781	2.492	7.06353
F-Test indicates unequal variances (p = 1.88E-05)	563.157	23.1539		

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CHRdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens
Comments:	Chrysene, µg/Kg				

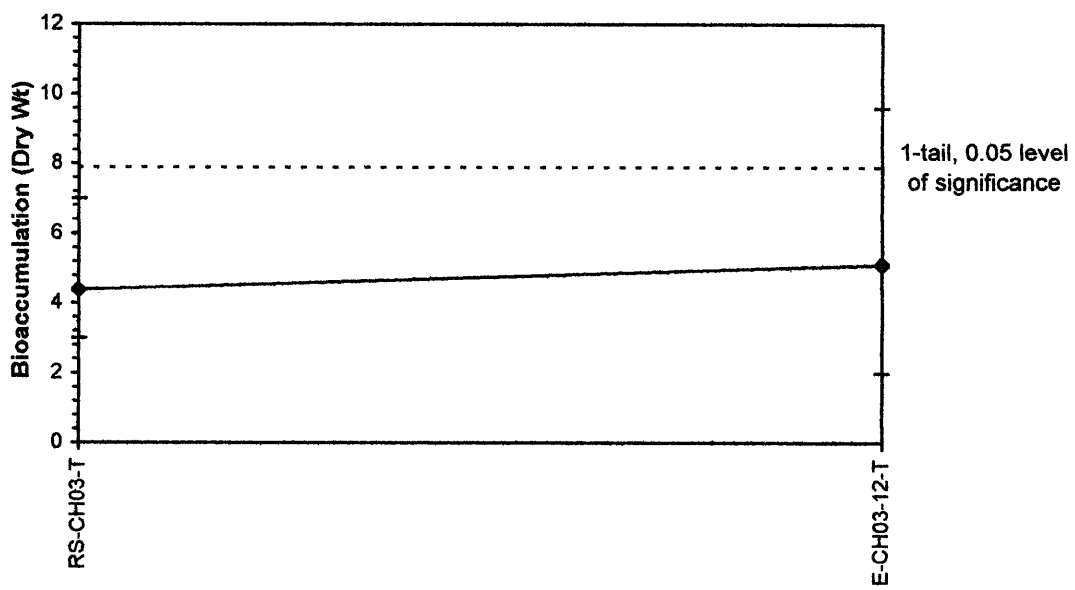
Conc-ppb	1	2	3	4	5
RS-CH03-T	4.2000	4.2000	3.0000	7.0000	3.5000
E-CH03-12-T	2.4000	2.0000	9.2000	9.6000	2.3000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	4.3800	0.0000	4.3800	3.0000	7.0000	35.384	5			
E-CH03-12-T	5.1000	-0.2130	5.1000	2.0000	9.6000	77.072	5	0.381	1.860	3.5137

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.88426	0.781	0.64186	-1.0423
F-Test indicates equal variances (p = 0.10)	6.43214	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	3.51371	0	1.296	8.926	0.71309	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280DBAdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Dibenz(a,h)anthracene, µg/Kg				

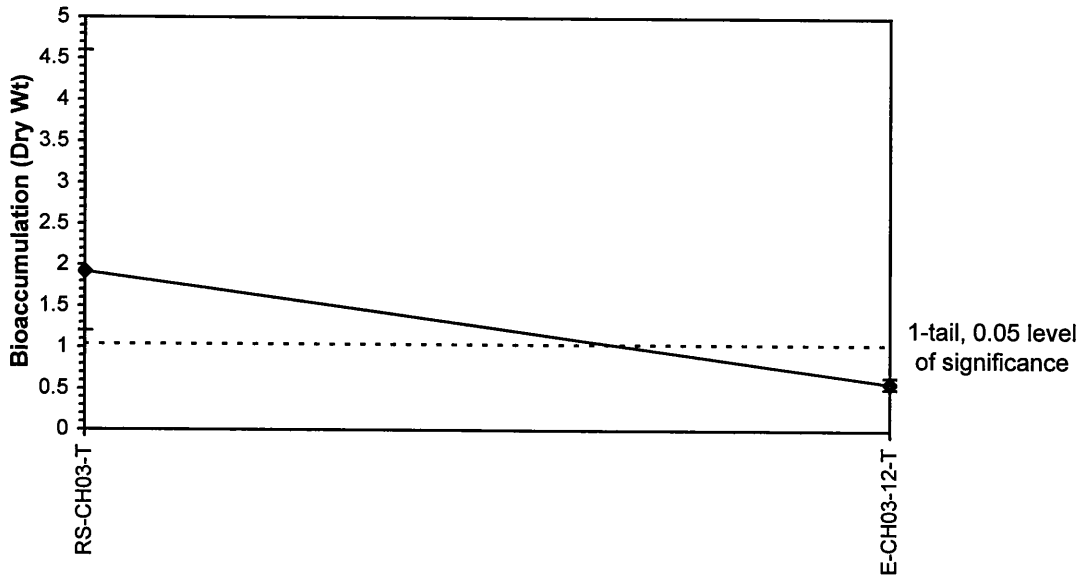
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.2000	1.3000	4.6000	1.2000	1.3000
E-CH03-12-T	0.6500	0.5200	0.6500	0.5400	0.5100

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.9200	0.0000	0.6845	0.2174	0.8333	38.434	5			
E-CH03-12-T	0.5740	1.4630	1.7625	1.5385	1.9608	11.815	5	-7.184	1.860	0.2790

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.78959	0.781	-1.2901	0.54321
F-Test indicates equal variances (p = 0.66)	1.59595	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	-0.4231	0	2.90534	0.05629	9.4E-05	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280DBFdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens

Comments: Dibenzofuran, µg/Kg

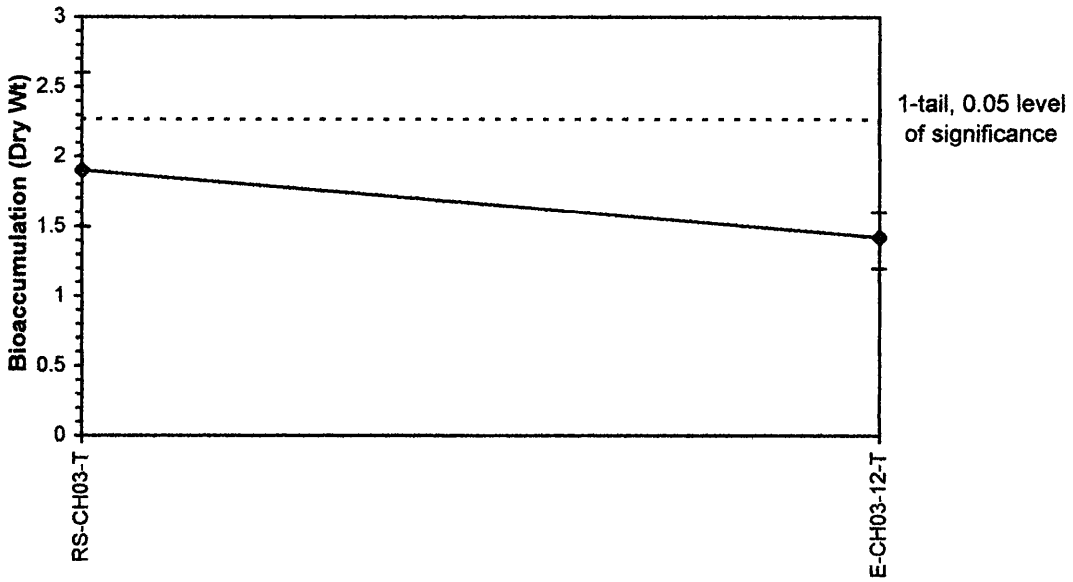
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.9000	1.8000	2.6000	1.5000	1.7000
E-CH03-12-T	1.5000	1.2000	1.5000	1.6000	1.3000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.9000	0.0000	1.9000	1.5000	2.6000	22.017	5			
E-CH03-12-T	1.4200	0.5333	1.4200	1.2000	1.6000	11.572	5	-2.388	1.860	0.3738

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.89702	0.781	1.36555	3.00119
F-Test indicates equal variances (p = 0.10)	6.48148	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.37376	0	0.576	0.101	0.04399	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280FLAdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Fluoranthene, µg/Kg				

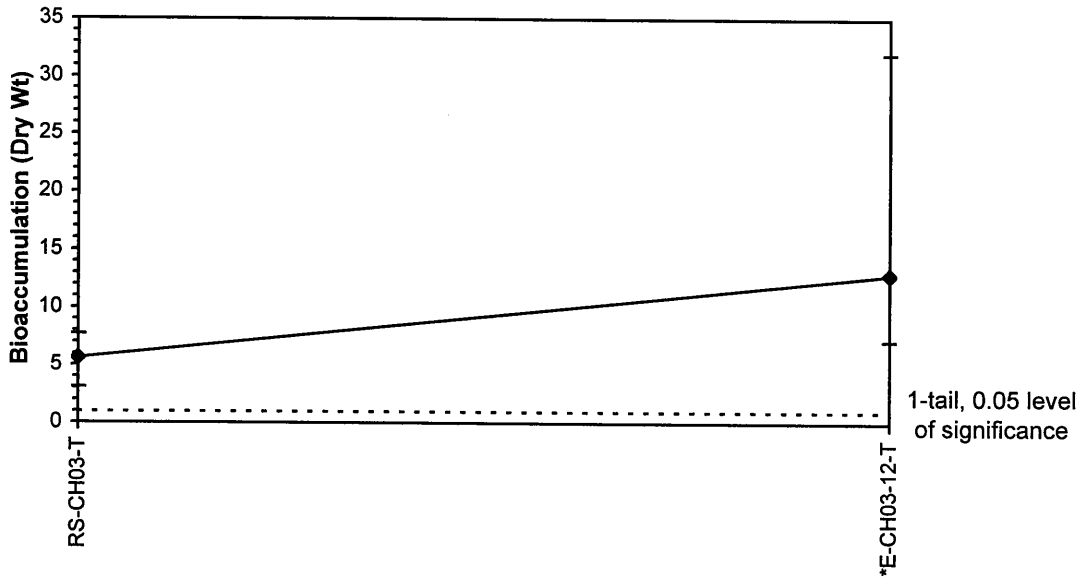
Conc-ppb	1	2	3	4	5
RS-CH03-T	7.100	3.100	3.200	7.700	7.000
E-CH03-12-T	8.600	7.200	9.600	32.000	7.300

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	5.620	0.0000	1.3445	1.2829	1.3896	4.040	5			
*E-CH03-12-T	12.940	-1.5844	1.4117	1.3834	1.4823	2.894	5	2.210	1.860	0.0565

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93894	0.781	0.11767	-1.2891
F-Test indicates equal variances (p = 0.59)	1.76759	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	0.02179	0	0.01128	0.00231	0.05811	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280FdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	NVI-Nereis virens
Comments:	Fluorene, µg/Kg				

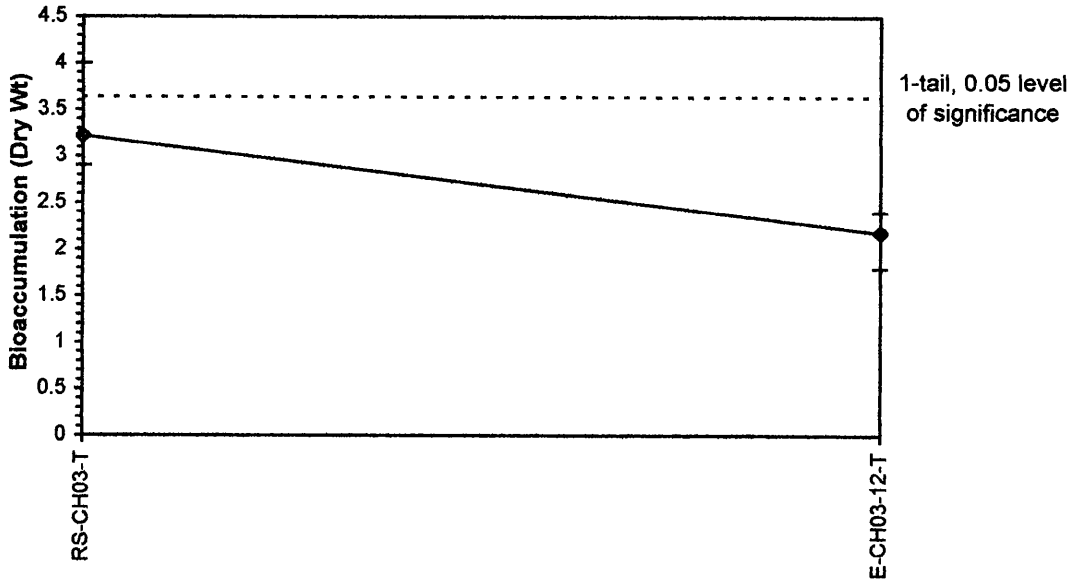
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.9000	3.1000	4.0000	2.9000	3.2000
E-CH03-12-T	2.2000	1.8000	2.4000	2.3000	2.2000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	3.2200	0.0000	3.2200	2.9000	4.0000	14.130	5			
E-CH03-12-T	2.1800	0.4685	2.1800	1.8000	2.4000	10.460	5	-4.569	1.860	0.4232

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.88287	0.781	1.29732	2.49187
F-Test indicates equal variances (p = 0.21)	3.98077	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.42323	0	2.704	0.1295	0.00183	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280INPdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Indeno(1,2,3-cd)pyrene, µg/Kg				

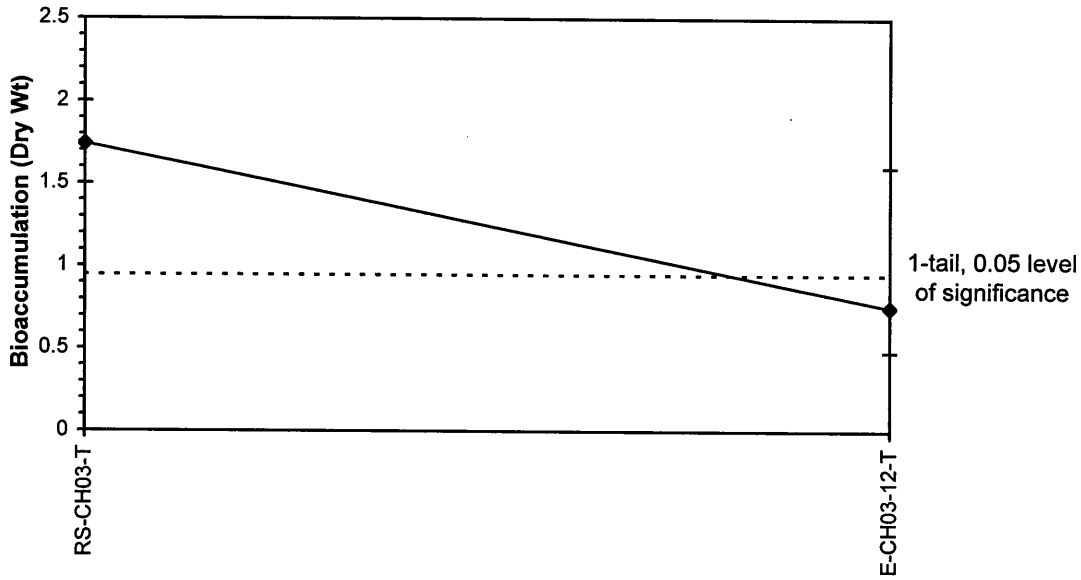
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.5000	1.9000	1.7000	2.0000	1.6000
E-CH03-12-T	0.6000	0.4800	0.6000	1.6000	0.4800

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.7400	0.0000	1.1802	1.1503	1.2094	2.069	5			
E-CH03-12-T	0.7520	1.3351	0.8935	0.7654	1.1644	18.248	5	-3.889	2.132	0.1572

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.78916	0.781	1.64138	4.52972
F-Test indicates unequal variances (p = 2.84E-03)	44.5915	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Heteroscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.09146	0	0.20551	0.01359	0.00462	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280NAPdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Naphthalene, µg/Kg				

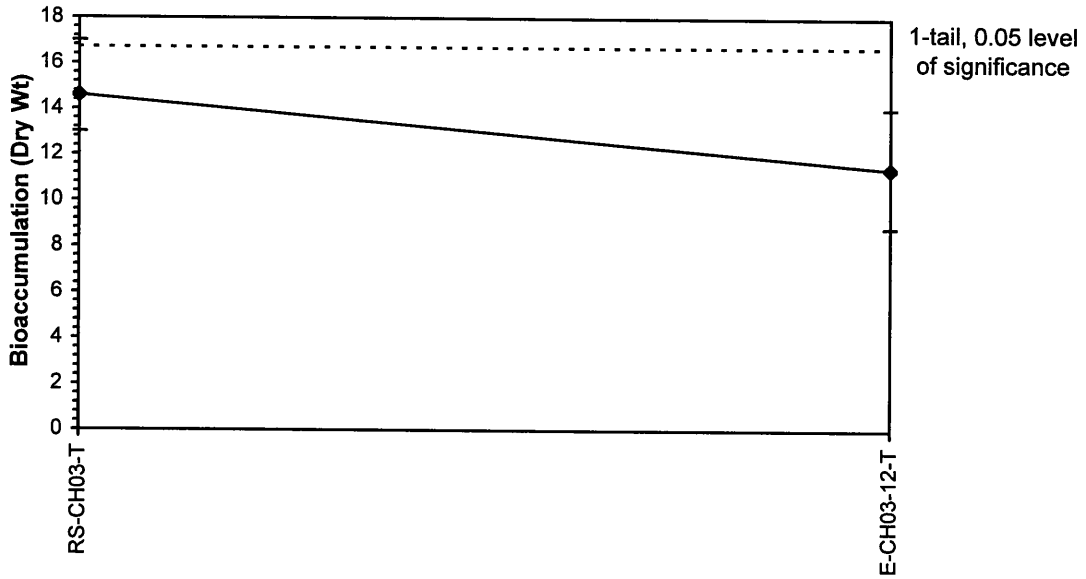
Conc-ppb	1	2	3	4	5
RS-CH03-T	17.000	13.000	14.000	14.000	15.000
E-CH03-12-T	12.000	8.800	12.000	10.000	14.000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	14.600	0.0000	14.600	13.000	17.000	10.388	5			
E-CH03-12-T	11.360	0.2382	11.360	8.800	14.000	17.711	5	-2.875	1.860	2.095

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95352	0.781	0.26352	-0.6295
F-Test indicates equal variances (p = 0.60)	1.76	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	2.09527	0	26.244	3.174	0.02065	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280PANdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Phenanthrene, µg/Kg				

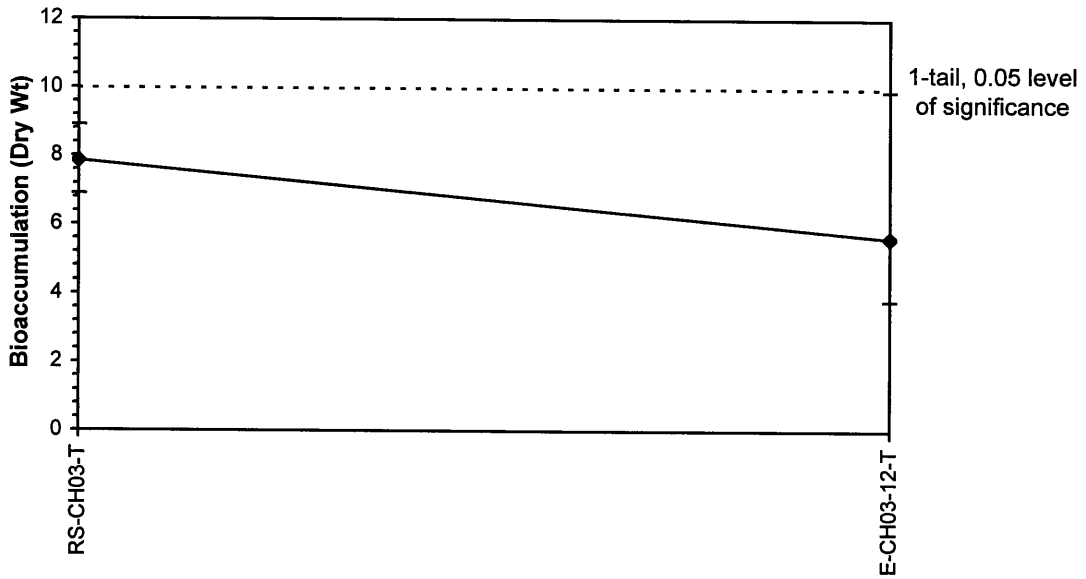
Conc-ppb	1	2	3	4	5
RS-CH03-T	8.0000	8.1000	8.9000	6.9000	7.4000
E-CH03-12-T	4.9000	3.8000	4.7000	9.9000	4.8000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	7.8600	0.0000	7.8600	6.9000	8.9000	9.631	5			
E-CH03-12-T	5.6200	0.3265	5.6200	3.8000	9.9000	43.283	5	-1.966	1.860	2.1186

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.79231	0.781	2.00814	4.84312
F-Test indicates equal variances (p = 0.04)	10.3264	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	2.11858	0	12.544	3.245	0.08485	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280PYRdwNV	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	NVI-Nereis virens
Comments:	Pyrene, µg/Kg				

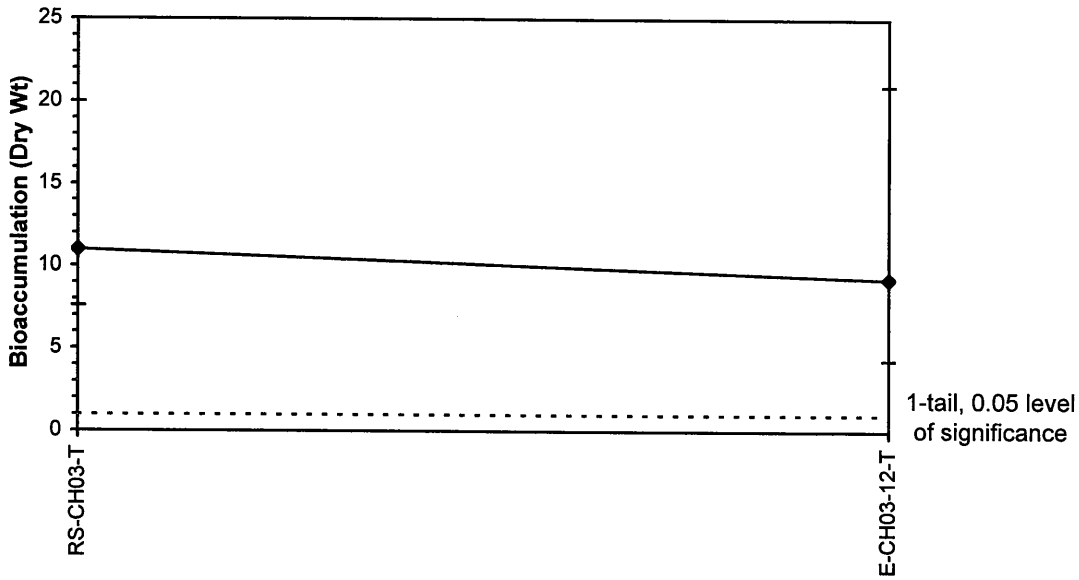
Conc-ppb	1	2	3	4	5
RS-CH03-T	9.500	10.000	20.000	7.900	7.600
E-CH03-12-T	6.200	4.800	10.000	21.000	4.300

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	11.000	0.0000	1.4118	1.3884	1.4588	1.991	5			
E-CH03-12-T	9.260	0.1740	1.3820	1.3273	1.4615	3.981	5	-1.079	1.860	0.0514

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.9489	0.781	0.74494	0.05695
F-Test indicates equal variances (p = 0.22)	3.83012	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.01353	0	0.00222	0.00191	0.31204	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

E 3

M. nasuta Wet Weight

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280DNBwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Di-n-butyltin, µg/kg				

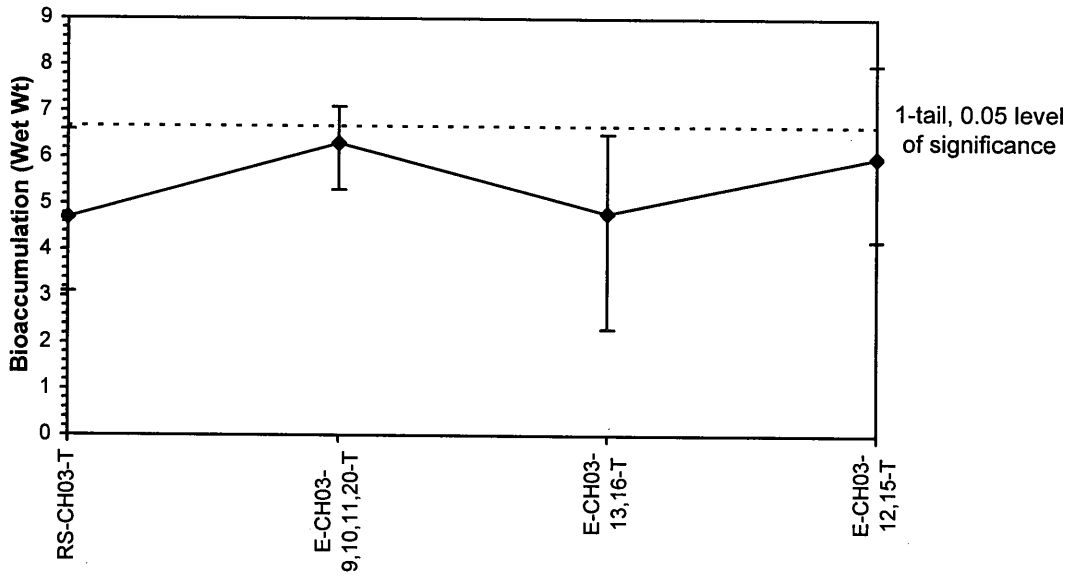
Conc-ppb	1	2	3	4	5
RS-CH03-T	3.1000	4.5000	6.6000	5.6000	3.7000
3-9,10,11,20-T	7.1000	5.3000	7.0000	6.8000	5.3000
CH03-13,16-T	4.8000	6.5000	6.0000	2.3000	4.4000
CH03-12,15-T	5.1000	5.7000	4.2000	7.0000	8.0000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	4.7000	0.0000	4.7000	3.1000	6.6000	30.127	5			
3-9,10,11,20-T	6.3000	-0.4324	6.3000	5.3000	7.1000	14.591	5	1.809	2.230	1.9720
CH03-13,16-T	4.8000	-0.0270	4.8000	2.3000	6.5000	34.137	5	0.113	2.230	1.9720
CH03-12,15-T	6.0000	-0.3514	6.0000	4.2000	8.0000	25.194	5	1.470	2.230	1.9720

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96748	0.868	-0.1432	-0.8304
Bartlett's Test indicates equal variances (p = 0.75)	1.23274	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences	1.97201	0	3.35	1.955	0.20437	3, 16
Treatments vs RS-CH03-T						

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280NBTwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta
Comments:	n-Butyltin, µg/Kg				

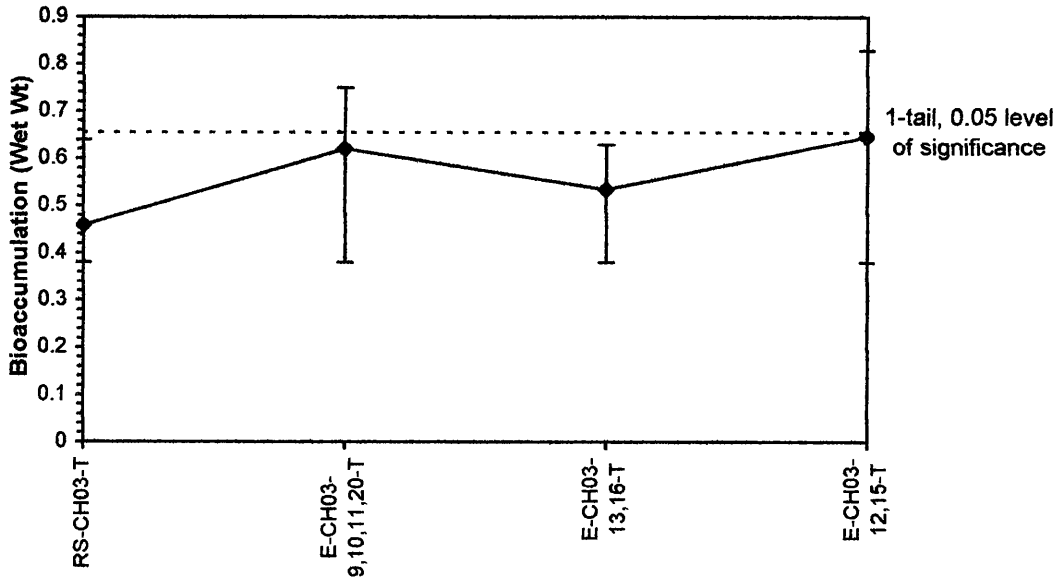
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.3800	0.3800	0.5100	0.6400	0.3800
3-9,10,11,20-T	0.7400	0.5600	0.6700	0.7500	0.3800
CH03-13,16-T	0.4800	0.6300	0.5600	0.3800	0.6200
CH03-12,15-T	0.3800	0.8300	0.5800	0.7400	0.7000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.4580	0.0000	0.4580	0.3800	0.6400	25.388	5			
3-9,10,11,20-T	0.6200	0.2989	0.6200	0.3800	0.7500	24.857	5	1.829	2.230	0.1975
CH03-13,16-T	0.5340	0.1402	0.5340	0.3800	0.6300	19.623	5	0.858	2.230	0.1975
CH03-12,15-T	0.6460	0.3469	0.6460	0.3800	0.8300	26.892	5	2.123	2.230	0.1975

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94074	0.868	-0.5349	-0.3557
Bartlett's Test indicates equal variances (p = 0.76)	1.19055	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.19749	0	0.03666	0.01961	0.17543	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	2804BTwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Tetra-n-butyltin, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.3800	0.3800	0.3800	0.3800	0.3800
3-9,10,11,20-T	0.3800	0.3800	0.3800	0.3800	0.3800
CH03-13,16-T	0.3800	0.3800	0.3800	0.3800	0.3800
CH03-12,15-T	0.3800	0.3800	0.3800	0.3800	0.3800

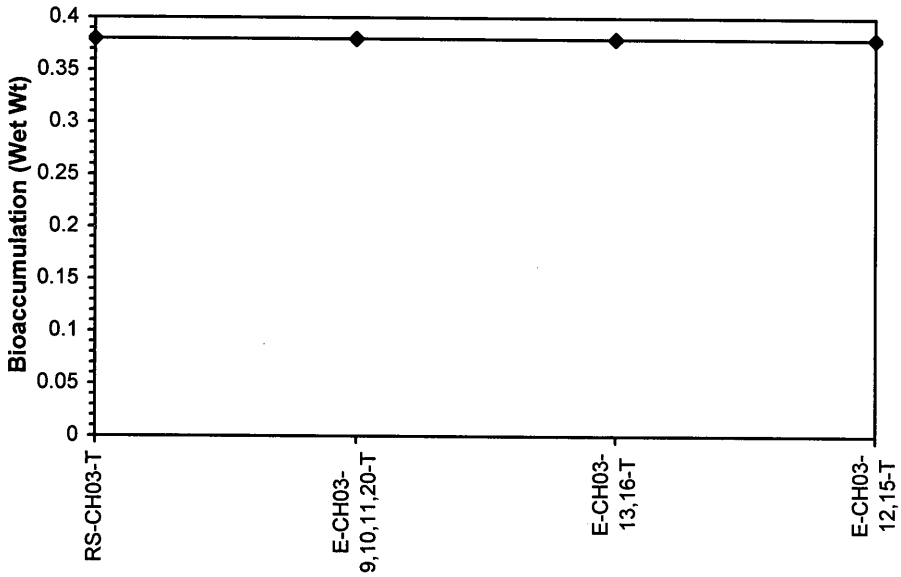
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5		
3-9,10,11,20-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5	27.50	17.00
CH03-13,16-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5	27.50	17.00
CH03-12,15-T	0.3800	0.0000	0.3800	0.3800	0.3800	0.000	5	27.50	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	1	0.868		
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	2803BTwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Tri-n-butyltin, µg/Kg				

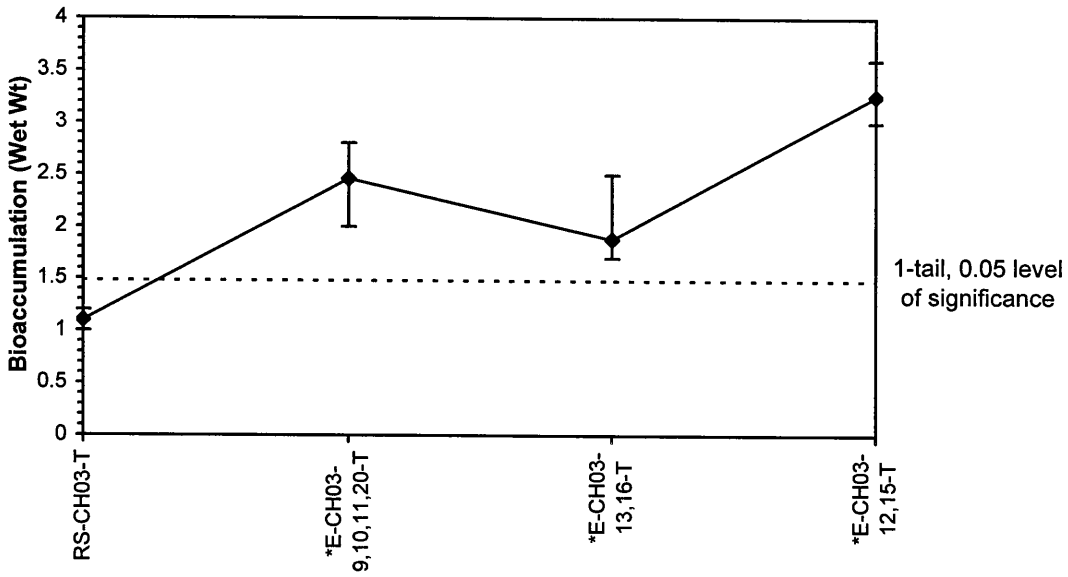
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.2000	1.1000	1.2000	1.0000	1.0000
3-9,10,11,20-T	2.8000	2.5000	2.7000	2.3000	2.0000
CH03-13,16-T	1.7000	1.7000	1.7000	1.8000	2.5000
CH03-12,15-T	3.1000	3.3000	3.0000	3.3000	3.6000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.1000	0.0000	1.1000	1.0000	1.2000	9.091	5			
3-9,10,11,20-T	2.4600	-13.6000	2.4600	2.0000	2.8000	13.046	5	8.014	2.230	0.3784
CH03-13,16-T	1.8800	-7.8000	1.8800	1.7000	2.5000	18.579	5	4.596	2.230	0.3784
CH03-12,15-T	3.2600	-21.6000	3.2600	3.0000	3.6000	7.062	5	12.728	2.230	0.3784

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94615	0.868	0.74361	1.02093
Bartlett's Test indicates equal variances (p = 0.17)	5.05372	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.37844	0	4.1685	0.072	8.2E-09	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280AlwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Aluminum, mg/kg				

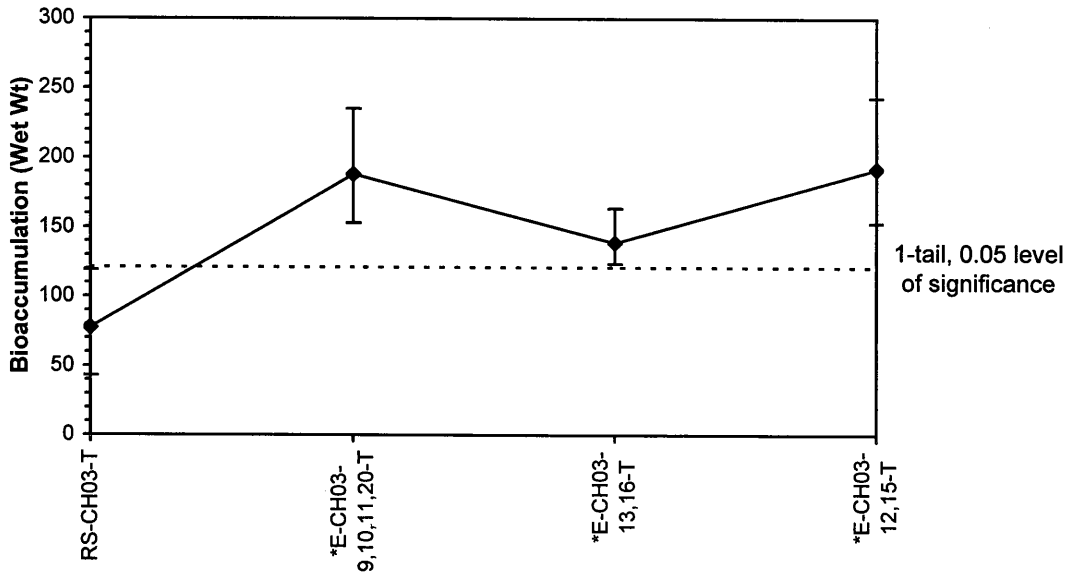
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	54.00	114.00	119.00	43.10	57.90
3-9,10,11,20-T	164.00	235.00	153.00	204.00	184.00
CH03-13,16-T	124.00	131.00	141.00	136.00	164.00
CH03-12,15-T	153.00	172.00	200.00	243.00	192.00

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	77.60	0.0000	77.60	43.10	119.00	46.348	5			
3-9,10,11,20-T	188.00	-1.4413	188.00	153.00	235.00	17.403	5	5.707	2.230	43.14
CH03-13,16-T	139.20	-0.8042	139.20	124.00	164.00	10.935	5	3.184	2.230	43.14
CH03-12,15-T	192.00	-1.4935	192.00	153.00	243.00	17.635	5	5.914	2.230	43.14

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93544	0.868	0.49055	-0.8592
Bartlett's Test indicates equal variances (p = 0.45)	2.65777	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	43.1391	0	14273.1	935.564	5.9E-05	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280SbwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Antimony, mg/kg				

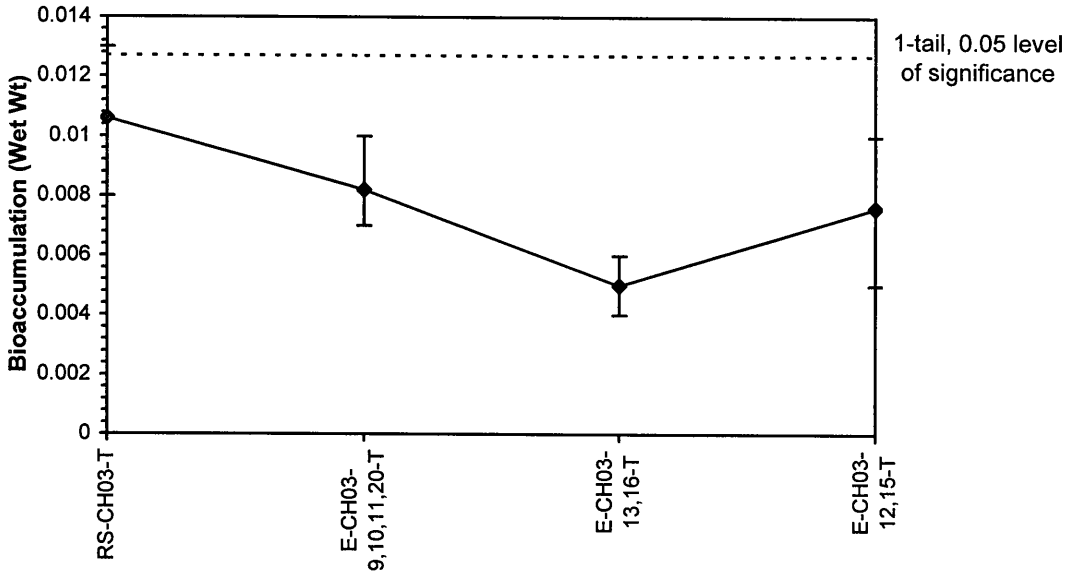
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0110	0.0110	0.0100	0.0130	0.0080
3-9,10,11,20-T	0.0090	0.0070	0.0100	0.0070	0.0080
CH03-13,16-T	0.0050	0.0050	0.0040	0.0060	0.0050
CH03-12,15-T	0.0080	0.0070	0.0050	0.0080	0.0100

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0106	0.0000	0.0106	0.0080	0.0130	17.138	5			
3-9,10,11,20-T	0.0082	-0.0024	0.0082	0.0070	0.0100	15.900	5	-2.558	2.230	0.0021
CH03-13,16-T	0.0050	-0.0057	0.0050	0.0040	0.0060	14.142	5	-5.970	2.230	0.0021
CH03-12,15-T	0.0076	-0.0030	0.0076	0.0050	0.0100	23.903	5	-3.198	2.230	0.0021

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95516	0.868	-0.1113	0.1476
Bartlett's Test indicates equal variances (p = 0.34)	3.36364	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences	0.00209	0	2.6E-05	2.2E-06	2.3E-04	3, 16
Treatments vs RS-CH03-T						

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280AswwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Arsenic, mg/kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	1.9000	2.0800	2.1200	2.0900	1.5100
3-9,10,11,20-T	2.1300	2.2400	2.5700	2.3100	2.3900
CH03-13,16-T	2.0800	1.5500	1.6000	1.9700	1.9900
CH03-12,15-T	2.5200	2.1300	1.4900	2.9300	3.6900

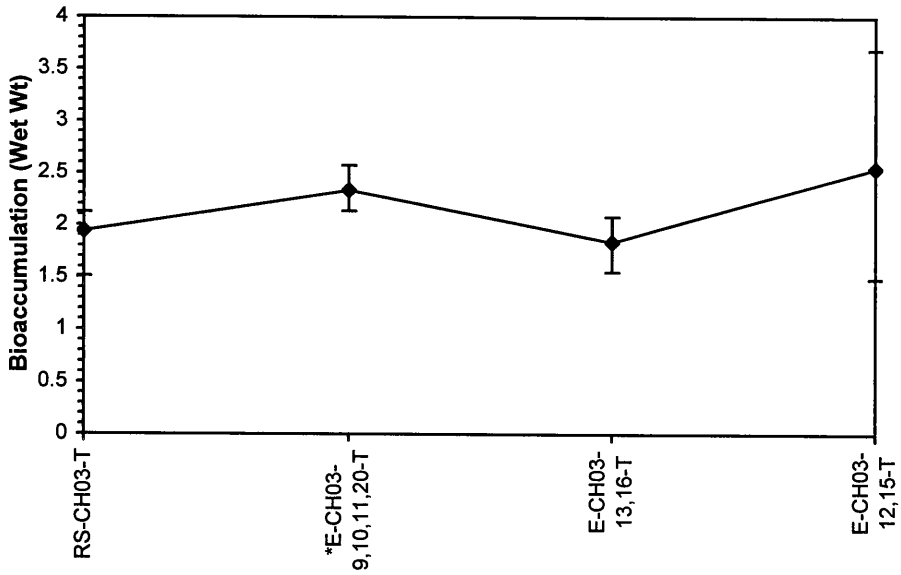
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	1.9400	0.0000	1.9400	1.5100	2.1200	13.167	5		
3-9,10,11,20-T	2.3280	-0.4128	2.3280	2.1300	2.5700	7.113	5	15.00	17.00
CH03-13,16-T	1.8380	0.1085	1.8380	1.5500	2.0800	13.290	5	31.50	17.00
CH03-12,15-T	2.5520	-0.6511	2.5520	1.4900	3.6900	32.460	5	20.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.90663	0.868	0.13858	3.54619
Bartlett's Test indicates unequal variances (p = 7.90E-03)	11.8534	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CdwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Cadmium, mg/kg				

Conc-mg/L	1	2	3	4	5
RS-CH03-T	0.0170	0.0220	0.0240	0.0120	0.0110
3-9,10,11,20-T	0.0170	0.0190	0.0190	0.0180	0.0200
CH03-13,16-T	0.0130	0.0130	0.0100	0.0130	0.0130
CH03-12,15-T	0.0200	0.0240	0.0140	0.0220	0.0270

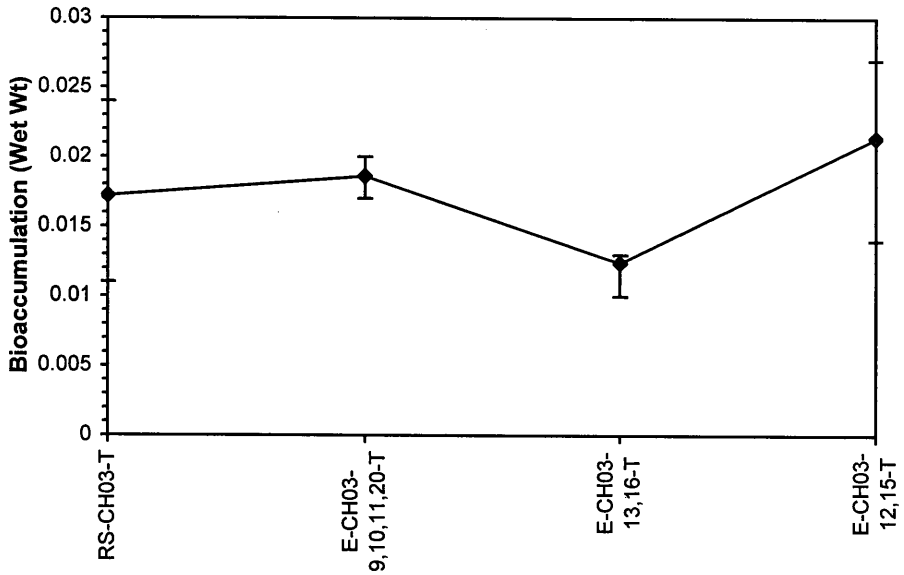
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.0172	0.0000	0.0172	0.0110	0.0240	33.751	5		
3-9,10,11,20-T	0.0186	0.0014	0.0186	0.0170	0.0200	6.130	5	25.50	17.00
CH03-13,16-T	0.0124	-0.0049	0.0124	0.0100	0.0130	10.820	5	32.00	17.00
CH03-12,15-T	0.0214	0.0043	0.0214	0.0140	0.0270	22.797	5	22.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93827	0.868	-0.2347	0.43476
Bartlett's Test indicates unequal variances (p = 7.11E-03)	12.0803	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CrwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Chromium, mg/kg				

Conc-mg/L	1	2	3	4	5
RS-CH03-T	4.9700	3.3900	7.3400	5.8600	2.7900
3-9,10,11,20-T	3.2000	2.7900	2.7200	3.0900	2.4300
CH03-13,16-T	0.4900	0.3900	0.3700	0.2100	0.2300
CH03-12,15-T	0.9500	1.8500	1.1300	3.4100	0.9500

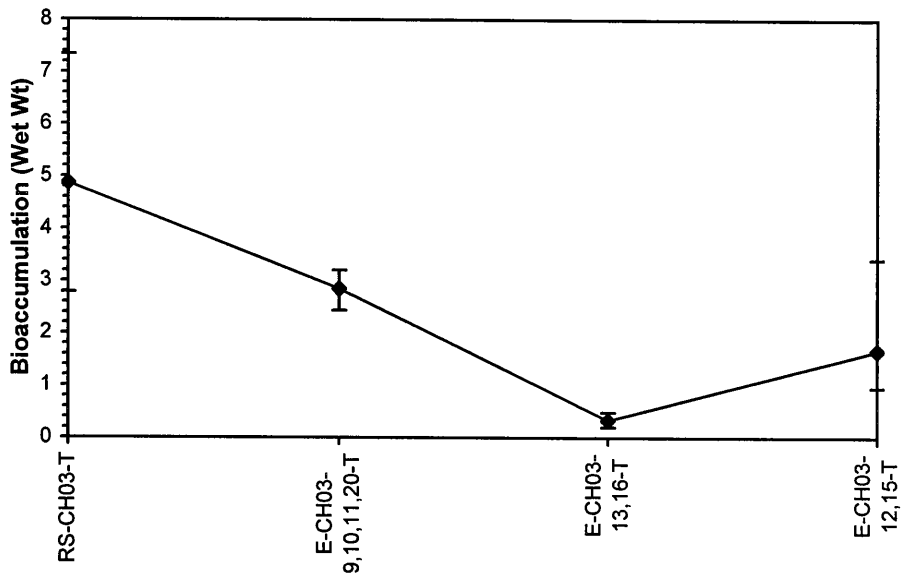
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	4.8700	0.0000	4.8700	2.7900	7.3400	37.873	5		
3-9,10,11,20-T	2.8460	0.5230	2.8460	2.4300	3.2000	10.786	5	37.50	17.00
CH03-13,16-T	0.3380	1.1711	0.3380	0.2100	0.4900	34.655	5	40.00	17.00
CH03-12,15-T	1.6580	0.8300	1.6580	0.9500	3.4100	63.169	5	38.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.91777	0.868	0.50896	1.97124
Bartlett's Test indicates unequal variances (p = 8.82E-05)	21.3701	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CuwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Copper, mg/kg				

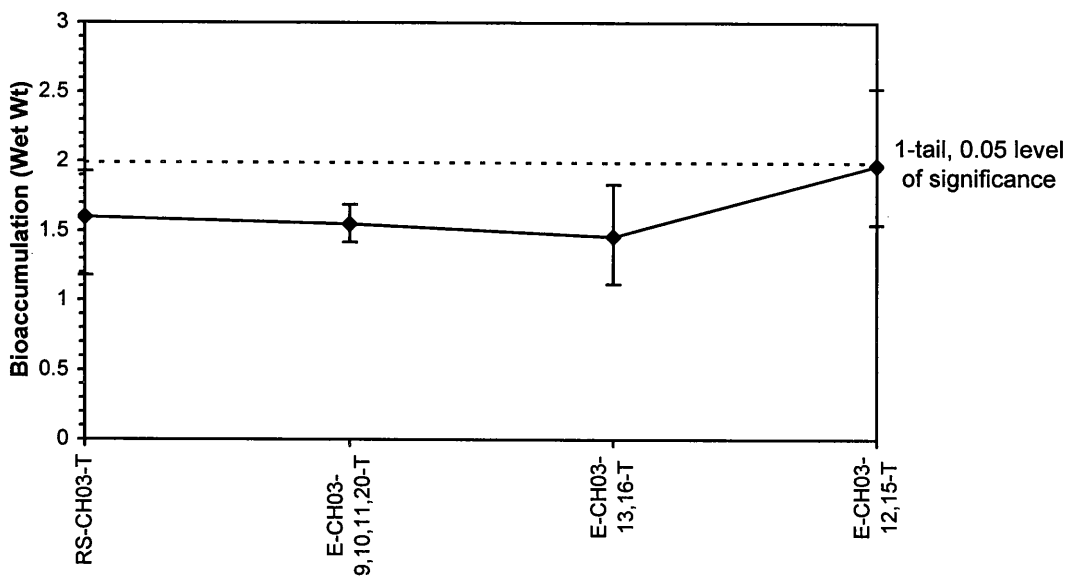
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	1.7000	1.9300	1.7900	1.4100	1.1800
3-9,10,11,20-T	1.6100	1.6900	1.6000	1.4200	1.4400
CH03-13,16-T	1.4400	1.5600	1.1200	1.3600	1.8400
CH03-12,15-T	1.9100	1.9600	1.5400	1.9000	2.5200

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.6020	0.0000	1.6020	1.1800	1.9300	18.920	5			
3-9,10,11,20-T	1.5520	0.0831	1.5520	1.4200	1.6900	7.533	5	-0.289	2.230	0.3860
CH03-13,16-T	1.4640	0.2292	1.4640	1.1200	1.8400	18.082	5	-0.797	2.230	0.3860
CH03-12,15-T	1.9660	-0.6047	1.9660	1.5400	2.5200	17.910	5	2.103	2.230	0.3860

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.97153	0.868	0.23748	0.24103
Bartlett's Test indicates equal variances (p = 0.28)	3.83739	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.38599	0	0.24383	0.0749	0.0493	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280PbwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Lead, mg/kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.1500	0.2200	0.2180	0.1140	0.0975
3-9,10,11,20-T	0.1990	0.2290	0.2000	0.2140	0.2150
CH03-13,16-T	0.1380	0.1380	0.1240	0.1360	0.1670
CH03-12,15-T	0.1930	0.2340	0.1690	0.2700	0.3150

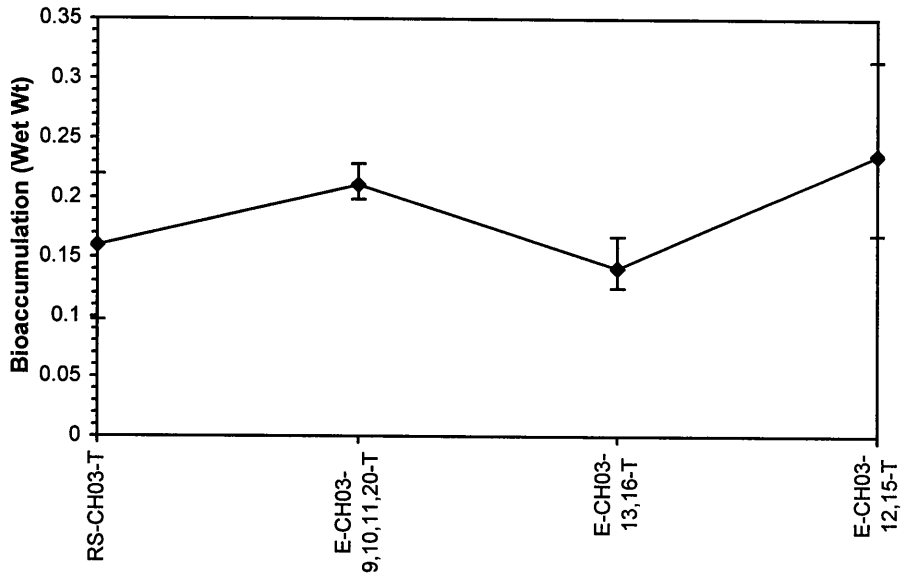
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.1599	0.0000	0.1599	0.0975	0.2200	35.771	5		
3-9,10,11,20-T	0.2114	0.0613	0.2114	0.1990	0.2290	5.857	5	23.00	17.00
CH03-13,16-T	0.1406	-0.0230	0.1406	0.1240	0.1670	11.286	5	29.00	17.00
CH03-12,15-T	0.2362	0.0908	0.2362	0.1690	0.3150	24.812	5	19.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95644	0.868	0.23441	-0.0427
Bartlett's Test indicates unequal variances (p = 9.91E-03)	11.3638	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280HgwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta
Comments:	Mercury, mg/kg				

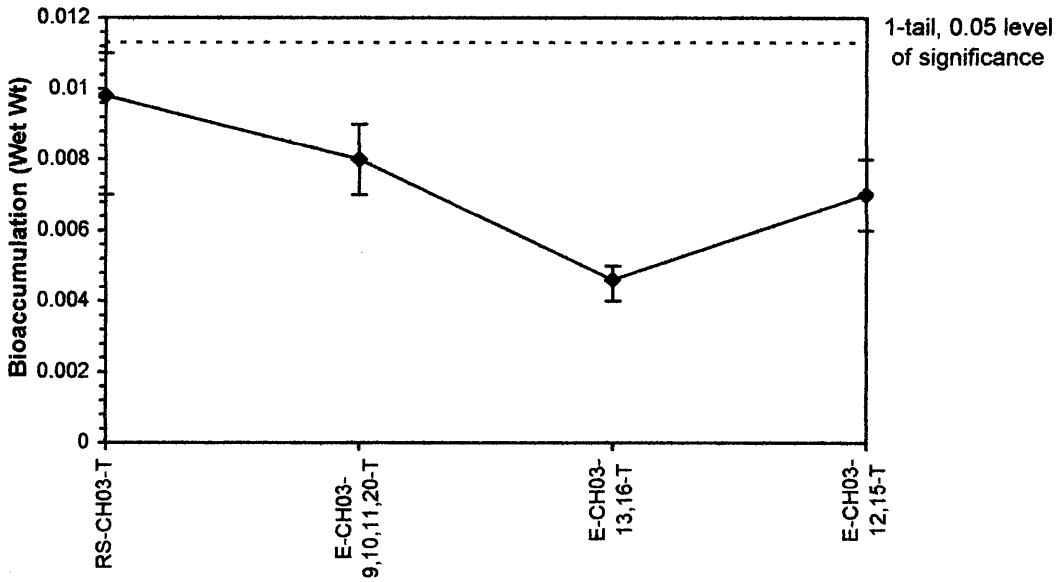
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0090	0.0110	0.0110	0.0110	0.0070
3-9,10,11,20-T	0.0070	0.0080	0.0080	0.0080	0.0090
CH03-13,16-T	0.0050	0.0040	0.0040	0.0050	0.0050
CH03-12,15-T	0.0070	0.0080	0.0070	0.0070	0.0060

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0098	0.0000	0.0098	0.0070	0.0110	18.254	5			
3-9,10,11,20-T	0.0080	-0.0018	0.0080	0.0070	0.0090	8.839	5	-2.683	2.230	0.0015
CH03-13,16-T	0.0046	-0.0053	0.0046	0.0040	0.0050	11.907	5	-7.752	2.230	0.0015
CH03-12,15-T	0.0070	-0.0028	0.0070	0.0060	0.0080	10.102	5	-4.174	2.230	0.0015

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.89411	0.868	-1.1111	2.29076
Bartlett's Test indicates equal variances (p = 0.08)	6.87667	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	0.0015	0	2.4E-05	1.1E-06	8.8E-06	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280NiwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta
Comments:	Nickel, mg/Kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	2.6900	2.1400	4.2800	3.1100	1.5200
3-9,10,11,20-T	1.8100	1.5400	1.6300	1.8500	1.4400
CH03-13,16-T	0.6330	0.3900	0.3120	0.3000	0.3110
CH03-12,15-T	0.7430	1.1900	0.8980	1.8700	0.9280

			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	2.7480	0.0000	2.7480	1.5200	4.2800	37.988	5		
3-9,10,11,20-T	1.6540	0.6259	1.6540	1.4400	1.8500	10.564	5	36.00	17.00
CH03-13,16-T	0.3892	1.3494	0.3892	0.3000	0.6330	36.216	5	40.00	17.00
CH03-12,15-T	1.1258	0.9280	1.1258	0.7430	1.8700	39.612	5	39.00	17.00

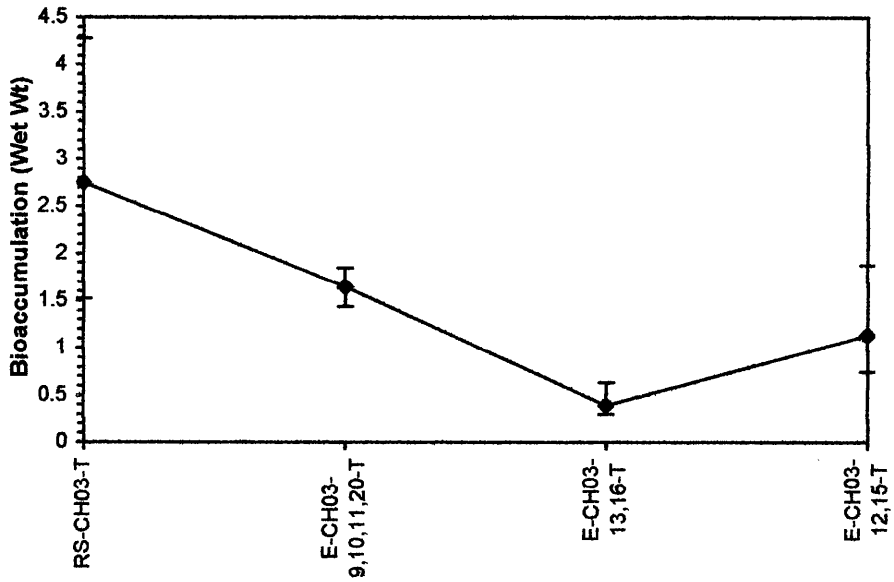
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.88197	0.868	0.74858	3.98454
Bartlett's Test indicates unequal variances (p = 8.88E-04)	16.5173	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: _____

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280AgwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Silver, mg/Kg				

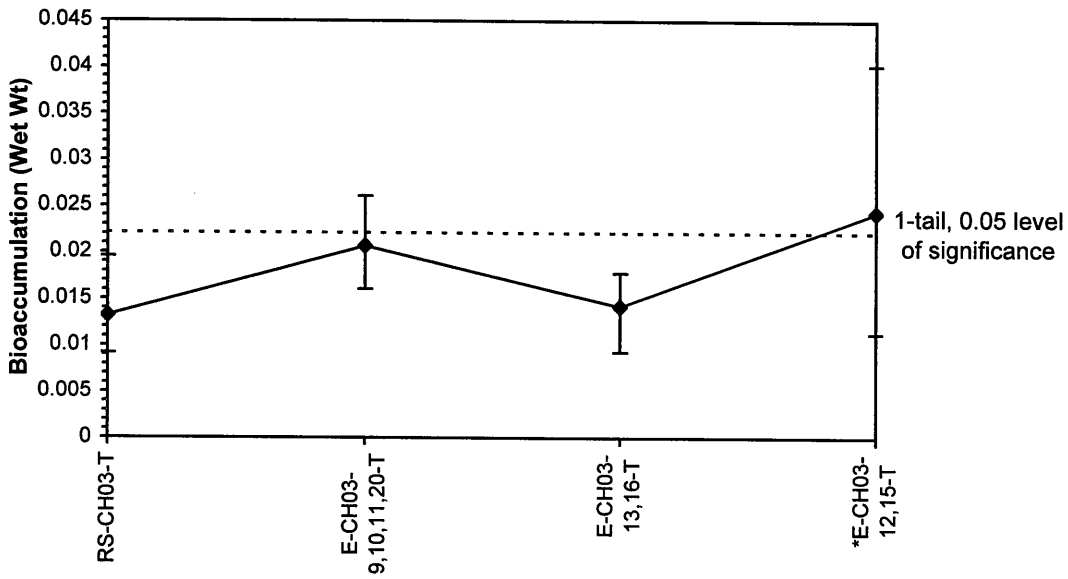
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0092	0.0152	0.0196	0.0119	0.0103
3-9,10,11,20-T	0.0179	0.0261	0.0227	0.0208	0.0161
CH03-13,16-T	0.0134	0.0093	0.0171	0.0134	0.0178
CH03-12,15-T	0.0199	0.0235	0.0113	0.0267	0.0402

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0132	0.0000	0.0132	0.0092	0.0196	31.832	5			
3-9,10,11,20-T	0.0207	0.0076	0.0207	0.0161	0.0261	19.027	5	1.889	2.230	0.0088
CH03-13,16-T	0.0142	0.0010	0.0142	0.0093	0.0178	24.052	5	0.242	2.230	0.0088
CH03-12,15-T	0.0243	0.0112	0.0243	0.0113	0.0402	43.495	5	2.798	2.230	0.0088

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93126	0.868	0.58235	2.88128
Bartlett's Test indicates equal variances (p = 0.08)	6.81599	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.00883	0	0.00014	3.9E-05	0.03727	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ZnwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Zinc, mg/Kg				

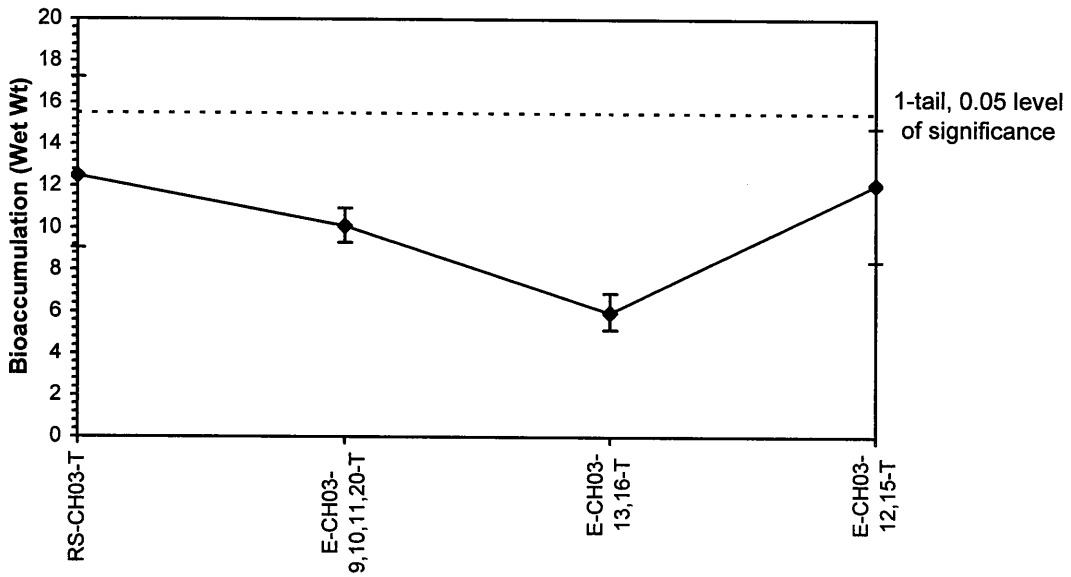
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	17.200	12.400	14.100	9.000	9.600
3-9,10,11,20-T	9.350	10.900	9.710	9.770	11.000
CH03-13,16-T	6.560	6.880	5.150	5.600	5.580
CH03-12,15-T	11.700	12.600	8.390	14.800	13.000

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	12.460	0.0000	12.4600	9.0000	17.2000	27.012	5			
3-9,10,11,20-T	10.146	0.2019	10.1460	9.3500	11.0000	7.413	5	-1.725	2.230	2.9916
CH03-13,16-T	5.954	0.5677	5.9540	5.1500	6.8800	12.274	5	-4.850	2.230	2.9916
CH03-12,15-T	12.098	0.0316	12.0980	8.3900	14.8000	19.505	5	-0.270	2.230	2.9916

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.92926	0.868	0.13041	1.33227
Bartlett's Test indicates equal variances (p = 0.01)	11.114	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	2.99155	0	44.5607	4.49908	6.2E-04	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	2802MNwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	2-Methylnaphthalene, µg/kg				

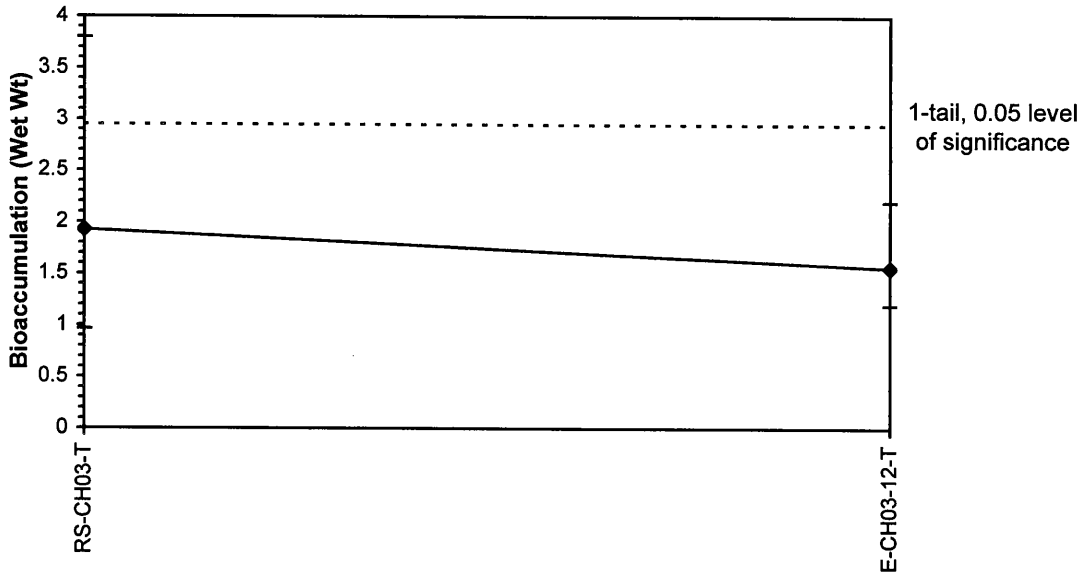
Conc-ppb	1	2	3	4	5
RS-CH03-T	3.8000	1.9000	2.0000	0.9700	0.9600
E-CH03-12-T	2.2000	1.2000	1.3000	1.8000	1.3000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.9260	0.0000	1.9260	0.9600	3.8000	60.132	5			
E-CH03-12-T	1.5600	0.3952	1.5600	1.2000	2.2000	27.422	5	-0.663	1.860	1.0267

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.89331	0.781	1.24558	2.43085
F-Test indicates equal variances (p = 0.08)	7.3294	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	1.02673	0	0.33489	0.76214	0.52604	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ACLwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Acenaphthylene, µg/kg				

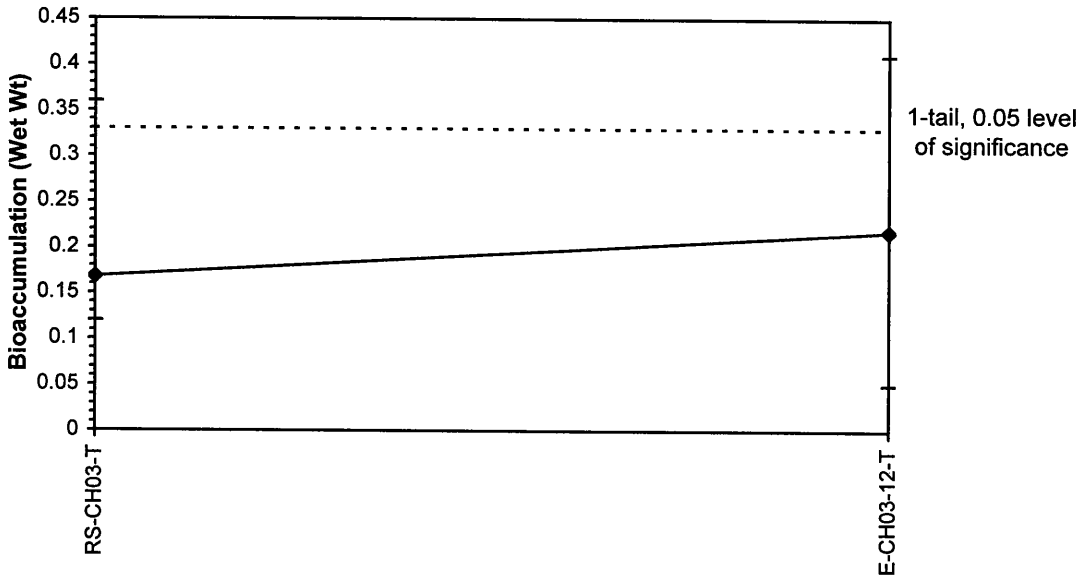
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1200	0.3600	0.1200	0.1200	0.1200
E-CH03-12-T	0.4100	0.0500	0.2600	0.3200	0.0500

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1680	0.0000	0.1680	0.1200	0.3600	63.888	5			
E-CH03-12-T	0.2180	0.0601	0.2180	0.0500	0.4100	74.490	5	0.574	1.860	0.1619

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.89456	0.781	0.341	-0.9193
F-Test indicates equal variances (p = 0.44)	2.28906	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.16188	0	0.00625	0.01895	0.5815	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ACEwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Acenaphthene, µg/Kg				

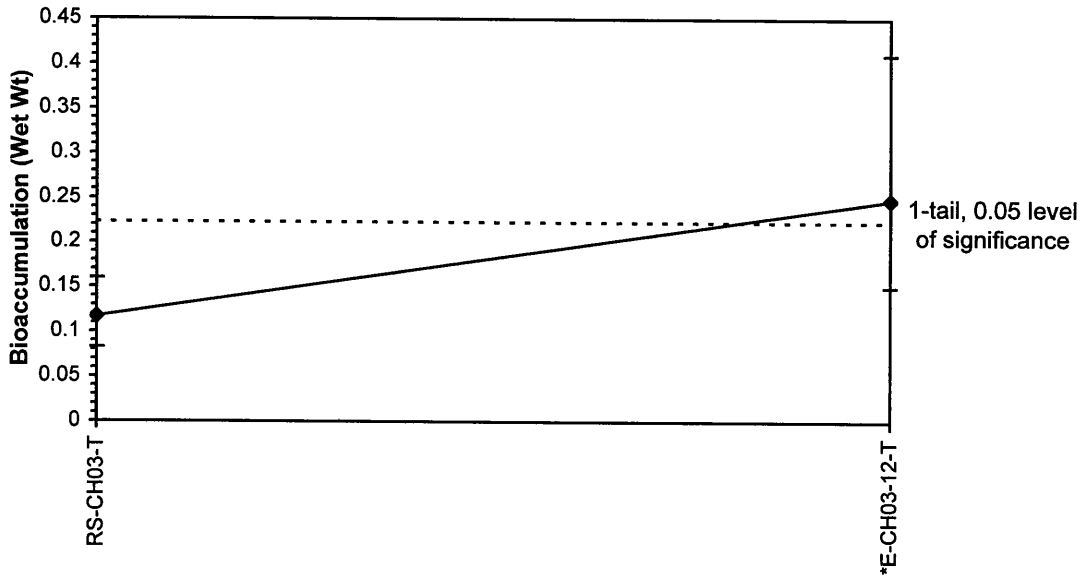
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1200	0.1400	0.1600	0.0830	0.0830
E-CH03-12-T	0.4100	0.1800	0.1500	0.3500	0.1500

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1172	0.0000	0.1172	0.0830	0.1600	29.244	5			
*E-CH03-12-T	0.2480	0.1482	0.2480	0.1500	0.4100	49.582	5	2.291	1.860	0.1062

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93761	0.781	0.70451	-0.1396
F-Test indicates equal variances (p = 0.03)	12.8714	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	0.10616	0	0.04277	0.00815	0.05117	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280ANTwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Anthracene, µg/kg				

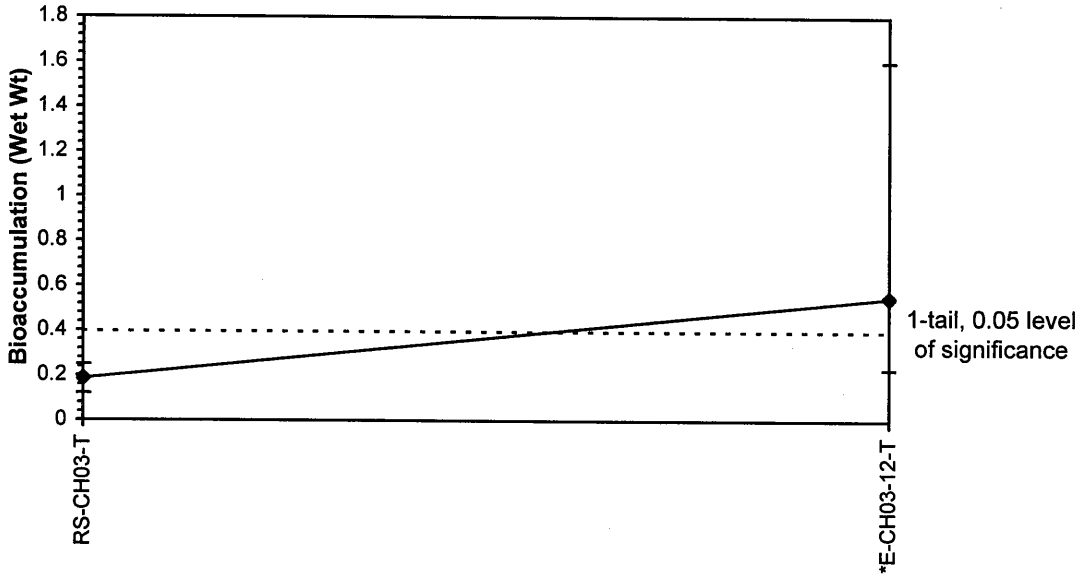
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1800	0.2300	0.2500	0.1600	0.1200
E-CH03-12-T	1.6000	0.2900	0.2600	0.3700	0.2300

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1880	0.0000	0.4454	0.3537	0.5236	15.357	5			
*E-CH03-12-T	0.5500	0.4458	0.6844	0.5002	1.1644	40.077	5	1.890	1.860	0.2351

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.7916	0.781	2.05868	5.17788
F-Test indicates equal variances (p = 0.02)	16.0798	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	0.21028	0	0.14281	0.03996	0.09536	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BAAwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benz(a)anthracene, µg/kg				

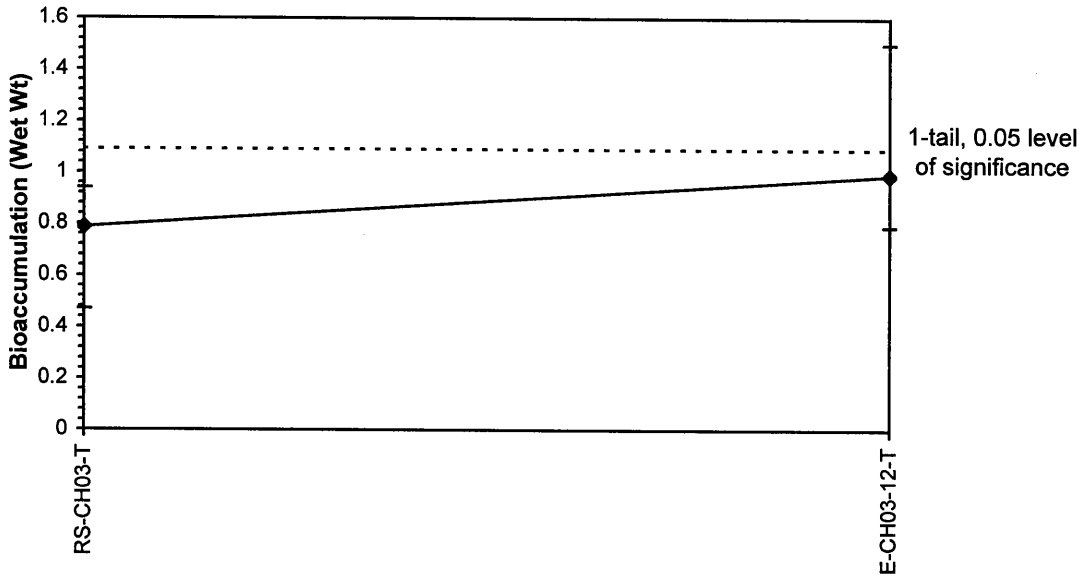
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.9400	0.9100	0.9300	0.6900	0.4700
E-CH03-12-T	0.8000	1.0000	0.8600	1.5000	0.7900

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.7880	0.0000	0.7880	0.4700	0.9400	26.076	5			
E-CH03-12-T	0.9900	0.9528	0.9900	0.7900	1.5000	30.015	5	1.250	1.860	0.3004

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93124	0.781	0.90152	1.00001
F-Test indicates equal variances (p = 0.49)	2.09143	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.30044	0	0.10201	0.06526	0.24654	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BAPwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(a)pyrene, µg/kg				

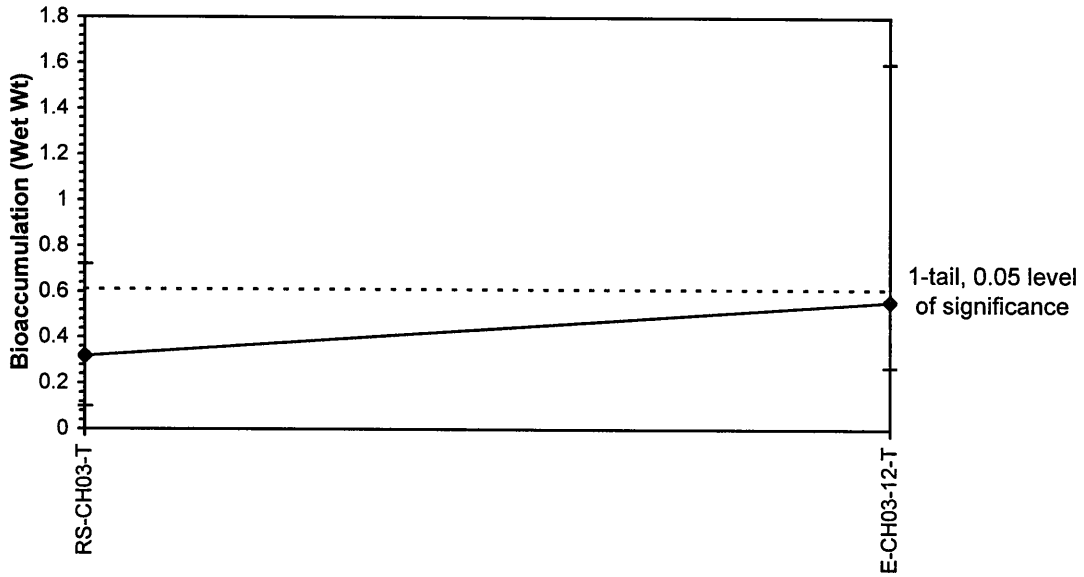
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.2900	0.7200	0.3300	0.1500	0.1000
E-CH03-12-T	0.2800	0.3200	0.2700	1.6000	0.3200

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.3180	0.0000	0.5827	0.3218	1.0132	46.109	5			
E-CH03-12-T	0.5580	0.3519	0.6942	0.5464	1.1644	38.037	5	0.662	1.860	0.3133

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.80293	0.781	1.33598	0.60139
F-Test indicates equal variances (p = 0.97)	1.0352	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.30685	0	0.0311	0.07095	0.52652	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BBFwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(b)fluoranthene, µg/kg				

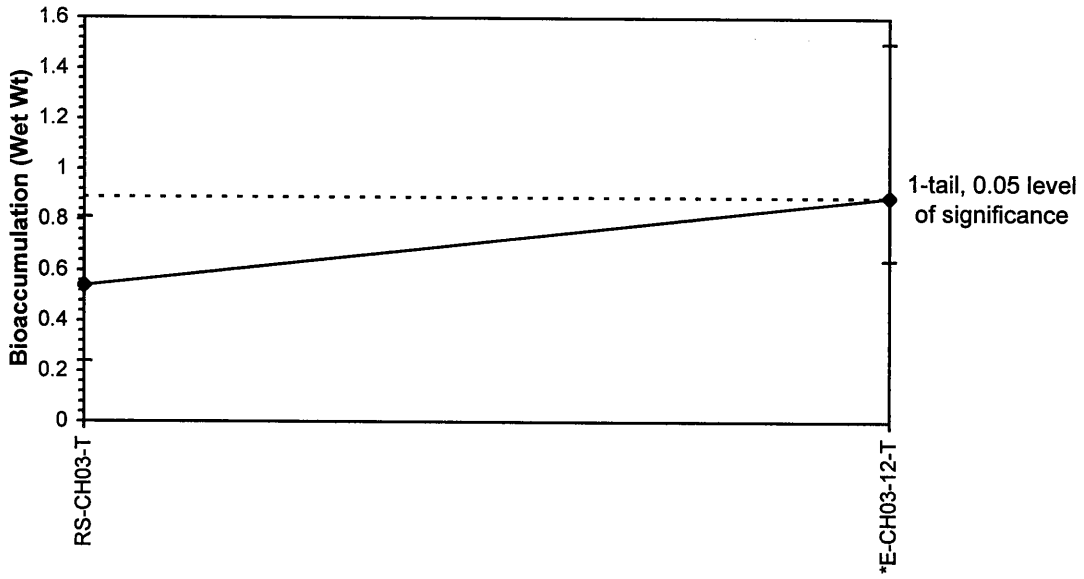
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.6000	0.8100	0.6700	0.3800	0.2400
E-CH03-12-T	0.7100	0.8700	0.7300	1.5000	0.6400

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.5400	0.0000	0.5400	0.2400	0.8100	42.330	5			
*E-CH03-12-T	0.8900	0.7609	0.8900	0.6400	1.5000	39.446	5	1.868	1.860	0.3484

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.89414	0.781	1.22681	1.34444
F-Test indicates equal variances (p = 0.43)	2.35885	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	0.34839	0	0.30625	0.08775	0.09869	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: GM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BxPwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(g,h,i)perylene, µg/kg				

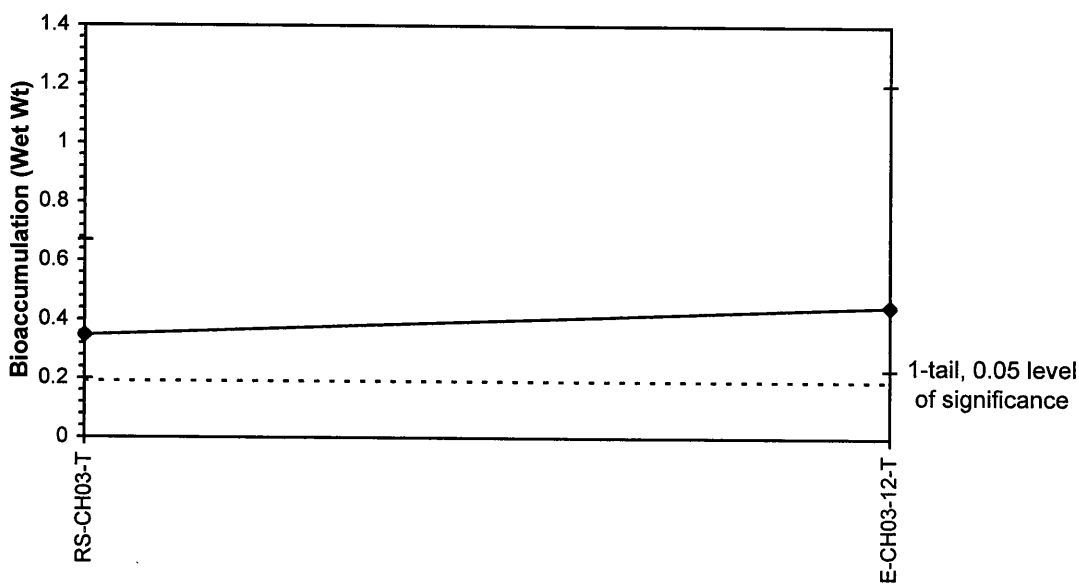
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.2900	0.6700	0.3800	0.2000	0.2000
E-CH03-12-T	0.2300	0.2700	0.2800	1.2000	0.2600

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.3480	0.0000	3.5145	1.4925	5.0000	43.353	5			
E-CH03-12-T	0.4480	0.1534	3.2605	0.8333	4.3478	42.580	5	0.276	1.860	1.7142

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.89803	0.781	-0.8078	-0.4631
F-Test indicates equal variances (p = 0.86)	1.20445	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	-0.0933	0	0.16128	2.1244	0.78989	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280BKFwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(k)fluoranthene, µg/kg				

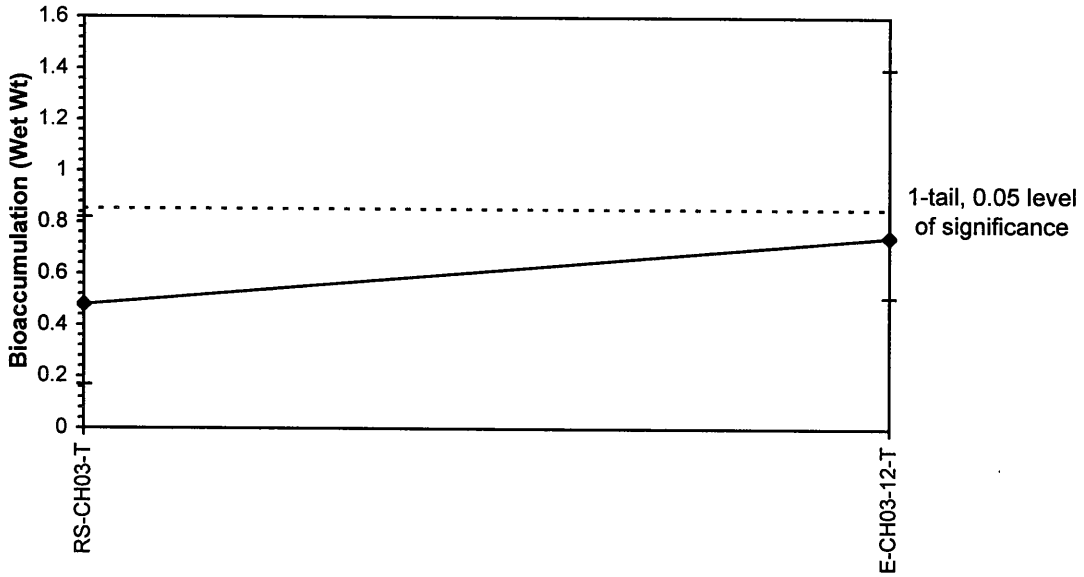
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.4600	0.8200	0.6200	0.3300	0.1700
E-CH03-12-T	0.5100	0.6400	0.6200	1.4000	0.5500

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.4800	0.0000	0.4800	0.1700	0.8200	52.519	5			
E-CH03-12-T	0.7440	0.5077	0.7440	0.5100	1.4000	49.791	5	1.317	1.860	0.3726

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.8609	0.781	1.3965	1.51097
F-Test indicates equal variances (p = 0.47)	2.1594	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.37263	0	0.17424	0.10039	0.22417	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:_____

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280CHRwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Chrysene, µg/kg				

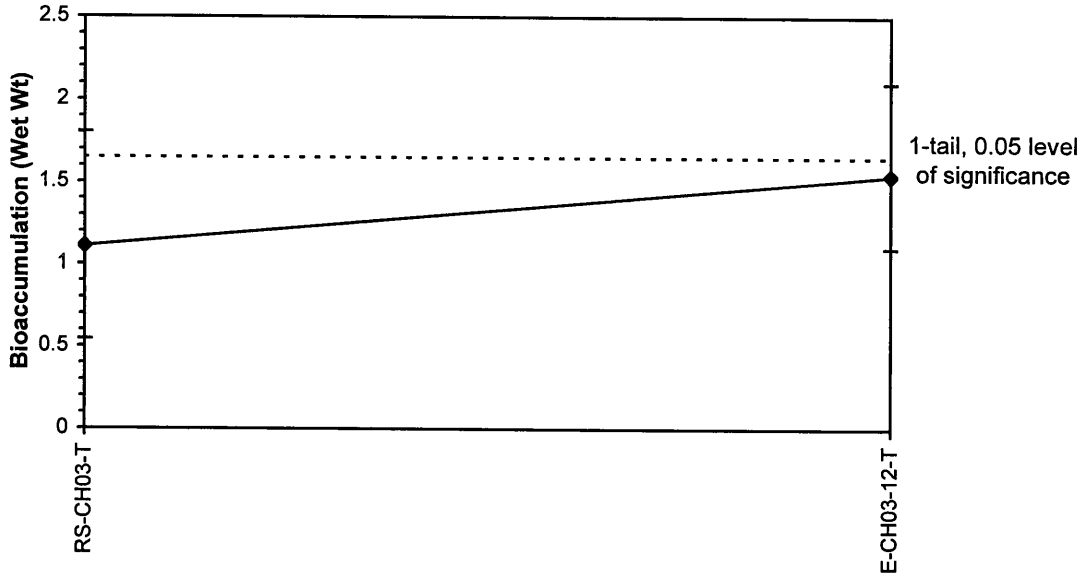
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.3000	1.8000	1.1000	0.7900	0.5400
E-CH03-12-T	1.4000	1.9000	1.1000	2.1000	1.2000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.1060	0.0000	1.1060	0.5400	1.8000	43.820	5			
E-CH03-12-T	1.5400	-4.0943	1.5400	1.1000	2.1000	28.527	5	1.484	1.860	0.5440

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94216	0.781	0.37468	-1.2472
F-Test indicates equal variances (p = 0.85)	1.21699	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.54398	0	0.47089	0.21394	0.17621	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280DBAwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Dibenz(a,h)anthracene, µg/kg				

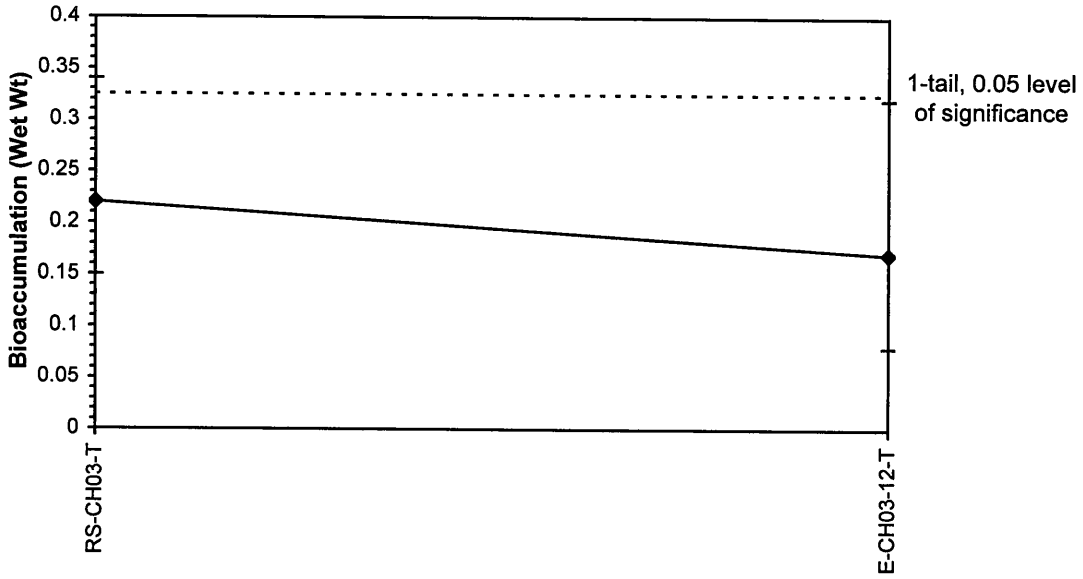
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.2300	0.3400	0.2300	0.1500	0.1500
E-CH03-12-T	0.1900	0.0790	0.1800	0.3200	0.0790

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2200	0.0000	0.2200	0.1500	0.3400	35.501	5			
E-CH03-12-T	0.1696	-0.0646	0.1696	0.0790	0.3200	58.638	5	-0.891	1.860	0.1052

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.87679	0.781	0.68813	-0.4414
F-Test indicates equal variances (p = 0.65)	1.62136	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.10516	0	0.00635	0.008	0.39882	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280DBFwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Dibenzofuran, µg/kg				

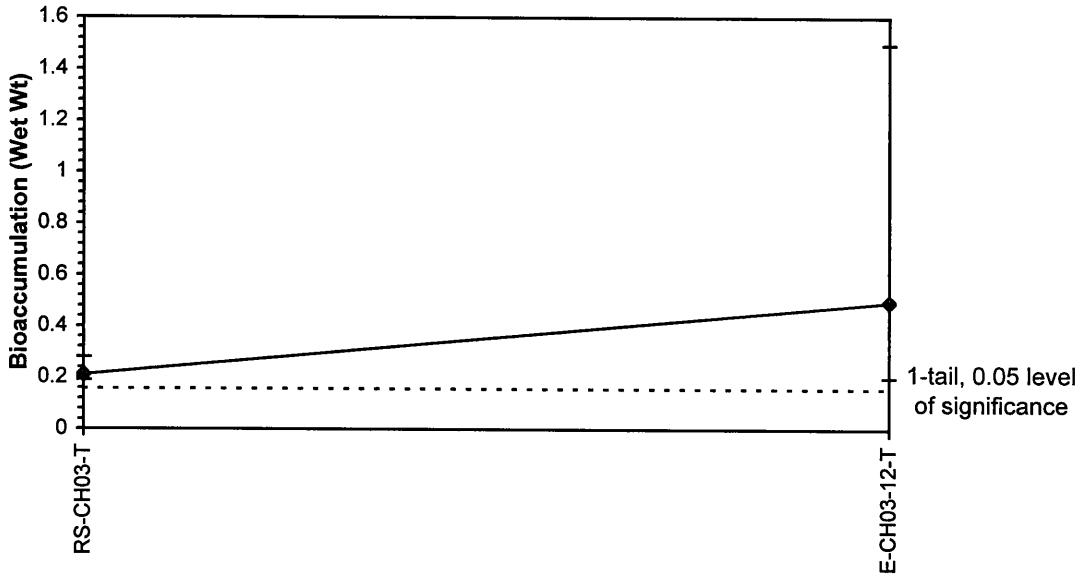
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.1900	0.2100	0.2800	0.1900	0.1900
E-CH03-12-T	1.5000	0.2900	0.2200	0.2700	0.2000

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2120	0.0000	4.8246	3.5714	5.2632	15.201	5			
E-CH03-12-T	0.4960	0.3604	3.4728	0.6667	5.0000	48.636	5	1.641	1.860	1.5313

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.86472	0.781	-1.4268	2.51813
F-Test indicates equal variances (p = 0.14)	5.30417	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	-0.0499	0	4.56801	1.69532	0.13932	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280FLAwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta

Comments: Fluoranthene, µg/kg

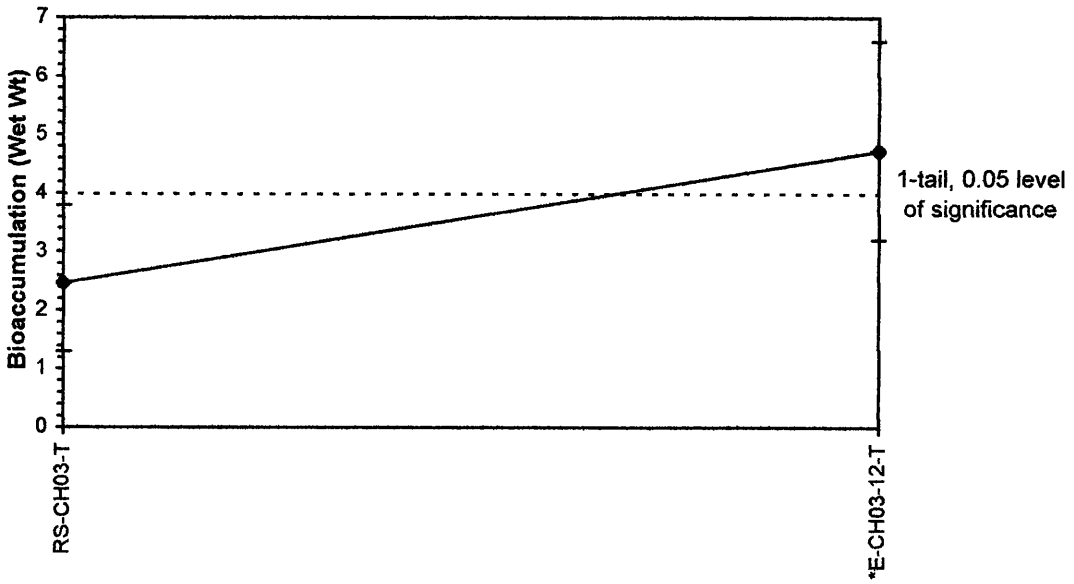
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.5000	3.8000	2.8000	1.9000	1.3000
E-CH03-12-T	6.2000	6.6000	3.5000	3.2000	4.1000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.4600	0.0000	2.4600	1.3000	3.8000	38.414	5			
*E-CH03-12-T	4.7200	-1.5479	4.7200	3.2000	6.6000	33.344	5	2.753	1.860	1.5266

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.91735	0.781	0.38108	-1.4072
F-Test indicates equal variances (p = 0.35)	2.7738	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	1.52664	0	12.769	1.685	0.02495	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280FwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Fluorene, µg/kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	0.3700	0.3700	0.3800	0.3700	0.3700
E-CH03-12-T	1.3000	0.4100	0.3000	0.4000	0.3100

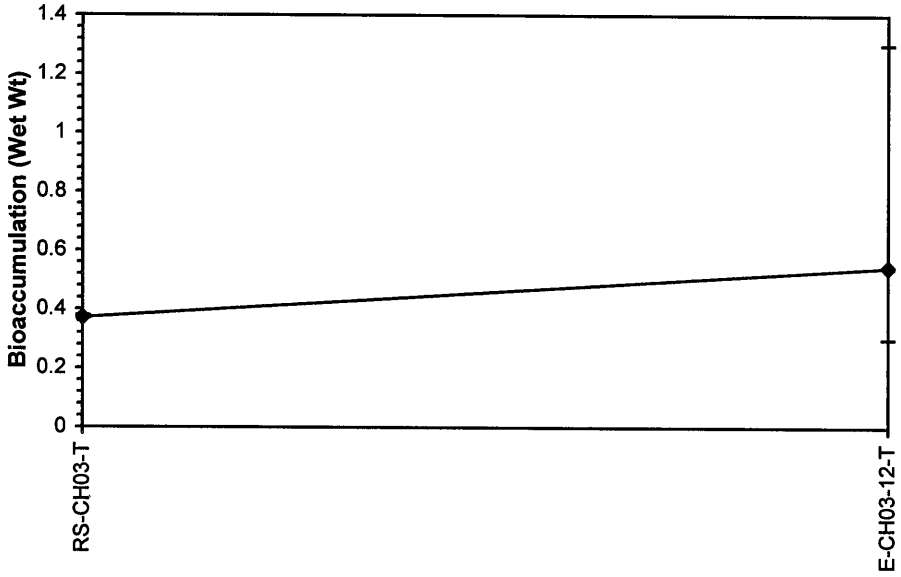
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.3720	0.0000	0.3720	0.3700	0.3800	1.202	5		
E-CH03-12-T	0.5440	0.2739	0.5440	0.3000	1.3000	78.234	5	25.00	19.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.01)	0.67643	0.781	2.42794	6.90495
F-Test indicates unequal variances (p = 7.31E-08)	9056.5	23.1539		

Hypothesis Test (1-tail, 0.05)

Wilcoxon Two-Sample Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280INPwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Indeno(1,2,3-cd)pyrene, µg/kg				

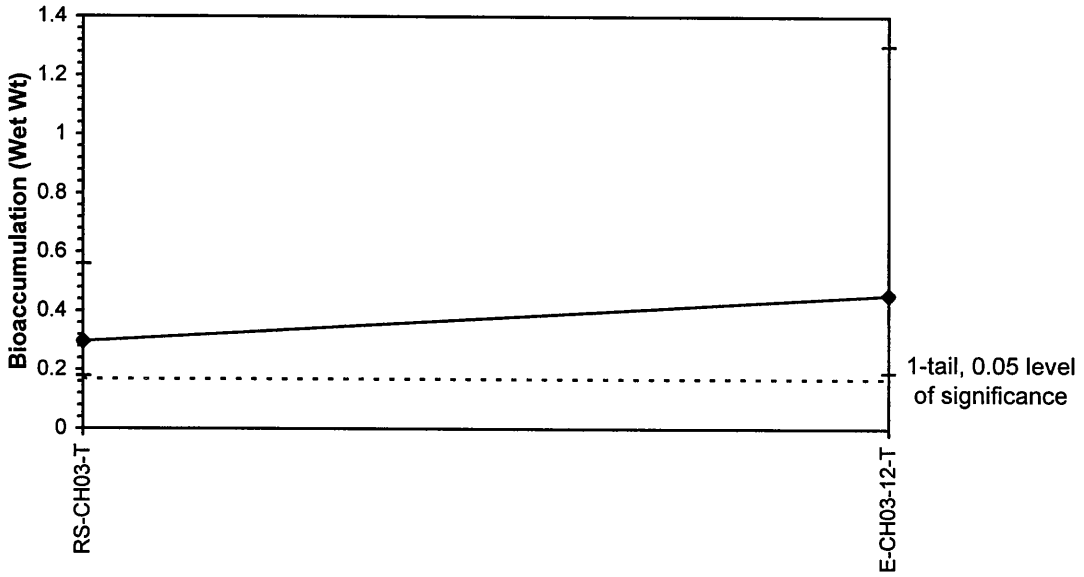
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.2500	0.5600	0.3200	0.1800	0.1800
E-CH03-12-T	0.1900	0.2500	0.2800	1.3000	0.2600

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.2980	0.0000	4.0044	1.7857	5.5556	40.476	5			
E-CH03-12-T	0.4560	0.2251	3.4900	0.7692	5.2632	47.387	5	0.497	1.860	1.9257

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.9084	0.781	-0.6993	-0.4512
F-Test indicates equal variances (p = 0.97)	1.04113	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	-0.0811	0	0.66144	2.68104	0.63276	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280NAPwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Naphthalene, µg/Kg				

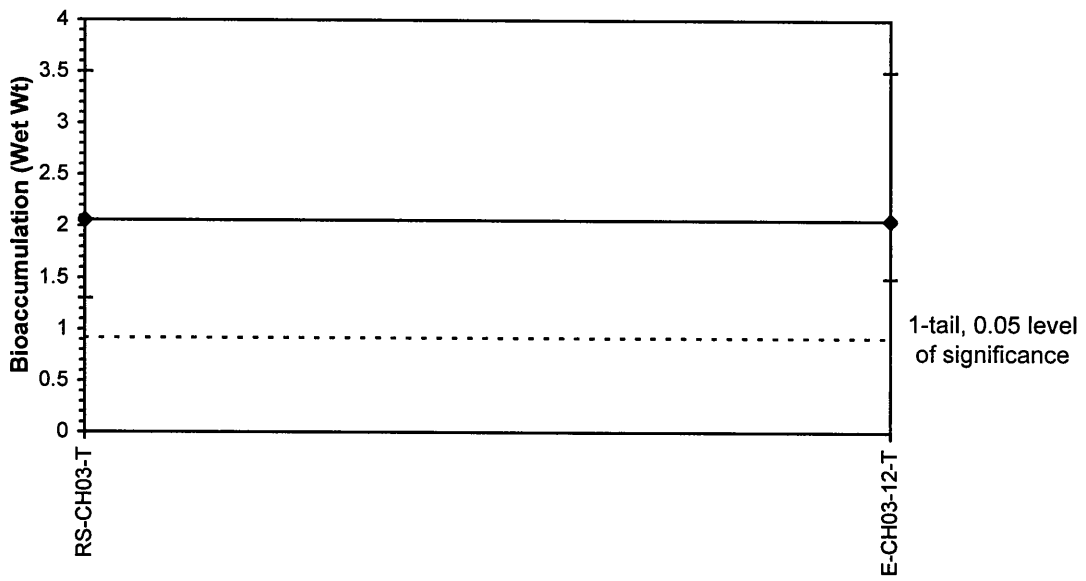
Conc-ppb	1	2	3	4	5
RS-CH03-T	3.5000	2.2000	2.0000	1.3000	1.3000
E-CH03-12-T	3.5000	1.5000	1.5000	2.2000	1.6000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.0600	0.0000	1.1941	1.1168	1.3002	6.557	5			
E-CH03-12-T	2.0600	0.0000	1.1984	1.1503	1.3002	5.436	5	0.096	1.860	0.0847

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.89663	0.781	0.50178	-1.0572
F-Test indicates equal variances (p = 0.73)	1.44434	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.05246	0	4.8E-05	0.00519	0.92596	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280PANwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta

Comments: Phenanthrene, µg/Kg

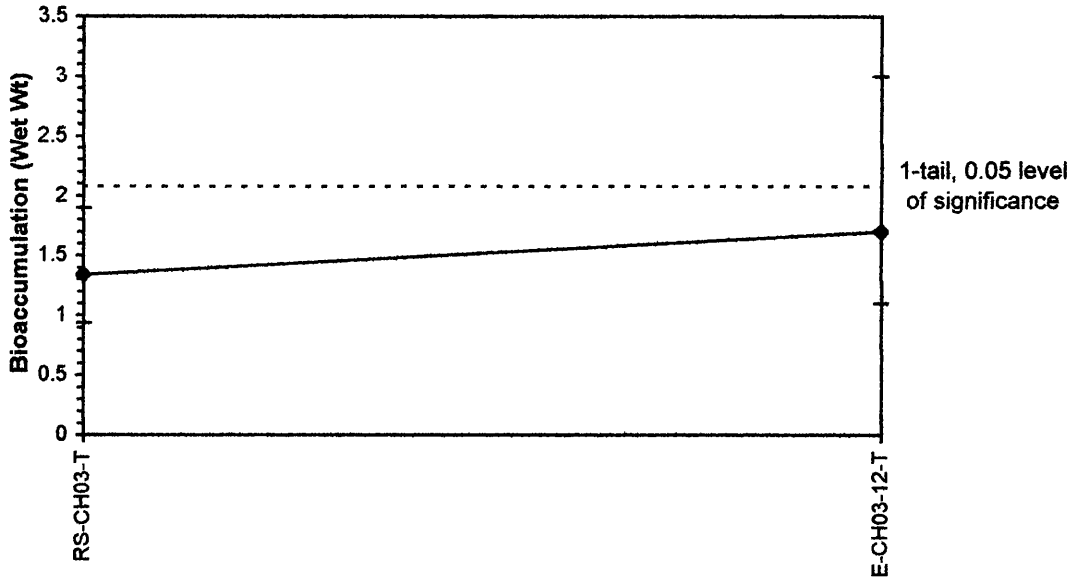
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.2000	1.9000	1.7000	0.9700	0.9400
E-CH03-12-T	3.0000	1.8000	1.1000	1.4000	1.2000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.3420	0.0000	1.3420	0.9400	1.9000	32.474	5			
E-CH03-12-T	1.7000	-1.0468	1.7000	1.1000	3.0000	45.565	5	0.901	1.860	0.7391

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.87779	0.781	1.28883	1.35451
F-Test indicates equal variances (p = 0.29)	3.15922	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.73912	0	0.32041	0.39496	0.39406	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Wet Wt)

Start Date:	4/18/2003	Test ID:	280PYRwwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta
Comments:	Pyrene, µg/Kg				

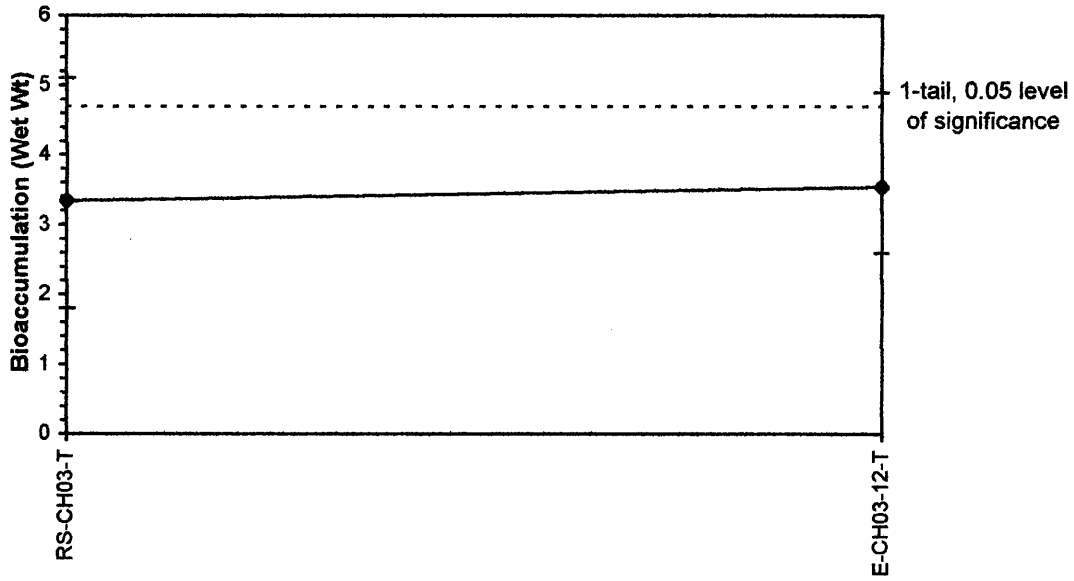
Conc-ppb	1	2	3	4	5
RS-CH03-T	3.5000	5.1000	3.8000	2.5000	1.8000
E-CH03-12-T	4.9000	4.4000	2.8000	2.6000	3.0000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	3.3400	0.0000	3.3400	1.8000	5.1000	37.907	5			
E-CH03-12-T	3.5400	-0.0855	3.5400	2.6000	4.9000	29.330	5	0.273	1.860	1.3617

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94866	0.781	0.32744	-1.127
F-Test indicates equal variances (p = 0.71)	1.48701	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	1.36167	0	0.1	1.3405	0.79167	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by

E 4

***M. nasuta* Dry Weight**

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280DNBdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Di-n-butyltin, µg/kg				

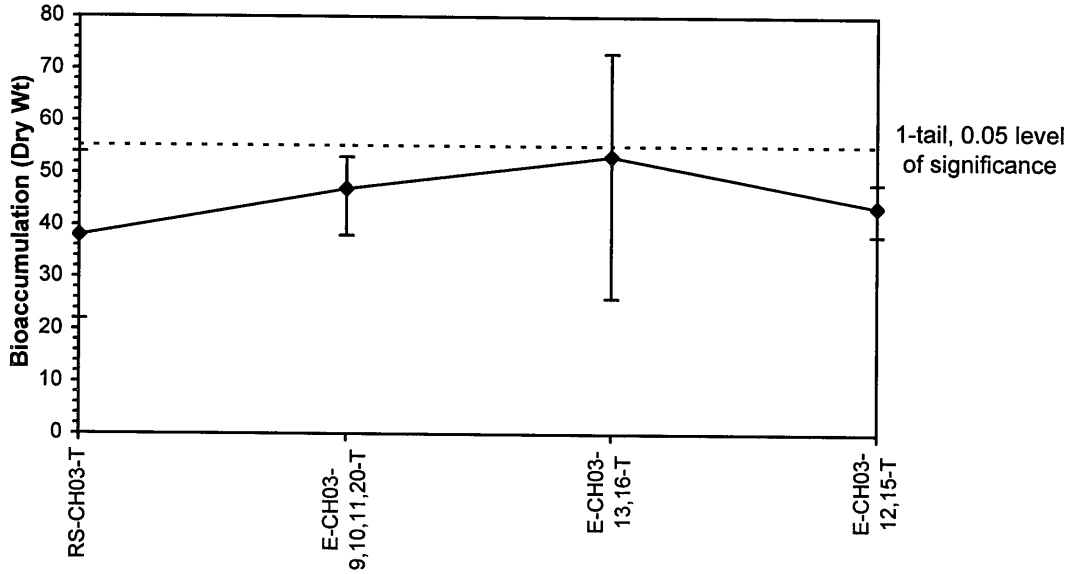
Conc-ppb	1	2	3	4	5
RS-CH03-T	22.000	29.000	42.000	54.000	43.000
3-9,10,11,20-T	53.000	38.000	50.000	53.000	41.000
CH03-13,16-T	49.000	71.000	73.000	26.000	47.000
CH03-12,15-T	38.000	43.000	45.000	48.000	44.000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	38.000	0.0000	38.000	22.000	54.000	33.131	5			
3-9,10,11,20-T	47.000	-0.2432	47.000	38.000	53.000	14.969	5	1.164	2.230	17.237
CH03-13,16-T	53.200	-0.4108	53.200	26.000	73.000	36.458	5	1.966	2.230	17.237
CH03-12,15-T	43.600	-0.1514	43.600	38.000	48.000	8.364	5	0.724	2.230	17.237

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96118	0.868	-0.3377	0.81461
Bartlett's Test indicates equal variances (p = 0.03)	9.20233	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	17.2375	0	202.317	149.375	0.29225	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: _____

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280NBTdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	n-Butyltin, µg/Kg				

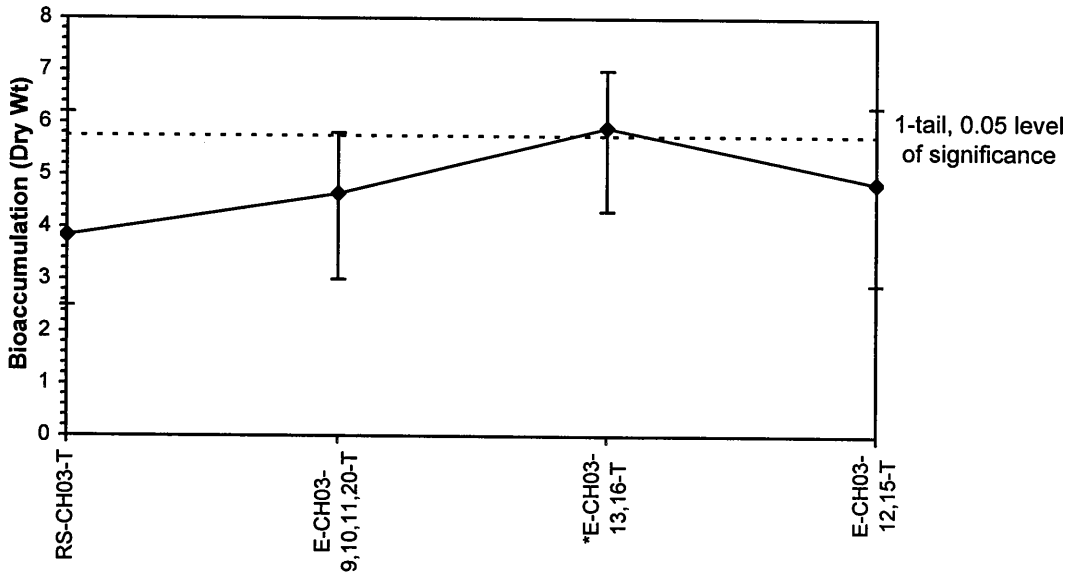
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.8000	2.5000	3.2000	6.2000	4.5000
3-9,10,11,20-T	5.5000	4.1000	4.8000	5.8000	3.0000
CH03-13,16-T	4.9000	7.0000	6.7000	4.3000	6.6000
CH03-12,15-T	2.9000	6.3000	6.1000	5.1000	3.8000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	3.8400	0.0000	3.8400	2.5000	6.2000	39.691	5			
3-9,10,11,20-T	4.6400	-0.2817	4.6400	3.0000	5.8000	24.316	5	0.941	2.230	1.8960
CH03-13,16-T	5.9000	-0.7254	5.9000	4.3000	7.0000	20.585	5	2.423	2.230	1.8960
CH03-12,15-T	4.8400	-0.3521	4.8400	2.9000	6.3000	30.352	5	1.176	2.230	1.8960

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94587	0.868	0.03318	-1.1214
Bartlett's Test indicates equal variances (p = 0.93)	0.45337	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	1.89602	0	3.59783	1.80725	0.15601	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	2804BTdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Tetra-n-butyltin, µg/Kg				

Conc-ppb	1	2	3	4	5
RS-CH03-T	2.8000	2.5000	2.5000	3.7000	4.5000
3-9,10,11,20-T	2.9000	2.8000	2.8000	3.0000	3.0000
CH03-13,16-T	3.9000	4.2000	4.6000	4.3000	4.1000
CH03-12,15-T	2.9000	2.9000	4.0000	2.6000	2.1000

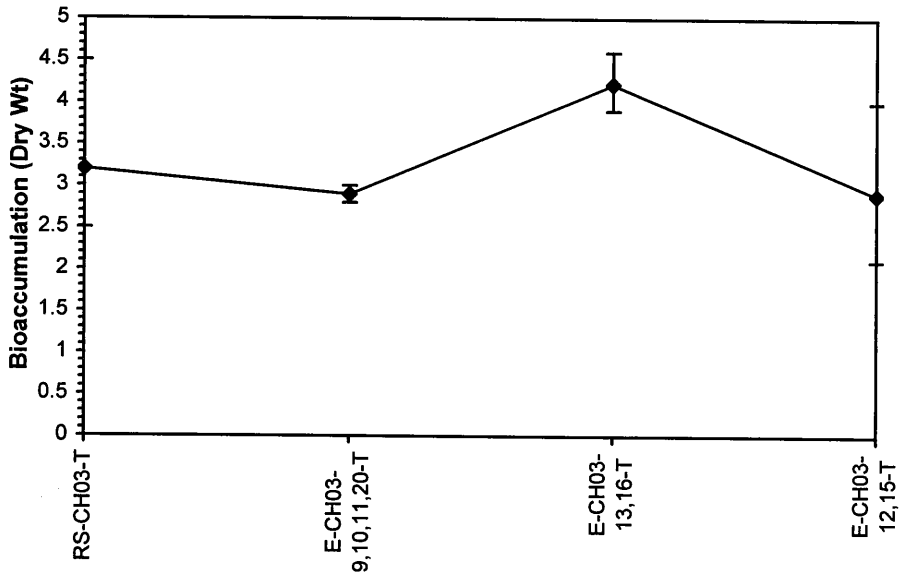
			Transform: Untransformed					Rank	1-Tailed
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	3.2000	0.0000	3.2000	2.5000	4.5000	27.422	5		
3-9,10,11,20-T	2.9000	0.1364	2.9000	2.8000	3.0000	3.448	5	26.00	17.00
CH03-13,16-T	4.2200	-0.4636	4.2200	3.9000	4.6000	6.134	5	19.00	17.00
CH03-12,15-T	2.9000	0.1364	2.9000	2.1000	4.0000	24.014	5	28.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.90725	0.868	0.93919	1.36474
Bartlett's Test indicates unequal variances (p = 2.76E-03)	14.1093	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	2803BTdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Tri-n-butyltin, µg/Kg				

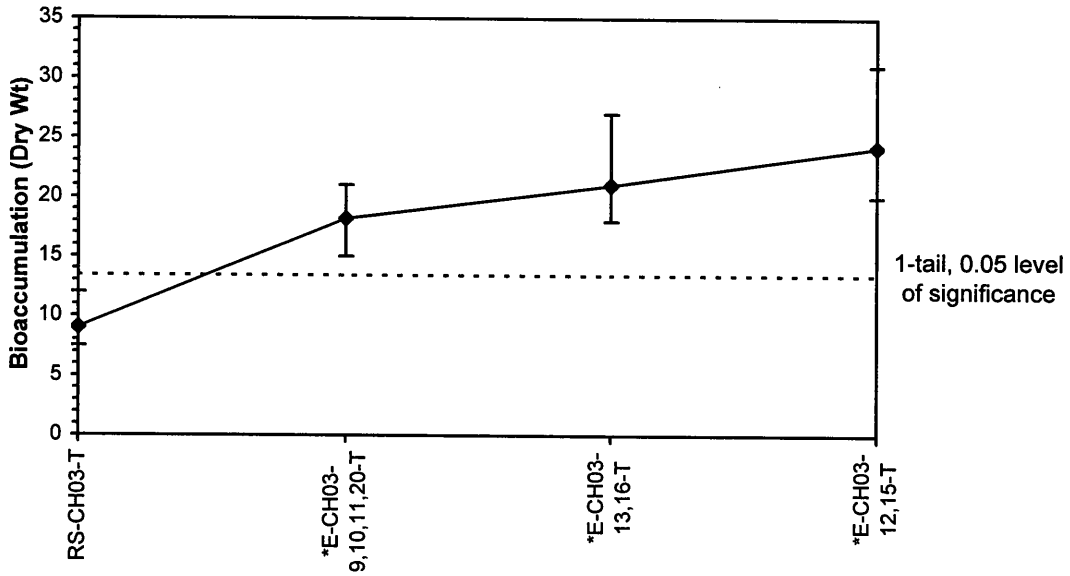
Conc-ppb	1	2	3	4	5
RS-CH03-T	8.500	7.500	7.600	9.700	12.000
3-9,10,11,20-T	21.000	18.000	19.000	18.000	15.000
CH03-13,16-T	18.000	19.000	21.000	20.000	27.000
CH03-12,15-T	23.000	25.000	31.000	22.000	20.000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	9.060	0.0000	9.060	7.500	12.000	20.599	5			
3-9,10,11,20-T	18.200	-1.1340	18.200	15.000	21.000	11.912	5	4.665	2.230	4.369
CH03-13,16-T	21.000	-1.4814	21.000	18.000	27.000	16.836	5	6.094	2.230	4.369
CH03-12,15-T	24.200	-1.8784	24.200	20.000	31.000	17.385	5	7.728	2.230	4.369

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.91483	0.868	1.06099	1.0204
Bartlett's Test indicates equal variances (p = 0.38)	3.08117	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	4.36892	0	212.251	9.59575	6.2E-06	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280AldwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Aluminum, mg/Kg				

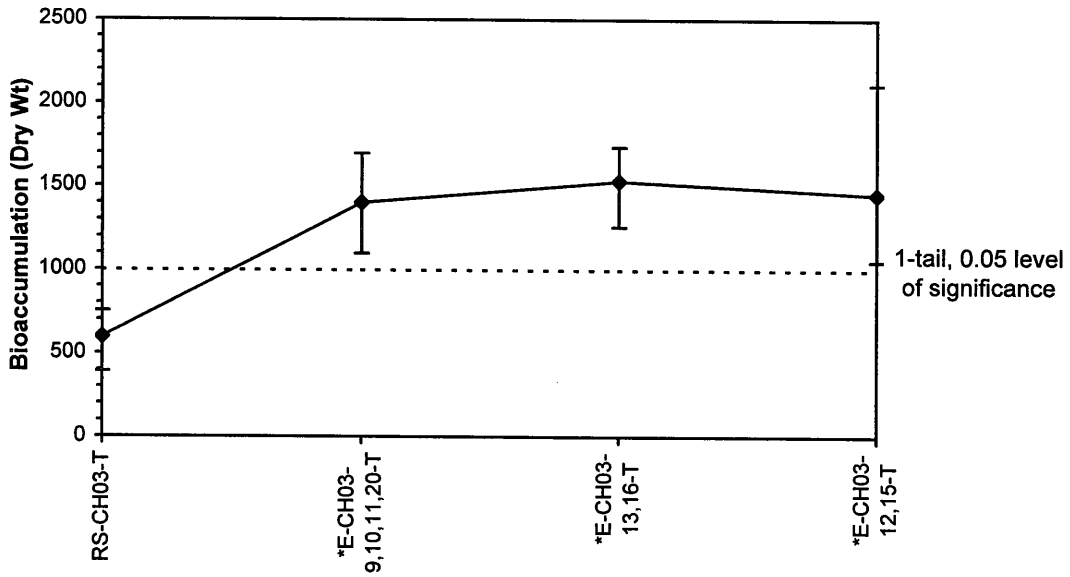
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	391	750	751	419	673
3-9,10,11,20-T	1230	1700	1100	1580	1410
CH03-13,16-T	1260	1440	1700	1530	1740
CH03-12,15-T	1140	1300	2110	1650	1050

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	596.8	0.0000	596.8	391	751	29.859	5			
3-9,10,11,20-T	1404	-1.3548	1404	1100	1700	17.494	5	4.519	2.230	398.363
CH03-13,16-T	1534	-1.5730	1534	1260	1740	12.788	5	5.246	2.230	398.363
CH03-12,15-T	1450	-1.4320	1450	1050	2110	29.946	5	4.776	2.230	398.363

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94517	0.868	0.60999	0.57417
Bartlett's Test indicates equal variances (p = 0.28)	3.87493	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	398.363	0	951641	79778.8	2.4E-04	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

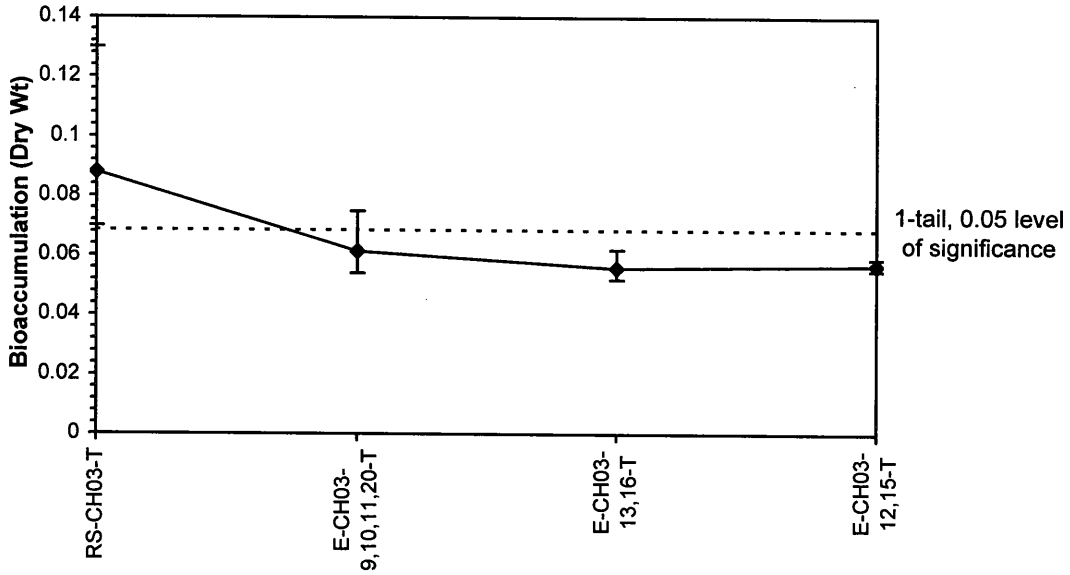
Start Date:	4/18/2003	Test ID:	280SbdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Antimony, mg/kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0800	0.0700	0.0700	0.1300	0.0900
3-9,10,11,20-T	0.0630	0.0540	0.0750	0.0550	0.0600
CH03-13,16-T	0.0530	0.0520	0.0540	0.0620	0.0580
CH03-12,15-T	0.0590	0.0550	0.0560	0.0570	0.0570

			Transform: Reciprocal						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.0880	0.0000	11.975	7.692	14.286	22.886	5			
3-9,10,11,20-T	0.0614	-0.0292	16.515	13.333	18.519	12.611	5	-3.877	2.230	2.611
CH03-13,16-T	0.0558	-0.0353	17.998	16.129	19.231	7.144	5	-5.144	2.230	2.611
CH03-12,15-T	0.0568	-0.0342	17.615	16.949	18.182	2.591	5	-4.817	2.230	2.611

Auxiliary Tests	Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.9289		0.868		-0.9366	1.11126
Bartlett's Test indicates equal variances (p = 0.03)	9.09077		11.3449			
Hypothesis Test (1-tail, 0.05)	**MSDu**	**MSDp**	**MSB**	**MSE**	**F-Prob**	**df**
Dunnett's Test indicates no significant differences	-0.0149	0	38.4367	3.42744	3.3E-04	3, 16
Treatments vs RS-CH03-T						

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: JM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280AsdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Arsenic, mg/kg				

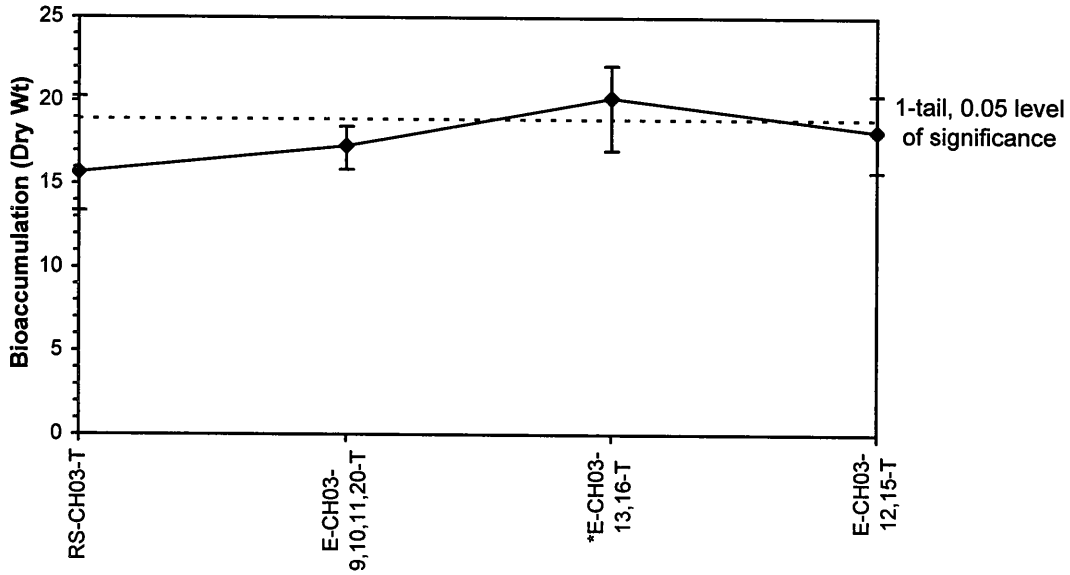
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	13.800	13.700	13.400	20.300	17.500
3-9,10,11,20-T	15.900	16.200	18.500	17.900	18.200
CH03-13,16-T	21.300	17.000	19.300	22.100	21.200
CH03-12,15-T	18.800	16.100	15.700	19.900	20.300

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	15.740	0.0000	15.740	13.400	20.300	19.399	5			
3-9,10,11,20-T	17.340	-0.1085	17.340	15.900	18.500	6.928	5	1.144	2.230	3.119
CH03-13,16-T	20.180	-0.3012	20.180	17.000	22.100	10.176	5	3.175	2.230	3.119
CH03-12,15-T	18.160	-0.1642	18.160	15.700	20.300	11.782	5	1.730	2.230	3.119

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93837	0.868	0.26576	-0.4896
Bartlett's Test indicates equal variances (p = 0.41)	2.85964	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	3.11889	0	17.0618	4.89025	0.04043	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CddwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Cadmium, mg/kg				

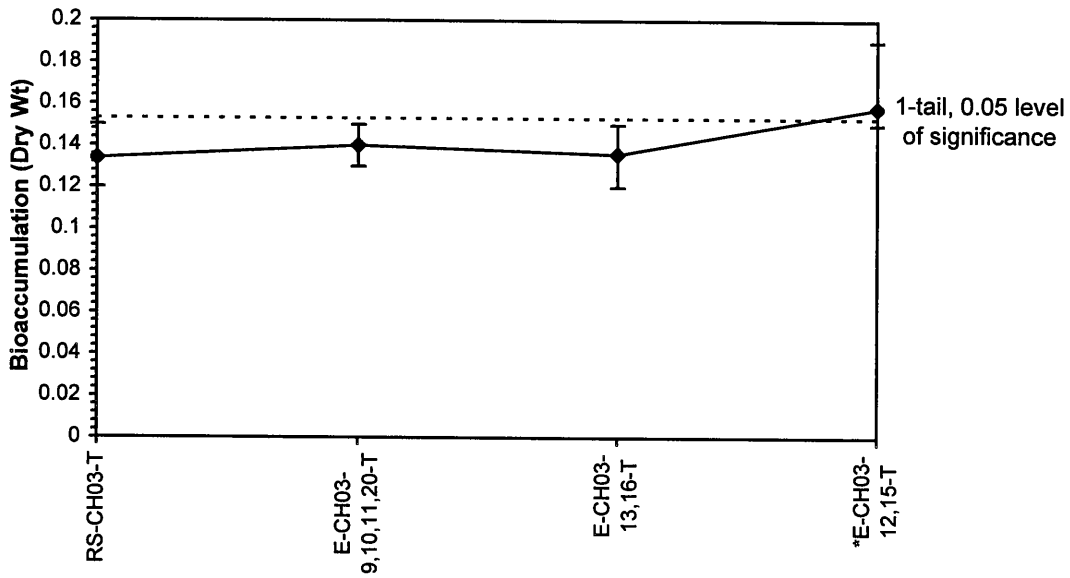
Conc-mg/L	1	2	3	4	5
RS-CH03-T	0.1200	0.1500	0.1500	0.1200	0.1300
3-9,10,11,20-T	0.1300	0.1400	0.1400	0.1400	0.1500
CH03-13,16-T	0.1300	0.1500	0.1200	0.1400	0.1400
CH03-12,15-T	0.1500	0.1900	0.1500	0.1500	0.1500

			Transform: Untransformed						1-Tailed	
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1340	0.0000	0.1340	0.1200	0.1500	11.318	5			
3-9,10,11,20-T	0.1400	0.0069	0.1400	0.1300	0.1500	5.051	5	0.702	2.230	0.0191
CH03-13,16-T	0.1360	0.0023	0.1360	0.1200	0.1500	8.384	5	0.234	2.230	0.0191
CH03-12,15-T	0.1580	0.0277	0.1580	0.1500	0.1900	11.322	5	2.809	2.230	0.0191

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.91836	0.868	0.97977	0.73933
Bartlett's Test indicates equal variances (p = 0.38)	3.0468	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.01905	0	0.0006	0.00018	0.04795	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CrdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Chromium, mg/kg				

Conc-mg/L	1	2	3	4	5
RS-CH03-T	36.000	22.300	46.500	56.900	32.500
3-9,10,11,20-T	23.900	20.200	19.600	23.900	18.600
CH03-13,16-T	5.000	4.300	4.500	2.300	2.400
CH03-12,15-T	7.100	14.000	11.900	23.200	5.200

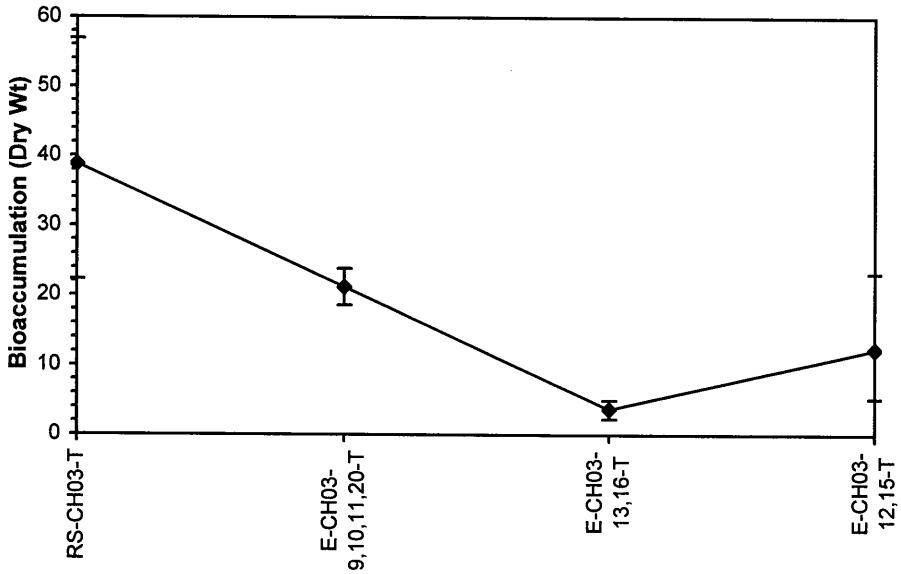
			Transform: Untransformed					Rank	1-Tailed
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	38.840	0.0000	38.840	22.300	56.900	34.222	5		
3-9,10,11,20-T	21.240	0.4651	21.240	18.600	23.900	11.745	5	38.00	17.00
CH03-13,16-T	3.700	0.9286	3.700	2.300	5.000	34.026	5	40.00	17.00
CH03-12,15-T	12.280	0.7019	12.280	5.200	23.200	57.482	5	39.00	17.00

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.92463	0.868	0.39877	2.51677
Bartlett's Test indicates unequal variances (p = 4.87E-04)	17.7858	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences
Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CudwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Copper, mg/kg				

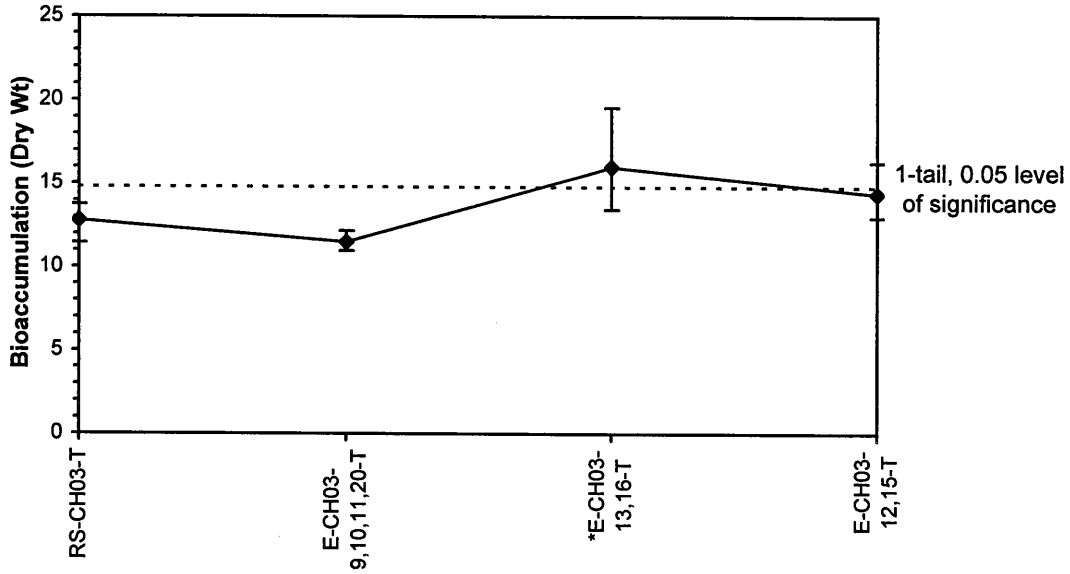
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	12.300	12.700	11.400	13.700	13.700
3-9,10,11,20-T	12.000	12.200	11.500	11.000	11.000
CH03-13,16-T	14.700	17.100	13.500	15.300	19.600
CH03-12,15-T	14.200	14.800	16.300	13.000	13.800

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	12.760	0.0000	12.760	11.400	13.700	7.671	5			
3-9,10,11,20-T	11.540	0.1037	11.540	11.000	12.200	4.809	5	-1.327	2.230	2.049
CH03-13,16-T	16.040	-0.2789	16.040	13.500	19.600	14.816	5	3.569	2.230	2.049
CH03-12,15-T	14.420	-0.1412	14.420	13.000	16.300	8.583	5	1.806	2.230	2.049

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95636	0.868	0.73539	1.69746
Bartlett's Test indicates equal variances (p = 0.06)	7.43468	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	2.04942	0	19.238	2.1115	9.4E-04	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280PbdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Lead, mg/kg				

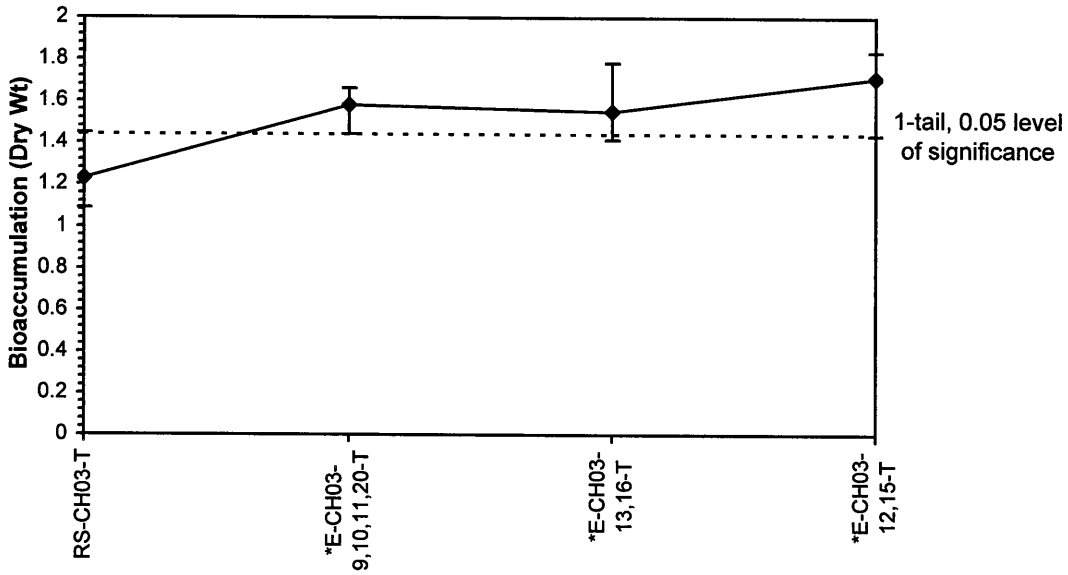
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	1.0900	1.4500	1.3800	1.1100	1.1300
3-9,10,11,20-T	1.4900	1.6600	1.4400	1.6600	1.6400
CH03-13,16-T	1.4100	1.5200	1.4900	1.5300	1.7800
CH03-12,15-T	1.4400	1.7800	1.7800	1.8400	1.7300

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.2320	0.0000	1.2320	1.0900	1.4500	13.756	5			
3-9,10,11,20-T	1.5780	-1.4914	1.5780	1.4400	1.6600	6.652	5	3.774	2.230	0.2044
CH03-13,16-T	1.5460	-1.3534	1.5460	1.4100	1.7800	8.993	5	3.425	2.230	0.2044
CH03-12,15-T	1.7140	-2.0776	1.7140	1.4400	1.8400	9.221	5	5.257	2.230	0.2044

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.9713	0.868	-0.0496	-0.4753
Bartlett's Test indicates equal variances (p = 0.83)	0.88186	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.20444	0	0.20766	0.02101	6.3E-04	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280HgdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta
Comments:	Mercury, mg/kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0700	0.0700	0.0700	0.1100	0.0800
3-9,10,11,20-T	0.0500	0.0600	0.0600	0.0600	0.0700
CH03-13,16-T	0.0500	0.0500	0.0500	0.0500	0.0500
CH03-12,15-T	0.0500	0.0600	0.0700	0.0500	0.0300

			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	0.0800	0.0000	0.0800	0.0700	0.1100	21.651	5		
3-9,10,11,20-T	0.0600	-0.0217	0.0600	0.0500	0.0700	11.785	5	38.50	17.00
CH03-13,16-T	0.0500	-0.0326	0.0500	0.0500	0.0500	0.000	5	40.00	17.00
CH03-12,15-T	0.0520	-0.0304	0.0520	0.0300	0.0700	28.524	5	38.50	17.00

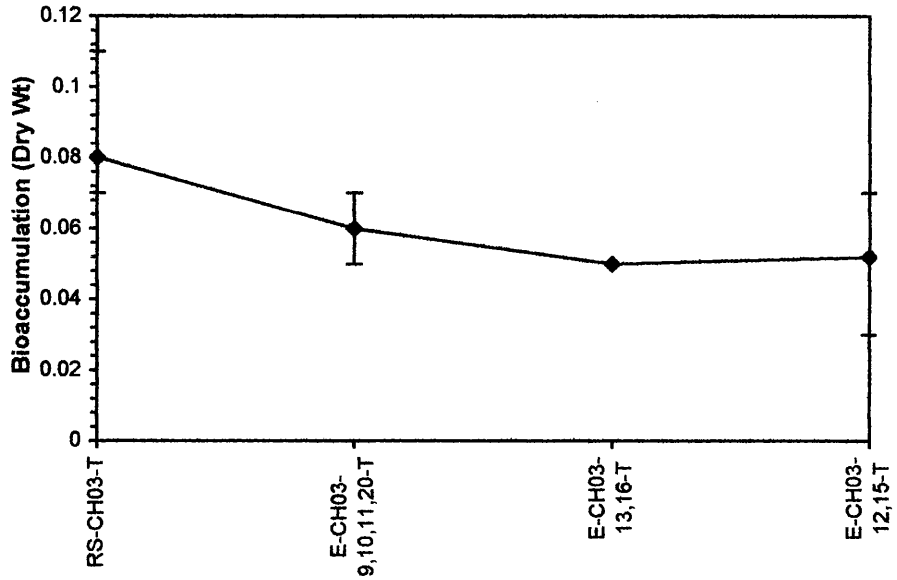
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.87424	0.868	0.8755	2.49759
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280NidwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta
Comments:	Nickel, mg/Kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	19.500	14.000	27.100	30.200	17.700
3-9,10,11,20-T	13.500	11.100	11.700	14.400	11.000
CH03-13,16-T	6.460	4.290	3.760	3.370	3.310
CH03-12,15-T	5.540	8.990	9.460	12.700	5.100

			Transform: Untransformed					Rank	1-Tailed
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
RS-CH03-T	21.700	0.0000	21.700	14.000	30.200	31.045	5		
3-9,10,11,20-T	12.340	0.4522	12.340	11.000	14.400	12.378	5	39.00	17.00
CH03-13,16-T	4.238	0.8436	4.238	3.310	6.460	30.727	5	40.00	17.00
CH03-12,15-T	8.358	0.6445	8.358	5.100	12.700	37.370	5	40.00	17.00

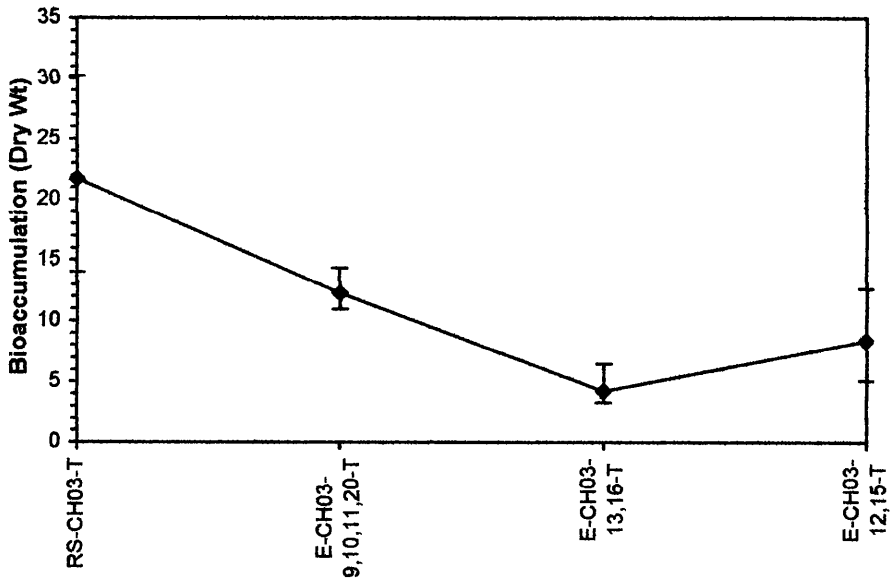
Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96704	0.868	0.37515	1.32542
Bartlett's Test indicates unequal variances (p = 7.44E-03)	11.9841	11.3449		

Hypothesis Test (1-tail, 0.05)

Steel's Many-One Rank Test indicates no significant differences

Treatments vs RS-CH03-T

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: GM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

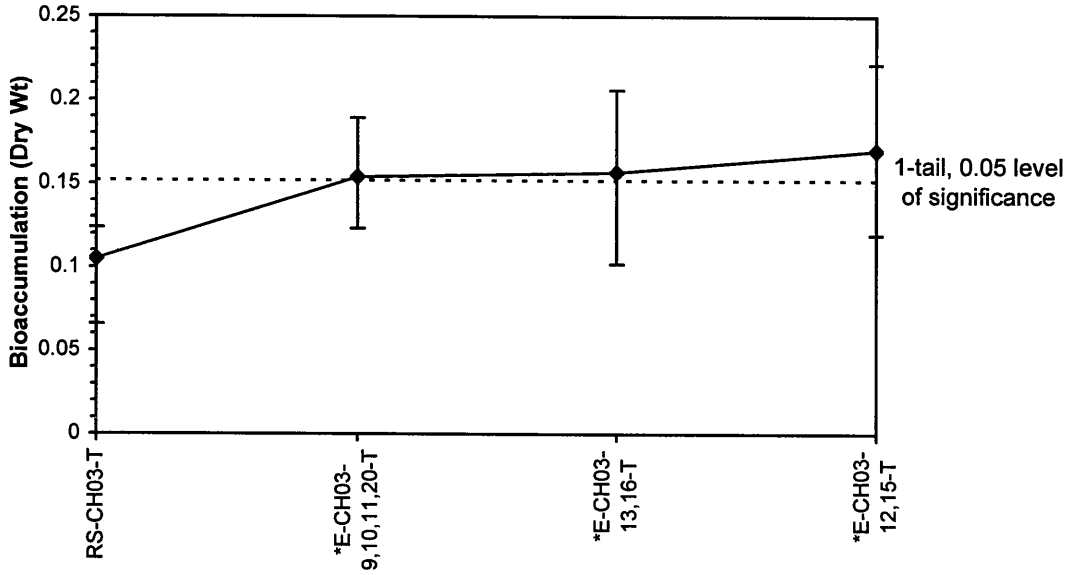
Start Date:	4/18/2003	Test ID:	280AgdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Silver, mg/Kg				

Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	0.0660	0.1000	0.1240	0.1160	0.1200
3-9,10,11,20-T	0.1330	0.1890	0.1630	0.1610	0.1230
CH03-13,16-T	0.1370	0.1020	0.2060	0.1510	0.1890
CH03-12,15-T	0.1480	0.1780	0.1190	0.1820	0.2210

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.1052	0.0000	0.1052	0.0660	0.1240	22.559	5			
3-9,10,11,20-T	0.1538	0.0543	0.1538	0.1230	0.1890	17.069	5	2.305	2.230	0.0470
CH03-13,16-T	0.1570	0.0579	0.1570	0.1020	0.2060	26.427	5	2.456	2.230	0.0470
CH03-12,15-T	0.1696	0.0720	0.1696	0.1190	0.2210	22.632	5	3.054	2.230	0.0470

Auxiliary Tests	Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.96751		0.868		-0.1392	-0.6476
Bartlett's Test indicates equal variances (p = 0.66)	1.59239		11.3449			
Hypothesis Test (1-tail, 0.05)	**MSDu**	**MSDp**	**MSB**	**MSE**	**F-Prob**	**df**
Dunnett's Test indicates significant differences Treatments vs RS-CH03-T	0.04703	0	0.004	0.00111	0.03678	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ZndwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Zinc, mg/Kg				

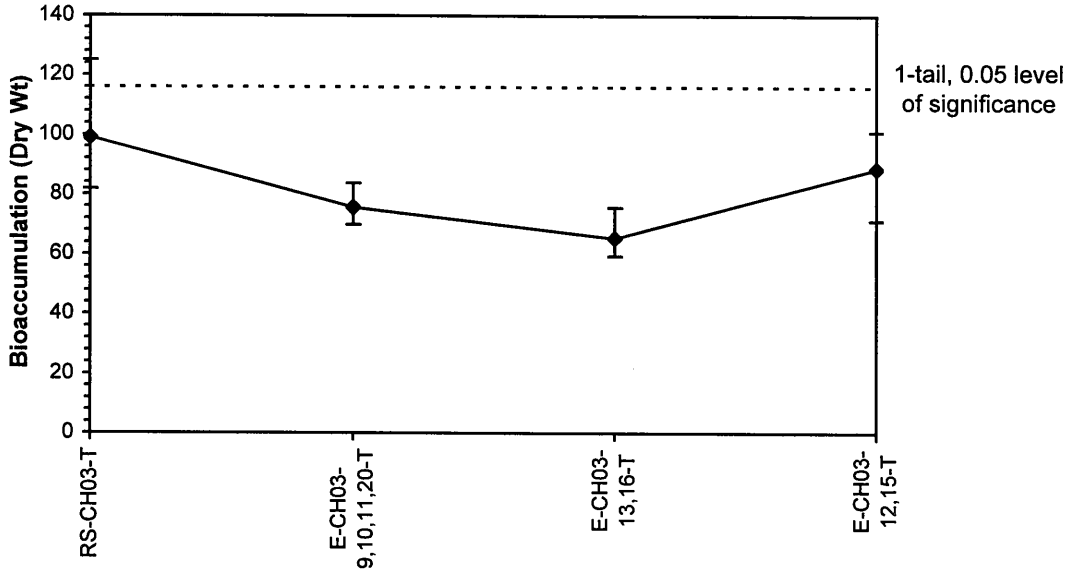
Conc-mg/Kg	1	2	3	4	5
RS-CH03-T	125.000	81.800	89.100	87.500	112.000
3-9,10,11,20-T	69.800	78.600	69.900	75.800	83.700
CH03-13,16-T	66.900	75.600	62.000	63.000	59.400
CH03-12,15-T	87.300	95.100	88.300	101.000	71.200

			Transform: Untransformed						1-Tailed	
Conc-mg/Kg	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	99.080	0.0000	99.080	81.800	125.000	18.686	5			
3-9,10,11,20-T	75.560	0.2398	75.560	69.800	83.700	7.851	5	-3.192	2.230	16.433
CH03-13,16-T	65.380	0.3436	65.380	59.400	75.600	9.662	5	-4.573	2.230	16.433
CH03-12,15-T	88.580	0.1071	88.580	71.200	101.000	12.629	5	-1.425	2.230	16.433

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.97152	0.868	0.46915	0.50786
Bartlett's Test indicates equal variances (p = 0.10)	6.26543	11.3449		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test indicates no significant differences Treatments vs RS-CH03-T	16.4325	0	1087.72	135.75	0.00174	3, 16

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	2802MNdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	2-Methylnaphthalene, µg/kg				

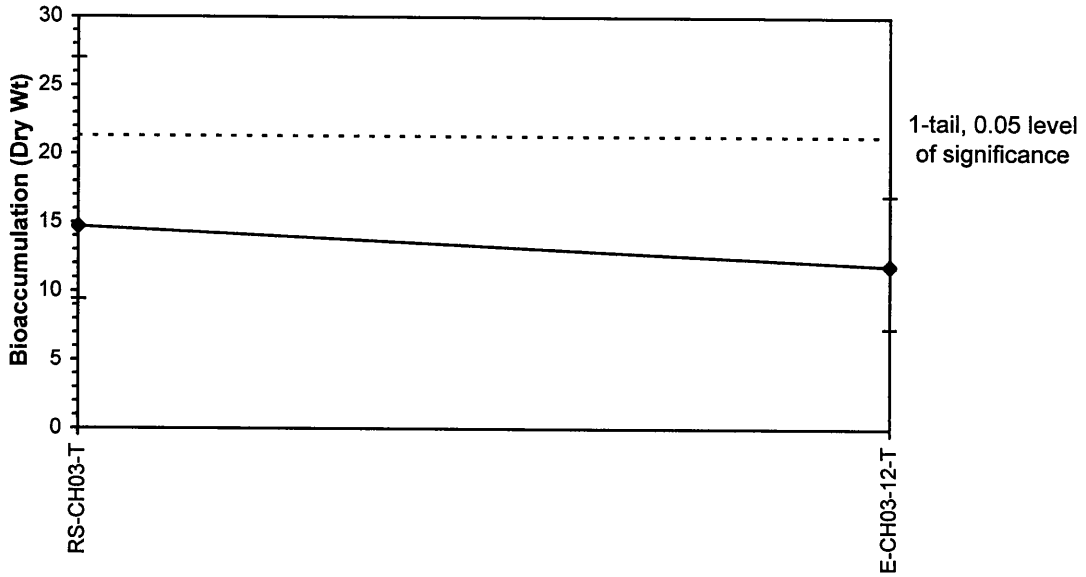
Conc-ppb	1	2	3	4	5
RS-CH03-T	27.000	13.000	13.000	9.400	11.000
E-CH03-12-T	17.000	9.300	14.000	12.000	7.400

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	14.680	0.0000	14.6800	9.4000	27.0000	48.029	5			
E-CH03-12-T	11.940	0.2003	11.9400	7.4000	17.0000	31.735	5	-0.765	1.860	6.6566

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.85693	0.781	1.54449	2.43327
F-Test indicates equal variances (p = 0.26)	3.46232	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	6.65656	0	18.769	32.035	0.46599	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ACLdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Acenaphthylene, µg/kg				

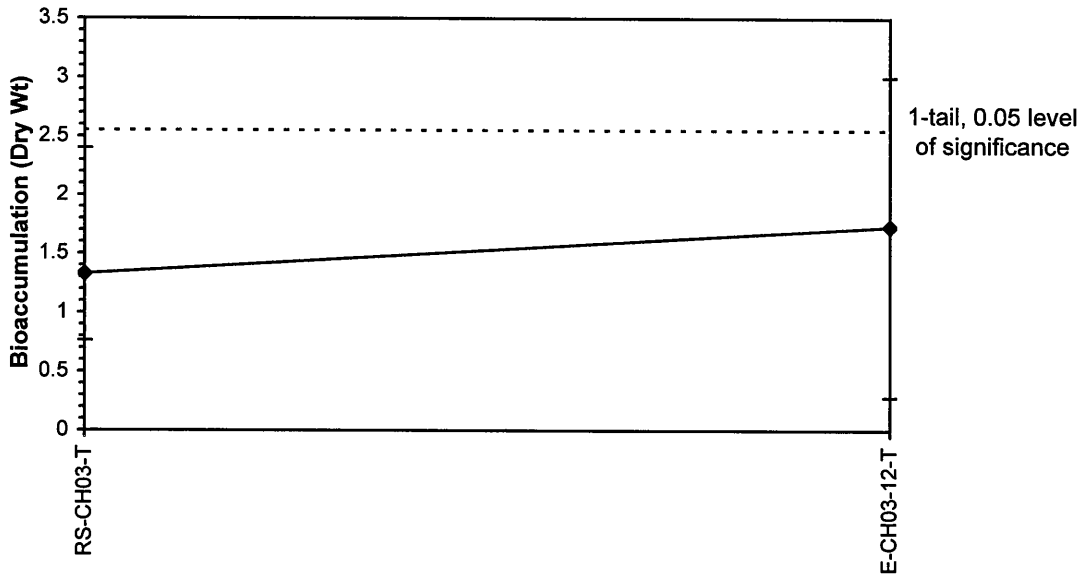
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.8700	2.4000	0.7600	1.2000	1.4000
E-CH03-12-T	3.0000	0.3800	2.8000	2.2000	0.2800

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.3260	0.0000	1.3260	0.7600	2.4000	49.210	5			
E-CH03-12-T	1.7320	-1.2454	1.7320	0.2800	3.0000	75.851	5	0.619	1.860	1.2199

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93074	0.781	-0.18	-1.1898
F-Test indicates equal variances (p = 0.20)	4.05355	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	1.21987	0	0.41209	1.07585	0.55319	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ANTdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Anthracene, µg/kg				

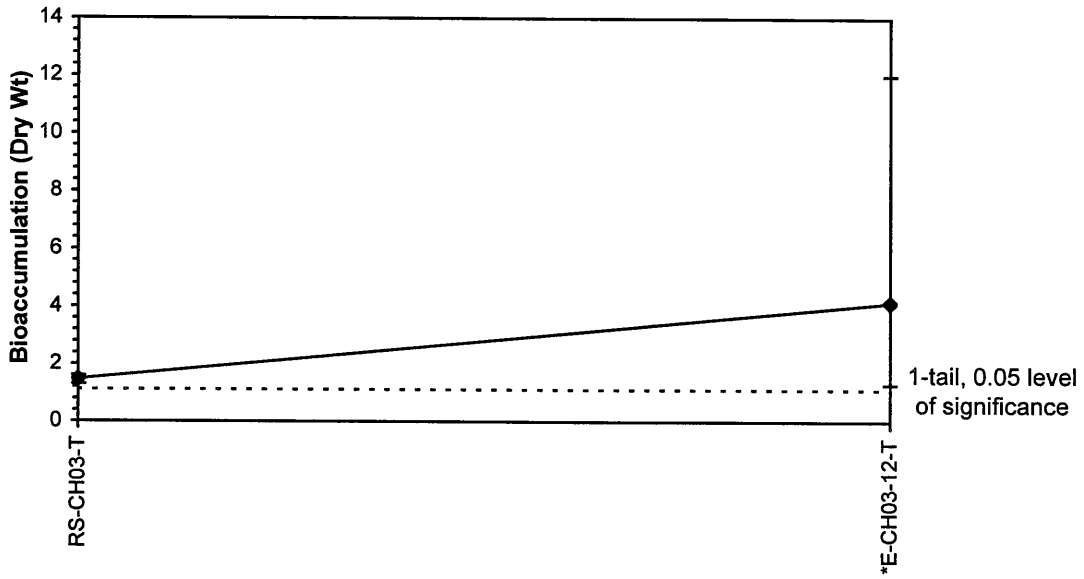
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.3000	1.5000	1.6000	1.6000	1.4000
E-CH03-12-T	12.0000	2.2000	2.7000	2.5000	1.3000

			Transform: Reciprocal						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.4800	0.0000	0.6800	0.6250	0.7692	9.114	5			
*E-CH03-12-T	4.1400	-5.5417	0.4155	0.0833	0.7692	58.863	5	2.345	1.860	0.2098

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.87141	0.781	0.23325	3.27363
F-Test indicates equal variances (p = 0.02)	15.5714	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	-0.3467	0	0.17495	0.03183	0.04708	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280ACEdwMN	Sample ID:	218
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Acenaphthene, µg/Kg				

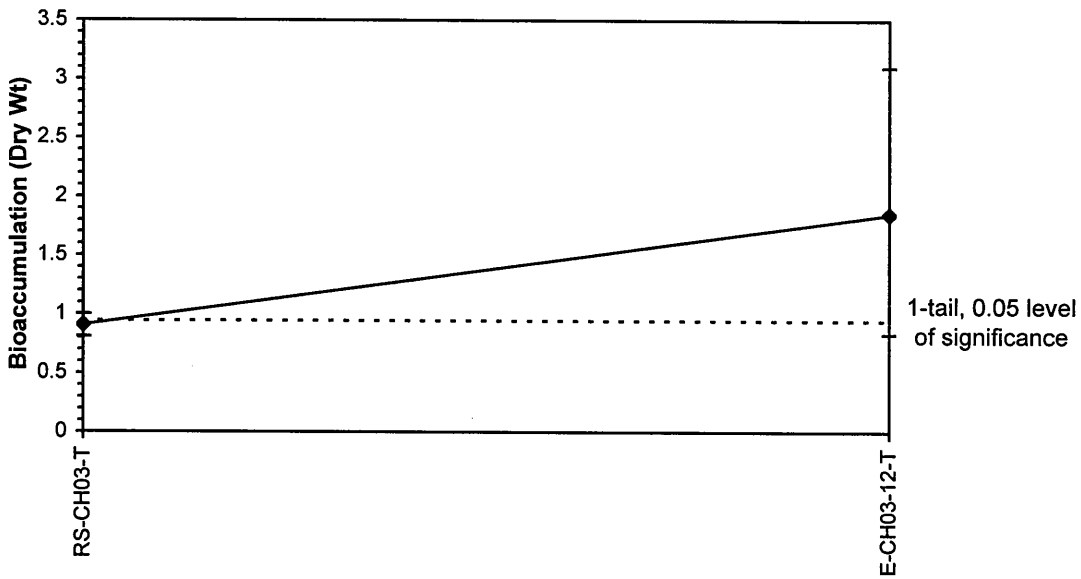
Conc-ppb	1	2	3	4	5
RS-CH03-T	0.8600	0.9100	1.0000	0.8100	0.9700
E-CH03-12-T	3.1000	1.3000	1.6000	2.4000	0.8300

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	0.9100	0.0000	1.2034	1.0472	1.3967	11.222	5			
E-CH03-12-T	1.8460	10.4000	1.1904	1.1168	1.2829	5.835	5	-0.191	1.860	0.1263

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.97489	0.781	0.4671	0.16794
F-Test indicates equal variances (p = 0.23)	3.77955	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.072	0	0.00042	0.01153	0.85296	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BAAdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benz(a)anthracene, µg/kg				

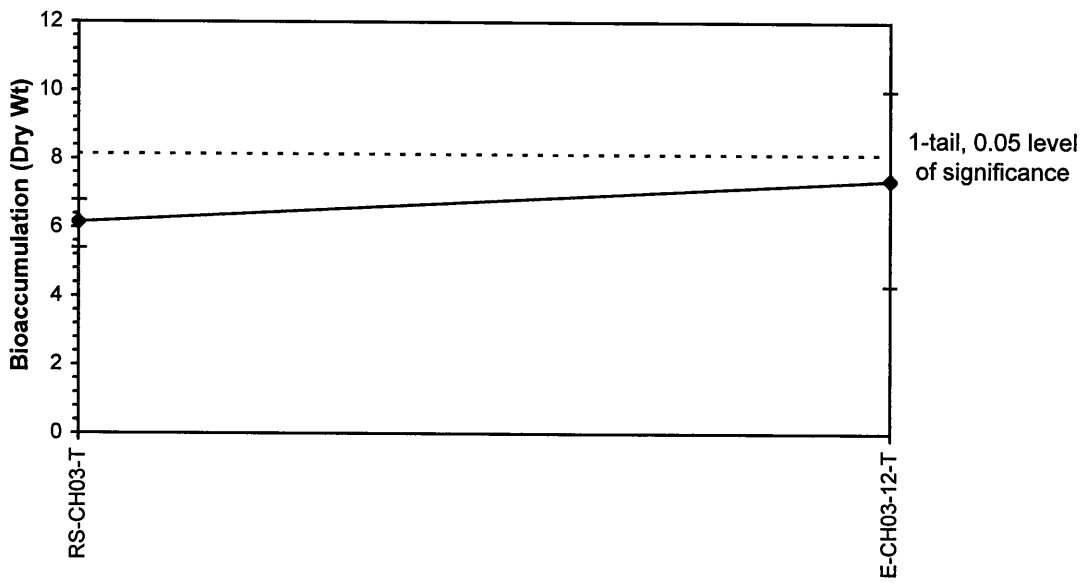
Conc-ppb	1	2	3	4	5
RS-CH03-T	6.8000	6.0000	5.9000	6.7000	5.4000
E-CH03-12-T	6.0000	7.6000	9.1000	10.0000	4.3000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	6.1600	0.0000	6.1600	5.4000	6.8000	9.508	5			
E-CH03-12-T	7.4000	-0.2403	7.4000	4.3000	10.0000	31.154	5	1.166	1.860	1.9781

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.97749	0.781	-0.351	0.86676
F-Test indicates equal variances (p = 0.02)	15.4956	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	1.97813	0	3.844	2.829	0.27732	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: _____

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BBFdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(b)fluoranthene, µg/kg				

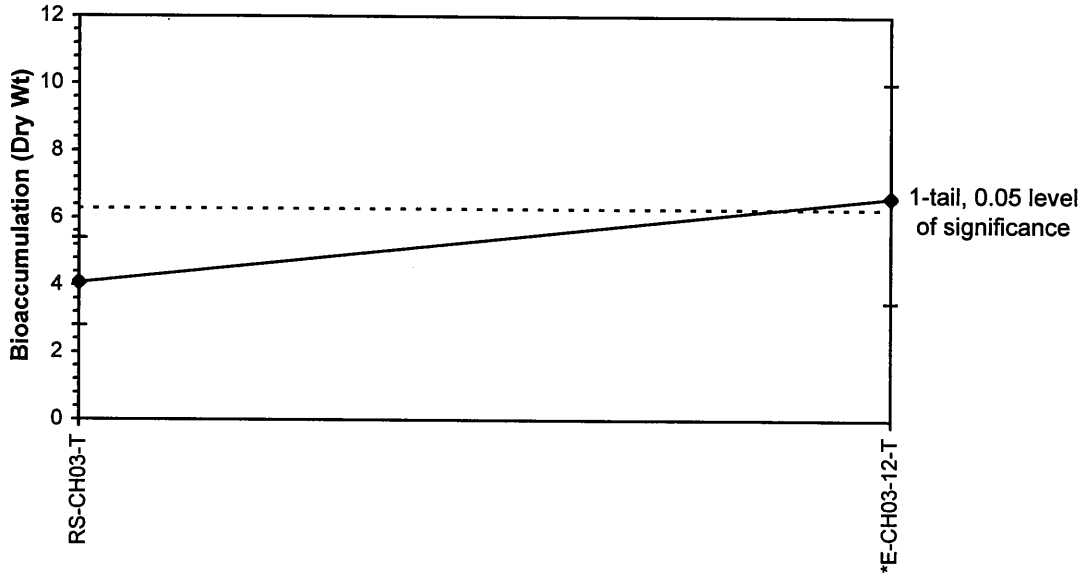
Conc-ppb	1	2	3	4	5
RS-CH03-T	4.3000	5.4000	4.2000	3.7000	2.8000
E-CH03-12-T	5.3000	6.6000	7.7000	10.0000	3.5000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	4.0800	0.0000	4.0800	2.8000	5.4000	23.213	5			
*E-CH03-12-T	6.6200	-0.8247	6.6200	3.5000	10.0000	37.054	5	2.160	1.860	2.1867

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.97152	0.781	0.18985	1.10203
F-Test indicates equal variances (p = 0.09)	6.70792	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	2.18669	0	16.129	3.457	0.06279	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BAPdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(a)pyrene, µg/kg				

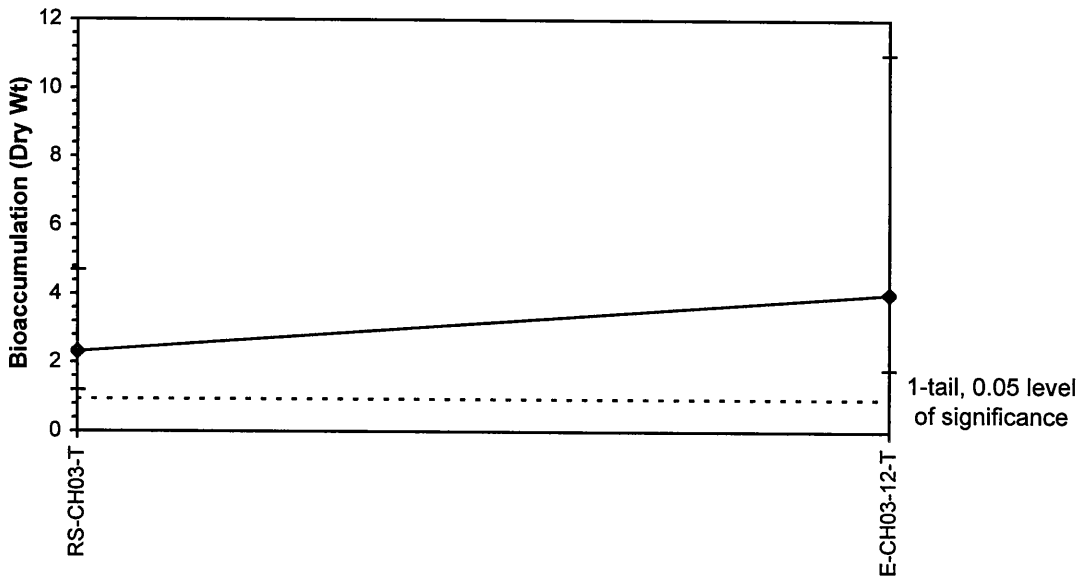
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.1000	4.7000	2.1000	1.5000	1.2000
E-CH03-12-T	2.1000	2.4000	2.8000	11.0000	1.8000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.3200	0.0000	1.2044	1.0968	1.3381	7.515	5			
E-CH03-12-T	4.0200	-1.2879	1.2673	1.1889	1.4195	7.092	5	1.102	1.860	0.1061

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.90123	0.781	0.88024	0.00915
F-Test indicates equal variances (p = 0.99)	1.01428	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.06209	0	0.00987	0.00814	0.30265	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: JM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BxPdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(g,h,i)perylene, µg/kg				

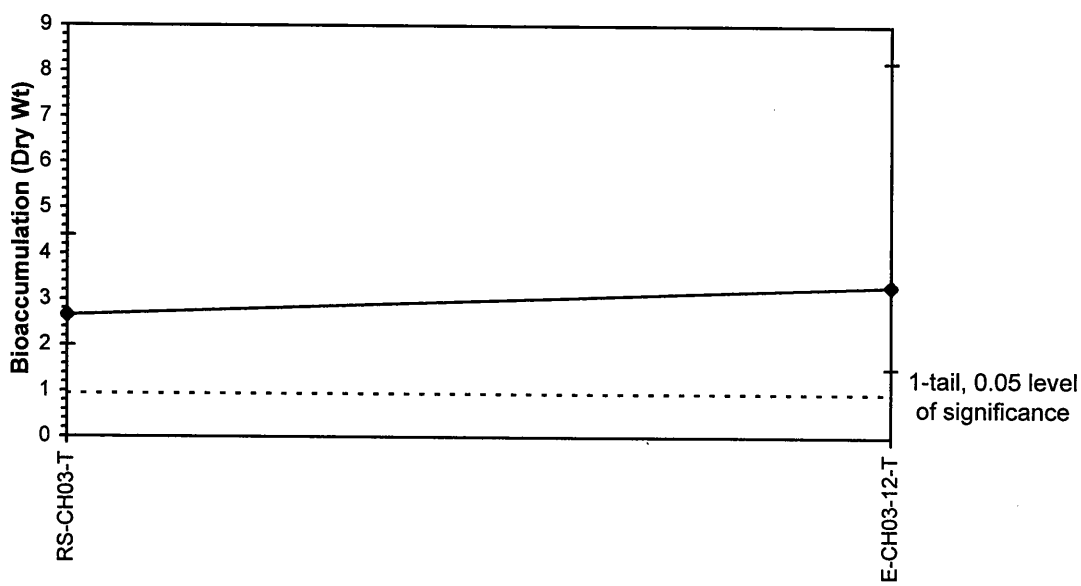
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.1000	4.4000	2.4000	2.0000	2.4000
E-CH03-12-T	1.7000	2.1000	3.0000	8.2000	1.5000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.6600	0.0000	1.2485	1.2094	1.3301	3.834	5			
E-CH03-12-T	3.3000	-0.3855	1.2439	1.1503	1.3953	7.829	5	-0.095	1.860	0.0902

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.92495	0.781	1.04112	1.01293
F-Test indicates equal variances (p = 0.20)	4.13855	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.04744	0	5.4E-05	0.00589	0.92639	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: JM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280BKFdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Benzo(k)fluoranthene, µg/kg				

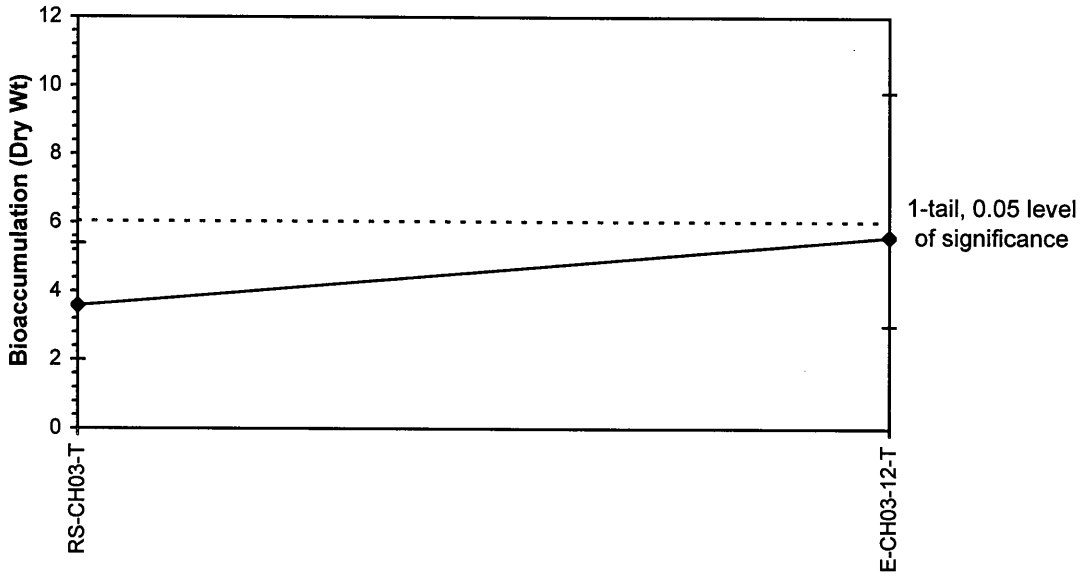
Conc-ppb	1	2	3	4	5
RS-CH03-T	3.4000	5.4000	3.9000	3.2000	2.0000
E-CH03-12-T	3.8000	4.9000	6.5000	9.8000	3.0000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	3.5800	0.0000	3.5800	2.0000	5.4000	34.461	5			
E-CH03-12-T	5.6000	-0.7829	5.6000	3.0000	9.8000	48.032	5	1.526	1.860	2.4609

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.9464	0.781	0.96092	1.21512
F-Test indicates equal variances (p = 0.16)	4.75361	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	2.46094	0	10.201	4.3785	0.16543	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: GM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280CHRdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Chrysene, µg/kg				

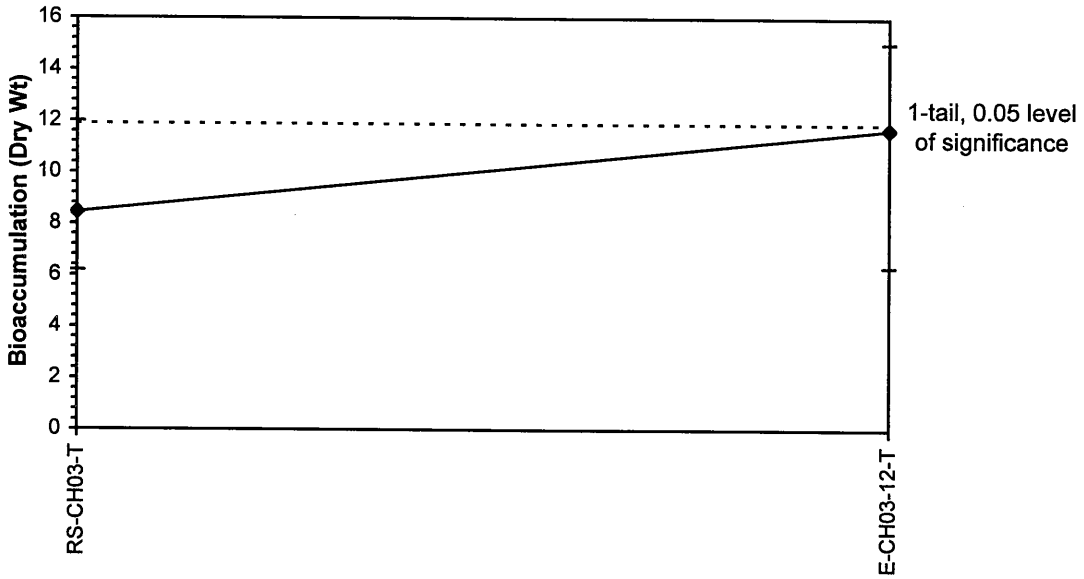
Conc-ppb	1	2	3	4	5
RS-CH03-T	9.400	12.000	7.000	7.700	6.200
E-CH03-12-T	11.000	15.000	12.000	14.000	6.300

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	8.460	0.0000	8.4600	6.2000	12.0000	27.233	5			
E-CH03-12-T	11.660	-0.4290	11.6600	6.3000	15.0000	29.056	5	1.746	1.860	3.4072

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.95609	0.781	-0.5048	0.24399
F-Test indicates equal variances (p = 0.47)	2.1624	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	3.40719	0	25.6	8.393	0.11887	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280DBAdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Dibenz(a,h)anthracene, µg/kg				

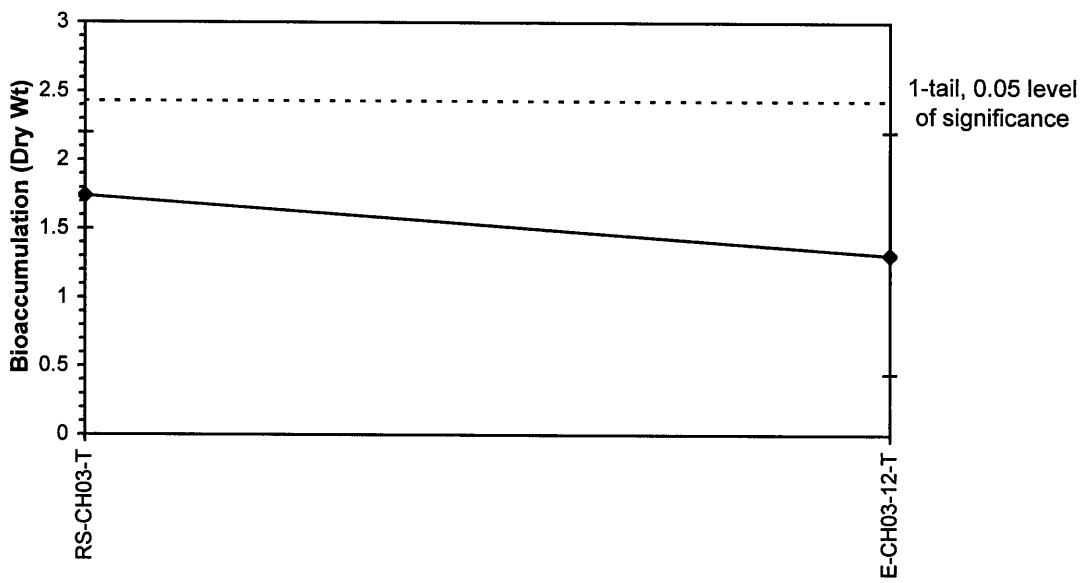
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.7000	2.2000	1.5000	1.5000	1.8000
E-CH03-12-T	1.4000	0.6000	1.9000	2.2000	0.4400

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.7400	0.0000	1.7400	1.5000	2.2000	16.557	5			
E-CH03-12-T	1.3080	0.5838	1.3080	0.4400	2.2000	59.334	5	-1.167	1.860	0.6884

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.97206	0.781	-0.0174	-0.5133
F-Test indicates equal variances (p = 0.08)	7.25687	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.68844	0	0.46656	0.34266	0.27687	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280DBFdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Dibenzofuran, µg/kg				

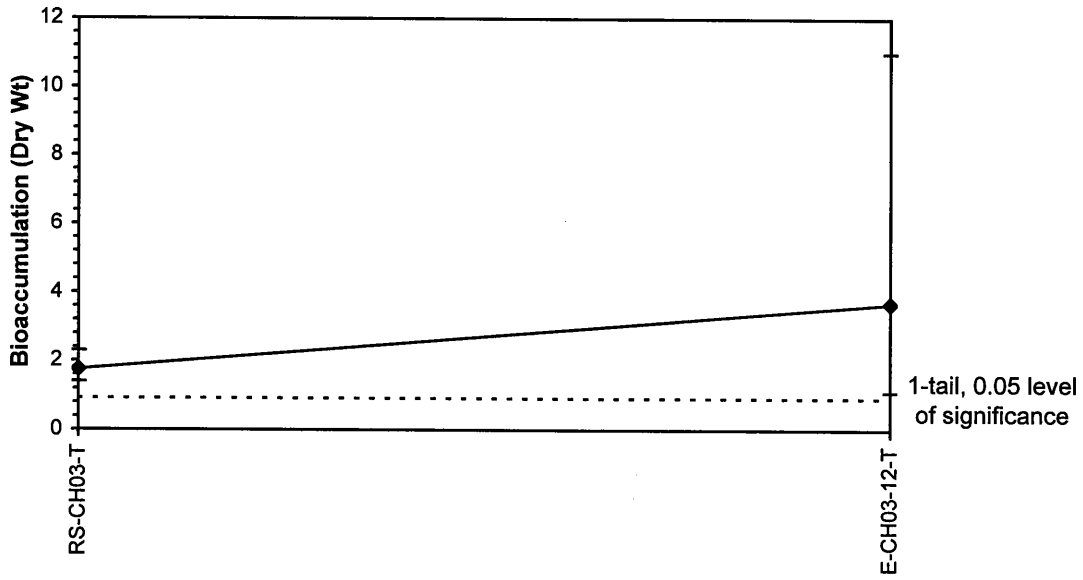
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.4000	1.4000	1.8000	1.9000	2.3000
E-CH03-12-T	11.0000	2.2000	2.3000	1.8000	1.1000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	1.7600	0.0000	1.1785	1.1345	1.2348	3.698	5			
E-CH03-12-T	3.6800	-2.5263	1.2288	1.0739	1.4195	10.131	5	0.853	1.860	0.1097

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.91088	0.781	0.64716	2.66357
F-Test indicates equal variances (p = 0.07)	8.16134	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.0684	0	0.00633	0.0087	0.41827	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280FLAdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta

Comments: Fluoranthene, µg/kg

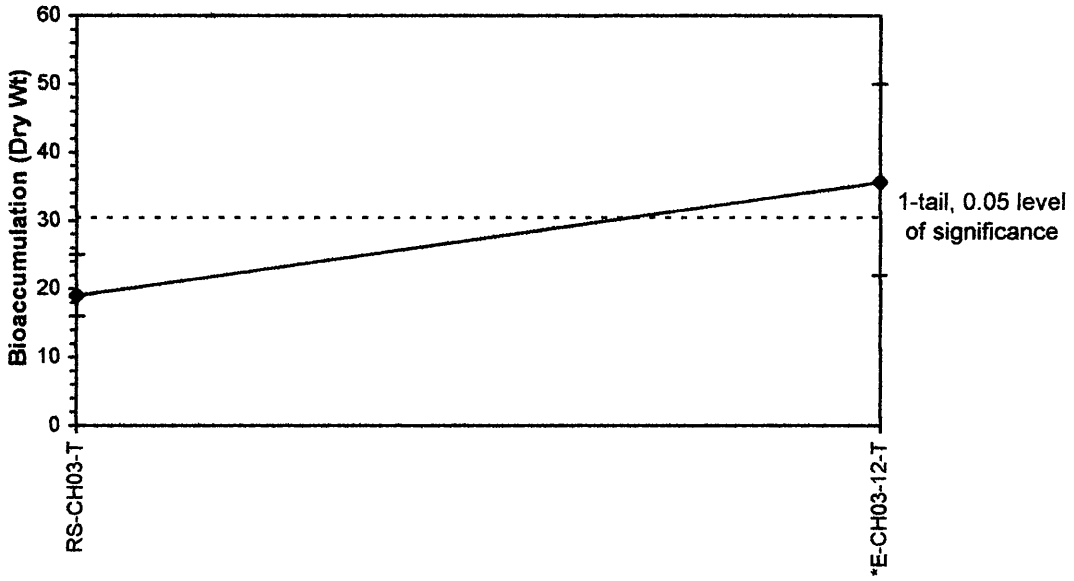
Conc-ppb	1	2	3	4	5
RS-CH03-T	18.000	25.000	18.000	18.000	16.000
E-CH03-12-T	47.000	50.000	37.000	22.000	22.000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	19.000	0.0000	19.000	16.000	25.000	18.232	5			
*E-CH03-12-T	35.600	-0.9222	35.600	22.000	50.000	37.403	5	2.698	1.860	11.442

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.92865	0.781	-0.0674	-0.3404
F-Test indicates equal variances (p = 0.02)	14.775	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates significant differences Treatments vs RS-CH03-T	11.4419	0	688.9	94.65	0.02716	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: GM

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280FdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Fluorene, µg/kg				

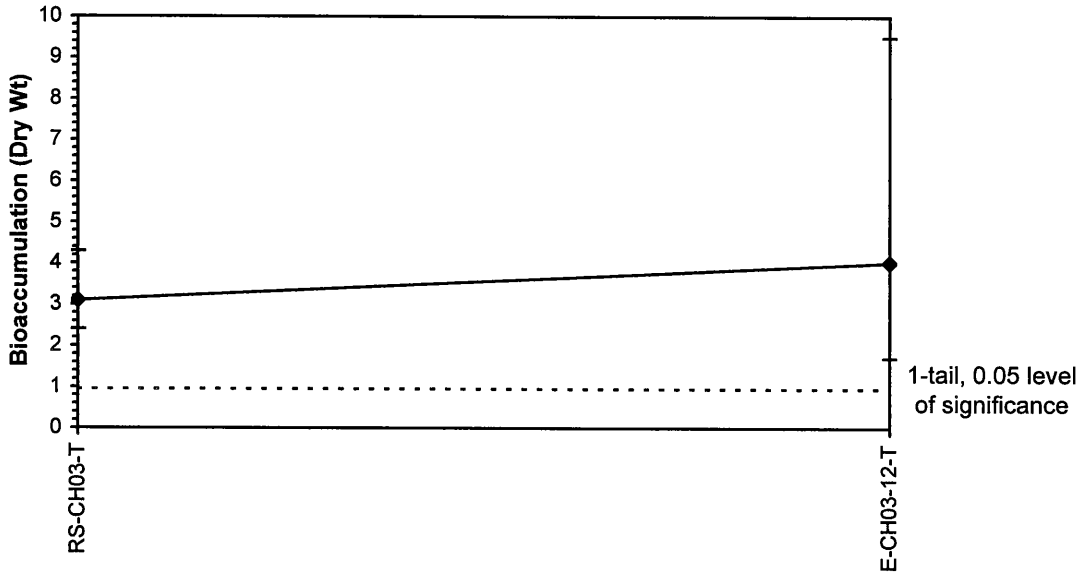
Conc-ppb	1	2	3	4	5
RS-CH03-T	2.7000	2.5000	2.4000	3.6000	4.3000
E-CH03-12-T	9.5000	3.1000	3.1000	2.7000	1.7000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	3.1000	0.0000	1.2768	1.2422	1.3273	2.903	5			
E-CH03-12-T	4.0200	-0.4381	1.2825	1.1772	1.4079	6.434	5	0.139	1.860	0.0752

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.93984	0.781	0.55594	1.91789
F-Test indicates equal variances (p = 0.15)	4.95562	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.03686	0	7.9E-05	0.00409	0.89262	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280INPdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Indeno(1,2,3-cd)pyrene, µg/kg				

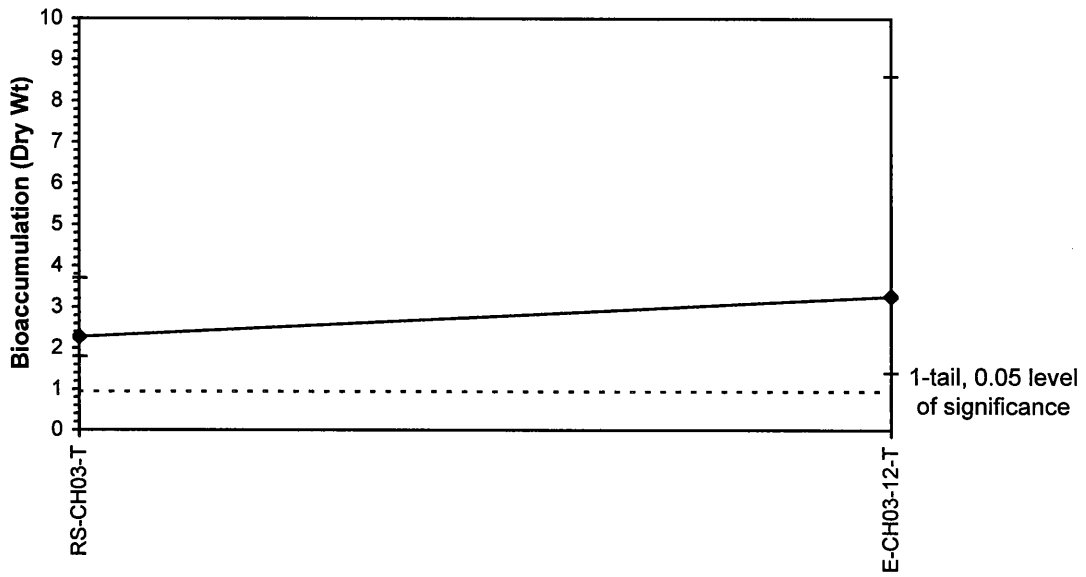
Conc-ppb	1	2	3	4	5
RS-CH03-T	1.8000	3.7000	2.0000	1.8000	2.1000
E-CH03-12-T	1.4000	1.9000	3.0000	8.6000	1.4000

			Transform: Arcsin Square Root						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	2.2800	0.0000	1.2227	1.1889	1.3078	4.033	5			
E-CH03-12-T	3.2600	-0.7656	1.2292	1.1345	1.3995	9.111	5	0.119	1.860	0.1018

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.90776	0.781	0.98828	0.89615
F-Test indicates equal variances (p = 0.14)	5.15851	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	0.05689	0	0.00011	0.00749	0.90859	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280NAPdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta
Comments:	Naphthalene, µg/Kg				

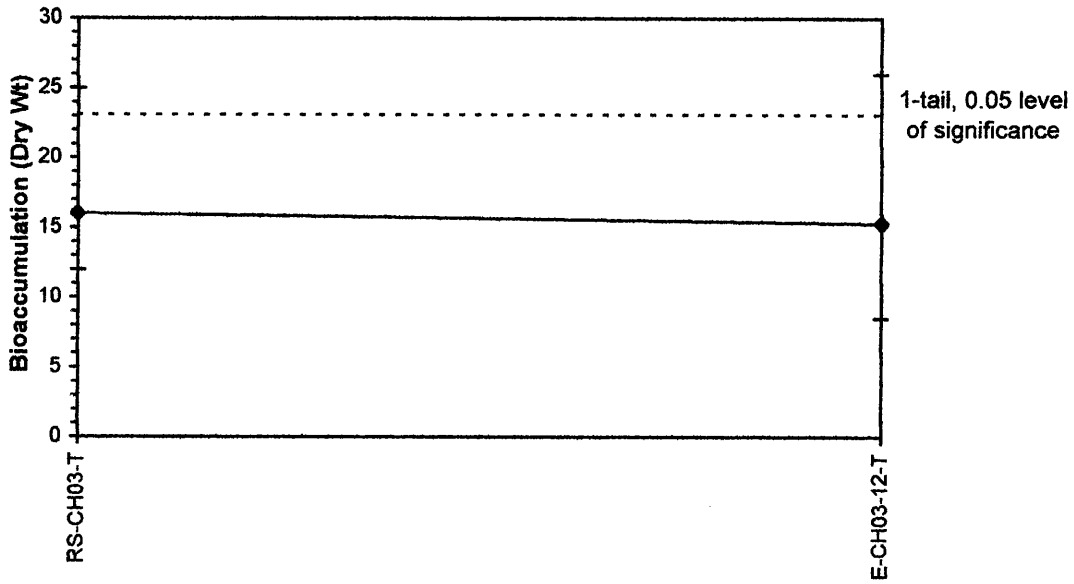
Conc-ppb	1	2	3	4	5
RS-CH03-T	25.000	15.000	13.000	12.000	15.000
E-CH03-12-T	26.000	11.000	16.000	15.000	8.500

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	16.000	0.0000	16.000	12.000	25.000	32.476	5			
E-CH03-12-T	15.300	0.0467	15.300	8.500	26.000	43.820	5	-0.185	1.860	7.054

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.8627	0.781	1.12707	0.46049
F-Test indicates equal variances (p = 0.63)	1.66481	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	7.05404	0	1.225	35.975	0.85819	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280PANdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/00	Test Species:	MNA-Macoma nasuta

Comments: Phenanthrene, µg/Kg

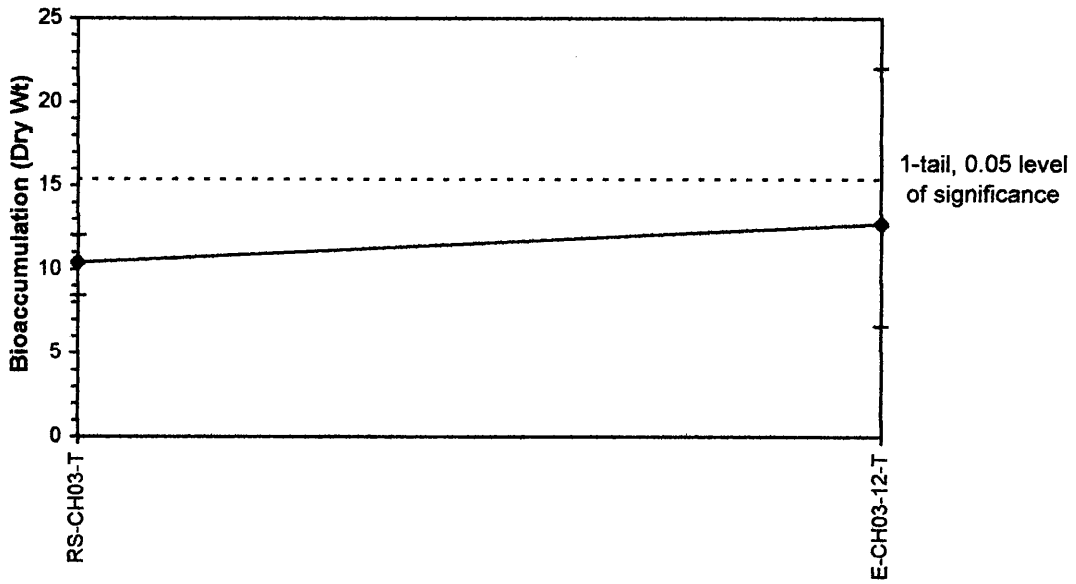
Conc-ppb	1	2	3	4	5
RS-CH03-T	8.400	12.000	11.000	9.400	11.000
E-CH03-12-T	22.000	14.000	11.000	9.800	6.600

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	10.360	0.0000	10.3600	8.4000	12.0000	13.881	5			
E-CH03-12-T	12.680	-0.2479	12.6800	6.6000	22.0000	46.102	5	0.862	1.860	5.0063

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.8927	0.781	1.19247	3.24467
F-Test indicates equal variances (p = 0.02)	16.5242	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	5.0063	0	13.456	18.12	0.41391	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by:

Evaluation of Dredge Materials for Bioaccumulation-Bioaccumulation (Dry Wt)

Start Date:	4/18/2003	Test ID:	280PYRdwMN	Sample ID:	280-COE-JAX-Cape Canaveral
End Date:	5/16/2003	Lab ID:	CAS-Columbia/ANAMAR	Sample Type:	MS-Marine Sediment
Sample Date:	3/31/2003	Protocol:	EPADM91-EPA 503/8-91/001	Test Species:	MNA-Macoma nasuta
Comments:	Pyrene, µg/Kg				

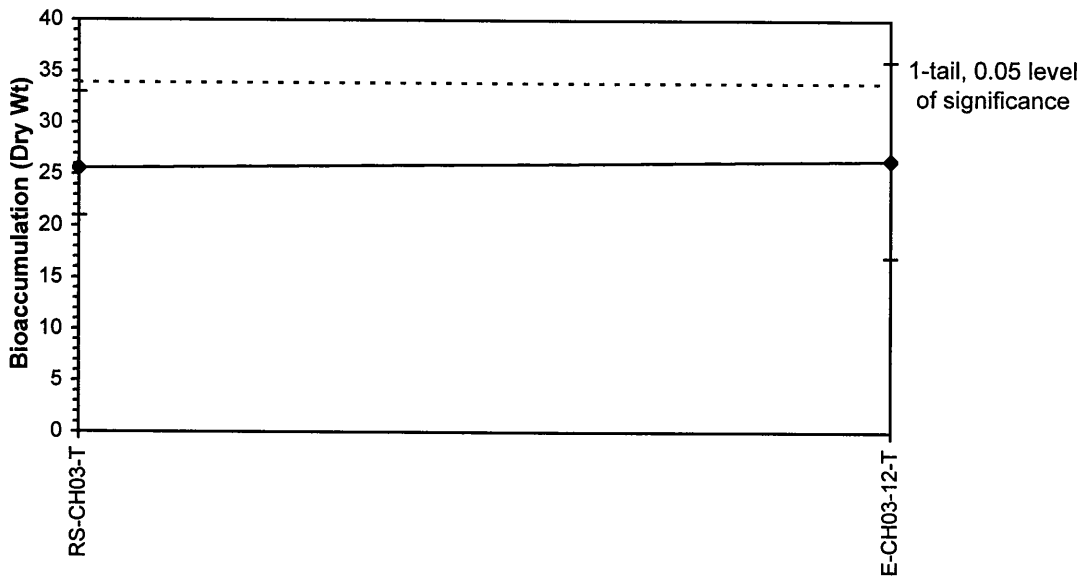
Conc-ppb	1	2	3	4	5
RS-CH03-T	26.000	33.000	24.000	24.000	21.000
E-CH03-12-T	36.000	33.000	29.000	17.000	17.000

			Transform: Untransformed						1-Tailed	
Conc-ppb	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
RS-CH03-T	25.600	0.0000	25.600	21.000	33.000	17.600	5			
E-CH03-12-T	26.400	-0.0325	26.400	17.000	36.000	33.837	5	0.179	1.860	8.320

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.01)	0.94236	0.781	-0.0803	-1.0851
F-Test indicates equal variances (p = 0.21)	3.93103	23.1539		

Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df
Homoscedastic t Test indicates no significant differences Treatments vs RS-CH03-T	8.32031	0	1.6	50.05	0.86254	1, 8

Dose-Response Plot



ToxCalc v5.0.23

Reviewed by: _____

Appendix F

ADDAMS Model/STFATE Module

F1

E-CH03-20 Arsenic STFATE Run

E-CH03-20 Arsenic Run

```
 MODEL:  SHORT-TERM FATE OF DREDGED MATERIAL FROM SPLIT HULL BARGE OR HOPPER DREDGE
               (PC Version 5.01  MAY, 1993)


 TITLE:   E-CH03-20 Arsenic Run


 FILE:    CH0320RE.DUE


 AREA:    THE PROJECT AREA IS DESCRIBED BY A 45 X 45 GRID.

          THERE ARE 45 GRID POINTS (NMAX) IN THE Z-DIRECTION (FROM LEFT TO RIGHT)
            AND 45 GRID POINTS (MMAX) IN THE X-DIRECTION (FROM TOP TO BOTTOM).


 SITE:    THE DISPOSAL SITE IS REPRESENTED AS A RECTANGLE ON THE SITE GRID.

          THE TOPMOST BOUNDARY IS LOCATED AT POINT # 6 (MDS1) FROM THE TOP OF THE GRID.

          THE BOTTOMMOST BOUNDARY IS LOCATED AT POINT #41 (MDS2) FROM THE TOP OF THE GRID.

          THE LEFTMOST BOUNDARY IS LOCATED AT POINT # 6 (NDS1) FROM THE LEFT OF THE GRID.

          THE RIGHTMOST BOUNDARY IS LOCATED AT POINT #41 (NDS2) FROM THE LEFT OF THE GRID.


 EXECUTION PARAMETERS:

          MODEL COEFFICIENTS SPECIFIED IN INPUT DATA (KEY1 = 1).

          PERFORM COMPLETE ANALYSIS INCLUDING DESCENT, COLLAPSE, AND TRANSPORT-DIFFUSION (KEY2 = 0).

          PERFORM TIER II OCEAN DUMPING INITIAL MIXING EVALUATION
            TO COMPARE WATER QUALITY WITH CRITERIA (KEY3 = 2).

          PRINTING OF CONVECTIVE DESCENT RESULTS REQUESTED (IPCN = 1).

          PRINTING OF CONVECTIVE DESCENT RESULTS REQUESTED (IPCN = 1).

          PRINTING OF DYNAMIC COLLAPSE RESULTS REQUESTED (IPCL = 1).

          QUARTERLY PRINTING OF LONG-TERM TRANSPORT DIFFUSION RESULTS REQUESTED (IPLT = 0).

          LONG-TERM TRANSPORT DIFFUSION RESULTS REQUESTED AT THE FOLLOWING 2 DEPTH(S):
                1.00 FT
               44.00 FT
```

```
GRID:    NUMBER OF LONG TERM GRID POINTS IN Z-DIRECTION (NMAX) = 45

         NUMBER OF LONG TERM GRID POINTS IN X-DIRECTION (MMAX) = 45

         GRID SPACING IN Z-DIRECTION (DZ) =   350.00000 FT

         GRID SPACING IN X-DIRECTION (DX) =   350.00000 FT

         CONSTANT DEPTH GRID SPECIFIED HAVING A DEPTH (DEPC) OF    45.00000 FT.
```

DEPTH GRID, FEET:

M N =	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
2	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
3	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
4	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
5	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
6	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
7	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
8	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
9	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
10	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
11	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
12	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
13	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
14	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
15	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
16	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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23	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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31	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
32	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
33	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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35	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
36	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
37	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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41	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
42	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
43	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
44	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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M N =	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
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12	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
13	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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M N =	35	36	37	38	39	40	41	42	43	44	45
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42	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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45	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.

CODED GRID:

RANGE OF N IS   1 TO 45

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LEGEND FOR CODED GRID:  W = WATER POINT
                        L = LAND POINT
                        O = OPEN BOUNDARY
                        B = DISPOSAL SITE BOUNDARY
                        D = DUMP LOCATION
                        X = DUMMY POINT


NUMBER OF GRID POINTS WITHIN ESTUARY =  1681
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DISPOSAL LOCATION:

THE DUMP LOCATION IS 7875. FT (XBARGE) OR ABOUT GRID POINT #24 FROM THE TOP OF THE GRID
AND 7875. FT (ZBARGE) OR ABOUT GRID POINT #24 FROM THE LEFT EDGE OF THE GRID.

THE BOTTOM SLOPE IN THE X-DIRECTION AT THE DUMP SITE (SLOPEX, POSITIVE IF DEPTH INCREASES
FROM TOP OF GRID TO BOTTOM OF GRID) IS 0.00 DEGREES.

THE BOTTOM SLOPE IN THE Z-DIRECTION AT THE DUMP SITE (SLOPEZ, POSITIVE IF DEPTH INCREASES
FROM LEFT SIDE OF GRID TO RIGHT SIDE OF GRID) IS 0.00 DEGREES.

THE DISPOSAL LOCATION IS NOT AT A HOLE OR DEPRESSION. (DHOLE = 0.0)

AMBIENT DENSITY PROFILE:

DEPTH (FT)	DENSITY (G/CC)
0.0000E+00	1.0237
45.00	1.0240

COMPUTED DEPTH:

THE DEPTH AT THE DUMP LOCATION WAS INTERPOLATED TO BE 45.00 FT.

VELOCITY DISTRIBUTION:

VERTICALLY AVERAGED X-DIRECTION (VAX = 0.000E+00 FPS) AND

Z-DIRECTION (VAZ = 0.330 FPS) VELOCITIES CONSTRUCTED AT EACH GRID POINT
FROM A SINGLE OBSERVATION AT A DEPTH (D) OF 45.0 FT AND
USED WITH A LOGARITHMIC VELOCITY DISTRIBUTION.

VELOCITY GRID: X-DIRECTION, FPS

M N=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M	N= 18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M	N= 35	36	37	38	39	40	41	42	43	44	45
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VELOCITY GRID: Z-DIRECTION, FPS

M N=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
2	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
3	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
4	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
5	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
6	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
7	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
8	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
9	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
10	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
11	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
12	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
13	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
14	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
15	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
16	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
17	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
18	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
19	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
20	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
21	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
22	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
23	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
24	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
25	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
26	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
27	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
28	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
29	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
30	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
31	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
32	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
33	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
34	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
35	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
36	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
37	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
38	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
39	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
40	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
41	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
42	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
43	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
44	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
45	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330

M	N= 18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
2	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
3	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
4	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
5	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
6	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
7	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
8	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
9	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
10	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
11	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
12	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
13	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
14	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
15	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
16	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
17	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
18	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
19	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
20	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
21	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
22	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
23	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
24	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
25	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
26	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
27	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
28	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
29	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
30	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
31	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
32	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
33	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
34	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
35	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
36	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
37	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
38	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
39	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
40	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
41	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
42	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
43	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
44	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
45	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330

M	N= 35	36	37	38	39	40	41	42	43	44	45
1	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
2	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
3	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
4	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
5	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
6	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
7	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
8	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
9	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
10	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
11	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
12	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
13	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
14	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
15	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
16	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
17	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
18	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
19	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
20	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
21	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
22	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
23	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
24	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
25	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
26	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
27	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
28	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
29	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
30	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
31	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
32	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
33	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
34	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
35	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
36	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
37	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
38	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
39	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
40	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
41	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
42	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
43	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
44	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
45	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330

BOTTOM SHEAR STRESS, LBS/SQ FT:

M N=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
3	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
4	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
5	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
6	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
7	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
8	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
9	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
10	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
11	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
12	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
13	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
14	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
15	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
16	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
17	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
18	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
19	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
20	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
21	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
22	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
23	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
24	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
25	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
26	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
27	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
28	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
29	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
30	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
31	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
32	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
33	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
34	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
35	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
36	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
37	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
38	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
39	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
40	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
41	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
42	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
43	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
44	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
45	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

M	N= 18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
3	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
5	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
6	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
7	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
8	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
9	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
10	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
11	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
12	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
13	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
14	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
15	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
16	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
17	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
18	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
19	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
20	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
21	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
22	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
23	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
24	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
25	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
26	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
27	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
28	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
29	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
30	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
31	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
32	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
33	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
34	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
35	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
36	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
37	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
38	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
39	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
40	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
41	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
42	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
43	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
44	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
45	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

M	N= 35	36	37	38	39	40	41	42	43	44	45
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
3	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
5	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
6	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
7	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
8	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
9	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
10	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
11	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
12	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
13	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
14	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
15	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
16	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
17	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
18	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
19	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
20	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
21	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
22	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
23	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
24	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
25	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
26	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
27	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
28	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
29	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
30	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
31	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
32	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
33	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
34	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
35	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
36	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
37	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
38	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
39	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
40	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
41	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
42	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
43	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
44	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
45	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

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TIME PARAMETERS:

         DURATION OF THE DISPOSAL, TREL =      60.00 SECONDS

         DURATION OF THE SIMULATION, TSTOP =   14400.00 SECONDS

         LONG-TERM TIME STEP USED IN THE SIMULATION, DTL =     600.00 SECONDS

BARGE DESCRIPTION:

         LENGTH OF BARGE, BARGL =  0.30E+03 FT

         WIDTH OF BARGE, BARGW =   72.     FT

         DRAFT OF LOADED BARGE, DREL1 =   17.0     FT

         DRAFT OF UNLOADED BARGE, DREL2 =   5.00     FT
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MODEL COEFFICIENTS READ FROM INPUT:

         TURBULENT THERMAL ENTRAINMENT            ALPHA0 =    0.2350

         SETTLING COEFFICIENT                     BETA   =    0.0000

         APPARENT MASS COEFFICIENT                CM     =    1.0000

         DRAG COEFFICIENT FOR A SPHERE            CD     =    0.5000

         RATIO--CLOUD/AMBIENT DENSITY GRADIENTS   GAMA   =    0.2500

         FORM DRAG FOR COLLAPSING CLOUD           CDRAG  =    1.0000

         SKIN FRICTION FOR COLLAPSING CLOUD       CFRIC  =    0.0100

         DRAG FOR AN ELLIPSOIDAL WEDGE            CD3    =    0.1000

         DRAG FOR A PLATE                         CD4    =    1.0000

         ENTRAINMENT IN COLLAPSE                  ALPHAC =    0.1000

         FRICTION BETWEEN CLOUD AND BOTTOM        FRICTN =    0.0100

         4/3 LAW HORIZ. DIFF. DISSIPATION FACTOR  ALAMDA  =    0.0225

         UNSTRATIFIED WATER VERT. DIFF. COEF.     AKY0    =    0.0250

         STRIPPING COEF. OF FINES DURING CONVERTIVE DESCENT=    0.0030
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MATERIAL DESCRIPTION: 2 SOLIDS FRACTIONS

L A Y E R 1

DESCRIPTION	SPEC. GRAV. OR DENSITY (GM/CC)	VOLUMETRIC CONCENTRATION (VOL/VOL)	FALL VELOCITY (FPS)	DEPOSITIONAL VOID RATIO	CHARACTER
SAND	2.638	0.2917	0.02000	0.7000	NONCOHESIVE

CRITICAL SHEAR STRESS FOR DEPOSITION = 0.1500E-01 LBS/SQ. FT.
SEDIMENT FRACTION WILL BE STRIPPED DURING CONVECTIVE DESCENT.

CLAY	2.638	0.2113	0.00200	7.500	COHESIVE

CRITICAL SHEAR STRESS FOR DEPOSITION = 0.3800E-02 LBS/SQ. FT.
SEDIMENT FRACTION WILL BE STRIPPED DURING CONVECTIVE DESCENT.

WATER QUALITY ANALYSIS DATA:

CONCENTRATIONS OF ARSENIC FOLLOWING INITIAL MIXING OF THE FLUID
ARE COMPUTED FOR WATER QUALITY EVALUATIONS.

THE INITIAL CONCENTRATION OF ARSENIC IS 0.701000E-01 MG/L
AND ITS BACKGROUND CONCENTRATION IS 0.5000000E-03 MG/L.

THE WATER QUALITY CRITERIA FOR ARSENIC IS 0.6900000E-01 MG/L.

DESCRIPTION	SPEC. GRAV. OR DENSITY (GM/CC)	VOLUMETRIC CONCENTRATION (VOL/VOL)
FLUID	1.024	0.4970

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DISCHARGE PARAMETERS:

         VOLUME OF LAYER 1 =    2223.     CU YD

         DEPTH IS TOO SHALLOW FOR CONVECTIVE DESCENT SO DESCENT IS BYPASSED.
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CLOUD COLLAPSE PHASE:

        IN TRIAL #1 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.30349072E-02 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1199.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    THE DISCHARGE DID NOT OBTAIN A NEUTRALLY BUOYANT CONDITION DURING CONVECTIVE DESCENT.

        IN TRIAL #2 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.45220116E-02 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1199.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    THE DISCHARGE DID NOT OBTAIN A NEUTRALLY BUOYANT CONDITION DURING CONVECTIVE DESCENT.

        IN TRIAL #3 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.67377975E-02 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1199.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    THE DISCHARGE DID NOT OBTAIN A NEUTRALLY BUOYANT CONDITION DURING CONVECTIVE DESCENT.

        IN TRIAL #4 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.10039318E-01 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1143.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    DIFFUSION OF THE DISCHARGE IS GREATER THAN DYNAMIC SPREADING FROM THE COLLAPSE.

        IN TRIAL #5 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.14021581E-01 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS  905.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    DIFFUSION OF THE DISCHARGE IS GREATER THAN DYNAMIC SPREADING FROM THE COLLAPSE.
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COLLAPSE PHASE RESULTS:

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID (DISTANCE FROM BARGE) X-DIR (FT)	DEPTH (FT)	Z-DIR (FT)	VELOCITY OF CLOUD CENTROID X-DIR (FPS)	DOWN (FPS)	Z-DIR (FPS)	DIFFERENCE OF CLOUD & WATER DENSITIES (G/CC)	CLOUD THICKNESS (FT)	ELLIPSOIDAL CLOUD AXIS LENGTHS MINOR (FT)	MAJOR (FT)	TRACER CONC. (MG/L)	VOLUME OF SOLID FRACTIONS (CU FT)	SOLIDS VOL. CONC. BY FRACTION (VOL/VOL)
60.92	7.55	32.70	0.02	7.49	11.20	0.05	0.6531E+00	32.87	65.75	65.75	0.2820E-01	0.1747E+05	0.2347E+00
												0.1265E+05	0.1700E+00
61.06	8.59	33.77	0.03	7.31	8.75	0.05	0.6335E+00	29.94	69.88	69.88	0.2743E-01	0.1743E+05	0.2277E+00
												0.1262E+05	0.1649E+00
61.20	9.60	35.04	0.04	7.13	9.05	0.06	0.6115E+00	26.55	75.41	75.41	0.2658E-01	0.1738E+05	0.2198E+00
												0.1258E+05	0.1592E+00
61.34	10.59	36.26	0.04	6.96	8.21	0.07	0.5886E+00	23.32	81.89	81.89	0.2568E-01	0.1732E+05	0.2116E+00
												0.1254E+05	0.1532E+00
61.48	11.55	37.32	0.05	6.78	7.00	0.07	0.5655E+00	20.49	88.96	88.96	0.2478E-01	0.1726E+05	0.2033E+00
												0.1250E+05	0.1472E+00
61.62	12.49	38.21	0.06	6.60	5.82	0.08	0.5426E+00	18.12	96.44	96.44	0.2387E-01	0.1721E+05	0.1950E+00
												0.1246E+05	0.1412E+00
61.76	13.41	38.94	0.08	6.42	4.80	0.08	0.5200E+00	16.16	104.16	104.16	0.2296E-01	0.1715E+05	0.1869E+00
												0.1242E+05	0.1353E+00
61.90	14.30	39.55	0.09	6.23	3.96	0.09	0.4979E+00	14.54	112.05	112.05	0.2207E-01	0.1711E+05	0.1790E+00
												0.1239E+05	0.1296E+00
62.04	15.16	40.05	0.10	6.05	3.28	0.10	0.4766E+00	13.21	120.03	120.03	0.2119E-01	0.1707E+05	0.1713E+00
												0.1236E+05	0.1240E+00
62.19	15.99	40.46	0.12	5.86	2.73	0.10	0.4561E+00	12.10	128.06	128.06	0.2035E-01	0.1703E+05	0.1639E+00
												0.1233E+05	0.1187E+00
62.33	16.80	40.81	0.13	5.68	2.29	0.11	0.4366E+00	11.17	136.09	136.09	0.1954E-01	0.1699E+05	0.1569E+00
												0.1230E+05	0.1136E+00
62.47	17.59	41.11	0.15	5.50	1.94	0.12	0.4182E+00	10.39	144.06	144.06	0.1877E-01	0.1696E+05	0.1503E+00
												0.1228E+05	0.1088E+00
62.61	18.35	41.35	0.16	5.33	1.65	0.12	0.4009E+00	9.72	151.93	151.93	0.1805E-01	0.1693E+05	0.1441E+00
												0.1226E+05	0.1043E+00
62.75	19.09	41.57	0.18	5.17	1.41	0.13	0.3849E+00	9.16	159.64	159.64	0.1737E-01	0.1690E+05	0.1383E+00
												0.1224E+05	0.1002E+00
62.89	19.80	41.75	0.20	5.02	1.21	0.13	0.3702E+00	8.67	167.17	167.17	0.1675E-01	0.1688E+05	0.1330E+00
												0.1222E+05	0.9633E-01
63.03	20.50	41.90	0.22	4.87	1.04	0.14	0.3566E+00	8.25	174.45	174.45	0.1617E-01	0.1686E+05	0.1282E+00
												0.1221E+05	0.9281E-01
63.17	21.17	42.04	0.24	4.74	0.91	0.14	0.3443E+00	7.89	181.47	181.47	0.1565E-01	0.1684E+05	0.1237E+00
												0.1219E+05	0.8959E-01
63.31	21.83	42.16	0.26	4.62	0.79	0.15	0.3330E+00	7.58	188.20	188.20	0.1517E-01	0.1682E+05	0.1197E+00
												0.1218E+05	0.8666E-01
63.45	22.47	42.26	0.28	4.50	0.69	0.15	0.3228E+00	7.30	194.62	194.62	0.1473E-01	0.1681E+05	0.1160E+00
												0.1217E+05	0.8401E-01
63.59	23.09	42.35	0.30	4.39	0.61	0.15	0.3136E+00	7.06	200.73	200.73	0.1433E-01	0.1679E+05	0.1127E+00
												0.1216E+05	0.8160E-01
63.73	23.70	42.43	0.32	4.29	0.54	0.16	0.3052E+00	6.85	206.51	206.51	0.1398E-01	0.1678E+05	0.1097E+00
												0.1215E+05	0.7942E-01
63.87	24.30	42.50	0.34	4.20	0.48	0.16	0.2976E+00	6.66	211.99	211.99	0.1365E-01	0.1677E+05	0.1069E+00
												0.1214E+05	0.7744E-01

64.01	24.88	42.56	0.37	4.12	0.43	0.16	0.2907E+00	6.50	217.17	217.17	0.1335E-01	0.1676E+05	0.1045E+00
												0.1213E+05	0.7564E-01
64.15	25.46	42.62	0.39	4.04	0.38	0.16	0.2844E+00	6.35	222.07	222.07	0.1308E-01	0.1675E+05	0.1022E+00
												0.1213E+05	0.7400E-01
64.29	26.02	42.67	0.41	3.97	0.34	0.17	0.2786E+00	6.21	226.70	226.70	0.1283E-01	0.1674E+05	0.1001E+00
												0.1212E+05	0.7251E-01
64.43	26.57	42.72	0.44	3.90	0.31	0.17	0.2734E+00	6.09	231.09	231.09	0.1261E-01	0.1673E+05	0.9824E-01
												0.1211E+05	0.7114E-01
64.57	27.11	42.76	0.46	3.84	0.28	0.17	0.2686E+00	5.98	235.24	235.24	0.1240E-01	0.1672E+05	0.9651E-01
												0.1211E+05	0.6988E-01
64.71	27.65	42.80	0.48	3.78	0.26	0.17	0.2641E+00	5.88	239.18	239.18	0.1221E-01	0.1671E+05	0.9491E-01
												0.1210E+05	0.6873E-01
64.85	28.17	42.83	0.51	3.72	0.24	0.17	0.2600E+00	5.79	242.93	242.93	0.1203E-01	0.1671E+05	0.9343E-01
												0.1210E+05	0.6766E-01
64.99	28.69	42.86	0.53	3.67	0.22	0.18	0.2562E+00	5.70	246.49	246.49	0.1187E-01	0.1670E+05	0.9206E-01
												0.1209E+05	0.6667E-01
65.13	29.20	42.89	0.56	3.62	0.20	0.18	0.2526E+00	5.62	249.90	249.90	0.1171E-01	0.1669E+05	0.9079E-01
												0.1209E+05	0.6574E-01
65.27	29.71	42.92	0.58	3.57	0.19	0.18	0.2493E+00	5.55	253.15	253.15	0.1157E-01	0.1669E+05	0.8960E-01
												0.1208E+05	0.6488E-01
65.41	30.20	42.94	0.61	3.53	0.18	0.18	0.2462E+00	5.48	256.27	256.27	0.1143E-01	0.1668E+05	0.8848E-01
												0.1208E+05	0.6407E-01
65.55	30.70	42.97	0.63	3.49	0.16	0.18	0.2433E+00	5.42	259.27	259.27	0.1131E-01	0.1668E+05	0.8744E-01
												0.1208E+05	0.6332E-01
65.69	31.18	42.99	0.66	3.45	0.15	0.18	0.2406E+00	5.36	262.15	262.15	0.1119E-01	0.1667E+05	0.8645E-01
												0.1207E+05	0.6260E-01
65.83	31.66	43.01	0.68	3.41	0.15	0.18	0.2380E+00	5.30	264.93	264.93	0.1108E-01	0.1667E+05	0.8551E-01
												0.1207E+05	0.6192E-01
65.97	32.14	43.03	0.71	3.37	0.14	0.18	0.2355E+00	5.25	267.61	267.61	0.1097E-01	0.1666E+05	0.8463E-01
												0.1207E+05	0.6128E-01
66.11	32.61	43.05	0.73	3.34	0.13	0.18	0.2332E+00	5.20	270.20	270.20	0.1087E-01	0.1666E+05	0.8379E-01
												0.1206E+05	0.6068E-01
66.25	33.08	43.07	0.76	3.30	0.12	0.18	0.2310E+00	5.15	272.72	272.72	0.1077E-01	0.1666E+05	0.8299E-01
												0.1206E+05	0.6010E-01
66.39	33.54	43.08	0.79	3.27	0.12	0.18	0.2288E+00	5.11	275.15	275.15	0.1068E-01	0.1665E+05	0.8223E-01
												0.1206E+05	0.5954E-01
66.53	33.99	43.10	0.81	3.24	0.11	0.18	0.2268E+00	5.07	277.53	277.53	0.1059E-01	0.1665E+05	0.8150E-01
												0.1206E+05	0.5902E-01
66.67	34.45	43.12	0.84	3.21	0.11	0.19	0.2249E+00	5.02	279.83	279.83	0.1051E-01	0.1664E+05	0.8080E-01
												0.1205E+05	0.5851E-01
66.81	34.89	43.13	0.86	3.18	0.10	0.19	0.2230E+00	4.98	282.08	282.08	0.1043E-01	0.1664E+05	0.8013E-01
												0.1205E+05	0.5802E-01
66.95	35.34	43.14	0.89	3.15	0.10	0.19	0.2212E+00	4.95	284.28	284.28	0.1035E-01	0.1664E+05	0.7948E-01
												0.1205E+05	0.5756E-01
67.09	35.78	43.16	0.92	3.12	0.10	0.19	0.2195E+00	4.91	286.42	286.42	0.1027E-01	0.1664E+05	0.7886E-01
												0.1205E+05	0.5711E-01
67.23	36.21	43.17	0.94	3.09	0.09	0.19	0.2178E+00	4.88	288.52	288.52	0.1020E-01	0.1663E+05	0.7826E-01
												0.1204E+05	0.5667E-01
67.37	36.65	43.18	0.97	3.07	0.09	0.19	0.2162E+00	4.84	290.57	290.57	0.1013E-01	0.1663E+05	0.7768E-01
												0.1204E+05	0.5625E-01
67.51	37.07	43.20	0.99	3.04	0.09	0.19	0.2146E+00	4.81	292.58	292.58	0.1006E-01	0.1663E+05	0.7712E-01
												0.1204E+05	0.5585E-01

67.65	37.50	43.21	1.02	3.02	0.08	0.19	0.2131E+00	4.78	294.55	294.55	0.9998E-02	0.1662E+05	0.7658E-01
												0.1204E+05	0.5546E-01
67.79	37.92	43.22	1.05	2.99	0.08	0.19	0.2117E+00	4.75	296.48	296.48	0.9934E-02	0.1662E+05	0.7606E-01
												0.1204E+05	0.5508E-01
67.93	38.34	43.23	1.07	2.97	0.08	0.19	0.2103E+00	4.72	298.38	298.38	0.9872E-02	0.1662E+05	0.7555E-01
												0.1203E+05	0.5471E-01
68.07	38.75	43.24	1.10	2.94	0.08	0.19	0.2089E+00	4.69	300.25	300.25	0.9813E-02	0.1662E+05	0.7506E-01
												0.1203E+05	0.5435E-01
68.21	39.16	43.25	1.13	2.92	0.07	0.19	0.2075E+00	4.66	302.09	302.09	0.9754E-02	0.1661E+05	0.7458E-01
												0.1203E+05	0.5400E-01
68.36	39.57	43.26	1.15	2.90	0.07	0.19	0.2062E+00	4.64	303.90	303.90	0.9698E-02	0.1661E+05	0.7411E-01
												0.1203E+05	0.5366E-01
68.50	39.98	43.27	1.18	2.88	0.07	0.19	0.2050E+00	4.61	305.68	305.68	0.9643E-02	0.1661E+05	0.7365E-01
												0.1203E+05	0.5334E-01
68.64	40.38	43.28	1.21	2.85	0.07	0.19	0.2037E+00	4.58	307.43	307.43	0.9589E-02	0.1661E+05	0.7321E-01
												0.1202E+05	0.5301E-01
68.78	40.78	43.29	1.23	2.83	0.07	0.19	0.2025E+00	4.56	309.16	309.16	0.9537E-02	0.1660E+05	0.7278E-01
												0.1202E+05	0.5270E-01
68.92	41.17	43.30	1.26	2.81	0.06	0.19	0.2014E+00	4.53	310.86	310.86	0.9485E-02	0.1660E+05	0.7236E-01
												0.1202E+05	0.5240E-01
69.06	41.57	43.31	1.29	2.79	0.06	0.19	0.2002E+00	4.51	312.54	312.54	0.9436E-02	0.1660E+05	0.7195E-01
												0.1202E+05	0.5210E-01
69.20	41.96	43.32	1.31	2.77	0.06	0.19	0.1991E+00	4.49	314.20	314.20	0.9387E-02	0.1660E+05	0.7154E-01
												0.1202E+05	0.5181E-01
69.34	42.34	43.33	1.34	2.75	0.06	0.19	0.1980E+00	4.47	315.84	315.84	0.9339E-02	0.1659E+05	0.7115E-01
												0.1202E+05	0.5152E-01

FALL VELOCITY OF COHESIVE MATERIAL IS 0.006900 FT/SEC COMPUTED FOR CLAY

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID X-LOCATION (FT)	CLOUD CENTROID Z-LOCATION (FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	T O T A L M A S S (CU FT)	ENTRAINED MASS (CU FT)	TIME STEP WHEN THIS CLOUD WAS CREATED	TIME STEP WHEN PREVIOUS CLOUD WAS CREATED
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 1									
60.27	8405.	7875.	55.25	15.72	0.5232	12.41	0.0000E+00	91	1
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 2									
60.55	8407.	7875.	56.38	16.24	1.500	13.62	0.0000E+00	181	91
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 3									
60.82	8409.	7875.	57.71	17.74	2.377	15.71	0.0000E+00	271	181
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 4									
61.71	8415.	7875.	89.55	20.12	15.98	298.0	0.0000E+00	361	305
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 5									
62.97	8423.	7875.	152.0	36.09	8.483	307.2	0.0000E+00	451	361
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 6									
64.23	8428.	7875.	199.3	42.85	2.151	128.1	0.0000E+00	541	451
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 7									
65.49	8433.	7876.	228.7	44.18	0.8194	60.29	0.0000E+00	631	541
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 8									
66.76	8437.	7876.	249.2	44.56	0.4436	36.35	0.0000E+00	721	631
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 9									
68.02	8441.	7876.	265.4	44.70	0.2993	26.30	0.0000E+00	811	721
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 10									
69.28	8445.	7876.	279.3	44.77	0.2269	21.03	0.0000E+00	901	811
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 11									
69.34	8445.	7876.	279.9	40.53	4.465	0.1660E+05	0.0000E+00	905	901

NOTE -- When all solid material has settled from a cloud, the cloud is erased and the remaining clouds for this solids type are renumbered.

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID X-LOCATION (FT)	CLOUD CENTROID Z-LOCATION (FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	T O T A L M A S S (CU FT)	ENTRAINED MASS (CU FT)	TIME STEP WHEN THIS CLOUD WAS CREATED	TIME STEP WHEN PREVIOUS CLOUD WAS CREATED
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 1									
60.27	8405.	7875.	55.25	15.72	0.5232	8.979	0.0000E+00	91	1
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 2									
60.55	8407.	7875.	56.38	16.24	1.500	9.865	0.0000E+00	181	91
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 3									
60.82	8409.	7875.	57.71	17.74	2.377	11.37	0.0000E+00	271	181
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 4									
61.71	8415.	7875.	89.55	20.12	15.98	215.8	0.0000E+00	361	305
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 5									
62.97	8423.	7875.	152.0	36.09	8.483	222.4	0.0000E+00	451	361
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 6									
64.23	8428.	7875.	199.3	42.85	2.151	92.77	0.0000E+00	541	451
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 7									
65.49	8433.	7876.	228.7	44.18	0.8194	43.66	0.0000E+00	631	541
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 8									
66.76	8437.	7876.	249.2	44.56	0.4436	26.31	0.0000E+00	721	631
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 9									
68.02	8441.	7876.	265.4	44.70	0.2993	19.04	0.0000E+00	811	721
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 10									
69.28	8445.	7876.	279.3	44.77	0.2269	15.22	0.0000E+00	901	811
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 11									
69.34	8445.	7876.	279.9	40.53	4.465	0.1202E+05	0.0000E+00	905	901

NOTE -- When all solid material has settled from a cloud, the cloud is erased and the remaining clouds for this solids type are renumbered.

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID X-LOCATION (FT)	CLOUD CENTROID Z-LOCATION (FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	T O T A L M A S S (MG)	ENTRAINED MASS (MG)	TIME STEP WHEN THIS CLOUD WAS CREATED	TIME STEP WHEN PREVIOUS CLOUD WAS CREATED
NEW CLOUD CREATED, NTCLD(K) (K = 3) = 1									
69.34	8445.	7876.	279.9	40.53	4.465	0.6168E+05	2452.	905	1

NOTE -- When all solid material has settled from a cloud, the cloud is erased and the remaining clouds for this solids type are renumbered.

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LONG TERM DIFFUSION RESULTS:

    BEGIN LONG TERM SIMULATION OF FATE OF SAND



SUMMARY OF SAND     DISTRIBUTIONS AFTER     600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     291.03
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     17223.



SUMMARY OF SAND     DISTRIBUTIONS AFTER    1200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     92.151
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     17422.



SUMMARY OF SAND     DISTRIBUTIONS AFTER    1800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =    0.00000E+00
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     17514.


     COMPUTATIONS FOR SAND     TERMINATED AT    1800.00  SEC. ELAPSED TIME...MATERIAL SETTLED TO BOTTOM
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BOTTOM ACCUMULATION OF SAND (CU FT/GRID SQUARE) , 1800.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	0	0
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	.	.	.	.	0
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	.	.
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	.
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.09	.26	.38	.28	.11	.03	.01	+	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.01	.20	1.2	3.7	5.3	3.6	1.2	.25	.04	.01	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.10	1.4	8.8	27	38	26	8.3	1.4	.17	.02	+	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	.01	.35	4.7	30	91	130	87	28	4.4	.43	.05	+	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	.02	.56	7.5	48	147	210	139	44	6.9	.64	.06	.01	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	.01	.43	5.7	36	110	157	105	33	5.2	.50	.05	+	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.15	2.0	13	39	55	37	12	1.9	.21	.02	+	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.02	.35	2.1	6.5	9.3	6.3	2.1	.38	.05	.01	+	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.18	.54	.77	.54	.20	.04	.01	+	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.03	.02	.01	+	+	+	+	.
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	.	.
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	.	.	.	0
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	.	0	0	0	0	0	0	0	0	0	0	0	0
21	.	.	0	0	0	0	0	0	0	0	0	0	0
22	.	.	0	0	0	0	0	0	0	0	0	0	0
23	+	.	0	0	0	0	0	0	0	0	0	0	0
24	+	.	.	0	0	0	0	0	0	0	0	0	0
25	+	.	.	0	0	0	0	0	0	0	0	0	0
26	+	.	.	0	0	0	0	0	0	0	0	0	0
27	+	.	0	0	0	0	0	0	0	0	0	0	0
28	.	.	0	0	0	0	0	0	0	0	0	0	0
29	.	.	0	0	0	0	0	0	0	0	0	0	0
30	.	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

THICKNESS (FT) OF SAND ACCUMULATED ON BOTTOM, 1800.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 0.1000E-01 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	0	0	0	0
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	.	.	.	.	0
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	.	.	.
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.05	.07	.05	.01	+	+	+	.	.
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.01	.12	.36	.52	.35	.11	.01	+	+	.	.
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.06	.41	1.2	1.8	1.2	.38	.06	+	+	+	.
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.10	.66	2.0	2.9	1.9	.61	.09	+	+	+	.
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.07	.50	1.5	2.1	1.4	.46	.07	+	+	+	.
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.02	.17	.53	.76	.51	.16	.02	+	+	.	.
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.09	.12	.08	.02	+	+	+	.	.
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.01	+	+	+	+	.	.	.
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	.	.	.	.	0
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	0	0	0	0
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0
23	.	0	0	0	0	0	0	0	0	0	0	0	0
24	.	0	0	0	0	0	0	0	0	0	0	0	0
25	.	0	0	0	0	0	0	0	0	0	0	0	0
26	.	0	0	0	0	0	0	0	0	0	0	0	0
27	.	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

```
    BEGIN LONG TERM SIMULATION OF FATE OF CLAY



SUMMARY OF CLAY     DISTRIBUTIONS AFTER     600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     3282.4
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     9400.5



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    1200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     383.74
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12299.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    1800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     383.32
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12300.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    2400.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     382.93
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12300.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    3000.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     382.57
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12300.
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SUMMARY OF CLAY     DISTRIBUTIONS AFTER    3600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     382.24
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12301.

    MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT    1.00 FT
```

CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 3600.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	.01	.01	.02	.02	.02	.02	.01	.01	+
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.03	.05	.08	.09	.09	.08	.06	.04	.02
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.02	.05	.09	.16	.22	.27	.28	.24	.18	.11	.06
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.05	.12	.23	.39	.55	.66	.68	.60	.44	.28	.15
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.11	.25	.48	.80	1.1	1.3	1.4	1.2	.92	.59	.32
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.07	.19	.44	.85	1.4	2.0	2.4	2.4	2.1	1.6	1.0	.56
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.03	.10	.29	.66	1.2	2.1	3.0	3.6	3.7	3.2	2.4	1.5	.85
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.14	.37	.85	1.6	2.7	3.8	4.6	4.8	4.2	3.1	2.0	1.0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.15	.40	.93	1.8	3.0	4.2	5.1	5.2	4.6	3.4	2.2	1.1
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.14	.38	.86	1.6	2.7	3.9	4.7	4.9	4.3	3.2	2.0	1.1
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.03	.11	.30	.69	1.3	2.2	3.1	3.7	3.9	3.4	2.5	1.6	.88
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.07	.20	.46	.91	1.5	2.1	2.5	2.6	2.3	1.7	1.1	.60
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.11	.27	.52	.87	1.2	1.4	1.5	1.3	1.0	.64	.34
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.05	.13	.26	.43	.60	.73	.75	.66	.49	.31	.17
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.02	.05	.10	.18	.25	.30	.31	.27	.20	.13	.07
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	0	0	0	0	0	0	0	0	0	0	0	00000	
14	0	0	0	0	0	0	0	0	0	0	0	00000	
15	0	0	0	0	0	0	0	0	0	0	0	00000	
16	0	0	0	0	0	0	0	0	0	0	0	00000	
17	+	0	0	0	0	0	0	0	0	0	0	00000	
18	.01	0	0	0	0	0	0	0	0	0	0	00000	
19	.02	0	0	0	0	0	0	0	0	0	0	00000	
20	.07	0	0	0	0	0	0	0	0	0	0	00000	
21	.14	0	0	0	0	0	0	0	0	0	0	00000	
22	.26	0	0	0	0	0	0	0	0	0	0	00000	
23	.39	0	0	0	0	0	0	0	0	0	0	00000	
24	.50	0	0	0	0	0	0	0	0	0	0	00000	
25	.55	0	0	0	0	0	0	0	0	0	0	00000	
26	.51	0	0	0	0	0	0	0	0	0	0	00000	
27	.41	0	0	0	0	0	0	0	0	0	0	00000	
28	.27	0	0	0	0	0	0	0	0	0	0	00000	
29	.16	0	0	0	0	0	0	0	0	0	0	00000	
30	.07	0	0	0	0	0	0	0	0	0	0	00000	
31	.03	0	0	0	0	0	0	0	0	0	0	00000	
32	0	0	0	0	0	0	0	0	0	0	0	00000	
33	0	0	0	0	0	0	0	0	0	0	0	00000	
34	0	0	0	0	0	0	0	0	0	0	0	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 3600.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	.	.	.	.
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	.	.
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	.
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.21	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.01	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.23	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.30	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.03	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.05	+	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.15	.10	.04	.01	+	+	.
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.01	.01	.01	.01	+	+	+	.	.
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	.	.	.
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	0	0
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

```
M N= 32  33  34  35  36  37  38  39  40  41  42  43  44
 2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 3    0   0   0   0   0   0   0   0   0   0   0   00000
 4    0   0   0   0   0   0   0   0   0   0   0   00000
 5    0   0   0   0   0   0   0   0   0   0   0   00000
 6    0   0   0   0   0   0   0   0   0   0   0   00000
 7    0   0   0   0   0   0   0   0   0   0   0   00000
 8    0   0   0   0   0   0   0   0   0   0   0   00000
 9    0   0   0   0   0   0   0   0   0   0   0   00000
10    0   0   0   0   0   0   0   0   0   0   0   00000
11    0   0   0   0   0   0   0   0   0   0   0   00000
12    0   0   0   0   0   0   0   0   0   0   0   00000
13    0   0   0   0   0   0   0   0   0   0   0   00000
14    0   0   0   0   0   0   0   0   0   0   0   00000
15    0   0   0   0   0   0   0   0   0   0   0   00000

16    0   0   0   0   0   0   0   0   0   0   0   00000
17    0   0   0   0   0   0   0   0   0   0   0   00000
18    .   0   0   0   0   0   0   0   0   0   0   00000
19    .   .   0   0   0   0   0   0   0   0   0   00000
20    .   .   .   0   0   0   0   0   0   0   0   00000
21    .   .   .   .   0   0   0   0   0   0   0   00000
22    .   .   .   .   0   0   0   0   0   0   0   00000
23    +   .   .   .   0   0   0   0   0   0   0   00000
24    +   .   .   .   0   0   0   0   0   0   0   00000
25    +   .   .   .   0   0   0   0   0   0   0   00000
26    +   .   .   .   0   0   0   0   0   0   0   00000
27    +   .   .   .   0   0   0   0   0   0   0   00000
28    +   .   .   .   0   0   0   0   0   0   0   00000
29    .   .   .   .   0   0   0   0   0   0   0   00000
30    .   .   .   0   0   0   0   0   0   0   0   00000
31    .   .   0   0   0   0   0   0   0   0   0   00000
32    .   0   0   0   0   0   0   0   0   0   0   00000
33    0   0   0   0   0   0   0   0   0   0   0   00000
34    0   0   0   0   0   0   0   0   0   0   0   00000
35    0   0   0   0   0   0   0   0   0   0   0   00000
36    0   0   0   0   0   0   0   0   0   0   0   00000
37    0   0   0   0   0   0   0   0   0   0   0   00000
38    0   0   0   0   0   0   0   0   0   0   0   00000
39    0   0   0   0   0   0   0   0   0   0   0   00000
40    0   0   0   0   0   0   0   0   0   0   0   00000
41    0   0   0   0   0   0   0   0   0   0   0   00000
42    0   0   0   0   0   0   0   0   0   0   0   00000
43    0   0   0   0   0   0   0   0   0   0   0   00000
44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
```

SMALL CLOUDS AT 3600.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	9062.	8.979	0.0000E+00	3090.	16.28	7.713	0.340000E-04
2	8407.	9060.	9.865	0.0000E+00	3090.	16.80	8.680	0.340000E-04
3	8409.	9057.	11.37	0.0000E+00	3089.	18.26	9.546	0.340000E-04
4	8415.	9033.	215.8	0.0000E+00	3087.	20.68	23.11	0.340000E-04
5	8423.	8975.	136.2	0.0000E+00	3115.	36.45	8.551	0.340000E-04

SUMMARY OF CLAY DISTRIBUTIONS AFTER 4200.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 381.92
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12301.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 4800.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 381.63
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12301.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 5400.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 381.20
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12302.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 6000.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 380.77
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12302.

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SUMMARY OF CLAY     DISTRIBUTIONS AFTER    6600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     380.35
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12302.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    7200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     379.95
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12303.

    MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT    1.00 FT
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CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 7200.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.01	.02	.02	.03	.03	.03
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.03	.04	.05	.06	.06	.06
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.03	.05	.07	.09	.11	.13	.13	.13
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.03	.05	.09	.13	.17	.21	.24	.25	.24
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.05	.10	.15	.22	.30	.36	.41	.43	.41
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.09	.15	.24	.35	.47	.57	.65	.67	.64
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.07	.13	.22	.35	.51	.68	.83	.94	.97	.93
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.04	.09	.18	.30	.47	.68	.91	1.1	1.2	1.3	1.2
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.06	.12	.22	.37	.58	.84	1.1	1.3	1.5	1.6	1.5
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.06	.13	.25	.42	.66	.96	1.2	1.5	1.7	1.8	1.7
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.07	.14	.26	.44	.69	1.0	1.3	1.6	1.8	1.9	1.8
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.07	.13	.25	.43	.67	.97	1.2	1.5	1.7	1.8	1.7
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.06	.12	.22	.38	.60	.86	1.1	1.3	1.5	1.6	1.5
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.10	.18	.31	.49	.70	.93	1.1	1.2	1.3	1.2
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.07	.14	.23	.37	.53	.70	.86	.97	1.0	.97
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.09	.16	.25	.37	.49	.60	.68	.70	.67
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.06	.10	.16	.23	.31	.38	.43	.45	.43
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.06	.09	.14	.18	.23	.25	.27	.25
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.07	.10	.12	.14	.14	.14
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	.02	.02	.01	.01	+	+	+	0	0	0	0	0	0
16	.05	.04	.03	.02	.01	+	+	0	0	0	0	0	0
17	.11	.09	.07	.04	.03	.01	.01	0	0	0	0	0	0
18	.21	.17	.13	.09	.05	.03	.01	0	0	0	0	0	0
19	.36	.29	.22	.15	.09	.05	.03	0	0	0	0	0	0
20	.57	.46	.35	.24	.15	.09	.04	0	0	0	0	0	0
21	.82	.67	.50	.35	.22	.13	.07	0	0	0	0	0	0
22	1.1	.90	.67	.47	.30	.17	.09	0	0	0	0	0	0
23	1.3	1.1	.83	.57	.36	.21	.11	0	0	0	0	0	0
24	1.5	1.2	.94	.65	.41	.24	.13	0	0	0	0	0	0
25	1.6	1.3	.99	.68	.43	.25	.14	0	0	0	0	0	0
26	1.5	1.2	.95	.66	.42	.24	.13	0	0	0	0	0	0
27	1.3	1.1	.85	.58	.37	.22	.12	0	0	0	0	0	0
28	1.1	.92	.69	.48	.30	.18	.09	0	0	0	0	0	0
29	.86	.70	.52	.36	.23	.13	.07	0	0	0	0	0	0
30	.60	.48	.36	.25	.16	.09	.05	0	0	0	0	0	0
31	.38	.31	.23	.16	.10	.06	.03	0	0	0	0	0	0
32	.22	.18	.14	.09	.06	.03	.01	0	0	0	0	0	0
33	.12	.10	.07	.05	.03	.01	.01	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 7200.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.01	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.03	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	+	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	.	.	.	0	0	0	0	0	0	0	0	0	0
14	.	.	.	.	.	0	0	0	0	0	0	0	0
15	.	.	.	.	.	.	.	0	0	0	0	0	0
16	.	.	.	.	.	.	.	.	0	0	0	0	0
17	.	.	.	.	.	.	.	.	0	0	0	0	0
18	+	+	.	.	.	.	.	.	.	0	0	0	0
19	+	+	+	+	.	.	.	.	.	.	0	0	0
20	+	+	+	+	.	.	.	.	.	.	0	0	0
21	+	+	+	+	+	.	.	.	.	.	.	0	0
22	+	+	+	+	+	+	.	.	.	.	.	0	0
23	+	+	+	+	+	+	.	.	.	.	.	0	0
24	+	+	+	+	+	+	.	.	.	.	.	0	0
25	+	+	+	+	+	+	.	.	.	.	.	0	0
26	+	+	+	+	+	+	.	.	.	.	.	0	0
27	+	+	+	+	+	+	.	.	.	.	.	0	0
28	+	+	+	+	+	+	.	.	.	.	.	0	0
29	+	+	+	+	+	.	.	.	.	.	.	0	0
30	+	+	+	+	+	.	.	.	.	.	0	0	0
31	+	+	+	+	.	.	.	.	.	.	0	0	0
32	+	+	.	.	.	.	.	.	.	0	0	0	0
33	.	.	.	.	.	.	.	.	.	0	0	0	0
34	.	.	.	.	.	.	.	.	0	0	0	0	0
35	.	.	.	.	.	.	.	0	0	0	0	0	0
36	.	.	.	.	.	0	0	0	0	0	0	0	0
37	.	.	.	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

SMALL CLOUDS AT 7200.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	0.1027E+05	8.979	0.0000E+00	4343.	13.11	14.29	0.340000E-04
2	8407.	0.1026E+05	9.865	0.0000E+00	4343.	13.64	15.25	0.340000E-04
3	8409.	0.1026E+05	11.37	0.0000E+00	4342.	15.10	16.12	0.340000E-04
4	8415.	0.1021E+05	215.2	0.0000E+00	4341.	17.51	27.49	0.340000E-04
5	8423.	0.1011E+05	134.6	0.0000E+00	4361.	33.28	11.72	0.340000E-04

SUMMARY OF CLAY DISTRIBUTIONS AFTER 7800.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 379.57
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12303.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 8400.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 379.19
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12304.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 9000.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 378.83
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12304.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 9600.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 378.48
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12304.

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SUMMARY OF CLAY     DISTRIBUTIONS AFTER   10200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     378.14
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12305.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER   10800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     377.81
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12305.

    MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT    1.00 FT
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CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 10800.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	.01	.01	.01
14	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.01	.02	.02	.02
15	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.02	.03	.04	.05
16	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.04	.06	.07	.08
17	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.07	.09	.12	.14
18	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.05	.08	.11	.14	.18	.21
19	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.03	.05	.08	.11	.16	.21	.26	.30
20	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.16	.22	.28	.35	.41
21	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.05	.09	.14	.20	.28	.36	.45	.53
22	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.07	.11	.17	.25	.34	.44	.55	.64
23	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.08	.13	.19	.28	.39	.51	.63	.74
24	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.08	.14	.21	.31	.43	.56	.69	.80
25	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.09	.14	.22	.32	.44	.58	.71	.83
26	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.08	.14	.21	.31	.43	.56	.69	.81
27	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.08	.13	.20	.29	.40	.52	.64	.75
28	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.07	.11	.17	.25	.35	.45	.56	.65
29	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.03	.05	.09	.14	.21	.29	.37	.46	.54
30	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.16	.22	.29	.36	.42
31	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.08	.12	.16	.22	.27	.31
32	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.06	.08	.11	.15	.19	.22
33	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.07	.10	.12	.14
34	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.05	.06	.08	.09
35	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	.01	.01	.01	.01	.01	.01	+	+	+	+	+	+	0
14	.03	.03	.03	.03	.02	.02	.01	.01	.01	+	+	+	0
15	.05	.06	.05	.05	.04	.04	.03	.02	.01	.01	+	+	0
16	.09	.10	.10	.09	.08	.07	.05	.04	.03	.02	.01	+	0
17	.15	.16	.16	.15	.13	.11	.08	.06	.04	.03	.02	.01	0
18	.23	.24	.24	.22	.20	.16	.13	.10	.07	.04	.03	.01	0
19	.33	.35	.34	.32	.28	.24	.19	.14	.10	.07	.04	.02	0
20	.45	.47	.47	.44	.39	.32	.26	.19	.14	.09	.06	.03	0
21	.58	.61	.60	.56	.50	.42	.33	.25	.18	.12	.07	.04	0
22	.71	.74	.73	.68	.61	.51	.40	.30	.21	.14	.09	.05	0
23	.81	.85	.84	.79	.70	.59	.46	.35	.25	.17	.10	.06	0
24	.89	.93	.92	.86	.76	.64	.51	.38	.27	.18	.11	.07	0
25	.91	.95	.94	.88	.78	.66	.52	.39	.28	.19	.12	.07	0
26	.89	.93	.92	.86	.77	.64	.51	.38	.27	.18	.11	.07	0
27	.82	.86	.85	.80	.71	.59	.47	.35	.25	.17	.11	.06	0
28	.72	.75	.74	.70	.62	.52	.41	.31	.22	.15	.09	.05	0
29	.60	.62	.62	.58	.51	.43	.34	.25	.18	.12	.07	.04	0
30	.47	.49	.48	.45	.40	.33	.27	.20	.14	.09	.06	.03	0
31	.34	.36	.36	.33	.30	.25	.20	.15	.10	.07	.04	.02	0
32	.24	.25	.25	.23	.21	.17	.14	.10	.07	.05	.03	.01	0
33	.16	.17	.16	.15	.14	.11	.09	.07	.05	.03	.02	.01	0
34	.10	.10	.10	.09	.08	.07	.05	.04	.03	.02	.01	+	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 10800.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M	N= 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	+	+	+	+	+
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.02	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.03	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	.01	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	+	+
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

```
M N= 32  33  34  35  36  37  38  39  40  41  42  43  44
 2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 3    0   0   0   0   0   0   0   0   0   0   0   00000
 4    0   0   0   0   0   0   0   0   0   0   0   00000
 5    0   0   0   0   0   0   0   0   0   0   0   00000
 6    0   0   0   0   0   0   0   0   0   0   0   00000
 7    0   0   0   0   0   0   0   0   0   0   0   00000
 8    0   0   0   0   0   0   0   0   0   0   0   00000
 9    0   0   0   0   0   0   0   0   0   0   0   00000
10    .   .   .   .   .   0   0   0   0   0   0   00000
11    .   .   .   .   .   .   .   .   0   0   0   00000
12    .   .   .   .   .   .   .   .   .   .   0   00000
13    .   .   .   .   .   .   .   .   .   .   .   00000
14    .   .   .   .   .   .   .   .   .   .   .   .0000
15    +   .   .   .   .   .   .   .   .   .   .   .0000
16    +   +   +   +   +   .   .   .   .   .   .   .0000
17    +   +   +   +   +   +   .   .   .   .   .   .0000
18    +   +   +   +   +   +   +   +   .   .   .   .0000
19    +   +   +   +   +   +   +   +   .   .   .   .0000
20    +   +   +   +   +   +   +   +   +   .   .   .0000
21    +   +   +   +   +   +   +   +   +   +   .   .0000
22    +   +   +   +   +   +   +   +   +   +   .   .0000
23    +   +   +   +   +   +   +   +   +   +   .   .0000
24    +   +   +   +   +   +   +   +   +   +   +   .0000
25    +   +   +   +   +   +   +   +   +   +   +   .0000
26    +   +   +   +   +   +   +   +   +   +   +   .0000
27    +   +   +   +   +   +   +   +   +   +   .   .0000
28    +   +   +   +   +   +   +   +   +   +   .   .0000
29    +   +   +   +   +   +   +   +   +   +   .   .0000
30    +   +   +   +   +   +   +   +   +   .   .   .0000
31    +   +   +   +   +   +   +   +   +   .   .   .0000
32    +   +   +   +   +   +   +   +   .   .   .   .0000
33    +   +   +   +   +   +   +   .   .   .   .   .0000
34    +   +   +   +   +   .   .   .   .   .   .   .0000
35    +   +   .   .   .   .   .   .   .   .   .   .0000
36    .   .   .   .   .   .   .   .   .   .   .   .0000
37    .   .   .   .   .   .   .   .   .   .   .   00000
38    .   .   .   .   .   .   .   .   .   .   0   00000
39    .   .   .   .   .   .   .   .   0   0   0   00000
40    .   .   .   .   .   .   0   0   0   0   0   00000
41    0   0   0   0   0   0   0   0   0   0   0   00000

42    0   0   0   0   0   0   0   0   0   0   0   00000
43    0   0   0   0   0   0   0   0   0   0   0   00000
44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
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SMALL CLOUDS AT 10800.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	0.1147E+05	8.979	0.0000E+00	5297.	9.951	20.86	0.340000E-04
2	8407.	0.1147E+05	9.865	0.0000E+00	5297.	10.47	21.83	0.340000E-04
3	8409.	0.1146E+05	11.37	0.0000E+00	5297.	11.94	22.69	0.340000E-04
4	8415.	0.1139E+05	214.3	0.0000E+00	5295.	14.35	30.65	0.340000E-04
5	8423.	0.1126E+05	133.3	0.0000E+00	5312.	30.12	14.88	0.340000E-04

SUMMARY OF CLAY DISTRIBUTIONS AFTER 11400.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 377.49
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12305.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 12000.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 377.18
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12306.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 12600.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 376.88
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12306.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 13200.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 376.58
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12306.

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SUMMARY OF CLAY     DISTRIBUTIONS AFTER   13800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     376.29
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12306.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER   14400.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     376.01
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12307.

    MAX CONC IS 0.00000001 OUTPUT SUPPRESSED AT    1.00 FT
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CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	+
13	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	.01	.01
14	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.01	.02
15	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.02	.02	.03
16	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.04	.05
17	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.04	.06	.07
18	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.04	.06	.08	.10
19	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.02	.04	.05	.08	.11	.14
20	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.07	.10	.13	.17
21	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.08	.12	.16	.21
22	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.02	.04	.07	.10	.14	.19	.24
23	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.03	.05	.07	.11	.16	.21	.27
24	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.05	.08	.12	.17	.22	.29
25	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.05	.08	.12	.17	.23	.30
26	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.05	.08	.12	.17	.23	.29
27	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.03	.05	.07	.11	.16	.21	.27
28	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.02	.04	.07	.10	.14	.19	.25
29	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.09	.12	.17	.21
30	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.07	.10	.14	.18
31	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.02	.04	.06	.08	.11	.14
32	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.04	.06	.08	.11
33	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.04	.06	.08
34	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.04	.05
35	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.02	.03	.03
36	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	+	+0000	
13	.01	.02	.02	.02	.02	.02	.02	.02	.02	.01	.01	.010000	
14	.03	.03	.04	.04	.04	.04	.04	.04	.03	.03	.02	.020000	
15	.04	.05	.06	.06	.07	.07	.06	.06	.05	.04	.04	.030000	
16	.06	.08	.09	.10	.10	.10	.10	.09	.08	.07	.05	.040000	
17	.09	.11	.13	.14	.15	.15	.14	.13	.12	.10	.08	.060000	
18	.13	.15	.18	.19	.20	.20	.20	.18	.16	.14	.11	.090000	
19	.17	.20	.23	.25	.27	.27	.26	.24	.21	.18	.15	.120000	
20	.22	.26	.29	.32	.34	.34	.33	.30	.27	.23	.19	.150000	
21	.26	.31	.35	.39	.41	.41	.40	.37	.33	.28	.23	.180000	
22	.30	.36	.41	.45	.47	.48	.46	.43	.38	.32	.26	.210000	
23	.34	.40	.46	.50	.53	.53	.51	.47	.42	.36	.29	.230000	
24	.36	.43	.49	.53	.56	.57	.55	.51	.45	.38	.31	.250000	
25	.37	.44	.50	.55	.57	.58	.56	.52	.46	.39	.32	.250000	
26	.36	.43	.49	.54	.56	.57	.55	.51	.45	.38	.31	.250000	
27	.34	.41	.46	.51	.53	.53	.52	.48	.43	.36	.30	.230000	
28	.31	.37	.42	.46	.48	.48	.47	.43	.38	.33	.27	.210000	
29	.27	.32	.36	.40	.42	.42	.40	.37	.33	.28	.23	.180000	
30	.22	.26	.30	.33	.35	.35	.34	.31	.28	.23	.19	.150000	
31	.18	.21	.24	.26	.27	.28	.27	.25	.22	.19	.15	.120000	
32	.13	.16	.18	.20	.21	.21	.20	.19	.17	.14	.12	.090000	
33	.10	.12	.13	.15	.15	.15	.15	.14	.12	.10	.08	.060000	
34	.07	.08	.09	.10	.11	.11	.10	.10	.08	.07	.06	.040000	
35	.04	.05	.06	.07	.07	.07	.07	.06	.06	.05	.04	.030000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000												

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	+	+	+	+
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	.01	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.02	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.04	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	.01	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	+	+	+	+
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	.	.	.	.	.	.	.	.	.	0	0	0	0
9	.	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	.
14	+	+	+	+	+	.	.	.	.	.	.	.	.
15	+	+	+	+	+	+	+	+	.	.	.	.	.
16	+	+	+	+	+	+	+	+	+	+	.	.	.
17	+	+	+	+	+	+	+	+	+	+	+	.	.
18	+	+	+	+	+	+	+	+	+	+	+	+	+
19	+	+	+	+	+	+	+	+	+	+	+	+	+
20	+	+	+	+	+	+	+	+	+	+	+	+	+
21	+	+	+	+	+	+	+	+	+	+	+	+	+
22	+	+	+	+	+	+	+	+	+	+	+	+	+
23	+	+	+	+	+	+	+	+	+	+	+	+	+
24	+	+	+	+	+	+	+	+	+	+	+	+	+
25	+	+	+	+	+	+	+	+	+	+	+	+	+
26	+	+	+	+	+	+	+	+	+	+	+	+	+
27	+	+	+	+	+	+	+	+	+	+	+	+	+
28	+	+	+	+	+	+	+	+	+	+	+	+	+
29	+	+	+	+	+	+	+	+	+	+	+	+	+
30	+	+	+	+	+	+	+	+	+	+	+	+	+
31	+	+	+	+	+	+	+	+	+	+	+	+	+
32	+	+	+	+	+	+	+	+	+	+	+	+	+
33	+	+	+	+	+	+	+	+	+	+	+	+	.
34	+	+	+	+	+	+	+	+	+	+	.	.	.
35	+	+	+	+	+	+	+	+	.	.	.	.	.
36	+	+	+	+	+	+	.	.	.	.	.	.	.
37	.	.	.	.	.	.	.	.	.	.	.	.	.
38	.	.	.	.	.	.	.	.	.	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
41	.	.	.	.	.	.	.	.	.	.	.	.	.
42	.	.	.	.	.	.	.	.	.	.	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

SMALL CLOUDS AT 14400.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	0.1268E+05	8.979	0.0000E+00	6100.	6.787	27.43	0.340000E-04
2	8407.	0.1267E+05	9.865	0.0000E+00	6100.	7.308	28.40	0.340000E-04
3	8409.	0.1266E+05	11.37	0.0000E+00	6100.	8.773	29.26	0.340000E-04
4	8415.	0.1258E+05	213.4	0.0000E+00	6099.	11.18	33.82	0.340000E-04
5	8423.	0.1241E+05	132.3	0.0000E+00	6113.	26.96	18.04	0.340000E-04

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	+	+	+	+
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	.01	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.02	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.04	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	.01	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	+	+	+	+
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	.	.	.	.	.	.	.	.	.	0	0	0	0
9	.	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	.
14	+	+	+	+	+	.	.	.	.	.	.	.	.
15	+	+	+	+	+	+	+	+	.	.	.	.	.
16	+	+	+	+	+	+	+	+	+	+	.	.	.
17	+	+	+	+	+	+	+	+	+	+	+	.	.
18	+	+	+	+	+	+	+	+	+	+	+	+	+
19	+	+	+	+	+	+	+	+	+	+	+	+	+
20	+	+	+	+	+	+	+	+	+	+	+	+	+
21	+	+	+	+	+	+	+	+	+	+	+	+	+
22	+	+	+	+	+	+	+	+	+	+	+	+	+
23	+	+	+	+	+	+	+	+	+	+	+	+	+
24	+	+	+	+	+	+	+	+	+	+	+	+	+
25	+	+	+	+	+	+	+	+	+	+	+	+	+
26	+	+	+	+	+	+	+	+	+	+	+	+	+
27	+	+	+	+	+	+	+	+	+	+	+	+	+
28	+	+	+	+	+	+	+	+	+	+	+	+	+
29	+	+	+	+	+	+	+	+	+	+	+	+	+
30	+	+	+	+	+	+	+	+	+	+	+	+	+
31	+	+	+	+	+	+	+	+	+	+	+	+	+
32	+	+	+	+	+	+	+	+	+	+	+	+	+
33	+	+	+	+	+	+	+	+	+	+	+	+	.
34	+	+	+	+	+	+	+	+	+	+	.	.	.
35	+	+	+	+	+	+	+	+	.	.	.	.	.
36	+	+	+	+	+	+	.	.	.	.	.	.	.
37	.	.	.	.	.	.	.	.	.	.	.	.	.
38	.	.	.	.	.	.	.	.	.	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
41	.	.	.	.	.	.	.	.	.	.	.	.	.
42	.	.	.	.	.	.	.	.	.	.	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

THICKNESS (FT) OF CLAY ACCUMULATED ON BOTTOM, 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 0.1000E-01 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+	+
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	.01	.03	.05	.04	.02	.01	+	+	+	+
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.02	.09	.25	.36	.30	.15	.05	.01	+	+	+
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.09	.48	1.3	1.9	1.4	.61	.18	.04	+	+	+
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.26	1.4	4.0	5.8	4.1	1.6	.42	.09	.01	+	+
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.40	2.2	6.3	9.0	6.3	2.4	.59	.12	.02	+	+
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.31	1.7	4.8	6.9	4.9	1.9	.48	.10	.01	+	+
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.13	.67	1.8	2.6	1.9	.83	.24	.05	.01	+	+
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.03	.15	.40	.58	.46	.22	.07	.02	+	+	+
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.08	.07	.04	.01	+	+	+	+
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	.01	.01	+	+	+	+	+	+
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	.	.	.	.	.	.
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

```
M N= 32  33  34  35  36  37  38  39  40  41  42  43  44
 2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 3    0   0   0   0   0   0   0   0   0   0   0   00000
 4    0   0   0   0   0   0   0   0   0   0   0   00000
 5    0   0   0   0   0   0   0   0   0   0   0   00000
 6    0   0   0   0   0   0   0   0   0   0   0   00000
 7    0   0   0   0   0   0   0   0   0   0   0   00000
 8    0   0   0   0   0   0   0   0   0   0   0   00000
 9    0   0   0   0   0   0   0   0   0   0   0   00000
10    0   0   0   0   0   0   0   0   0   0   0   00000
11    .   .   .   .   .   .   0   0   0   0   0   00000
12    .   .   .   .   .   .   .   .   .   .   0   00000
13    .   .   .   .   .   .   .   .   .   .   .   00000
14    .   .   .   .   .   .   .   .   .   .   .   .0000
15    .   .   .   .   .   .   .   .   .   .   .   .0000
16    .   .   .   .   .   .   .   .   .   .   .   .0000
17    .   .   .   .   .   .   .   .   .   .   .   .0000
18    .   .   .   .   .   .   .   .   .   .   .   .0000
19    +   .   .   .   .   .   .   .   .   .   .   .0000
20    +   +   +   +   .   .   .   .   .   .   .   .0000
21    +   +   +   +   +   +   .   .   .   .   .   .0000
22    +   +   +   +   +   +   +   .   .   .   .   .0000
23    +   +   +   +   +   +   +   .   .   .   .   .0000
24    +   +   +   +   +   +   +   .   .   .   .   .0000
25    +   +   +   +   +   +   +   +   .   .   .   .0000
26    +   +   +   +   +   +   +   .   .   .   .   .0000
27    +   +   +   +   +   +   +   .   .   .   .   .0000
28    +   +   +   +   +   +   +   .   .   .   .   .0000
29    +   +   +   +   +   +   .   .   .   .   .   .0000
30    +   +   +   +   .   .   .   .   .   .   .   .0000
31    +   +   .   .   .   .   .   .   .   .   .   .0000
32    .   .   .   .   .   .   .   .   .   .   .   .0000
33    .   .   .   .   .   .   .   .   .   .   .   .0000
34    .   .   .   .   .   .   .   .   .   .   .   .0000
35    .   .   .   .   .   .   .   .   .   .   .   .0000
36    .   .   .   .   .   .   .   .   .   .   .   .0000
37    .   .   .   .   .   .   .   .   .   .   .   .0000
38    .   .   .   .   .   .   .   .   .   .   0   00000
39    .   .   .   .   .   .   .   0   0   0   0   00000
40    0   0   0   0   0   0   0   0   0   0   0   00000
41    0   0   0   0   0   0   0   0   0   0   0   00000
42    0   0   0   0   0   0   0   0   0   0   0   00000
43    0   0   0   0   0   0   0   0   0   0   0   00000
44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
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    BEGIN LONG TERM SIMULATION OF FATE OF ARSENIC


SUMMARY OF ARSENIC  DISTRIBUTIONS AFTER     600.00 SEC

    TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) =     59225.
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SMALL CLOUDS AT 600.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8038.	0.2015E+06	0.1423E+06	1433.	40.02	4.981	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 1200.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 1200.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8222.	0.3571E+06	0.2979E+06	1959.	39.47	5.528	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 1800.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 1800.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8407.	0.5294E+06	0.4701E+06	2344.	38.92	6.076	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 2400.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 2400.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8592.	0.7231E+06	0.6639E+06	2666.	38.38	6.624	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 3000.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 3000.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8778.	0.9394E+06	0.8802E+06	2948.	37.83	7.172	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 3600.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 3600.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-04 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+	+
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	.01	.01	.01	.01	.01	.01	+	+
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.05	.06	.06	.05	.04	.02	.01
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.03	.06	.10	.13	.16	.16	.14	.10	.07	.03
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.07	.14	.23	.32	.38	.38	.33	.25	.16	.09
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.07	.15	.29	.46	.64	.76	.77	.67	.51	.33	.18
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.05	.12	.27	.50	.80	1.1	1.3	1.3	1.1	.88	.57	.31
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.07	.18	.40	.75	1.1	1.6	1.9	1.9	1.7	1.3	.84	.47
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.03	.09	.24	.51	.95	1.5	2.1	2.4	2.5	2.2	1.6	1.0	.60
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.10	.26	.56	1.0	1.6	2.3	2.7	2.7	2.4	1.8	1.1	.66
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.09	.24	.53	.99	1.5	2.1	2.5	2.6	2.2	1.7	1.1	.62
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.08	.20	.43	.81	1.2	1.7	2.1	2.1	1.8	1.4	.91	.51
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.05	.14	.30	.56	.90	1.2	1.4	1.4	1.3	.98	.64	.35
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.08	.18	.34	.54	.75	.88	.90	.79	.59	.38	.21
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.04	.09	.17	.28	.38	.46	.46	.41	.30	.20	.11
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.04	.07	.12	.17	.20	.20	.18	.13	.08	.05
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	0	0	0	0	0	0	0	0	0	0	0	00000	
14	0	0	0	0	0	0	0	0	0	0	0	00000	
15	0	0	0	0	0	0	0	0	0	0	0	00000	
16	+	0	0	0	0	0	0	0	0	0	0	00000	
17	+	0	0	0	0	0	0	0	0	0	0	00000	
18	+	0	0	0	0	0	0	0	0	0	0	00000	
19	.01	0	0	0	0	0	0	0	0	0	0	00000	
20	.04	0	0	0	0	0	0	0	0	0	0	00000	
21	.08	0	0	0	0	0	0	0	0	0	0	00000	
22	.15	0	0	0	0	0	0	0	0	0	0	00000	
23	.22	0	0	0	0	0	0	0	0	0	0	00000	
24	.29	0	0	0	0	0	0	0	0	0	0	00000	
25	.31	0	0	0	0	0	0	0	0	0	0	00000	
26	.30	0	0	0	0	0	0	0	0	0	0	00000	
27	.24	0	0	0	0	0	0	0	0	0	0	00000	
28	.17	0	0	0	0	0	0	0	0	0	0	00000	
29	.10	0	0	0	0	0	0	0	0	0	0	00000	
30	.05	0	0	0	0	0	0	0	0	0	0	00000	
31	.02	0	0	0	0	0	0	0	0	0	0	00000	
32	0	0	0	0	0	0	0	0	0	0	0	00000	
33	0	0	0	0	0	0	0	0	0	0	0	00000	
34	0	0	0	0	0	0	0	0	0	0	0	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000000												

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 3600.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

...MULTIPLY DISPLAYED VALUES BY 0.1000E-04 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	.01	.01	.01	.01	.01	+	+
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.04	.05	.05	.05	.03	.02	.01
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.03	.07	.11	.15	.18	.18	.16	.12	.07	.04
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.04	.10	.18	.30	.41	.49	.49	.43	.32	.21	.11
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.11	.23	.44	.70	.96	1.1	1.1	1.0	.76	.49	.27
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.03	.08	.22	.47	.88	1.4	1.9	2.2	2.3	2.0	1.5	.99	.55
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.05	.15	.38	.82	1.5	2.4	3.3	3.9	3.9	3.5	2.6	1.7	.95
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.07	.22	.56	1.2	2.2	3.5	4.9	5.8	5.9	5.1	3.9	2.5	1.4
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.09	.28	.72	1.5	2.8	4.5	6.2	7.4	7.5	6.6	4.9	3.2	1.8
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.10	.31	.79	1.7	3.1	5.0	6.9	8.1	8.3	7.2	5.4	3.5	1.9
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.10	.29	.74	1.6	2.9	4.7	6.5	7.7	7.8	6.8	5.1	3.3	1.8
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.08	.24	.60	1.3	2.4	3.8	5.3	6.2	6.4	5.6	4.2	2.7	1.5
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.05	.17	.42	.92	1.7	2.7	3.7	4.4	4.4	3.9	2.9	1.9	1.0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.10	.25	.55	1.0	1.6	2.2	2.6	2.7	2.3	1.7	1.1	.64
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.05	.13	.28	.53	.85	1.1	1.3	1.4	1.2	.92	.60	.33
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.05	.12	.23	.38	.52	.61	.62	.54	.41	.26	.15
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M	N= 32	33	34	35	36	37	38	39	40	41	42	43	44
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	0	0	0	0	0	0	0	0	0	0	0	00000	
14	0	0	0	0	0	0	0	0	0	0	0	00000	
15	0	0	0	0	0	0	0	0	0	0	0	00000	
16	+	0	0	0	0	0	0	0	0	0	0	00000	
17	+	0	0	0	0	0	0	0	0	0	0	00000	
18	.02	0	0	0	0	0	0	0	0	0	0	00000	
19	.05	0	0	0	0	0	0	0	0	0	0	00000	
20	.13	0	0	0	0	0	0	0	0	0	0	00000	
21	.26	0	0	0	0	0	0	0	0	0	0	00000	
22	.45	0	0	0	0	0	0	0	0	0	0	00000	
23	.68	0	0	0	0	0	0	0	0	0	0	00000	
24	.86	0	0	0	0	0	0	0	0	0	0	00000	
25	.95	0	0	0	0	0	0	0	0	0	0	00000	
26	.90	0	0	0	0	0	0	0	0	0	0	00000	
27	.73	0	0	0	0	0	0	0	0	0	0	00000	
28	.51	0	0	0	0	0	0	0	0	0	0	00000	
29	.31	0	0	0	0	0	0	0	0	0	0	00000	
30	.16	0	0	0	0	0	0	0	0	0	0	00000	
31	.07	0	0	0	0	0	0	0	0	0	0	00000	
32	0	0	0	0	0	0	0	0	0	0	0	00000	
33	0	0	0	0	0	0	0	0	0	0	0	00000	
34	0	0	0	0	0	0	0	0	0	0	0	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												

SMALL CLOUDS AT 3600.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8965.	0.1179E+07	0.1120E+07	3204.	37.28	7.720	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 4200.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 4200.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9152.	0.1441E+07	0.1382E+07	3440.	36.73	8.267	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 4800.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 4800.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9340.	0.1727E+07	0.1668E+07	3659.	36.18	8.815	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 5400.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 5400.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9528.	0.2037E+07	0.1977E+07	3865.	35.64	9.363	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 6000.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 6000.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9716.	0.2369E+07	0.2310E+07	4060.	35.09	9.911	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 6600.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 6600.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9905.	0.2726E+07	0.2666E+07	4246.	34.54	10.46	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 7200.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 7200.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-05 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													
3	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.03	.04	.05	.06	.06	.05
15	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.08	.10	.12	.13	.14	.13
16	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.04	.07	.12	.17	.22	.26	.29	.30	.29
17	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.09	.15	.24	.33	.43	.52	.58	.60	.57
18	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.09	.17	.28	.43	.61	.80	.96	1.0	1.0	1.0
19	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.08	.16	.29	.48	.73	1.0	1.3	1.6	1.8	1.8	1.7
20	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.06	.13	.25	.45	.75	1.1	1.6	2.1	2.5	2.8	2.8	2.7
21	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.09	.19	.36	.65	1.0	1.6	2.3	3.0	3.6	4.0	4.1	3.9
22	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.12	.25	.49	.87	1.4	2.1	3.0	4.0	4.8	5.3	5.5	5.2
23	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.15	.31	.60	1.0	1.7	2.7	3.8	4.9	5.9	6.6	6.7	6.4
24	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.17	.35	.68	1.2	2.0	3.0	4.3	5.6	6.7	7.5	7.7	7.3
25	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.17	.37	.72	1.2	2.1	3.2	4.5	5.9	7.1	7.8	8.1	7.7
26	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.17	.36	.70	1.2	2.0	3.1	4.4	5.7	6.8	7.6	7.8	7.4
27	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.15	.32	.62	1.1	1.8	2.8	3.9	5.1	6.1	6.8	7.0	6.7
28	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.12	.27	.52	.93	1.5	2.3	3.2	4.2	5.1	5.7	5.8	5.5
29	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.09	.20	.40	.71	1.1	1.7	2.5	3.2	3.9	4.3	4.4	4.2
30	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.07	.14	.28	.50	.83	1.2	1.7	2.3	2.7	3.1	3.1	3.0
31	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.09	.18	.33	.54	.83	1.1	1.5	1.8	2.0	2.0	1.9
32	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.11	.20	.33	.50	.70	.92	1.1	1.2	1.2	1.2
33	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.06	.11	.18	.28	.39	.51	.62	.69	.70	.67
34	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	.05	.04	.03	.02	.01	+	0	0	0	0	0	0	0
15	.11	.09	.07	.05	.03	.01	0	0	0	0	0	0	0
16	.25	.20	.15	.10	.06	.04	0	0	0	0	0	0	0
17	.50	.40	.30	.21	.13	.08	0	0	0	0	0	0	0
18	.91	.74	.55	.38	.24	.14	0	0	0	0	0	0	0
19	1.5	1.2	.93	.65	.41	.24	0	0	0	0	0	0	0
20	2.4	1.9	1.4	1.0	.64	.38	0	0	0	0	0	0	0
21	3.4	2.8	2.1	1.4	.93	.55	0	0	0	0	0	0	0
22	4.6	3.7	2.8	1.9	1.2	.73	0	0	0	0	0	0	0
23	5.6	4.5	3.4	2.3	1.5	.90	0	0	0	0	0	0	0
24	6.4	5.2	3.9	2.7	1.7	1.0	0	0	0	0	0	0	0
25	6.7	5.4	4.1	2.8	1.8	1.0	0	0	0	0	0	0	0
26	6.5	5.3	3.9	2.7	1.7	1.0	0	0	0	0	0	0	0
27	5.8	4.7	3.5	2.4	1.5	.94	0	0	0	0	0	0	0
28	4.8	3.9	2.9	2.0	1.3	.78	0	0	0	0	0	0	0
29	3.7	3.0	2.2	1.5	1.0	.60	0	0	0	0	0	0	0
30	2.6	2.1	1.6	1.1	.71	.42	0	0	0	0	0	0	0
31	1.7	1.4	1.0	.73	.47	.27	0	0	0	0	0	0	0
32	1.0	.85	.64	.44	.28	.16	0	0	0	0	0	0	0
33	.59	.47	.35	.24	.15	.09	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 7200.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

...MULTIPLY DISPLAYED VALUES BY 0.1000E-04 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	.01	.01	.02	.02	.02	.02
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.03	.03	.04	.05	.05	.05
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.03	.04	.06	.08	.10	.11	.11	.11
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.06	.09	.12	.16	.20	.22	.23	.21
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.06	.10	.16	.23	.30	.36	.40	.41	.39
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.06	.11	.18	.28	.39	.51	.61	.68	.70	.67
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.09	.17	.28	.43	.61	.80	.96	1.0	1.1	1.0
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.07	.14	.25	.41	.63	.88	1.1	1.3	1.5	1.5	1.5
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.09	.18	.33	.55	.83	1.1	1.5	1.8	2.0	2.1	2.0
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.11	.23	.41	.67	1.0	1.4	1.8	2.2	2.5	2.5	2.4
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.06	.13	.26	.46	.76	1.1	1.6	2.1	2.5	2.8	2.9	2.7
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.14	.27	.49	.80	1.2	1.7	2.2	2.7	3.0	3.0	2.9
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.06	.13	.26	.47	.78	1.1	1.6	2.1	2.6	2.9	3.0	2.8
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.12	.24	.42	.70	1.0	1.5	1.9	2.3	2.6	2.6	2.5
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.10	.19	.35	.58	.89	1.2	1.6	1.9	2.1	2.2	2.1
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.07	.15	.27	.44	.68	.96	1.2	1.5	1.6	1.7	1.6
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.10	.19	.31	.48	.68	.88	1.0	1.1	1.2	1.1
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.07	.12	.20	.31	.44	.58	.69	.77	.79	.75
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.12	.19	.27	.35	.42	.47	.48	.45
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.04	.07	.10	.15	.19	.23	.26	.27	.25
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	.01	.01	.01	+	+	+	0	0	0	0	0	0	0
15	.04	.03	.02	.01	.01	+	0	0	0	0	0	0	0
16	.09	.07	.05	.04	.02	.01	0	0	0	0	0	0	0
17	.19	.15	.11	.08	.05	.03	0	0	0	0	0	0	0
18	.34	.28	.21	.14	.09	.05	0	0	0	0	0	0	0
19	.58	.47	.35	.24	.15	.09	0	0	0	0	0	0	0
20	.91	.74	.55	.38	.24	.14	0	0	0	0	0	0	0
21	1.3	1.0	.80	.55	.35	.21	0	0	0	0	0	0	0
22	1.7	1.4	1.0	.74	.47	.28	0	0	0	0	0	0	0
23	2.1	1.7	1.3	.91	.58	.34	0	0	0	0	0	0	0
24	2.4	1.9	1.4	1.0	.66	.39	0	0	0	0	0	0	0
25	2.5	2.0	1.5	1.0	.69	.41	0	0	0	0	0	0	0
26	2.5	2.0	1.5	1.0	.67	.40	0	0	0	0	0	0	0
27	2.2	1.8	1.3	.94	.60	.35	0	0	0	0	0	0	0
28	1.8	1.5	1.1	.78	.50	.29	0	0	0	0	0	0	0
29	1.4	1.1	.87	.60	.38	.22	0	0	0	0	0	0	0
30	1.0	.82	.61	.42	.27	.16	0	0	0	0	0	0	0
31	.66	.53	.40	.28	.17	.10	0	0	0	0	0	0	0
32	.40	.32	.24	.16	.10	.06	0	0	0	0	0	0	0
33	.22	.18	.13	.09	.06	.03	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

SMALL CLOUDS AT 7200.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1009E+05	0.3105E+07	0.3046E+07	4423.	33.99	11.01	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 7800.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 7800.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1028E+05	0.3509E+07	0.3449E+07	4594.	33.45	11.55	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 8400.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 8400.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1047E+05	0.3935E+07	0.3876E+07	4758.	32.90	12.10	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 9000.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 9000.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1067E+05	0.4385E+07	0.4326E+07	4916.	32.35	12.65	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 9600.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 9600.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1086E+05	0.4859E+07	0.4800E+07	5070.	31.80	13.20	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 10200.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 10200.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1105E+05	0.5356E+07	0.5297E+07	5218.	31.25	13.75	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 10800.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 10800.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-05 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.02	.03	.04	.05	.06
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.04	.06	.08	.10	.11
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.04	.06	.08	.11	.15	.18	.21
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.10	.14	.19	.25	.30	.35
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.06	.10	.16	.23	.31	.40	.48	.56
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.06	.10	.16	.24	.34	.47	.60	.73	.84
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.08	.14	.23	.34	.49	.67	.86	1.0	1.2
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.11	.19	.31	.47	.67	.90	1.1	1.4	1.6
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.08	.15	.25	.40	.60	.86	1.1	1.4	1.8	2.0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.10	.18	.30	.48	.73	1.0	1.4	1.8	2.1	2.5
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.12	.21	.35	.56	.84	1.2	1.6	2.0	2.5	2.9
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.13	.23	.38	.61	.92	1.3	1.7	2.2	2.7	3.1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.13	.23	.40	.63	.95	1.3	1.8	2.3	2.8	3.2
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.13	.23	.39	.62	.93	1.3	1.8	2.3	2.7	3.2
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.12	.21	.36	.57	.87	1.2	1.6	2.1	2.5	2.9
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.10	.19	.32	.51	.76	1.0	1.4	1.8	2.2	2.6
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.09	.16	.26	.42	.63	.91	1.2	1.5	1.9	2.1
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.07	.12	.21	.33	.50	.72	.97	1.2	1.5	1.7
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.09	.15	.25	.37	.54	.73	.93	1.1	1.3
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.06	.11	.17	.27	.38	.51	.66	.80	.92
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.07	.12	.18	.25	.35	.44	.54	.62
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.16	.22	.28	.34	.39
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	.06	.07	.07	.06	.05	.04	.03	.02	.02	.01	+	00000	
14	.13	.13	.13	.12	.10	.08	.07	.05	.03	.02	.01	00000	
15	.22	.23	.23	.21	.19	.15	.12	.09	.06	.04	.02	00000	
16	.38	.39	.38	.36	.31	.26	.20	.15	.11	.07	.04	00000	
17	.61	.63	.61	.57	.50	.42	.33	.24	.17	.11	.07	00000	
18	.91	.94	.92	.86	.75	.63	.50	.37	.26	.17	.11	00000	
19	1.3	1.3	1.3	1.2	1.0	.90	.71	.53	.38	.25	.16	00000	
20	1.7	1.8	1.7	1.6	1.4	1.2	.96	.72	.51	.34	.22	00000	
21	2.2	2.3	2.2	2.1	1.8	1.5	1.2	.92	.65	.44	.28	00000	
22	2.7	2.8	2.7	2.5	2.2	1.8	1.5	1.1	.79	.53	.34	00000	
23	3.1	3.2	3.2	2.9	2.6	2.1	1.7	1.2	.91	.61	.39	00000	
24	3.4	3.5	3.5	3.2	2.8	2.3	1.8	1.4	1.0	.67	.43	00000	
25	3.5	3.6	3.6	3.3	2.9	2.4	1.9	1.4	1.0	.69	.44	00000	
26	3.5	3.6	3.5	3.2	2.8	2.4	1.9	1.4	1.0	.68	.43	00000	
27	3.2	3.3	3.2	3.0	2.6	2.2	1.7	1.3	.94	.63	.40	00000	
28	2.8	2.9	2.9	2.6	2.3	1.9	1.5	1.1	.83	.56	.35	00000	
29	2.3	2.4	2.4	2.2	1.9	1.6	1.3	.97	.69	.46	.29	00000	
30	1.8	1.9	1.9	1.7	1.5	1.3	1.0	.77	.55	.37	.23	00000	
31	1.4	1.4	1.4	1.3	1.1	.98	.77	.58	.41	.27	.17	00000	
32	1.0	1.0	1.0	.94	.83	.69	.55	.41	.29	.19	.12	00000	
33	.68	.70	.68	.64	.56	.46	.37	.27	.19	.13	.08	00000	
34	.43	.44	.44	.40	.35	.30	.23	.17	.12	.08	.05	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000000												

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 10800.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

...MULTIPLY DISPLAYED VALUES BY 0.1000E-04 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.01	.02	.02	.02
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.02	.02	.03	.04	.05
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.05	.06	.08	.09
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.01	.03	.04	.06	.08	.11	.13	.15
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.03	.04	.07	.10	.13	.17	.21	.24
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.10	.15	.20	.26	.32	.37
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.06	.10	.15	.21	.29	.37	.45	.52
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.08	.13	.20	.29	.39	.51	.62	.71
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.06	.11	.17	.26	.37	.51	.65	.79	.91
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.08	.13	.21	.32	.46	.62	.79	.96	1.1
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.09	.15	.24	.37	.52	.71	.91	1.1	1.2
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.05	.10	.17	.26	.40	.57	.78	.99	1.2	1.3
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.05	.10	.17	.27	.41	.59	.80	1.0	1.2	1.4
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.05	.10	.17	.27	.41	.58	.79	1.0	1.2	1.4
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.09	.16	.25	.38	.54	.73	.94	1.1	1.3
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.08	.14	.22	.33	.47	.64	.82	1.0	1.1
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.07	.11	.18	.28	.40	.54	.69	.83	.96
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.05	.09	.14	.22	.31	.42	.54	.66	.76
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.06	.11	.16	.23	.32	.41	.49	.57
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.16	.22	.29	.35	.40
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.07	.11	.15	.19	.23	.27
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.05	.07	.09	.12	.15	.17
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	.03	.03	.03	.02	.02	.02	.01	.01	+	+	+	0	0
14	.05	.05	.05	.05	.04	.03	.03	.02	.01	.01	+	0	0
15	.10	.10	.10	.09	.08	.06	.05	.04	.02	.01	.01	0	0
16	.16	.17	.17	.15	.13	.11	.09	.06	.04	.03	.02	0	0
17	.26	.27	.27	.25	.22	.18	.14	.10	.07	.05	.03	0	0
18	.40	.41	.40	.37	.33	.27	.21	.16	.11	.07	.05	0	0
19	.57	.59	.58	.54	.47	.39	.31	.23	.16	.11	.07	0	0
20	.77	.80	.78	.73	.64	.53	.42	.31	.22	.15	.09	0	0
21	.99	1.0	1.0	.93	.82	.68	.54	.40	.28	.19	.12	0	0
22	1.2	1.2	1.2	1.1	.99	.83	.65	.49	.35	.23	.15	0	0
23	1.3	1.4	1.4	1.3	1.1	.95	.75	.56	.40	.27	.17	0	0
24	1.5	1.5	1.5	1.4	1.2	1.0	.82	.62	.44	.29	.18	0	0
25	1.5	1.6	1.5	1.4	1.2	1.0	.85	.64	.45	.30	.19	0	0
26	1.5	1.5	1.5	1.4	1.2	1.0	.83	.62	.44	.30	.19	0	0
27	1.4	1.4	1.4	1.3	1.1	.98	.77	.58	.41	.27	.17	0	0
28	1.2	1.3	1.2	1.1	1.0	.86	.68	.51	.36	.24	.15	0	0
29	1.0	1.0	1.0	.98	.86	.72	.57	.42	.30	.20	.13	0	0
30	.83	.86	.84	.78	.68	.57	.45	.34	.24	.16	.10	0	0
31	.62	.64	.63	.58	.51	.43	.34	.25	.18	.12	.07	0	0
32	.44	.45	.44	.41	.36	.30	.24	.18	.12	.08	.05	0	0
33	.29	.30	.30	.28	.24	.20	.16	.12	.08	.05	.03	0	0
34	.19	.19	.19	.17	.15	.13	.10	.07	.05	.03	.02	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

SMALL CLOUDS AT 10800.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1124E+05	0.5877E+07	0.5817E+07	5363.	30.71	14.29	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 11400.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 11400.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1143E+05	0.6421E+07	0.6361E+07	5503.	30.16	14.84	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 12000.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 12000.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1162E+05	0.6988E+07	0.6929E+07	5640.	29.61	15.39	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 12600.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 12600.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1181E+05	0.7579E+07	0.7520E+07	5774.	29.06	15.94	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 13200.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59225.

SMALL CLOUDS AT 13200.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1201E+05	0.8194E+07	0.8134E+07	5905.	28.52	16.48	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 13800.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59226.

SMALL CLOUDS AT 13800.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1220E+05	0.8831E+07	0.8772E+07	6032.	27.97	17.03	0.000000E+00

SUMMARY OF ARSENIC DISTRIBUTIONS AFTER 14400.00 SEC

TOTAL TRACER OR CONTAMINANT IN SOLUTION (MG) = 59226.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-05 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.02	.02	.03
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.04	.05
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.01	.02	.04	.05	.07	.09
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.02	.04	.06	.08	.11	.14
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.09	.12	.16	.21
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.06	.09	.12	.17	.23	.30
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.05	.08	.12	.17	.24	.32	.40
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.06	.10	.16	.23	.31	.42	.53
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.05	.08	.13	.20	.29	.40	.53	.67
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.10	.16	.24	.35	.48	.63	.81
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.07	.12	.18	.28	.40	.56	.74	.94
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.08	.13	.21	.31	.45	.62	.82	1.0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.08	.14	.22	.33	.48	.66	.88	1.1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.09	.14	.23	.34	.49	.68	.90	1.1
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.08	.14	.22	.33	.48	.67	.89	1.1
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.08	.13	.21	.32	.46	.63	.84	1.0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.07	.12	.19	.29	.41	.57	.76	.97
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.10	.17	.25	.36	.50	.66	.84
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.05	.09	.14	.21	.30	.42	.55	.71
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.07	.11	.17	.24	.33	.44	.57
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.05	.08	.13	.18	.26	.34	.44
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.06	.09	.14	.19	.25	.32
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.02	.04	.06	.10	.13	.18	.23
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.04	.06	.09	.12	.15
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.04	.06	.08	.10
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	.04	.04	.05	.06	.06	.06	.05	.05	.04	.04	.03	.020000	
13	.07	.08	.09	.10	.10	.10	.09	.09	.08	.06	.05	.040000	
14	.11	.13	.14	.16	.16	.16	.16	.14	.12	.10	.08	.060000	
15	.17	.20	.23	.24	.25	.25	.24	.22	.19	.16	.13	.100000	
16	.25	.30	.34	.36	.38	.38	.36	.33	.29	.25	.20	.150000	
17	.36	.43	.48	.52	.54	.54	.51	.47	.41	.35	.28	.220000	
18	.50	.58	.65	.71	.73	.73	.70	.64	.57	.48	.39	.300000	
19	.65	.76	.86	.93	.96	.96	.92	.84	.74	.63	.51	.400000	
20	.82	.96	1.0	1.1	1.2	1.2	1.1	1.0	.93	.79	.64	.500000	
21	.99	1.1	1.3	1.4	1.4	1.4	1.3	1.2	1.1	.96	.78	.600000	
22	1.1	1.3	1.5	1.6	1.7	1.6	1.6	1.4	1.3	1.1	.90	.700000	
23	1.2	1.5	1.6	1.8	1.8	1.8	1.8	1.6	1.4	1.2	1.0	.780000	
24	1.3	1.6	1.8	1.9	2.0	2.0	1.9	1.7	1.5	1.3	1.0	.830000	
25	1.4	1.6	1.8	1.9	2.0	2.0	1.9	1.8	1.6	1.3	1.1	.860000	
26	1.3	1.6	1.8	1.9	2.0	2.0	1.9	1.7	1.5	1.3	1.0	.840000	
27	1.3	1.5	1.7	1.8	1.9	1.9	1.8	1.6	1.4	1.2	1.0	.800000	
28	1.1	1.3	1.5	1.6	1.7	1.7	1.6	1.5	1.3	1.1	.93	.720000	
29	1.0	1.2	1.3	1.4	1.5	1.5	1.4	1.3	1.1	1.0	.81	.630000	
30	.86	1.0	1.1	1.2	1.2	1.2	1.2	1.1	.98	.83	.68	.530000	
31	.69	.81	.91	.99	1.0	1.0	.98	.90	.79	.67	.54	.420000	
32	.53	.63	.70	.76	.79	.79	.75	.69	.61	.52	.42	.330000	
33	.39	.46	.52	.56	.58	.58	.56	.51	.45	.38	.31	.240000	
34	.28	.33	.37	.40	.41	.41	.40	.36	.32	.27	.22	.170000	
35	.19	.22	.25	.27	.28	.28	.27	.25	.22	.18	.15	.110000	
36	.12	.14	.16	.18	.18	.18	.17	.16	.14	.12	.10	.070000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000												

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

...MULTIPLY DISPLAYED VALUES BY 0.1000E-05 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.07	.09	.13	.16
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.05	.08	.12	.16	.21	.27
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.05	.08	.13	.19	.26	.35	.44
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.05	.08	.13	.20	.29	.40	.54	.68
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.08	.13	.20	.30	.43	.60	.80	1.0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.11	.18	.29	.43	.62	.85	1.1	1.4
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.09	.15	.25	.39	.59	.84	1.1	1.5	1.9
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.12	.20	.33	.51	.77	1.1	1.5	2.0	2.5
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.15	.25	.41	.65	.97	1.3	1.9	2.5	3.2
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.18	.31	.50	.78	1.1	1.6	2.3	3.0	3.9
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.21	.36	.58	.91	1.3	1.9	2.6	3.5	4.5
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.23	.40	.65	1.0	1.5	2.1	2.9	3.9	5.0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.25	.42	.69	1.0	1.6	2.3	3.2	4.2	5.3
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.26	.43	.71	1.1	1.6	2.3	3.2	4.3	5.5
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.25	.43	.70	1.0	1.6	2.3	3.2	4.2	5.4
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.24	.40	.66	1.0	1.5	2.2	3.0	4.0	5.1
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.22	.37	.60	.93	1.4	2.0	2.7	3.6	4.6
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.19	.32	.52	.81	1.2	1.7	2.4	3.2	4.0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.16	.27	.44	.68	1.0	1.4	2.0	2.6	3.4
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.12	.21	.35	.55	.82	1.1	1.6	2.1	2.7
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.09	.16	.27	.42	.63	.91	1.2	1.6	2.1
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.12	.20	.31	.47	.67	.93	1.2	1.5
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.08	.14	.22	.33	.48	.66	.88	1.1
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.09	.15	.22	.32	.45	.60	.76
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.06	.10	.15	.21	.29	.39	.50
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	.20	.23	.26	.29	.30	.30	.28	.26	.23	.19	.16	.120000	
13	.34	.39	.44	.48	.50	.50	.48	.44	.38	.32	.26	.200000	
14	.54	.64	.72	.77	.80	.80	.77	.70	.62	.52	.42	.330000	
15	.84	.98	1.1	1.1	1.2	1.2	1.1	1.0	.96	.81	.66	.510000	
16	1.2	1.4	1.6	1.7	1.8	1.8	1.7	1.6	1.4	1.2	.97	.760000	
17	1.7	2.0	2.3	2.5	2.6	2.6	2.4	2.2	2.0	1.7	1.3	1.00000	
18	2.4	2.8	3.1	3.4	3.5	3.5	3.3	3.1	2.7	2.3	1.8	1.40000	
19	3.1	3.6	4.1	4.4	4.6	4.6	4.4	4.0	3.5	3.0	2.4	1.90000	
20	3.9	4.6	5.2	5.6	5.8	5.8	5.5	5.1	4.5	3.8	3.1	2.40000	
21	4.7	5.5	6.2	6.8	7.0	7.0	6.7	6.1	5.4	4.6	3.7	2.90000	
22	5.5	6.4	7.2	7.8	8.1	8.1	7.8	7.1	6.3	5.3	4.3	3.30000	
23	6.1	7.2	8.1	8.7	9.1	9.0	8.6	7.9	7.0	5.9	4.8	3.70000	
24	6.5	7.7	8.6	9.3	10	10	9.2	8.5	7.5	6.3	5.1	4.00000	
25	6.7	7.9	8.8	10	10	10	10	8.7	7.7	6.5	5.3	4.10000	
26	6.6	7.7	8.7	9.4	10	10	9.3	8.6	7.5	6.4	5.2	4.00000	
27	6.2	7.3	8.2	8.9	9.2	9.2	8.8	8.1	7.1	6.0	4.9	3.80000	
28	5.7	6.6	7.5	8.1	8.4	8.4	8.0	7.3	6.5	5.5	4.4	3.50000	
29	4.9	5.8	6.5	7.0	7.3	7.3	7.0	6.4	5.6	4.8	3.9	3.00000	
30	4.1	4.8	5.4	5.9	6.1	6.1	5.8	5.3	4.7	4.0	3.2	2.50000	
31	3.3	3.9	4.4	4.7	4.9	4.9	4.7	4.3	3.8	3.2	2.6	2.00000	
32	2.5	3.0	3.4	3.6	3.8	3.8	3.6	3.3	2.9	2.5	2.0	1.50000	
33	1.9	2.2	2.5	2.7	2.8	2.8	2.7	2.4	2.1	1.8	1.5	1.10000	
34	1.3	1.6	1.8	1.9	2.0	2.0	1.9	1.7	1.5	1.3	1.0	.830000	
35	.93	1.0	1.2	1.3	1.3	1.3	1.3	1.2	1.0	.90	.73	.570000	
36	.61	.71	.80	.87	.90	.90	.86	.79	.69	.59	.48	.370000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000												

CONCENTRATIONS ABOVE BACKGROUND OF ARSENIC (MG/L) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM THAT EVER OCCURRED IN THE WATER COLUMN DURING THE SIMULATION

...MULTIPLY DISPLAYED VALUES BY 0.1000E-03 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+	+
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	+	+	+	.01	.01	.01	.01
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	+	.01	.01	.02	.02	.02	.02
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.02	.02	.03	.03	.04	.04	.04
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.03	.04	.05	.06	.06	.07	.07	.06
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.04	.07	.09	.11	.12	.12	.11	.11	.10
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.02	.05	.11	.17	.21	.23	.23	.21	.19	.17	.15
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.05	.14	.28	.43	.50	.48	.41	.35	.29	.24	.20
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.03	.11	.36	.84	1.2	1.2	.92	.69	.51	.40	.32	.26
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.21	.95	2.8	4.0	2.7	1.5	.98	.69	.50	.38	.30
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.05	.27	1.5	4.5	6.4	4.3	1.9	1.1	.77	.54	.41	.32
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.05	.23	1.1	3.4	4.9	3.2	1.7	1.0	.72	.51	.39	.31
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.03	.13	.44	1.2	1.7	1.4	1.0	.77	.56	.43	.33	.27
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.06	.17	.38	.57	.62	.56	.47	.39	.31	.26	.22
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.07	.13	.21	.27	.28	.27	.24	.21	.18	.16
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.05	.08	.11	.13	.14	.14	.13	.12	.11
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.05	.06	.07	.08	.08	.07	.07
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.02	.03	.03	.04	.04	.04	.04
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.01	.01	.02	.02	.02	.03
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	.01	.01	.01	.01
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	+	.01
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	+
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	+	+	+	+	+	+	+	+	+	+	+	+	0
13	+	+	+	+	+	+	+	+	+	+	+	+	0
14	+	+	+	+	+	+	+	+	+	+	+	+	0
15	.01	.01	.01	.01	.01	.01	.01	.01	+	+	+	+	0
16	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	+	+	0
17	.02	.02	.02	.02	.02	.02	.02	.02	.02	.01	.01	.01	0
18	.04	.04	.04	.03	.03	.03	.03	.03	.02	.02	.01	.01	0
19	.06	.06	.05	.05	.05	.04	.04	.04	.03	.03	.02	.01	0
20	.09	.08	.08	.07	.06	.06	.05	.05	.04	.03	.03	.02	0
21	.13	.11	.10	.09	.08	.07	.06	.06	.05	.04	.03	.02	0
22	.17	.15	.13	.11	.10	.08	.07	.07	.06	.05	.04	.03	0
23	.21	.18	.15	.13	.11	.10	.08	.07	.07	.05	.04	.03	0
24	.24	.20	.17	.14	.12	.10	.09	.08	.07	.06	.05	.04	0
25	.25	.21	.17	.15	.12	.11	.09	.08	.07	.06	.05	.04	0
26	.25	.20	.17	.14	.12	.11	.09	.08	.07	.06	.05	.04	0
27	.22	.18	.15	.13	.11	.10	.09	.08	.07	.06	.04	.03	0
28	.18	.15	.13	.11	.10	.09	.08	.07	.06	.05	.04	.03	0
29	.14	.12	.11	.09	.08	.07	.07	.06	.05	.04	.03	.03	0
30	.10	.09	.08	.07	.07	.06	.05	.05	.04	.04	.03	.02	0
31	.07	.06	.06	.05	.05	.05	.04	.04	.03	.03	.02	.02	0
32	.04	.04	.04	.04	.04	.03	.03	.03	.02	.02	.02	.01	0
33	.03	.03	.03	.03	.02	.02	.02	.02	.02	.01	.01	.01	0
34	.01	.01	.02	.02	.02	.02	.01	.01	.01	.01	.01	+	0
35	.01	.01	.01	.01	.01	.01	.01	.01	.01	+	+	+	0
36	+	+	+	+	+	+	+	+	+	+	+	+	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

SMALL CLOUDS AT 14400.00 SECONDS ELAPSED TIME FOR ARSENIC

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (MG)	ENTRAINED MASS (MG)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1239E+05	0.9493E+07	0.9434E+07	6157.	27.42	17.58	0.000000E+00

FINAL DISTRIBUTIONS OF TOTAL SETTLED MATERIAL FOLLOW.....

TOTAL ACCUMULATED SOLID VOLUME ON BOTTOM (CU FT/GRID SQR), 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	+	+	+	+
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	.01	.01	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.03	.07	.11	.11	.07	.03	.01	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.07	.31	.79	1.1	.98	.53	.21	.06	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.54	2.6	7.4	11	8.0	3.4	1.0	.26	.05	.01	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.30	2.8	16	46	65	46	17	4.1	.82	.15	.02	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.81	8.5	51	150	213	147	51	11	1.7	.29	.04	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	1.2	13	80	239	341	231	79	15	2.3	.37	.05	.01
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.06	.95	10	61	180	257	176	61	12	1.9	.32	.04	.01
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.40	3.9	23	66	94	66	24	5.4	1.0	.18	.03	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.01	.10	.85	4.4	12	18	13	5.3	1.5	.36	.07	.01	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.02	.12	.54	1.4	2.0	1.6	.85	.31	.09	.02	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.13	.20	.19	.11	.05	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	.01	.02	.02	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	+	+	+	+
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	.	.	.	.	.	.	.	.	.	0	0	0	0
9	.	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	.
14	+	+	+	+	+	.	.	.	.	.	.	.	.
15	+	+	+	+	+	+	+	+	.	.	.	.	.
16	+	+	+	+	+	+	+	+	+	+	.	.	.
17	+	+	+	+	+	+	+	+	+	+	+	.	.
18	+	+	+	+	+	+	+	+	+	+	+	+	+
19	+	+	+	+	+	+	+	+	+	+	+	+	+
20	+	+	+	+	+	+	+	+	+	+	+	+	+
21	+	+	+	+	+	+	+	+	+	+	+	+	+
22	+	+	+	+	+	+	+	+	+	+	+	+	+
23	+	+	+	+	+	+	+	+	+	+	+	+	+
24	+	+	+	+	+	+	+	+	+	+	+	+	+
25	+	+	+	+	+	+	+	+	+	+	+	+	+
26	+	+	+	+	+	+	+	+	+	+	+	+	+
27	+	+	+	+	+	+	+	+	+	+	+	+	+
28	+	+	+	+	+	+	+	+	+	+	+	+	+
29	+	+	+	+	+	+	+	+	+	+	+	+	+
30	+	+	+	+	+	+	+	+	+	+	+	+	+
31	+	+	+	+	+	+	+	+	+	+	+	+	+
32	+	+	+	+	+	+	+	+	+	+	+	+	+
33	+	+	+	+	+	+	+	+	+	+	+	+	.
34	+	+	+	+	+	+	+	+	+	+	.	.	.
35	+	+	+	+	+	+	+	+	.	.	.	.	.
36	+	+	+	+	+	+	.	.	.	.	.	.	.
37	.	.	.	.	.	.	.	.	.	.	.	.	.
38	.	.	.	.	.	.	.	.	.	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
41	.	.	.	.	.	.	.	.	.	.	.	.	.
42	.	.	.	.	.	.	.	.	.	.	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

TOTAL THICKNESS (FT) OF NEW MATERIAL ON BOTTOM, 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	0
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	.	.	.	.	.
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	.	.	.	.
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	.01	.02	.01	+	+	+	.	.	.
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.07	.05	.01	+	+	+	.	.
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.02	.08	.12	.08	.02	+	+	+	.	.
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.02	.06	.09	.06	.02	+	+	+	.	.
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	.02	.03	.02	+	+	+	.	.	.
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	.	.	.
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	.	.	.	.
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	0
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	.	0	0	0	0	0	0	0	0	0	0	0	0
22	.	.	.	0	0	0	0	0	0	0	0	0	0
23	.	.	.	.	0	0	0	0	0	0	0	0	0
24	.	.	.	.	.	0	0	0	0	0	0	0	0
25	.	.	.	.	.	0	0	0	0	0	0	0	0
26	.	.	.	.	.	0	0	0	0	0	0	0	0
27	.	.	.	.	0	0	0	0	0	0	0	0	0
28	.	.	.	0	0	0	0	0	0	0	0	0	0
29	.	.	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

INITIAL MIXING COMPUTATIONS RESULTS FOR SAND :

TIME (HR)	DEPTH (FT)	MAX CONC ABOVE BACKGROUND ON ENTIRE GRID (MG/L)	X-LOC (FT)	Z-LOC (FT)	MAX CONC ABOVE BACKGROUND OUTSIDE DISPOSAL SITE (MG/L)
1.00	1.0	0.000E+00	0.	0.	0.000E+00
2.00	1.0	0.000E+00	0.	0.	0.000E+00
3.00	1.0	0.000E+00	0.	0.	0.000E+00
4.00	1.0	0.000E+00	0.	0.	0.000E+00
1.00	44.0	0.000E+00	0.	0.	0.000E+00
2.00	44.0	0.000E+00	0.	0.	0.000E+00
3.00	44.0	0.000E+00	0.	0.	0.000E+00
4.00	44.0	0.000E+00	0.	0.	0.000E+00

INITIAL MIXING COMPUTATIONS RESULTS FOR CLAY :

TIME (HR)	DEPTH (FT)	MAX CONC ABOVE BACKGROUND ON ENTIRE GRID (MG/L)	X-LOC (FT)	Z-LOC (FT)	MAX CONC ABOVE BACKGROUND OUTSIDE DISPOSAL SITE (MG/L)
1.00	1.0	0.426E-05	8400.	9100.	0.000E+00
2.00	1.0	0.274E-03	8400.	10150.	0.000E+00
3.00	1.0	0.299E-02	8400.	11550.	0.663E-03
4.00	1.0	0.170E-01	8400.	12600.	0.122E-01
1.00	44.0	0.526E+01	8400.	9100.	0.000E+00
2.00	44.0	0.191E+01	8400.	10150.	0.000E+00
3.00	44.0	0.960E+00	8400.	11200.	0.191E+00
4.00	44.0	0.584E+00	8400.	12600.	0.397E+00

INITIAL MIXING COMPUTATIONS RESULTS FOR ARSENIC :

TIME (HR)	DEPTH (FT)	MAX CONC ABOVE BACKGROUND ON ENTIRE GRID (MG/L)	MAX CONC ON GRID (MG/L)	X-LOC (FT)	Z-LOC (FT)	MAX CONC ABOVE BACKGROUND OUTSIDE DISPOSAL SITE (MG/L)	MAX CONC OUTSIDE SITE (MG/L)
0.17	1.0	0.119E-40	0.500E-03	6300.	5950.	0.000E+00	0.500E-03
0.33	1.0	0.571E-41	0.500E-03	5950.	5950.	0.000E+00	0.500E-03
0.50	1.0	0.363E-41	0.500E-03	5950.	5950.	0.000E+00	0.500E-03
0.67	1.0	0.258E-41	0.500E-03	5600.	5950.	0.000E+00	0.500E-03
0.83	1.0	0.195E-41	0.500E-03	5600.	5950.	0.000E+00	0.500E-03
1.00	1.0	0.153E-41	0.500E-03	5250.	5950.	0.000E+00	0.500E-03
1.17	1.0	0.124E-41	0.500E-03	5250.	5950.	0.000E+00	0.500E-03
1.33	1.0	0.103E-41	0.500E-03	5250.	5950.	0.000E+00	0.500E-03
1.50	1.0	0.866E-42	0.500E-03	4900.	5950.	0.000E+00	0.500E-03
1.67	1.0	0.744E-42	0.500E-03	4900.	6300.	0.000E+00	0.500E-03
1.83	1.0	0.643E-42	0.500E-03	4900.	6300.	0.000E+00	0.500E-03
2.00	1.0	0.563E-42	0.500E-03	4550.	6300.	0.000E+00	0.500E-03
2.17	1.0	0.589E-42	0.500E-03	8400.	10150.	0.000E+00	0.500E-03
2.33	1.0	0.167E-38	0.500E-03	8400.	10500.	0.000E+00	0.500E-03
2.50	1.0	0.328E-35	0.500E-03	8400.	10500.	0.000E+00	0.500E-03
2.67	1.0	0.245E-32	0.500E-03	8400.	10850.	0.219E-33	0.500E-03
2.83	1.0	0.795E-30	0.500E-03	8400.	11200.	0.107E-30	0.500E-03
3.00	1.0	0.130E-27	0.500E-03	8400.	11200.	0.245E-28	0.500E-03
3.17	1.0	0.116E-25	0.500E-03	8400.	11550.	0.295E-26	0.500E-03
3.33	1.0	0.627E-24	0.500E-03	8400.	11550.	0.206E-24	0.500E-03
3.50	1.0	0.219E-22	0.500E-03	8400.	11900.	0.892E-23	0.500E-03
3.67	1.0	0.525E-21	0.500E-03	8400.	11900.	0.257E-21	0.500E-03
3.83	1.0	0.908E-20	0.500E-03	8400.	12250.	0.519E-20	0.500E-03
4.00	1.0	0.118E-18	0.500E-03	8400.	12250.	0.770E-19	0.500E-03
0.17	44.0	0.317E-03	0.817E-03	8400.	8050.	0.000E+00	0.500E-03
0.33	44.0	0.132E-03	0.632E-03	8400.	8050.	0.000E+00	0.500E-03
0.50	44.0	0.811E-04	0.581E-03	8400.	8400.	0.000E+00	0.500E-03
0.67	44.0	0.523E-04	0.552E-03	8400.	8750.	0.000E+00	0.500E-03
0.83	44.0	0.378E-04	0.538E-03	8400.	8750.	0.000E+00	0.500E-03
1.00	44.0	0.277E-04	0.528E-03	8400.	9100.	0.000E+00	0.500E-03
1.17	44.0	0.216E-04	0.522E-03	8400.	9100.	0.000E+00	0.500E-03
1.33	44.0	0.170E-04	0.517E-03	8400.	9450.	0.000E+00	0.500E-03
1.50	44.0	0.138E-04	0.514E-03	8400.	9450.	0.000E+00	0.500E-03
1.67	44.0	0.114E-04	0.511E-03	8400.	9800.	0.000E+00	0.500E-03
1.83	44.0	0.953E-05	0.510E-03	8400.	9800.	0.000E+00	0.500E-03
2.00	44.0	0.811E-05	0.508E-03	8400.	10150.	0.000E+00	0.500E-03
2.17	44.0	0.693E-05	0.507E-03	8400.	10150.	0.000E+00	0.500E-03
2.33	44.0	0.604E-05	0.506E-03	8400.	10500.	0.000E+00	0.500E-03
2.50	44.0	0.525E-05	0.505E-03	8400.	10500.	0.000E+00	0.500E-03
2.67	44.0	0.466E-05	0.505E-03	8400.	10850.	0.416E-06	0.500E-03

2.83	44.0	0.412E-05	0.504E-03	8400.	11200.	0.554E-06	0.501E-03
3.00	44.0	0.370E-05	0.504E-03	8400.	11200.	0.699E-06	0.501E-03
3.17	44.0	0.331E-05	0.503E-03	8400.	11550.	0.844E-06	0.501E-03
3.33	44.0	0.300E-05	0.503E-03	8400.	11550.	0.982E-06	0.501E-03
3.50	44.0	0.272E-05	0.503E-03	8400.	11900.	0.111E-05	0.501E-03
3.67	44.0	0.247E-05	0.502E-03	8400.	11900.	0.121E-05	0.501E-03
3.83	44.0	0.227E-05	0.502E-03	8400.	12250.	0.130E-05	0.501E-03
4.00	44.0	0.207E-05	0.502E-03	8400.	12250.	0.136E-05	0.501E-03

0.17	36.2	0.649E-03	0.115E-02	8400.	8050.	0.000E+00	0.500E-03
0.33	36.2	0.299E-03	0.799E-03	8400.	8050.	0.000E+00	0.500E-03
0.50	36.2	0.199E-03	0.699E-03	8400.	8400.	0.000E+00	0.500E-03
0.67	36.2	0.138E-03	0.638E-03	8400.	8750.	0.000E+00	0.500E-03
0.83	36.2	0.107E-03	0.607E-03	8400.	8750.	0.000E+00	0.500E-03
1.00	36.2	0.832E-04	0.583E-03	8400.	9100.	0.000E+00	0.500E-03
1.17	36.2	0.681E-04	0.568E-03	8400.	9100.	0.000E+00	0.500E-03
1.33	36.2	0.562E-04	0.556E-03	8400.	9450.	0.000E+00	0.500E-03
1.50	36.2	0.476E-04	0.548E-03	8400.	9450.	0.000E+00	0.500E-03
1.67	36.2	0.407E-04	0.541E-03	8400.	9800.	0.000E+00	0.500E-03
1.83	36.2	0.352E-04	0.535E-03	8400.	9800.	0.000E+00	0.500E-03
2.00	36.2	0.310E-04	0.531E-03	8400.	10150.	0.000E+00	0.500E-03
2.17	36.2	0.272E-04	0.527E-03	8400.	10150.	0.000E+00	0.500E-03
2.33	36.2	0.243E-04	0.524E-03	8400.	10500.	0.000E+00	0.500E-03
2.50	36.2	0.217E-04	0.522E-03	8400.	10500.	0.000E+00	0.500E-03
2.67	36.2	0.197E-04	0.520E-03	8400.	10850.	0.176E-05	0.502E-03
2.83	36.2	0.177E-04	0.518E-03	8400.	11200.	0.238E-05	0.502E-03
3.00	36.2	0.162E-04	0.516E-03	8400.	11200.	0.307E-05	0.503E-03
3.17	36.2	0.148E-04	0.515E-03	8400.	11550.	0.377E-05	0.504E-03
3.33	36.2	0.136E-04	0.514E-03	8400.	11550.	0.446E-05	0.504E-03
3.50	36.2	0.125E-04	0.513E-03	8400.	11900.	0.511E-05	0.505E-03
3.67	36.2	0.116E-04	0.512E-03	8400.	11900.	0.568E-05	0.506E-03
3.83	36.2	0.108E-04	0.511E-03	8400.	12250.	0.615E-05	0.506E-03
4.00	36.2	0.998E-05	0.510E-03	8400.	12250.	0.653E-05	0.507E-03

RESULT: THE WATER QUALITY CRITERIA FOR THE DISPOSAL SITE WAS NOT VIOLATED.

*** RUN COMPLETED ***

F2

E-CH03-14 Toxicity STFATE Run

E-CH03-14 Toxicity Run

MODEL: SHORT-TERM FATE OF DREDGED MATERIAL FROM SPLIT HULL BARGE OR HOPPER DREDGE
(PC Version 5.01 MAY, 1993)

TITLE: E-CH03-14 Toxicity Run

FILE: CH0314RE.DUE

AREA: THE PROJECT AREA IS DESCRIBED BY A 45 X 45 GRID.

THERE ARE 45 GRID POINTS (NMAX) IN THE Z-DIRECTION (FROM LEFT TO RIGHT)
AND 45 GRID POINTS (MMAX) IN THE X-DIRECTION (FROM TOP TO BOTTOM).

SITE: THE DISPOSAL SITE IS REPRESENTED AS A RECTANGLE ON THE SITE GRID.

THE TOPMOST BOUNDARY IS LOCATED AT POINT # 6 (MDS1) FROM THE TOP OF THE GRID.

THE BOTTOMMOST BOUNDARY IS LOCATED AT POINT #41 (MDS2) FROM THE TOP OF THE GRID.

THE LEFTMOST BOUNDARY IS LOCATED AT POINT # 6 (NDS1) FROM THE LEFT OF THE GRID.

THE RIGHTMOST BOUNDARY IS LOCATED AT POINT #41 (NDS2) FROM THE LEFT OF THE GRID.

EXECUTION PARAMETERS:

MODEL COEFFICIENTS SPECIFIED IN INPUT DATA (KEY1 = 1).

PERFORM COMPLETE ANALYSIS INCLUDING DESCENT, COLLAPSE, AND TRANSPORT-DIFFUSION (KEY2 = 0).

PERFORM TIER III OCEAN DUMPING INITIAL MIXING EVALUATION
TO COMPARE WITH TOXICITY CRITERIA (KEY3 = 3).

PRINTING OF CONVECTIVE DESCENT RESULTS REQUESTED (IPCN = 1).

PRINTING OF CONVECTIVE DESCENT RESULTS REQUESTED (IPCN = 1).

PRINTING OF DYNAMIC COLLAPSE RESULTS REQUESTED (IPCL = 1).

QUARTERLY PRINTING OF LONG-TERM TRANSPORT DIFFUSION RESULTS REQUESTED (IPLT = 0).

LONG-TERM TRANSPORT DIFFUSION RESULTS REQUESTED AT THE FOLLOWING 2 DEPTH(S):
1.00 FT
44.00 FT

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GRID:    NUMBER OF LONG TERM GRID POINTS IN Z-DIRECTION (NMAX) = 45

         NUMBER OF LONG TERM GRID POINTS IN X-DIRECTION (MMAX) = 45

         GRID SPACING IN Z-DIRECTION (DZ) =   350.00000 FT

         GRID SPACING IN X-DIRECTION (DX) =   350.00000 FT

         CONSTANT DEPTH GRID SPECIFIED HAVING A DEPTH (DEPC) OF    45.00000 FT.
```

DEPTH GRID, FEET:

M N =	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
2	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
3	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
4	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
5	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
6	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
7	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
8	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
9	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
10	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
11	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
12	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
13	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
14	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
15	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
16	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
17	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
18	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
19	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
20	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
21	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
22	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
23	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
24	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
25	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
26	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
27	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
28	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
29	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
30	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
31	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
32	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
33	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
34	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
35	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
36	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
37	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
38	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
39	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
40	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
41	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
42	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
43	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
44	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
45	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.

M N =	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
2	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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4	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
5	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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17	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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21	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
22	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
23	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
24	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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39	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
40	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
41	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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45	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.

M N =	35	36	37	38	39	40	41	42	43	44	45
1	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
2	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
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17	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
18	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
19	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
20	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
21	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
22	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
23	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
24	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
25	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
26	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
27	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
28	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
29	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
30	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
31	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
32	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
33	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
34	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
35	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
36	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
37	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
38	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
39	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
40	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
41	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
42	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
43	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
44	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.
45	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.	45.

CODED GRID:

RANGE OF N IS   1 TO 45

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LEGEND FOR CODED GRID:  W = WATER POINT
                        L = LAND POINT
                        O = OPEN BOUNDARY
                        B = DISPOSAL SITE BOUNDARY
                        D = DUMP LOCATION
                        X = DUMMY POINT


NUMBER OF GRID POINTS WITHIN ESTUARY =  1681
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DISPOSAL LOCATION:

THE DUMP LOCATION IS 7875. FT (XBARGE) OR ABOUT GRID POINT #24 FROM THE TOP OF THE GRID
AND 7875. FT (ZBARGE) OR ABOUT GRID POINT #24 FROM THE LEFT EDGE OF THE GRID.

THE BOTTOM SLOPE IN THE X-DIRECTION AT THE DUMP SITE (SLOPEX, POSITIVE IF DEPTH INCREASES
FROM TOP OF GRID TO BOTTOM OF GRID) IS 0.00 DEGREES.

THE BOTTOM SLOPE IN THE Z-DIRECTION AT THE DUMP SITE (SLOPEZ, POSITIVE IF DEPTH INCREASES
FROM LEFT SIDE OF GRID TO RIGHT SIDE OF GRID) IS 0.00 DEGREES.

THE DISPOSAL LOCATION IS NOT AT A HOLE OR DEPRESSION. (DHOLE = 0.0)

AMBIENT DENSITY PROFILE:

DEPTH (FT)	DENSITY (G/CC)
0.0000E+00	1.0237
45.00	1.0240

COMPUTED DEPTH:

THE DEPTH AT THE DUMP LOCATION WAS INTERPOLATED TO BE 45.00 FT.

VELOCITY DISTRIBUTION:

VERTICALLY AVERAGED X-DIRECTION (VAX = 0.000E+00 FPS) AND
Z-DIRECTION (VAZ = 0.330 FPS) VELOCITIES CONSTRUCTED AT EACH GRID POINT
FROM A SINGLE OBSERVATION AT A DEPTH (D) OF 45.0 FT AND
USED WITH A LOGARITHMIC VELOCITY DISTRIBUTION.

VELOCITY GRID: X-DIRECTION, FPS

M N=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M	N= 18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M	N= 35	36	37	38	39	40	41	42	43	44	45
1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

VELOCITY GRID: Z-DIRECTION, FPS

M N=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
2	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
3	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
4	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
5	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
6	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
7	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
8	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
9	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
10	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
11	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
12	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
13	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
14	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
15	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
16	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
17	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
18	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
19	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
20	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
21	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
22	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
23	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
24	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
25	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
26	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
27	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
28	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
29	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
30	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
31	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
32	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
33	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
34	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
35	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
36	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
37	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
38	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
39	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
40	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
41	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
42	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
43	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
44	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
45	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330

M	N= 18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
2	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
3	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
4	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
5	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
6	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
7	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
8	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
9	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
10	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
11	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
12	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
13	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
14	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
15	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
16	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
17	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
18	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
19	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
20	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
21	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
22	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
23	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
24	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
25	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
26	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
27	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
28	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
29	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
30	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
31	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
32	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
33	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
34	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
35	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
36	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
37	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
38	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
39	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
40	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
41	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
42	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
43	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
44	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
45	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330

M	N= 35	36	37	38	39	40	41	42	43	44	45
1	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
2	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
3	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
4	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
5	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
6	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
7	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
8	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
9	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
10	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
11	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
12	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
13	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
14	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
15	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
16	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
17	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
18	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
19	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
20	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
21	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
22	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
23	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
24	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
25	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
26	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
27	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
28	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
29	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
30	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
31	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
32	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
33	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
34	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
35	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
36	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
37	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
38	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
39	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
40	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
41	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
42	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
43	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
44	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
45	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330

BOTTOM SHEAR STRESS, LBS/SQ FT:

M N=	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
3	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
4	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
5	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
6	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
7	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
8	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
9	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
10	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
11	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
12	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
13	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
14	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
15	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
16	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
17	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
18	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
19	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
20	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
21	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
22	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
23	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
24	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
25	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
26	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
27	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
28	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
29	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
30	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
31	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
32	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
33	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
34	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
35	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
36	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
37	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
38	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
39	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
40	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
41	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
42	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
43	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
44	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
45	0.0000	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

M	N= 18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
3	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
5	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
6	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
7	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
8	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
9	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
10	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
11	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
12	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
13	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
14	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
15	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
16	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
17	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
18	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
19	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
20	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
21	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
22	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
23	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
24	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
25	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
26	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
27	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
28	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
29	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
30	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
31	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
32	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
33	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
34	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
35	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
36	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
37	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
38	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
39	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
40	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
41	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
42	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
43	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
44	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
45	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

M	N= 35	36	37	38	39	40	41	42	43	44	45
1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
3	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
4	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
5	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
6	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
7	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
8	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
9	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
10	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
11	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
12	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
13	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
14	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
15	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
16	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
17	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
18	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
19	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
20	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
21	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
22	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
23	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
24	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
25	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
26	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
27	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
28	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
29	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
30	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
31	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
32	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
33	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
34	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
35	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
36	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
37	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
38	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
39	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
40	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
41	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
42	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
43	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
44	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
45	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003

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TIME PARAMETERS:

         DURATION OF THE DISPOSAL, TREL =      60.00 SECONDS

         DURATION OF THE SIMULATION, TSTOP =   14400.00 SECONDS

         LONG-TERM TIME STEP USED IN THE SIMULATION, DTL =     600.00 SECONDS

BARGE DESCRIPTION:

         LENGTH OF BARGE, BARGL =  0.30E+03 FT

         WIDTH OF BARGE, BARGW =   72.     FT

         DRAFT OF LOADED BARGE, DREL1 =   17.0     FT

         DRAFT OF UNLOADED BARGE, DREL2 =   5.00     FT
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MODEL COEFFICIENTS READ FROM INPUT:

         TURBULENT THERMAL ENTRAINMENT            ALPHA0 =    0.2350

         SETTLING COEFFICIENT                     BETA   =    0.0000

         APPARENT MASS COEFFICIENT                CM     =    1.0000

         DRAG COEFFICIENT FOR A SPHERE            CD     =    0.5000

         RATIO--CLOUD/AMBIENT DENSITY GRADIENTS   GAMA   =    0.2500

         FORM DRAG FOR COLLAPSING CLOUD           CDRAG  =    1.0000

         SKIN FRICTION FOR COLLAPSING CLOUD       CFRIC  =    0.0100

         DRAG FOR AN ELLIPSOIDAL WEDGE            CD3    =    0.1000

         DRAG FOR A PLATE                         CD4    =    1.0000

         ENTRAINMENT IN COLLAPSE                  ALPHAC =    0.1000

         FRICTION BETWEEN CLOUD AND BOTTOM        FRICTN =    0.0100

         4/3 LAW HORIZ. DIFF. DISSIPATION FACTOR  ALAMDA  =    0.0225

         UNSTRATIFIED WATER VERT. DIFF. COEF.     AKY0    =    0.0250

         STRIPPING COEF. OF FINES DURING CONVERTIVE DESCENT=    0.0030
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MATERIAL DESCRIPTION: 2 SOLIDS FRACTIONS

L A Y E R 1

DESCRIPTION	SPEC. GRAV. OR DENSITY (GM/CC)	VOLUMETRIC CONCENTRATION (VOL/VOL)	FALL VELOCITY (FPS)	DEPOSITIONAL VOID RATIO	CHARACTER
SAND	2.638	0.2917	0.02000	0.7000	NONCOHESIVE

CRITICAL SHEAR STRESS FOR DEPOSITION = 0.1500E-01 LBS/SQ. FT.
SEDIMENT FRACTION WILL BE STRIPPED DURING CONVECTIVE DESCENT.

CLAY	2.638	0.2113	0.00200	7.500	COHESIVE

CRITICAL SHEAR STRESS FOR DEPOSITION = 0.3800E-02 LBS/SQ. FT.
SEDIMENT FRACTION WILL BE STRIPPED DURING CONVECTIVE DESCENT.

TOXICITY ANALYSIS DATA:

CONCENTRATIONS OF FLUID IN TERMS OF PERCENT OF THE DREDGED MATERIAL
FOLLOWING INITIAL MIXING ARE COMPUTED FOR WATER QUALITY EVALUATIONS.

THE INITIAL CONCENTRATION OF FLUID IS 100. PERCENT
AND ITS BACKGROUND CONCENTRATION IS 0.000E+00 PERCENT.

THE DILUTION REQUIRED TO MEET TOXICITY CRITERIA IS 0.790000 PERCENT.
(TYPICALLY, 1 PERCENT OF THE LC50)

DESCRIPTION	SPEC. GRAV. OR DENSITY (GM/CC)	VOLUMETRIC CONCENTRATION (VOL/VOL)
FLUID	1.024	0.4970

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DISCHARGE PARAMETERS:

         VOLUME OF LAYER 1 =    2223.     CU YD

         DEPTH IS TOO SHALLOW FOR CONVECTIVE DESCENT SO DESCENT IS BYPASSED.
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CLOUD COLLAPSE PHASE:

        IN TRIAL #1 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.30349072E-02 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1199.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    THE DISCHARGE DID NOT OBTAIN A NEUTRALLY BUOYANT CONDITION DURING CONVECTIVE DESCENT.

        IN TRIAL #2 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.45220116E-02 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1199.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    THE DISCHARGE DID NOT OBTAIN A NEUTRALLY BUOYANT CONDITION DURING CONVECTIVE DESCENT.

        IN TRIAL #3 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.67377975E-02 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1199.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    THE DISCHARGE DID NOT OBTAIN A NEUTRALLY BUOYANT CONDITION DURING CONVECTIVE DESCENT.

        IN TRIAL #4 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.10039318E-01 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS 1143.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    DIFFUSION OF THE DISCHARGE IS GREATER THAN DYNAMIC SPREADING FROM THE COLLAPSE.

        IN TRIAL #5 THE COLLAPSE PHASE TIME STEP (DT) WAS  0.14021581E-01 SECONDS.
                    THE TOTAL NUMBER OF INTEGRATION TIME STEPS (ISTEP) FOR CONVECTIVE DESCENT AND COLAPSE WAS  905.
                    THE INTEGRATION TIME STEP NUMBER WHEN THE BED WAS ENCOUNTERED (IBED) WAS  305.
                    THE BOTTOM WAS ENCOUNTERED DURING CONVECTIVE DESCENT.
                    DIFFUSION OF THE DISCHARGE IS GREATER THAN DYNAMIC SPREADING FROM THE COLLAPSE.
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COLLAPSE PHASE RESULTS:

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID (DISTANCE FROM BARGE) X-DIR (FT)	DEPTH (FT)	Z-DIR (FT)	VELOCITY OF CLOUD CENTROID X-DIR (FPS)	DOWN (FPS)	Z-DIR (FPS)	DIFFERENCE OF CLOUD & WATER DENSITIES (G/CC)	CLOUD THICKNESS (FT)	ELLIPSOIDAL CLOUD AXIS LENGTHS MINOR (FT)	MAJOR (FT)	TRACER VOLUMETRIC CONC. (VOL/VOL)	VOLUME OF SOLID FRACTIONS (CU FT)	SOLIDS VOL. CONC. BY FRACTION (VOL/VOL)
60.92	7.55	32.70	0.02	7.49	11.20	0.05	0.6531E+00	32.87	65.75	65.75	0.4010E+00	0.1747E+05	0.2347E+00
												0.1265E+05	0.1700E+00
61.06	8.59	33.77	0.03	7.31	8.75	0.05	0.6335E+00	29.94	69.88	69.88	0.3898E+00	0.1743E+05	0.2277E+00
												0.1262E+05	0.1649E+00
61.20	9.60	35.04	0.04	7.13	9.05	0.06	0.6115E+00	26.55	75.41	75.41	0.3774E+00	0.1738E+05	0.2198E+00
												0.1258E+05	0.1592E+00
61.34	10.59	36.26	0.04	6.96	8.21	0.07	0.5886E+00	23.32	81.89	81.89	0.3645E+00	0.1732E+05	0.2116E+00
												0.1254E+05	0.1532E+00
61.48	11.55	37.32	0.05	6.78	7.00	0.07	0.5655E+00	20.49	88.96	88.96	0.3514E+00	0.1726E+05	0.2033E+00
												0.1250E+05	0.1472E+00
61.62	12.49	38.21	0.06	6.60	5.82	0.08	0.5426E+00	18.12	96.44	96.44	0.3382E+00	0.1721E+05	0.1950E+00
												0.1246E+05	0.1412E+00
61.76	13.41	38.94	0.08	6.42	4.80	0.08	0.5200E+00	16.16	104.16	104.16	0.3251E+00	0.1715E+05	0.1869E+00
												0.1242E+05	0.1353E+00
61.90	14.30	39.55	0.09	6.23	3.96	0.09	0.4979E+00	14.54	112.05	112.05	0.3121E+00	0.1711E+05	0.1790E+00
												0.1239E+05	0.1296E+00
62.04	15.16	40.05	0.10	6.05	3.28	0.10	0.4766E+00	13.21	120.03	120.03	0.2995E+00	0.1707E+05	0.1713E+00
												0.1236E+05	0.1240E+00
62.19	15.99	40.46	0.12	5.86	2.73	0.10	0.4561E+00	12.10	128.06	128.06	0.2872E+00	0.1703E+05	0.1639E+00
												0.1233E+05	0.1187E+00
62.33	16.80	40.81	0.13	5.68	2.29	0.11	0.4366E+00	11.17	136.09	136.09	0.2755E+00	0.1699E+05	0.1569E+00
												0.1230E+05	0.1136E+00
62.47	17.59	41.11	0.15	5.50	1.94	0.12	0.4182E+00	10.39	144.06	144.06	0.2644E+00	0.1696E+05	0.1503E+00
												0.1228E+05	0.1088E+00
62.61	18.35	41.35	0.16	5.33	1.65	0.12	0.4009E+00	9.72	151.93	151.93	0.2539E+00	0.1693E+05	0.1441E+00
												0.1226E+05	0.1043E+00
62.75	19.09	41.57	0.18	5.17	1.41	0.13	0.3849E+00	9.16	159.64	159.64	0.2442E+00	0.1690E+05	0.1383E+00
												0.1224E+05	0.1002E+00
62.89	19.80	41.75	0.20	5.02	1.21	0.13	0.3702E+00	8.67	167.17	167.17	0.2351E+00	0.1688E+05	0.1330E+00
												0.1222E+05	0.9633E-01
63.03	20.50	41.90	0.22	4.87	1.04	0.14	0.3566E+00	8.25	174.45	174.45	0.2268E+00	0.1686E+05	0.1282E+00
												0.1221E+05	0.9281E-01
63.17	21.17	42.04	0.24	4.74	0.91	0.14	0.3443E+00	7.89	181.47	181.47	0.2192E+00	0.1684E+05	0.1237E+00
												0.1219E+05	0.8959E-01
63.31	21.83	42.16	0.26	4.62	0.79	0.15	0.3330E+00	7.58	188.20	188.20	0.2123E+00	0.1682E+05	0.1197E+00
												0.1218E+05	0.8666E-01
63.45	22.47	42.26	0.28	4.50	0.69	0.15	0.3228E+00	7.30	194.62	194.62	0.2060E+00	0.1681E+05	0.1160E+00
												0.1217E+05	0.8401E-01
63.59	23.09	42.35	0.30	4.39	0.61	0.15	0.3136E+00	7.06	200.73	200.73	0.2002E+00	0.1679E+05	0.1127E+00
												0.1216E+05	0.8160E-01
63.73	23.70	42.43	0.32	4.29	0.54	0.16	0.3052E+00	6.85	206.51	206.51	0.1950E+00	0.1678E+05	0.1097E+00
												0.1215E+05	0.7942E-01
63.87	24.30	42.50	0.34	4.20	0.48	0.16	0.2976E+00	6.66	211.99	211.99	0.1903E+00	0.1677E+05	0.1069E+00

												0.1214E+05	0.7744E-01
64.01	24.88	42.56	0.37	4.12	0.43	0.16	0.2907E+00	6.50	217.17	217.17	0.1860E+00	0.1676E+05	0.1045E+00
												0.1213E+05	0.7564E-01
64.15	25.46	42.62	0.39	4.04	0.38	0.16	0.2844E+00	6.35	222.07	222.07	0.1821E+00	0.1675E+05	0.1022E+00
												0.1213E+05	0.7400E-01
64.29	26.02	42.67	0.41	3.97	0.34	0.17	0.2786E+00	6.21	226.70	226.70	0.1785E+00	0.1674E+05	0.1001E+00
												0.1212E+05	0.7251E-01
64.43	26.57	42.72	0.44	3.90	0.31	0.17	0.2734E+00	6.09	231.09	231.09	0.1752E+00	0.1673E+05	0.9824E-01
												0.1211E+05	0.7114E-01
64.57	27.11	42.76	0.46	3.84	0.28	0.17	0.2686E+00	5.98	235.24	235.24	0.1722E+00	0.1672E+05	0.9651E-01
												0.1211E+05	0.6988E-01
64.71	27.65	42.80	0.48	3.78	0.26	0.17	0.2641E+00	5.88	239.18	239.18	0.1694E+00	0.1671E+05	0.9491E-01
												0.1210E+05	0.6873E-01
64.85	28.17	42.83	0.51	3.72	0.24	0.17	0.2600E+00	5.79	242.93	242.93	0.1669E+00	0.1671E+05	0.9343E-01
												0.1210E+05	0.6766E-01
64.99	28.69	42.86	0.53	3.67	0.22	0.18	0.2562E+00	5.70	246.49	246.49	0.1645E+00	0.1670E+05	0.9206E-01
												0.1209E+05	0.6667E-01
65.13	29.20	42.89	0.56	3.62	0.20	0.18	0.2526E+00	5.62	249.90	249.90	0.1623E+00	0.1669E+05	0.9079E-01
												0.1209E+05	0.6574E-01
65.27	29.71	42.92	0.58	3.57	0.19	0.18	0.2493E+00	5.55	253.15	253.15	0.1602E+00	0.1669E+05	0.8960E-01
												0.1208E+05	0.6488E-01
65.41	30.20	42.94	0.61	3.53	0.18	0.18	0.2462E+00	5.48	256.27	256.27	0.1583E+00	0.1668E+05	0.8848E-01
												0.1208E+05	0.6407E-01
65.55	30.70	42.97	0.63	3.49	0.16	0.18	0.2433E+00	5.42	259.27	259.27	0.1564E+00	0.1668E+05	0.8744E-01
												0.1208E+05	0.6332E-01
65.69	31.18	42.99	0.66	3.45	0.15	0.18	0.2406E+00	5.36	262.15	262.15	0.1547E+00	0.1667E+05	0.8645E-01
												0.1207E+05	0.6260E-01
65.83	31.66	43.01	0.68	3.41	0.15	0.18	0.2380E+00	5.30	264.93	264.93	0.1531E+00	0.1667E+05	0.8551E-01
												0.1207E+05	0.6192E-01
65.97	32.14	43.03	0.71	3.37	0.14	0.18	0.2355E+00	5.25	267.61	267.61	0.1515E+00	0.1666E+05	0.8463E-01
												0.1207E+05	0.6128E-01
66.11	32.61	43.05	0.73	3.34	0.13	0.18	0.2332E+00	5.20	270.20	270.20	0.1501E+00	0.1666E+05	0.8379E-01
												0.1206E+05	0.6068E-01
66.25	33.08	43.07	0.76	3.30	0.12	0.18	0.2310E+00	5.15	272.72	272.72	0.1487E+00	0.1666E+05	0.8299E-01
												0.1206E+05	0.6010E-01
66.39	33.54	43.08	0.79	3.27	0.12	0.18	0.2288E+00	5.11	275.15	275.15	0.1473E+00	0.1665E+05	0.8223E-01
												0.1206E+05	0.5954E-01
66.53	33.99	43.10	0.81	3.24	0.11	0.18	0.2268E+00	5.07	277.53	277.53	0.1461E+00	0.1665E+05	0.8150E-01
												0.1206E+05	0.5902E-01
66.67	34.45	43.12	0.84	3.21	0.11	0.19	0.2249E+00	5.02	279.83	279.83	0.1448E+00	0.1664E+05	0.8080E-01
												0.1205E+05	0.5851E-01
66.81	34.89	43.13	0.86	3.18	0.10	0.19	0.2230E+00	4.98	282.08	282.08	0.1437E+00	0.1664E+05	0.8013E-01
												0.1205E+05	0.5802E-01
66.95	35.34	43.14	0.89	3.15	0.10	0.19	0.2212E+00	4.95	284.28	284.28	0.1425E+00	0.1664E+05	0.7948E-01
												0.1205E+05	0.5756E-01
67.09	35.78	43.16	0.92	3.12	0.10	0.19	0.2195E+00	4.91	286.42	286.42	0.1414E+00	0.1664E+05	0.7886E-01
												0.1205E+05	0.5711E-01
67.23	36.21	43.17	0.94	3.09	0.09	0.19	0.2178E+00	4.88	288.52	288.52	0.1404E+00	0.1663E+05	0.7826E-01
												0.1204E+05	0.5667E-01
67.37	36.65	43.18	0.97	3.07	0.09	0.19	0.2162E+00	4.84	290.57	290.57	0.1394E+00	0.1663E+05	0.7768E-01
												0.1204E+05	0.5625E-01

67.51	37.07	43.20	0.99	3.04	0.09	0.19	0.2146E+00	4.81	292.58	292.58	0.1384E+00	0.1663E+05	0.7712E-01
												0.1204E+05	0.5585E-01
67.65	37.50	43.21	1.02	3.02	0.08	0.19	0.2131E+00	4.78	294.55	294.55	0.1375E+00	0.1662E+05	0.7658E-01
												0.1204E+05	0.5546E-01
67.79	37.92	43.22	1.05	2.99	0.08	0.19	0.2117E+00	4.75	296.48	296.48	0.1365E+00	0.1662E+05	0.7606E-01
												0.1204E+05	0.5508E-01
67.93	38.34	43.23	1.07	2.97	0.08	0.19	0.2103E+00	4.72	298.38	298.38	0.1356E+00	0.1662E+05	0.7555E-01
												0.1203E+05	0.5471E-01
68.07	38.75	43.24	1.10	2.94	0.08	0.19	0.2089E+00	4.69	300.25	300.25	0.1348E+00	0.1662E+05	0.7506E-01
												0.1203E+05	0.5435E-01
68.21	39.16	43.25	1.13	2.92	0.07	0.19	0.2075E+00	4.66	302.09	302.09	0.1339E+00	0.1661E+05	0.7458E-01
												0.1203E+05	0.5400E-01
68.36	39.57	43.26	1.15	2.90	0.07	0.19	0.2062E+00	4.64	303.90	303.90	0.1331E+00	0.1661E+05	0.7411E-01
												0.1203E+05	0.5366E-01
68.50	39.98	43.27	1.18	2.88	0.07	0.19	0.2050E+00	4.61	305.68	305.68	0.1323E+00	0.1661E+05	0.7365E-01
												0.1203E+05	0.5334E-01
68.64	40.38	43.28	1.21	2.85	0.07	0.19	0.2037E+00	4.58	307.43	307.43	0.1315E+00	0.1661E+05	0.7321E-01
												0.1202E+05	0.5301E-01
68.78	40.78	43.29	1.23	2.83	0.07	0.19	0.2025E+00	4.56	309.16	309.16	0.1308E+00	0.1660E+05	0.7278E-01
												0.1202E+05	0.5270E-01
68.92	41.17	43.30	1.26	2.81	0.06	0.19	0.2014E+00	4.53	310.86	310.86	0.1300E+00	0.1660E+05	0.7236E-01
												0.1202E+05	0.5240E-01
69.06	41.57	43.31	1.29	2.79	0.06	0.19	0.2002E+00	4.51	312.54	312.54	0.1293E+00	0.1660E+05	0.7195E-01
												0.1202E+05	0.5210E-01
69.20	41.96	43.32	1.31	2.77	0.06	0.19	0.1991E+00	4.49	314.20	314.20	0.1286E+00	0.1660E+05	0.7154E-01
												0.1202E+05	0.5181E-01
69.34	42.34	43.33	1.34	2.75	0.06	0.19	0.1980E+00	4.47	315.84	315.84	0.1279E+00	0.1659E+05	0.7115E-01
												0.1202E+05	0.5152E-01

FALL VELOCITY OF COHESIVE MATERIAL IS 0.006900 FT/SEC COMPUTED FOR CLAY

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID X-LOCATION (FT)	CLOUD CENTROID Z-LOCATION (FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	T O T A L M A S S (CU FT)	ENTRAINED MASS (CU FT)	TIME STEP WHEN THIS CLOUD WAS CREATED	TIME STEP WHEN PREVIOUS CLOUD WAS CREATED
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 1									
60.27	8405.	7875.	55.25	15.72	0.5232	12.41	0.0000E+00	91	1
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 2									
60.55	8407.	7875.	56.38	16.24	1.500	13.62	0.0000E+00	181	91
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 3									
60.82	8409.	7875.	57.71	17.74	2.377	15.71	0.0000E+00	271	181
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 4									
61.71	8415.	7875.	89.55	20.12	15.98	298.0	0.0000E+00	361	305
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 5									
62.97	8423.	7875.	152.0	36.09	8.483	307.2	0.0000E+00	451	361
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 6									
64.23	8428.	7875.	199.3	42.85	2.151	128.1	0.0000E+00	541	451
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 7									
65.49	8433.	7876.	228.7	44.18	0.8194	60.29	0.0000E+00	631	541
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 8									
66.76	8437.	7876.	249.2	44.56	0.4436	36.35	0.0000E+00	721	631
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 9									
68.02	8441.	7876.	265.4	44.70	0.2993	26.30	0.0000E+00	811	721
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 10									
69.28	8445.	7876.	279.3	44.77	0.2269	21.03	0.0000E+00	901	811
NEW CLOUD CREATED, NTCLD(K) (K = 1) = 11									
69.34	8445.	7876.	279.9	40.53	4.465	0.1660E+05	0.0000E+00	905	901

NOTE -- When all solid material has settled from a cloud, the cloud is erased and the remaining clouds for this solids type are renumbered.

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID X-LOCATION (FT)	CLOUD CENTROID Z-LOCATION (FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	T O T A L M A S S (CU FT)	ENTRAINED MASS (CU FT)	TIME STEP WHEN THIS CLOUD WAS CREATED	TIME STEP WHEN PREVIOUS CLOUD WAS CREATED
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 1									
60.27	8405.	7875.	55.25	15.72	0.5232	8.979	0.0000E+00	91	1
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 2									
60.55	8407.	7875.	56.38	16.24	1.500	9.865	0.0000E+00	181	91
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 3									
60.82	8409.	7875.	57.71	17.74	2.377	11.37	0.0000E+00	271	181
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 4									
61.71	8415.	7875.	89.55	20.12	15.98	215.8	0.0000E+00	361	305
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 5									
62.97	8423.	7875.	152.0	36.09	8.483	222.4	0.0000E+00	451	361
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 6									
64.23	8428.	7875.	199.3	42.85	2.151	92.77	0.0000E+00	541	451
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 7									
65.49	8433.	7876.	228.7	44.18	0.8194	43.66	0.0000E+00	631	541
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 8									
66.76	8437.	7876.	249.2	44.56	0.4436	26.31	0.0000E+00	721	631
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 9									
68.02	8441.	7876.	265.4	44.70	0.2993	19.04	0.0000E+00	811	721
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 10									
69.28	8445.	7876.	279.3	44.77	0.2269	15.22	0.0000E+00	901	811
NEW CLOUD CREATED, NTCLD(K) (K = 2) = 11									
69.34	8445.	7876.	279.9	40.53	4.465	0.1202E+05	0.0000E+00	905	901

NOTE -- When all solid material has settled from a cloud, the cloud is erased and the remaining clouds for this solids type are renumbered.

TIME FROM DISPOSAL (SEC)	CLOUD CENTROID X-LOCATION (FT)	CLOUD CENTROID Z-LOCATION (FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	T O T A L M A S S (CU FT)	ENTRAINED MASS (CU FT)	TIME STEP WHEN THIS CLOUD WAS CREATED	TIME STEP WHEN PREVIOUS CLOUD WAS CREATED
NEW CLOUD CREATED, NTCLD(K) (K = 3) = 1									
69.34	8445.	7876.	279.9	40.53	4.465	0.2984E+05	0.0000E+00	905	1

NOTE -- When all solid material has settled from a cloud, the cloud is erased and the remaining clouds for this solids type are renumbered.

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LONG TERM DIFFUSION RESULTS:

    BEGIN LONG TERM SIMULATION OF FATE OF SAND



SUMMARY OF SAND     DISTRIBUTIONS AFTER     600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     291.03
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     17223.



SUMMARY OF SAND     DISTRIBUTIONS AFTER    1200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     92.151
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     17422.



SUMMARY OF SAND     DISTRIBUTIONS AFTER    1800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =    0.00000E+00
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     17514.


     COMPUTATIONS FOR SAND     TERMINATED AT    1800.00  SEC. ELAPSED TIME...MATERIAL SETTLED TO BOTTOM
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BOTTOM ACCUMULATION OF SAND (CU FT/GRID SQUARE) , 1800.00 SECONDS AFTER DUMP
...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	0	0
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	.	.	.	.	0
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	.	.
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	.
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.09	.26	.38	.28	.11	.03	.01	+	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.01	.20	1.2	3.7	5.3	3.6	1.2	.25	.04	.01	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.10	1.4	8.8	27	38	26	8.3	1.4	.17	.02	+	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	.01	.35	4.7	30	91	130	87	28	4.4	.43	.05	+	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	.02	.56	7.5	48	147	210	139	44	6.9	.64	.06	.01	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	.01	.43	5.7	36	110	157	105	33	5.2	.50	.05	+	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.15	2.0	13	39	55	37	12	1.9	.21	.02	+	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.02	.35	2.1	6.5	9.3	6.3	2.1	.38	.05	.01	+	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.18	.54	.77	.54	.20	.04	.01	+	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.03	.02	.01	+	+	+	+	.
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	.	.
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	.	.	.	0
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	.	0	0	0	0	0	0	0	0	0	0	0	0
21	.	.	0	0	0	0	0	0	0	0	0	0	0
22	.	.	0	0	0	0	0	0	0	0	0	0	0
23	+	.	0	0	0	0	0	0	0	0	0	0	0
24	+	.	.	0	0	0	0	0	0	0	0	0	0
25	+	.	.	0	0	0	0	0	0	0	0	0	0
26	+	.	.	0	0	0	0	0	0	0	0	0	0
27	+	.	0	0	0	0	0	0	0	0	0	0	0
28	.	.	0	0	0	0	0	0	0	0	0	0	0
29	.	.	0	0	0	0	0	0	0	0	0	0	0
30	.	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

THICKNESS (FT) OF SAND ACCUMULATED ON BOTTOM, 1800.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 0.1000E-01 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	0	0	0	0
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	.	.	.	.	0
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	.	.	.
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.05	.07	.05	.01	+	+	+	.	.
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.01	.12	.36	.52	.35	.11	.01	+	+	.	.
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.06	.41	1.2	1.8	1.2	.38	.06	+	+	+	.
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.10	.66	2.0	2.9	1.9	.61	.09	+	+	+	.
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.07	.50	1.5	2.1	1.4	.46	.07	+	+	+	.
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	.02	.17	.53	.76	.51	.16	.02	+	+	.	.
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.09	.12	.08	.02	+	+	+	.	.
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.01	+	+	+	+	.	.	.
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	.	.	.	.	0
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	0	0	0	0
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0
23	.	0	0	0	0	0	0	0	0	0	0	0	0
24	.	0	0	0	0	0	0	0	0	0	0	0	0
25	.	0	0	0	0	0	0	0	0	0	0	0	0
26	.	0	0	0	0	0	0	0	0	0	0	0	0
27	.	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

```
    BEGIN LONG TERM SIMULATION OF FATE OF CLAY



SUMMARY OF CLAY     DISTRIBUTIONS AFTER     600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     3282.4
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     9400.5



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    1200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     383.74
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12299.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    1800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     383.32
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12300.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    2400.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     382.93
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12300.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    3000.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     382.57
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12300.
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SUMMARY OF CLAY     DISTRIBUTIONS AFTER    3600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     382.24
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12301.

    MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT    1.00 FT
```

CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 3600.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	.01	.01	.02	.02	.02	.02	.01	.01	+
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.03	.05	.08	.09	.09	.08	.06	.04	.02
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.02	.05	.09	.16	.22	.27	.28	.24	.18	.11	.06
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.05	.12	.23	.39	.55	.66	.68	.60	.44	.28	.15
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.11	.25	.48	.80	1.1	1.3	1.4	1.2	.92	.59	.32
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.07	.19	.44	.85	1.4	2.0	2.4	2.4	2.1	1.6	1.0	.56
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.03	.10	.29	.66	1.2	2.1	3.0	3.6	3.7	3.2	2.4	1.5	.85
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.14	.37	.85	1.6	2.7	3.8	4.6	4.8	4.2	3.1	2.0	1.0
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.15	.40	.93	1.8	3.0	4.2	5.1	5.2	4.6	3.4	2.2	1.1
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.14	.38	.86	1.6	2.7	3.9	4.7	4.9	4.3	3.2	2.0	1.1
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.03	.11	.30	.69	1.3	2.2	3.1	3.7	3.9	3.4	2.5	1.6	.88
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.07	.20	.46	.91	1.5	2.1	2.5	2.6	2.3	1.7	1.1	.60
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.11	.27	.52	.87	1.2	1.4	1.5	1.3	1.0	.64	.34
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.05	.13	.26	.43	.60	.73	.75	.66	.49	.31	.17
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.02	.05	.10	.18	.25	.30	.31	.27	.20	.13	.07
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	0	0	0	0	0	0	0	0	0	0	0	00000	
14	0	0	0	0	0	0	0	0	0	0	0	00000	
15	0	0	0	0	0	0	0	0	0	0	0	00000	
16	0	0	0	0	0	0	0	0	0	0	0	00000	
17	+	0	0	0	0	0	0	0	0	0	0	00000	
18	.01	0	0	0	0	0	0	0	0	0	0	00000	
19	.02	0	0	0	0	0	0	0	0	0	0	00000	
20	.07	0	0	0	0	0	0	0	0	0	0	00000	
21	.14	0	0	0	0	0	0	0	0	0	0	00000	
22	.26	0	0	0	0	0	0	0	0	0	0	00000	
23	.39	0	0	0	0	0	0	0	0	0	0	00000	
24	.50	0	0	0	0	0	0	0	0	0	0	00000	
25	.55	0	0	0	0	0	0	0	0	0	0	00000	
26	.51	0	0	0	0	0	0	0	0	0	0	00000	
27	.41	0	0	0	0	0	0	0	0	0	0	00000	
28	.27	0	0	0	0	0	0	0	0	0	0	00000	
29	.16	0	0	0	0	0	0	0	0	0	0	00000	
30	.07	0	0	0	0	0	0	0	0	0	0	00000	
31	.03	0	0	0	0	0	0	0	0	0	0	00000	
32	0	0	0	0	0	0	0	0	0	0	0	00000	
33	0	0	0	0	0	0	0	0	0	0	0	00000	
34	0	0	0	0	0	0	0	0	0	0	0	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												

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BOTTOM ACCUMULATION OF CLAY     (CU FT/GRID SQUARE) ,   3600.00 SECONDS AFTER DUMP
...MULTIPLY DISPLAYED VALUES BY   10.00         (LEGEND... + = .LT. .01   . = .LT. .0001   0 = .LT. .000001)
M N=  2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31
 2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 3 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 4 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 5 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 6 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 7 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 8 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 9 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
10 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
11 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
12 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
13 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
14 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
15 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
16 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   0   0
17 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   .   .
18 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   +   +   +   +   +   +   .   .   .   .
19 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   +   +   +   +   +   +   +   +   +   .   .
20 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   +   + .02 .06 .09 .09 .06 .02   +   +   +   .
21 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .01 .06 .22 .52 .76 .69 .41 .17 .05 .01   +   +
22 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .05 .33 1.4 3.6 5.3 4.3 2.2 .80 .21 .04   +   +
23 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .02 .19 1.4 7.0  19  28  21 8.9 2.6 .65 .12 .01   +
24 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .04 .45 3.8  21  59  84  60  24 6.1 1.3 .23 .03   +
25 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .05 .64 5.7  32  91 130  92  35 8.5 1.7 .30 .04   +
26 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .04 .52 4.5  25  70 100  71  28 6.9 1.4 .26 .03   +
27 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .02 .25 1.9  10  27  39  29  12 3.4 .81 .15 .02   +
28 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .07 .50 2.2 5.8 8.3 6.6 3.2 1.1 .30 .05   +   +
29 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .01 .09 .36 .87 1.2 1.1 .65 .26 .07 .01   +   +
30 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .01 .05 .11 .16 .15 .10 .04 .01   +   +   .
31 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   +   + .01 .01 .01 .01   +   +   +   .   .
32 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   +   +   +   +   +   +   +   .   .   .
33 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   .   .   .
34 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   0   0
35 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
36 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
37 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
38 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
39 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
40 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
41 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
42 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
43 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
```

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	.	0	0	0	0	0	0	0	0	0	0	0	0
19	.	.	0	0	0	0	0	0	0	0	0	0	0
20	.	.	.	0	0	0	0	0	0	0	0	0	0
21	.	.	.	.	0	0	0	0	0	0	0	0	0
22	.	.	.	.	0	0	0	0	0	0	0	0	0
23	+	.	.	.	0	0	0	0	0	0	0	0	0
24	+	.	.	.	0	0	0	0	0	0	0	0	0
25	+	.	.	.	0	0	0	0	0	0	0	0	0
26	+	.	.	.	0	0	0	0	0	0	0	0	0
27	+	.	.	.	0	0	0	0	0	0	0	0	0
28	+	.	.	.	0	0	0	0	0	0	0	0	0
29	.	.	.	.	0	0	0	0	0	0	0	0	0
30	.	.	.	0	0	0	0	0	0	0	0	0	0
31	.	.	0	0	0	0	0	0	0	0	0	0	0
32	.	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

SMALL CLOUDS AT 3600.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	9062.	8.979	0.0000E+00	3090.	16.28	7.713	0.340000E-04
2	8407.	9060.	9.865	0.0000E+00	3090.	16.80	8.680	0.340000E-04
3	8409.	9057.	11.37	0.0000E+00	3089.	18.26	9.546	0.340000E-04
4	8415.	9033.	215.8	0.0000E+00	3087.	20.68	23.11	0.340000E-04
5	8423.	8975.	136.2	0.0000E+00	3115.	36.45	8.551	0.340000E-04

SUMMARY OF CLAY DISTRIBUTIONS AFTER 4200.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 381.92
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12301.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 4800.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 381.63
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12301.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 5400.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 381.20
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12302.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 6000.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 380.77
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12302.

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SUMMARY OF CLAY     DISTRIBUTIONS AFTER    6600.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     380.35
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12302.



SUMMARY OF CLAY     DISTRIBUTIONS AFTER    7200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     379.95
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12303.

    MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT    1.00 FT
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CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 7200.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.01	.02	.02	.03	.03	.03
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.03	.04	.05	.06	.06	.06
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.03	.05	.07	.09	.11	.13	.13	.13
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.03	.05	.09	.13	.17	.21	.24	.25	.24
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.05	.10	.15	.22	.30	.36	.41	.43	.41
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.09	.15	.24	.35	.47	.57	.65	.67	.64
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.07	.13	.22	.35	.51	.68	.83	.94	.97	.93
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.04	.09	.18	.30	.47	.68	.91	1.1	1.2	1.3	1.2
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.06	.12	.22	.37	.58	.84	1.1	1.3	1.5	1.6	1.5
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.06	.13	.25	.42	.66	.96	1.2	1.5	1.7	1.8	1.7
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.07	.14	.26	.44	.69	1.0	1.3	1.6	1.8	1.9	1.8
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.07	.13	.25	.43	.67	.97	1.2	1.5	1.7	1.8	1.7
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.06	.12	.22	.38	.60	.86	1.1	1.3	1.5	1.6	1.5
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.10	.18	.31	.49	.70	.93	1.1	1.2	1.3	1.2
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.07	.14	.23	.37	.53	.70	.86	.97	1.0	.97
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.09	.16	.25	.37	.49	.60	.68	.70	.67
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.06	.10	.16	.23	.31	.38	.43	.45	.43
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.06	.09	.14	.18	.23	.25	.27	.25
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.07	.10	.12	.14	.14	.14
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	.02	.02	.01	.01	+	+	+	0	0	0	0	0	0
16	.05	.04	.03	.02	.01	+	+	0	0	0	0	0	0
17	.11	.09	.07	.04	.03	.01	.01	0	0	0	0	0	0
18	.21	.17	.13	.09	.05	.03	.01	0	0	0	0	0	0
19	.36	.29	.22	.15	.09	.05	.03	0	0	0	0	0	0
20	.57	.46	.35	.24	.15	.09	.04	0	0	0	0	0	0
21	.82	.67	.50	.35	.22	.13	.07	0	0	0	0	0	0
22	1.1	.90	.67	.47	.30	.17	.09	0	0	0	0	0	0
23	1.3	1.1	.83	.57	.36	.21	.11	0	0	0	0	0	0
24	1.5	1.2	.94	.65	.41	.24	.13	0	0	0	0	0	0
25	1.6	1.3	.99	.68	.43	.25	.14	0	0	0	0	0	0
26	1.5	1.2	.95	.66	.42	.24	.13	0	0	0	0	0	0
27	1.3	1.1	.85	.58	.37	.22	.12	0	0	0	0	0	0
28	1.1	.92	.69	.48	.30	.18	.09	0	0	0	0	0	0
29	.86	.70	.52	.36	.23	.13	.07	0	0	0	0	0	0
30	.60	.48	.36	.25	.16	.09	.05	0	0	0	0	0	0
31	.38	.31	.23	.16	.10	.06	.03	0	0	0	0	0	0
32	.22	.18	.14	.09	.06	.03	.01	0	0	0	0	0	0
33	.12	.10	.07	.05	.03	.01	.01	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

BOTTOM ACCUMULATION OF CLAY   (CU FT/GRID SQUARE) ,   7200.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY   10.00   (LEGEND... + = .LT. .01   . = .LT. .0001   0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.01	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.03	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	+	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	.	.	.	0	0	0	0	0	0	0	0	0	0
14	.	.	.	.	.	0	0	0	0	0	0	0	0
15	.	.	.	.	.	.	.	0	0	0	0	0	0
16	.	.	.	.	.	.	.	.	0	0	0	0	0
17	.	.	.	.	.	.	.	.	0	0	0	0	0
18	+	+	.	.	.	.	.	.	.	0	0	0	0
19	+	+	+	+	.	.	.	.	.	.	0	0	0
20	+	+	+	+	.	.	.	.	.	.	0	0	0
21	+	+	+	+	+	.	.	.	.	.	.	0	0
22	+	+	+	+	+	+	.	.	.	.	.	0	0
23	+	+	+	+	+	+	.	.	.	.	.	0	0
24	+	+	+	+	+	+	.	.	.	.	.	0	0
25	+	+	+	+	+	+	.	.	.	.	.	0	0
26	+	+	+	+	+	+	.	.	.	.	.	0	0
27	+	+	+	+	+	+	.	.	.	.	.	0	0
28	+	+	+	+	+	+	.	.	.	.	.	0	0
29	+	+	+	+	+	.	.	.	.	.	.	0	0
30	+	+	+	+	+	.	.	.	.	.	0	0	0
31	+	+	+	+	.	.	.	.	.	.	0	0	0
32	+	+	.	.	.	.	.	.	.	0	0	0	0
33	.	.	.	.	.	.	.	.	.	0	0	0	0
34	.	.	.	.	.	.	.	.	0	0	0	0	0
35	.	.	.	.	.	.	.	0	0	0	0	0	0
36	.	.	.	.	.	0	0	0	0	0	0	0	0
37	.	.	.	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

SMALL CLOUDS AT 7200.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	0.1027E+05	8.979	0.0000E+00	4343.	13.11	14.29	0.340000E-04
2	8407.	0.1026E+05	9.865	0.0000E+00	4343.	13.64	15.25	0.340000E-04
3	8409.	0.1026E+05	11.37	0.0000E+00	4342.	15.10	16.12	0.340000E-04
4	8415.	0.1021E+05	215.2	0.0000E+00	4341.	17.51	27.49	0.340000E-04
5	8423.	0.1011E+05	134.6	0.0000E+00	4361.	33.28	11.72	0.340000E-04

SUMMARY OF CLAY DISTRIBUTIONS AFTER 7800.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 379.57
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12303.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 8400.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 379.19
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12304.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 9000.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 378.83
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12304.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 9600.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 378.48
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12304.

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SUMMARY OF CLAY     DISTRIBUTIONS AFTER   10200.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     378.14
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12305.


SUMMARY OF CLAY     DISTRIBUTIONS AFTER   10800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     377.81
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12305.

    MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT    1.00 FT
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CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 10800.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	.01	.01	.01
14	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.01	.02	.02	.02
15	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.02	.03	.04	.05
16	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.04	.06	.07	.08
17	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.07	.09	.12	.14
18	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.05	.08	.11	.14	.18	.21
19	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.03	.05	.08	.11	.16	.21	.26	.30
20	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.16	.22	.28	.35	.41
21	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.05	.09	.14	.20	.28	.36	.45	.53
22	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.07	.11	.17	.25	.34	.44	.55	.64
23	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.08	.13	.19	.28	.39	.51	.63	.74
24	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.08	.14	.21	.31	.43	.56	.69	.80
25	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.09	.14	.22	.32	.44	.58	.71	.83
26	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.08	.14	.21	.31	.43	.56	.69	.81
27	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.08	.13	.20	.29	.40	.52	.64	.75
28	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.07	.11	.17	.25	.35	.45	.56	.65
29	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.03	.05	.09	.14	.21	.29	.37	.46	.54
30	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.16	.22	.29	.36	.42
31	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.08	.12	.16	.22	.27	.31
32	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.06	.08	.11	.15	.19	.22
33	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.07	.10	.12	.14
34	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.05	.06	.08	.09
35	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	.01	.01	.01	.01	.01	.01	+	+	+	+	+	+	0
14	.03	.03	.03	.03	.02	.02	.01	.01	.01	+	+	+	0
15	.05	.06	.05	.05	.04	.04	.03	.02	.01	.01	+	+	0
16	.09	.10	.10	.09	.08	.07	.05	.04	.03	.02	.01	+	0
17	.15	.16	.16	.15	.13	.11	.08	.06	.04	.03	.02	.01	0
18	.23	.24	.24	.22	.20	.16	.13	.10	.07	.04	.03	.01	0
19	.33	.35	.34	.32	.28	.24	.19	.14	.10	.07	.04	.02	0
20	.45	.47	.47	.44	.39	.32	.26	.19	.14	.09	.06	.03	0
21	.58	.61	.60	.56	.50	.42	.33	.25	.18	.12	.07	.04	0
22	.71	.74	.73	.68	.61	.51	.40	.30	.21	.14	.09	.05	0
23	.81	.85	.84	.79	.70	.59	.46	.35	.25	.17	.10	.06	0
24	.89	.93	.92	.86	.76	.64	.51	.38	.27	.18	.11	.07	0
25	.91	.95	.94	.88	.78	.66	.52	.39	.28	.19	.12	.07	0
26	.89	.93	.92	.86	.77	.64	.51	.38	.27	.18	.11	.07	0
27	.82	.86	.85	.80	.71	.59	.47	.35	.25	.17	.11	.06	0
28	.72	.75	.74	.70	.62	.52	.41	.31	.22	.15	.09	.05	0
29	.60	.62	.62	.58	.51	.43	.34	.25	.18	.12	.07	.04	0
30	.47	.49	.48	.45	.40	.33	.27	.20	.14	.09	.06	.03	0
31	.34	.36	.36	.33	.30	.25	.20	.15	.10	.07	.04	.02	0
32	.24	.25	.25	.23	.21	.17	.14	.10	.07	.05	.03	.01	0
33	.16	.17	.16	.15	.14	.11	.09	.07	.05	.03	.02	.01	0
34	.10	.10	.10	.09	.08	.07	.05	.04	.03	.02	.01	+	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 10800.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	+	+	+	+	+
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.02	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.03	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	.01	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	+	+
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

```
M N= 32  33  34  35  36  37  38  39  40  41  42  43  44
 2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 3    0   0   0   0   0   0   0   0   0   0   0   00000
 4    0   0   0   0   0   0   0   0   0   0   0   00000
 5    0   0   0   0   0   0   0   0   0   0   0   00000
 6    0   0   0   0   0   0   0   0   0   0   0   00000
 7    0   0   0   0   0   0   0   0   0   0   0   00000
 8    0   0   0   0   0   0   0   0   0   0   0   00000
 9    0   0   0   0   0   0   0   0   0   0   0   00000
10    .   .   .   .   .   0   0   0   0   0   0   00000
11    .   .   .   .   .   .   .   .   0   0   0   00000
12    .   .   .   .   .   .   .   .   .   .   0   00000
13    .   .   .   .   .   .   .   .   .   .   .   00000
14    .   .   .   .   .   .   .   .   .   .   .   .0000
15    +   .   .   .   .   .   .   .   .   .   .   .0000
16    +   +   +   +   +   .   .   .   .   .   .   .0000
17    +   +   +   +   +   +   .   .   .   .   .   .0000
18    +   +   +   +   +   +   +   +   .   .   .   .0000
19    +   +   +   +   +   +   +   +   .   .   .   .0000
20    +   +   +   +   +   +   +   +   +   .   .   .0000
21    +   +   +   +   +   +   +   +   +   +   .   .0000
22    +   +   +   +   +   +   +   +   +   +   .   .0000
23    +   +   +   +   +   +   +   +   +   +   .   .0000
24    +   +   +   +   +   +   +   +   +   +   +   .0000
25    +   +   +   +   +   +   +   +   +   +   +   .0000
26    +   +   +   +   +   +   +   +   +   +   +   .0000
27    +   +   +   +   +   +   +   +   +   +   .   .0000
28    +   +   +   +   +   +   +   +   +   +   .   .0000
29    +   +   +   +   +   +   +   +   +   +   .   .0000
30    +   +   +   +   +   +   +   +   +   .   .   .0000
31    +   +   +   +   +   +   +   +   +   .   .   .0000
32    +   +   +   +   +   +   +   +   .   .   .   .0000
33    +   +   +   +   +   +   +   .   .   .   .   .0000
34    +   +   +   +   +   .   .   .   .   .   .   .0000
35    +   +   .   .   .   .   .   .   .   .   .   .0000
36    .   .   .   .   .   .   .   .   .   .   .   .0000
37    .   .   .   .   .   .   .   .   .   .   .   00000
38    .   .   .   .   .   .   .   .   .   .   0   00000
39    .   .   .   .   .   .   .   .   0   0   0   00000
40    .   .   .   .   .   .   0   0   0   0   0   00000
41    0   0   0   0   0   0   0   0   0   0   0   00000
42    0   0   0   0   0   0   0   0   0   0   0   00000
43    0   0   0   0   0   0   0   0   0   0   0   00000
44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
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SMALL CLOUDS AT 10800.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	0.1147E+05	8.979	0.0000E+00	5297.	9.951	20.86	0.340000E-04
2	8407.	0.1147E+05	9.865	0.0000E+00	5297.	10.47	21.83	0.340000E-04
3	8409.	0.1146E+05	11.37	0.0000E+00	5297.	11.94	22.69	0.340000E-04
4	8415.	0.1139E+05	214.3	0.0000E+00	5295.	14.35	30.65	0.340000E-04
5	8423.	0.1126E+05	133.3	0.0000E+00	5312.	30.12	14.88	0.340000E-04

SUMMARY OF CLAY DISTRIBUTIONS AFTER 11400.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 377.49
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12305.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 12000.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 377.18
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12306.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 12600.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 376.88
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12306.

SUMMARY OF CLAY DISTRIBUTIONS AFTER 13200.00 SEC.

TOTAL SUSPENDED MATERIAL (CU FT) = 376.58
TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) = 12306.

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SUMMARY OF CLAY     DISTRIBUTIONS AFTER   13800.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     376.29
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12306.


SUMMARY OF CLAY     DISTRIBUTIONS AFTER   14400.00 SEC.

    TOTAL SUSPENDED MATERIAL (CU FT) =     376.01
    TOTAL MATERIAL SETTLED TO BOTTOM (CU FT) =     12307.

    MAX CONC IS 0.00000001 OUTPUT SUPPRESSED AT    1.00 FT
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CONCENTRATIONS ABOVE BACKGROUND OF CLAY (MG/L) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	+
13	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	.01	.01
14	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.01	.02
15	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.02	.02	.03
16	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.04	.05
17	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.04	.06	.07
18	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.04	.06	.08	.10
19	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.02	.04	.05	.08	.11	.14
20	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.07	.10	.13	.17
21	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.08	.12	.16	.21
22	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.02	.04	.07	.10	.14	.19	.24
23	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.03	.05	.07	.11	.16	.21	.27
24	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.05	.08	.12	.17	.22	.29
25	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.05	.08	.12	.17	.23	.30
26	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.05	.08	.12	.17	.23	.29
27	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.03	.05	.07	.11	.16	.21	.27
28	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.02	.04	.07	.10	.14	.19	.25
29	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.09	.12	.17	.21
30	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.07	.10	.14	.18
31	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.02	.04	.06	.08	.11	.14
32	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.04	.06	.08	.11
33	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.04	.06	.08
34	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.04	.05
35	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.01	.02	.03	.03
36	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	O	O	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	+	+0000	
13	.01	.02	.02	.02	.02	.02	.02	.02	.02	.01	.01	.010000	
14	.03	.03	.04	.04	.04	.04	.04	.04	.03	.03	.02	.020000	
15	.04	.05	.06	.06	.07	.07	.06	.06	.05	.04	.04	.030000	
16	.06	.08	.09	.10	.10	.10	.10	.09	.08	.07	.05	.040000	
17	.09	.11	.13	.14	.15	.15	.14	.13	.12	.10	.08	.060000	
18	.13	.15	.18	.19	.20	.20	.20	.18	.16	.14	.11	.090000	
19	.17	.20	.23	.25	.27	.27	.26	.24	.21	.18	.15	.120000	
20	.22	.26	.29	.32	.34	.34	.33	.30	.27	.23	.19	.150000	
21	.26	.31	.35	.39	.41	.41	.40	.37	.33	.28	.23	.180000	
22	.30	.36	.41	.45	.47	.48	.46	.43	.38	.32	.26	.210000	
23	.34	.40	.46	.50	.53	.53	.51	.47	.42	.36	.29	.230000	
24	.36	.43	.49	.53	.56	.57	.55	.51	.45	.38	.31	.250000	
25	.37	.44	.50	.55	.57	.58	.56	.52	.46	.39	.32	.250000	
26	.36	.43	.49	.54	.56	.57	.55	.51	.45	.38	.31	.250000	
27	.34	.41	.46	.51	.53	.53	.52	.48	.43	.36	.30	.230000	
28	.31	.37	.42	.46	.48	.48	.47	.43	.38	.33	.27	.210000	
29	.27	.32	.36	.40	.42	.42	.40	.37	.33	.28	.23	.180000	
30	.22	.26	.30	.33	.35	.35	.34	.31	.28	.23	.19	.150000	
31	.18	.21	.24	.26	.27	.28	.27	.25	.22	.19	.15	.120000	
32	.13	.16	.18	.20	.21	.21	.20	.19	.17	.14	.12	.090000	
33	.10	.12	.13	.15	.15	.15	.15	.14	.12	.10	.08	.060000	
34	.07	.08	.09	.10	.11	.11	.10	.10	.08	.07	.06	.040000	
35	.04	.05	.06	.07	.07	.07	.07	.06	.06	.05	.04	.030000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000												

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	+	+	+	+
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	.01	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.02	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.04	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	.01	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	+	+	+	+
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	.	.	.	.	.	.	.	.	.	0	0	0	0
9	.	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	.
14	+	+	+	+	+	.	.	.	.	.	.	.	.
15	+	+	+	+	+	+	+	+	.	.	.	.	.
16	+	+	+	+	+	+	+	+	+	+	.	.	.
17	+	+	+	+	+	+	+	+	+	+	+	.	.
18	+	+	+	+	+	+	+	+	+	+	+	+	+
19	+	+	+	+	+	+	+	+	+	+	+	+	+
20	+	+	+	+	+	+	+	+	+	+	+	+	+
21	+	+	+	+	+	+	+	+	+	+	+	+	+
22	+	+	+	+	+	+	+	+	+	+	+	+	+
23	+	+	+	+	+	+	+	+	+	+	+	+	+
24	+	+	+	+	+	+	+	+	+	+	+	+	+
25	+	+	+	+	+	+	+	+	+	+	+	+	+
26	+	+	+	+	+	+	+	+	+	+	+	+	+
27	+	+	+	+	+	+	+	+	+	+	+	+	+
28	+	+	+	+	+	+	+	+	+	+	+	+	+
29	+	+	+	+	+	+	+	+	+	+	+	+	+
30	+	+	+	+	+	+	+	+	+	+	+	+	+
31	+	+	+	+	+	+	+	+	+	+	+	+	+
32	+	+	+	+	+	+	+	+	+	+	+	+	+
33	+	+	+	+	+	+	+	+	+	+	+	+	.
34	+	+	+	+	+	+	+	+	+	+	.	.	.
35	+	+	+	+	+	+	+	+	.	.	.	.	.
36	+	+	+	+	+	+	.	.	.	.	.	.	.
37	.	.	.	.	.	.	.	.	.	.	.	.	.
38	.	.	.	.	.	.	.	.	.	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
41	.	.	.	.	.	.	.	.	.	.	.	.	.
42	.	.	.	.	.	.	.	.	.	.	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

SMALL CLOUDS AT 14400.00 SECONDS ELAPSED TIME FOR CLAY

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8405.	0.1268E+05	8.979	0.0000E+00	6100.	6.787	27.43	0.340000E-04
2	8407.	0.1267E+05	9.865	0.0000E+00	6100.	7.308	28.40	0.340000E-04
3	8409.	0.1266E+05	11.37	0.0000E+00	6100.	8.773	29.26	0.340000E-04
4	8415.	0.1258E+05	213.4	0.0000E+00	6099.	11.18	33.82	0.340000E-04
5	8423.	0.1241E+05	132.3	0.0000E+00	6113.	26.96	18.04	0.340000E-04

BOTTOM ACCUMULATION OF CLAY (CU FT/GRID SQUARE) , 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 10.00 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	+	+	+	+
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	+	+	+	+	+	+	+	+
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	+	+	+	+	+	+	+	+
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	.01	+	+	+	+	+	+
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.09	.09	.06	.02	+	+	+	+
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.06	.22	.52	.76	.69	.41	.17	.05	.01	+	+
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.05	.33	1.4	3.6	5.3	4.3	2.2	.80	.22	.04	+	+
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.19	1.4	7.0	19	28	21	8.9	2.6	.65	.12	.02	+
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.45	3.8	21	59	84	60	24	6.1	1.3	.24	.03	+
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.05	.64	5.7	32	91	130	92	35	8.5	1.7	.31	.04	+
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.52	4.5	25	70	100	71	28	6.9	1.4	.26	.04	+
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.02	.25	1.9	10	27	39	29	12	3.4	.81	.15	.02	+
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.07	.50	2.2	5.8	8.3	6.6	3.2	1.1	.30	.06	.01	+
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.09	.36	.87	1.2	1.1	.65	.26	.07	.01	+	+
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.11	.16	.16	.10	.04	.01	+	+	+
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	.01	.01	.01	.01	+	+	+	+	+
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	+	+	+	+	+	+	+	+	+
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	+	+	+	+	+	+
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	+	+	+	+
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	+
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	.	.	.	.	.	.	.	.	.	0	0	0	0
9	.	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	.
14	+	+	+	+	+	.	.	.	.	.	.	.	.
15	+	+	+	+	+	+	+	+	.	.	.	.	.
16	+	+	+	+	+	+	+	+	+	+	.	.	.
17	+	+	+	+	+	+	+	+	+	+	+	.	.
18	+	+	+	+	+	+	+	+	+	+	+	+	+
19	+	+	+	+	+	+	+	+	+	+	+	+	+
20	+	+	+	+	+	+	+	+	+	+	+	+	+
21	+	+	+	+	+	+	+	+	+	+	+	+	+
22	+	+	+	+	+	+	+	+	+	+	+	+	+
23	+	+	+	+	+	+	+	+	+	+	+	+	+
24	+	+	+	+	+	+	+	+	+	+	+	+	+
25	+	+	+	+	+	+	+	+	+	+	+	+	+
26	+	+	+	+	+	+	+	+	+	+	+	+	+
27	+	+	+	+	+	+	+	+	+	+	+	+	+
28	+	+	+	+	+	+	+	+	+	+	+	+	+
29	+	+	+	+	+	+	+	+	+	+	+	+	+
30	+	+	+	+	+	+	+	+	+	+	+	+	+
31	+	+	+	+	+	+	+	+	+	+	+	+	+
32	+	+	+	+	+	+	+	+	+	+	+	+	+
33	+	+	+	+	+	+	+	+	+	+	+	+	.
34	+	+	+	+	+	+	+	+	+	+	.	.	.
35	+	+	+	+	+	+	+	+	.	.	.	.	.
36	+	+	+	+	+	+	.	.	.	.	.	.	.
37	.	.	.	.	.	.	.	.	.	.	.	.	.
38	.	.	.	.	.	.	.	.	.	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
41	.	.	.	.	.	.	.	.	.	.	.	.	.
42	.	.	.	.	.	.	.	.	.	.	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

THICKNESS (FT) OF CLAY ACCUMULATED ON BOTTOM, 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 0.1000E-01 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+	+
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	.01	.03	.05	.04	.02	.01	+	+	+	+
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.02	.09	.25	.36	.30	.15	.05	.01	+	+	+
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.09	.48	1.3	1.9	1.4	.61	.18	.04	+	+	+
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.26	1.4	4.0	5.8	4.1	1.6	.42	.09	.01	+	+
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.04	.40	2.2	6.3	9.0	6.3	2.4	.59	.12	.02	+	+
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.03	.31	1.7	4.8	6.9	4.9	1.9	.48	.10	.01	+	+
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	.01	.13	.67	1.8	2.6	1.9	.83	.24	.05	.01	+	+
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.03	.15	.40	.58	.46	.22	.07	.02	+	+	+
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	.02	.06	.08	.07	.04	.01	+	+	+	+
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	.01	.01	+	+	+	+	+	+
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	+	+	.	.	.	.	.	.
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

```
M N= 32  33  34  35  36  37  38  39  40  41  42  43  44
 2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 3    0   0   0   0   0   0   0   0   0   0   0   00000
 4    0   0   0   0   0   0   0   0   0   0   0   00000
 5    0   0   0   0   0   0   0   0   0   0   0   00000
 6    0   0   0   0   0   0   0   0   0   0   0   00000
 7    0   0   0   0   0   0   0   0   0   0   0   00000
 8    0   0   0   0   0   0   0   0   0   0   0   00000
 9    0   0   0   0   0   0   0   0   0   0   0   00000
10    0   0   0   0   0   0   0   0   0   0   0   00000
11    .   .   .   .   .   .   0   0   0   0   0   00000
12    .   .   .   .   .   .   .   .   .   .   0   00000
13    .   .   .   .   .   .   .   .   .   .   .   00000
14    .   .   .   .   .   .   .   .   .   .   .   .0000
15    .   .   .   .   .   .   .   .   .   .   .   .0000
16    .   .   .   .   .   .   .   .   .   .   .   .0000
17    .   .   .   .   .   .   .   .   .   .   .   .0000
18    .   .   .   .   .   .   .   .   .   .   .   .0000
19    +   .   .   .   .   .   .   .   .   .   .   .0000
20    +   +   +   +   .   .   .   .   .   .   .   .0000
21    +   +   +   +   +   +   .   .   .   .   .   .0000
22    +   +   +   +   +   +   +   .   .   .   .   .0000
23    +   +   +   +   +   +   +   .   .   .   .   .0000
24    +   +   +   +   +   +   +   .   .   .   .   .0000
25    +   +   +   +   +   +   +   +   .   .   .   .0000
26    +   +   +   +   +   +   +   .   .   .   .   .0000
27    +   +   +   +   +   +   +   .   .   .   .   .0000
28    +   +   +   +   +   +   +   .   .   .   .   .0000
29    +   +   +   +   +   +   .   .   .   .   .   .0000
30    +   +   +   +   .   .   .   .   .   .   .   .0000
31    +   +   .   .   .   .   .   .   .   .   .   .0000
32    .   .   .   .   .   .   .   .   .   .   .   .0000
33    .   .   .   .   .   .   .   .   .   .   .   .0000
34    .   .   .   .   .   .   .   .   .   .   .   .0000
35    .   .   .   .   .   .   .   .   .   .   .   .0000
36    .   .   .   .   .   .   .   .   .   .   .   .0000
37    .   .   .   .   .   .   .   .   .   .   .   .0000
38    .   .   .   .   .   .   .   .   .   .   0   00000
39    .   .   .   .   .   .   .   0   0   0   0   00000
40    0   0   0   0   0   0   0   0   0   0   0   00000
41    0   0   0   0   0   0   0   0   0   0   0   00000
42    0   0   0   0   0   0   0   0   0   0   0   00000
43    0   0   0   0   0   0   0   0   0   0   0   00000
44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
```

```
    BEGIN LONG TERM SIMULATION OF FATE OF FLUID


SUMMARY OF FLUID    DISTRIBUTIONS AFTER     600.00 SEC

    TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) =     29837.
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SMALL CLOUDS AT 600.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8038.	0.2984E+05	0.0000E+00	1433.	40.02	4.981	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 1200.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 1200.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8222.	0.2984E+05	0.0000E+00	1959.	39.47	5.528	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 1800.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 1800.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8407.	0.2984E+05	0.0000E+00	2344.	38.92	6.076	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 2400.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 2400.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8592.	0.2984E+05	0.0000E+00	2666.	38.38	6.624	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 3000.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 3000.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8778.	0.2984E+05	0.0000E+00	2948.	37.83	7.172	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 3600.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 3600.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-03 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	+	+	+	+	+	+	+
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.02	.02	.02	.02	.01	.01	+
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.03	.05	.07	.08	.08	.07	.05	.03	.02
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.02	.04	.09	.14	.19	.23	.23	.20	.15	.10	.05
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.05	.11	.20	.33	.45	.54	.55	.48	.36	.23	.13
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.10	.22	.41	.66	.91	1.0	1.1	.96	.72	.47	.26
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.07	.18	.39	.72	1.1	1.5	1.8	1.9	1.6	1.2	.81	.45
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.10	.26	.57	1.0	1.7	2.3	2.7	2.8	2.4	1.8	1.2	.67
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.13	.34	.73	1.3	2.1	2.9	3.5	3.6	3.1	2.3	1.5	.86
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.05	.15	.37	.81	1.5	2.3	3.2	3.8	3.9	3.4	2.6	1.6	.94
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.04	.14	.35	.76	1.4	2.2	3.1	3.6	3.7	3.2	2.4	1.6	.89
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.11	.29	.62	1.1	1.8	2.5	2.9	3.0	2.6	2.0	1.3	.72
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.08	.20	.43	.81	1.2	1.7	2.0	2.1	1.8	1.4	.91	.51
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.12	.26	.48	.78	1.0	1.2	1.2	1.1	.84	.55	.30
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.06	.13	.25	.40	.55	.65	.66	.58	.44	.28	.15
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.06	.11	.18	.24	.29	.29	.26	.19	.12	.07
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	0	0	0	0	0	0	0	0	0	0	0	00000	
14	0	0	0	0	0	0	0	0	0	0	0	00000	
15	0	0	0	0	0	0	0	0	0	0	0	00000	
16	+	0	0	0	0	0	0	0	0	0	0	00000	
17	+	0	0	0	0	0	0	0	0	0	0	00000	
18	.01	0	0	0	0	0	0	0	0	0	0	00000	
19	.02	0	0	0	0	0	0	0	0	0	0	00000	
20	.06	0	0	0	0	0	0	0	0	0	0	00000	
21	.12	0	0	0	0	0	0	0	0	0	0	00000	
22	.21	0	0	0	0	0	0	0	0	0	0	00000	
23	.32	0	0	0	0	0	0	0	0	0	0	00000	
24	.41	0	0	0	0	0	0	0	0	0	0	00000	
25	.45	0	0	0	0	0	0	0	0	0	0	00000	
26	.43	0	0	0	0	0	0	0	0	0	0	00000	
27	.35	0	0	0	0	0	0	0	0	0	0	00000	
28	.24	0	0	0	0	0	0	0	0	0	0	00000	
29	.14	0	0	0	0	0	0	0	0	0	0	00000	
30	.07	0	0	0	0	0	0	0	0	0	0	00000	
31	.03	0	0	0	0	0	0	0	0	0	0	00000	
32	0	0	0	0	0	0	0	0	0	0	0	00000	
33	0	0	0	0	0	0	0	0	0	0	0	00000	
34	0	0	0	0	0	0	0	0	0	0	0	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 3600.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

...MULTIPLY DISPLAYED VALUES BY 0.1000E-02 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	+	+	+	+	+	+	+	+	+	+	+
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	+	+	+	+	+	+	+
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.02	.02	.02	.02	.01	.01	+
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.04	.05	.06	.07	.06	.04	.03	.01
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.03	.06	.10	.13	.16	.16	.14	.10	.07	.03
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.06	.12	.20	.27	.32	.33	.28	.21	.14	.07
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.05	.11	.21	.34	.47	.56	.57	.49	.37	.24	.13
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.08	.17	.32	.51	.70	.83	.84	.74	.55	.36	.20
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.10	.22	.41	.65	.89	1.0	1.0	.94	.71	.46	.25
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.11	.24	.45	.71	.98	1.1	1.1	1.0	.78	.50	.28
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.10	.23	.42	.68	.93	1.1	1.1	.98	.74	.48	.26
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.08	.18	.34	.55	.76	.89	.91	.79	.60	.39	.21
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.06	.13	.24	.38	.53	.62	.64	.56	.42	.27	.15
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.07	.14	.23	.32	.37	.38	.33	.25	.16	.09
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.04	.07	.12	.16	.19	.20	.17	.13	.08	.04
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.03	.05	.07	.08	.08	.07	.05	.03	.02
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	0	0	0	0	0	0	0	0	0	0	0	00000	
14	0	0	0	0	0	0	0	0	0	0	0	00000	
15	0	0	0	0	0	0	0	0	0	0	0	00000	
16	+	0	0	0	0	0	0	0	0	0	0	00000	
17	+	0	0	0	0	0	0	0	0	0	0	00000	
18	+	0	0	0	0	0	0	0	0	0	0	00000	
19	+	0	0	0	0	0	0	0	0	0	0	00000	
20	.01	0	0	0	0	0	0	0	0	0	0	00000	
21	.03	0	0	0	0	0	0	0	0	0	0	00000	
22	.06	0	0	0	0	0	0	0	0	0	0	00000	
23	.09	0	0	0	0	0	0	0	0	0	0	00000	
24	.12	0	0	0	0	0	0	0	0	0	0	00000	
25	.13	0	0	0	0	0	0	0	0	0	0	00000	
26	.12	0	0	0	0	0	0	0	0	0	0	00000	
27	.10	0	0	0	0	0	0	0	0	0	0	00000	
28	.07	0	0	0	0	0	0	0	0	0	0	00000	
29	.04	0	0	0	0	0	0	0	0	0	0	00000	
30	.02	0	0	0	0	0	0	0	0	0	0	00000	
31	.01	0	0	0	0	0	0	0	0	0	0	00000	
32	0	0	0	0	0	0	0	0	0	0	0	00000	
33	0	0	0	0	0	0	0	0	0	0	0	00000	
34	0	0	0	0	0	0	0	0	0	0	0	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO												

SMALL CLOUDS AT 3600.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	8965.	0.2984E+05	0.0000E+00	3204.	37.28	7.720	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 4200.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 4200.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9152.	0.2984E+05	0.0000E+00	3440.	36.73	8.267	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 4800.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 4800.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9340.	0.2984E+05	0.0000E+00	3659.	36.18	8.815	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 5400.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 5400.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9528.	0.2984E+05	0.0000E+00	3865.	35.64	9.363	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 6000.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 6000.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9716.	0.2984E+05	0.0000E+00	4060.	35.09	9.911	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 6600.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 6600.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	9905.	0.2984E+05	0.0000E+00	4246.	34.54	10.46	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 7200.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 7200.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-03 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	+	+	+	+	+	+
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	.01	.01	.01	.01	.02	.01
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.02	.03	.03	.04	.04	.04
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.04	.06	.07	.08	.08	.08
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.04	.06	.08	.11	.13	.15	.15	.14
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.04	.06	.10	.14	.19	.23	.25	.26	.25
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.06	.10	.16	.23	.29	.36	.40	.41	.39
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.09	.15	.23	.33	.43	.51	.57	.59	.56
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.07	.12	.20	.31	.44	.57	.69	.76	.78	.74
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.04	.08	.15	.25	.38	.54	.70	.84	.94	.96	.91
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.09	.17	.28	.43	.61	.80	.96	1.0	1.1	1.0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.10	.18	.30	.46	.64	.84	1.0	1.1	1.1	1.0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.10	.17	.29	.44	.62	.81	.98	1.0	1.1	1.0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.04	.08	.16	.26	.40	.56	.73	.88	.98	1.0	.95
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.07	.13	.21	.33	.46	.60	.73	.81	.83	.79
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.10	.16	.25	.35	.46	.56	.62	.64	.60
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.18	.25	.33	.39	.44	.45	.43
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.04	.07	.11	.16	.21	.26	.29	.29	.28
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.04	.07	.10	.13	.15	.17	.18	.17
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.04	.05	.07	.08	.09	.10	.09
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	+	+	+	+	+	+	0	0	0	0	0	0	0
15	.01	.01	.01	+	+	+	0	0	0	0	0	0	0
16	.03	.02	.02	.01	+	+	0	0	0	0	0	0	0
17	.07	.05	.04	.03	.01	.01	0	0	0	0	0	0	0
18	.13	.10	.07	.05	.03	.02	0	0	0	0	0	0	0
19	.22	.17	.13	.09	.05	.03	0	0	0	0	0	0	0
20	.34	.27	.20	.14	.09	.05	0	0	0	0	0	0	0
21	.49	.40	.30	.20	.13	.07	0	0	0	0	0	0	0
22	.65	.53	.39	.27	.17	.10	0	0	0	0	0	0	0
23	.80	.65	.49	.34	.21	.12	0	0	0	0	0	0	0
24	.91	.74	.55	.38	.24	.14	0	0	0	0	0	0	0
25	.96	.78	.58	.40	.26	.15	0	0	0	0	0	0	0
26	.93	.75	.56	.39	.25	.14	0	0	0	0	0	0	0
27	.84	.68	.51	.35	.22	.13	0	0	0	0	0	0	0
28	.69	.56	.42	.29	.18	.11	0	0	0	0	0	0	0
29	.53	.43	.32	.22	.14	.08	0	0	0	0	0	0	0
30	.37	.30	.23	.15	.10	.06	0	0	0	0	0	0	0
31	.24	.20	.15	.10	.06	.03	0	0	0	0	0	0	0
32	.15	.12	.09	.06	.04	.02	0	0	0	0	0	0	0
33	.08	.06	.05	.03	.02	.01	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 7200.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

...MULTIPLY DISPLAYED VALUES BY 0.1000E-03 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	.01	.01	.02	.02	.03	.03	.03
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.04	.05	.06	.07	.07	.07
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.04	.06	.09	.12	.14	.16	.16	.15
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.05	.08	.13	.18	.23	.28	.31	.32	.31
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.05	.09	.15	.23	.33	.43	.52	.58	.59	.56
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.02	.04	.08	.16	.26	.40	.56	.73	.88	.98	1.0	.95
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.07	.13	.24	.41	.62	.87	1.1	1.3	1.5	1.5	1.4
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.10	.20	.35	.59	.89	1.2	1.6	1.9	2.1	2.2	2.1
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.06	.13	.26	.47	.78	1.1	1.6	2.1	2.6	2.9	3.0	2.8
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.08	.17	.32	.58	.96	1.4	2.0	2.6	3.2	3.5	3.6	3.5
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.09	.19	.37	.66	1.0	1.6	2.3	3.0	3.6	4.0	4.2	3.9
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.09	.20	.39	.70	1.1	1.7	2.4	3.2	3.8	4.2	4.4	4.1
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.09	.19	.38	.68	1.1	1.7	2.4	3.1	3.7	4.1	4.2	4.0
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.08	.17	.34	.61	1.0	1.5	2.1	2.8	3.3	3.7	3.8	3.6
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.07	.14	.28	.50	.83	1.2	1.7	2.3	2.7	3.1	3.1	3.0
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.11	.21	.38	.64	.97	1.3	1.7	2.1	2.3	2.4	2.3
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.08	.15	.27	.45	.69	.97	1.2	1.5	1.6	1.7	1.6
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.05	.10	.18	.29	.45	.63	.82	.99	1.1	1.1	1.0
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.03	.06	.10	.18	.27	.38	.50	.60	.67	.68	.65
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.06	.10	.15	.21	.28	.33	.37	.38	.36
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	0	0	0	0	0	0	0	0	0	0	0	00000	
14	.02	.02	.01	.01	+	+	0	0	0	0	0	00000	
15	.06	.05	.03	.02	.01	.01	0	0	0	0	0	00000	
16	.13	.11	.08	.05	.03	.02	0	0	0	0	0	00000	
17	.27	.22	.16	.11	.07	.04	0	0	0	0	0	00000	
18	.49	.40	.30	.21	.13	.07	0	0	0	0	0	00000	
19	.84	.68	.51	.35	.22	.13	0	0	0	0	0	00000	
20	1.3	1.0	.79	.55	.35	.20	0	0	0	0	0	00000	
21	1.8	1.5	1.1	.79	.50	.30	0	0	0	0	0	00000	
22	2.5	2.0	1.5	1.0	.67	.40	0	0	0	0	0	00000	
23	3.0	2.4	1.8	1.2	.83	.49	0	0	0	0	0	00000	
24	3.5	2.8	2.1	1.4	.94	.56	0	0	0	0	0	00000	
25	3.6	2.9	2.2	1.5	.99	.58	0	0	0	0	0	00000	
26	3.5	2.8	2.1	1.5	.96	.57	0	0	0	0	0	00000	
27	3.2	2.6	1.9	1.3	.86	.51	0	0	0	0	0	00000	
28	2.6	2.1	1.6	1.1	.71	.42	0	0	0	0	0	00000	
29	2.0	1.6	1.2	.86	.55	.32	0	0	0	0	0	00000	
30	1.4	1.1	.88	.61	.39	.23	0	0	0	0	0	00000	
31	.94	.76	.57	.39	.25	.15	0	0	0	0	0	00000	
32	.57	.46	.34	.24	.15	.09	0	0	0	0	0	00000	
33	.32	.26	.19	.13	.08	.05	0	0	0	0	0	00000	
34	0	0	0	0	0	0	0	0	0	0	0	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000000												

SMALL CLOUDS AT 7200.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1009E+05	0.2984E+05	0.0000E+00	4423.	33.99	11.01	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 7800.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 7800.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1028E+05	0.2984E+05	0.0000E+00	4594.	33.45	11.55	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 8400.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 8400.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1047E+05	0.2984E+05	0.0000E+00	4758.	32.90	12.10	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 9000.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 9000.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1067E+05	0.2984E+05	0.0000E+00	4916.	32.35	12.65	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 9600.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 9600.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1086E+05	0.2984E+05	0.0000E+00	5070.	31.80	13.20	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 10200.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 10200.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1105E+05	0.2984E+05	0.0000E+00	5218.	31.25	13.75	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 10800.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 10800.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-04 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.01	.02	.03	.05	.06	.07	.09
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.03	.04	.07	.09	.12	.14	.17
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.03	.05	.08	.12	.16	.21	.26	.30
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.06	.09	.14	.20	.28	.36	.43	.50
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.05	.09	.15	.23	.33	.44	.57	.69	.79
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.08	.14	.23	.35	.49	.67	.86	1.0	1.2
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.07	.12	.20	.33	.49	.71	.96	1.2	1.4	1.7
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.09	.16	.28	.44	.67	.96	1.2	1.6	2.0	2.3
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.12	.21	.36	.57	.86	1.2	1.6	2.1	2.5	2.9
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.08	.14	.26	.44	.69	1.0	1.4	2.0	2.5	3.1	3.6
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.09	.17	.30	.50	.80	1.2	1.7	2.3	2.9	3.6	4.1
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.10	.18	.33	.55	.87	1.3	1.8	2.5	3.2	3.9	4.5
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.10	.19	.34	.57	.90	1.3	1.9	2.6	3.3	4.0	4.6
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.10	.18	.33	.56	.88	1.3	1.9	2.5	3.2	3.9	4.5
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.09	.17	.31	.52	.82	1.2	1.7	2.3	3.0	3.7	4.2
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.08	.15	.27	.45	.72	1.0	1.5	2.1	2.6	3.2	3.7
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.12	.22	.38	.60	.91	1.3	1.7	2.2	2.7	3.1
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.10	.18	.30	.48	.72	1.0	1.3	1.7	2.1	2.4
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.07	.13	.22	.36	.54	.77	1.0	1.3	1.6	1.8
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.09	.16	.25	.38	.54	.74	.94	1.1	1.3
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.06	.10	.17	.25	.36	.49	.63	.77	.89
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.06	.11	.16	.23	.31	.40	.49	.56
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	.09	.10	.10	.09	.08	.06	.05	.04	.02	.01	.01	0	0
14	.18	.19	.18	.17	.15	.12	.10	.07	.05	.03	.02	0	0
15	.32	.33	.33	.30	.27	.22	.17	.13	.09	.06	.04	0	0
16	.54	.56	.55	.51	.45	.37	.29	.22	.15	.10	.06	0	0
17	.87	.90	.88	.81	.72	.60	.47	.35	.25	.17	.10	0	0
18	1.3	1.3	1.3	1.2	1.0	.90	.71	.53	.38	.25	.16	0	0
19	1.8	1.9	1.8	1.7	1.5	1.2	1.0	.76	.54	.36	.23	0	0
20	2.5	2.6	2.5	2.3	2.0	1.7	1.3	1.0	.73	.49	.31	0	0
21	3.2	3.3	3.2	3.0	2.6	2.2	1.7	1.3	.93	.63	.40	0	0
22	3.9	4.0	3.9	3.6	3.2	2.7	2.1	1.6	1.1	.76	.48	0	0
23	4.5	4.6	4.5	4.2	3.7	3.1	2.4	1.8	1.3	.88	.56	0	0
24	4.9	5.0	4.9	4.6	4.0	3.4	2.6	2.0	1.4	.96	.61	0	0
25	5.1	5.2	5.1	4.7	4.2	3.5	2.7	2.0	1.4	.99	.63	0	0
26	5.0	5.1	5.0	4.6	4.1	3.4	2.7	2.0	1.4	.97	.62	0	0
27	4.6	4.8	4.7	4.3	3.8	3.2	2.5	1.8	1.3	.90	.57	0	0
28	4.0	4.2	4.1	3.8	3.3	2.8	2.2	1.6	1.1	.79	.51	0	0
29	3.4	3.5	3.4	3.2	2.8	2.3	1.8	1.3	.99	.66	.42	0	0
30	2.7	2.7	2.7	2.5	2.2	1.8	1.4	1.1	.78	.52	.33	0	0
31	2.0	2.0	2.0	1.9	1.6	1.3	1.1	.82	.58	.39	.25	0	0
32	1.4	1.4	1.4	1.3	1.1	.99	.78	.58	.41	.28	.17	0	0
33	.97	1.0	.98	.91	.80	.67	.52	.39	.28	.18	.12	0	0
34	.62	.64	.62	.58	.51	.42	.33	.25	.18	.12	.07	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 10800.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

...MULTIPLY DISPLAYED VALUES BY 0.1000E-03 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													
3	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.02	.02	.03	.04
14	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.03	.04	.05	.06	.07
15	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.02	.03	.05	.07	.09	.11	.13
16	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.02	.04	.06	.09	.12	.15	.19	.22
17	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.10	.14	.19	.25	.30	.35
18	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.06	.10	.15	.21	.29	.37	.45	.52
19	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.05	.09	.14	.21	.31	.42	.53	.65	.75
20	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.07	.12	.19	.29	.42	.56	.72	.88	1.0
21	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.05	.09	.15	.25	.37	.54	.72	.93	1.1	1.3
22	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.11	.19	.30	.46	.65	.88	1.1	1.3	1.5
23	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.07	.13	.22	.35	.53	.75	1.0	1.3	1.5	1.8
24	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.08	.14	.24	.38	.57	.82	1.1	1.4	1.7	1.9
25	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.08	.15	.25	.39	.59	.85	1.1	1.4	1.7	2.0
26	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.08	.14	.24	.39	.58	.83	1.1	1.4	1.7	2.0
27	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.07	.13	.22	.36	.54	.77	1.0	1.3	1.6	1.8
28	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.12	.20	.31	.48	.68	.92	1.1	1.4	1.6
29	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.05	.10	.16	.26	.40	.57	.77	.98	1.1	1.3
30	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.07	.13	.21	.31	.45	.61	.78	.94	1.0
31	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.03	.05	.09	.15	.23	.33	.45	.58	.71	.81
32	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.07	.11	.16	.24	.32	.41	.50	.58
33	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.07	.11	.16	.21	.28	.34	.39
34	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.03	.04	.07	.10	.14	.17	.21	.25
35	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	OOOO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	0	0	0	0	0	0	0	0	0	0	0	00000	
13	.04	.04	.04	.04	.03	.03	.02	.01	.01	+	+	00000	
14	.08	.08	.08	.07	.06	.05	.04	.03	.02	.01	.01	00000	
15	.14	.14	.14	.13	.11	.09	.07	.05	.04	.02	.01	00000	
16	.24	.24	.24	.22	.19	.16	.13	.09	.06	.04	.03	00000	
17	.38	.39	.38	.35	.31	.26	.20	.15	.11	.07	.04	00000	
18	.57	.59	.58	.54	.47	.39	.31	.23	.16	.11	.07	00000	
19	.82	.84	.83	.77	.67	.56	.44	.33	.23	.16	.10	00000	
20	1.1	1.1	1.1	1.0	.91	.76	.60	.45	.32	.21	.13	00000	
21	1.4	1.4	1.4	1.3	1.1	.97	.77	.58	.41	.27	.17	00000	
22	1.7	1.7	1.7	1.6	1.4	1.1	.94	.70	.50	.33	.21	00000	
23	1.9	2.0	2.0	1.8	1.6	1.3	1.0	.81	.57	.38	.24	00000	
24	2.1	2.2	2.1	2.0	1.7	1.4	1.1	.88	.62	.42	.27	00000	
25	2.2	2.3	2.2	2.1	1.8	1.5	1.2	.91	.65	.43	.27	00000	
26	2.1	2.2	2.2	2.0	1.8	1.5	1.1	.89	.63	.42	.27	00000	
27	2.0	2.1	2.0	1.9	1.6	1.4	1.1	.83	.59	.39	.25	00000	
28	1.7	1.8	1.8	1.6	1.4	1.2	.97	.73	.52	.35	.22	00000	
29	1.5	1.5	1.5	1.4	1.2	1.0	.81	.61	.43	.29	.18	00000	
30	1.1	1.2	1.2	1.1	.98	.81	.64	.48	.34	.23	.14	00000	
31	.89	.92	.90	.83	.73	.61	.48	.36	.25	.17	.11	00000	
32	.63	.65	.64	.59	.52	.43	.34	.25	.18	.12	.07	00000	
33	.42	.44	.43	.40	.35	.29	.23	.17	.12	.08	.05	00000	
34	.27	.28	.27	.25	.22	.18	.14	.11	.07	.05	.03	00000	
35	0	0	0	0	0	0	0	0	0	0	0	00000	
36	0	0	0	0	0	0	0	0	0	0	0	00000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000000												

SMALL CLOUDS AT 10800.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1124E+05	0.2984E+05	0.0000E+00	5363.	30.71	14.29	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 11400.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 11400.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1143E+05	0.2984E+05	0.0000E+00	5503.	30.16	14.84	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 12000.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 12000.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1162E+05	0.2984E+05	0.0000E+00	5640.	29.61	15.39	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 12600.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 12600.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1181E+05	0.2984E+05	0.0000E+00	5774.	29.06	15.94	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 13200.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 13200.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1201E+05	0.2984E+05	0.0000E+00	5905.	28.52	16.48	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 13800.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

SMALL CLOUDS AT 13800.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1220E+05	0.2984E+05	0.0000E+00	6032.	27.97	17.03	0.000000E+00

SUMMARY OF FLUID DISTRIBUTIONS AFTER 14400.00 SEC

TOTAL FLUID FRACTION VOLUME FROM DISPOSAL (CU FT) = 29837.

MAX CONC IS 0.00000000 OUTPUT SUPPRESSED AT 1.00 FT

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

44.00 FT BELOW THE WATER SURFACE

...MULTIPLY DISPLAYED VALUES BY 0.1000E-04 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	0000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													
3	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.02	.03	.04
13	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.01	.02	.03	.04	.06	.08
14	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.02	.03	.05	.07	.10	.13
15	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.02	.04	.06	.08	.12	.16	.20
16	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.03	.06	.09	.13	.17	.23	.30
17	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.05	.08	.12	.18	.25	.33	.42
18	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.07	.11	.17	.25	.34	.45	.58
19	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.09	.15	.22	.32	.45	.60	.76
20	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.07	.12	.19	.28	.41	.57	.75	.96
21	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.09	.14	.23	.34	.50	.68	.91	1.1
22	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.10	.17	.26	.40	.57	.79	1.0	1.3
23	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.11	.19	.30	.44	.64	.88	1.1	1.4
24	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.12	.20	.32	.47	.68	.94	1.2	1.5
25	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.13	.21	.32	.49	.70	.97	1.2	1.6
26	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.12	.20	.32	.48	.69	.95	1.2	1.6
27	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.07	.12	.19	.30	.45	.65	.90	1.2	1.5
28	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.06	.11	.17	.27	.41	.59	.82	1.0	1.3
29	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.05	.09	.15	.24	.36	.52	.71	.95	1.2
30	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.04	.08	.13	.20	.30	.43	.60	.79	1.0
31	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	.06	.10	.16	.24	.35	.48	.64	.81
32	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.04	.08	.12	.18	.27	.37	.49	.62
33	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.02	.03	.06	.09	.13	.20	.27	.36	.46
34	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.02	.04	.06	.09	.14	.19	.26	.33
35	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.01	.02	.04	.06	.09	.13	.17	.22
36	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.01	.02	.04	.06	.08	.11	.14
37	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000																													

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	.06	.07	.07	.08	.08	.08	.08	.07	.06	.05	.04	.030000	
13	.10	.11	.13	.14	.14	.14	.14	.13	.11	.09	.07	.060000	
14	.16	.18	.21	.23	.23	.23	.22	.20	.18	.15	.12	.090000	
15	.24	.29	.32	.35	.36	.36	.35	.32	.28	.24	.19	.150000	
16	.36	.43	.48	.52	.54	.54	.51	.47	.42	.35	.29	.220000	
17	.52	.61	.69	.74	.77	.77	.73	.67	.59	.50	.41	.320000	
18	.71	.83	.94	1.0	1.0	1.0	1.0	.92	.81	.69	.56	.430000	
19	.93	1.0	1.2	1.3	1.3	1.3	1.3	1.2	1.0	.90	.73	.570000	
20	1.1	1.3	1.5	1.6	1.7	1.7	1.6	1.5	1.3	1.1	.92	.720000	
21	1.4	1.6	1.8	2.0	2.0	2.0	1.9	1.8	1.6	1.3	1.1	.870000	
22	1.6	1.9	2.1	2.3	2.4	2.4	2.3	2.1	1.8	1.5	1.2	1.00000	
23	1.8	2.1	2.4	2.6	2.7	2.6	2.5	2.3	2.0	1.7	1.4	1.10000	
24	1.9	2.2	2.5	2.7	2.8	2.8	2.7	2.5	2.2	1.8	1.5	1.10000	
25	2.0	2.3	2.6	2.8	2.9	2.9	2.8	2.5	2.2	1.9	1.5	1.20000	
26	1.9	2.3	2.5	2.8	2.9	2.9	2.7	2.5	2.2	1.9	1.5	1.20000	
27	1.8	2.1	2.4	2.6	2.7	2.7	2.6	2.4	2.1	1.8	1.4	1.10000	
28	1.6	1.9	2.2	2.4	2.5	2.4	2.3	2.1	1.9	1.6	1.3	1.00000	
29	1.4	1.7	1.9	2.1	2.1	2.1	2.0	1.9	1.6	1.4	1.1	.900000	
30	1.2	1.4	1.6	1.7	1.8	1.8	1.7	1.6	1.4	1.1	.97	.750000	
31	.99	1.1	1.3	1.4	1.4	1.4	1.4	1.2	1.1	.96	.78	.610000	
32	.76	.89	1.0	1.0	1.1	1.1	1.0	.99	.87	.74	.60	.470000	
33	.56	.66	.75	.81	.84	.83	.80	.73	.64	.55	.44	.340000	
34	.40	.47	.53	.57	.59	.59	.57	.52	.46	.39	.31	.240000	
35	.27	.32	.36	.39	.40	.40	.39	.35	.31	.26	.21	.170000	
36	.18	.21	.23	.25	.26	.26	.25	.23	.20	.17	.14	.110000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000												

CONCENTRATIONS ABOVE BACKGROUND OF FLUID   (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM OCCURING IN THE WATER COLUMN AT THIS TIME

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 ...MULTIPLY DISPLAYED VALUES BY  0.1000E-03     (LEGEND... + = .LT. .01   . = .LT. .0001   0 = .LT. .000001)
 M N=  2    3    4    5    6    7    8    9   10   11   12   13   14   15   16   17   18   19   20   21   22   23   24   25   26   27   28   29   30   31
  2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
  3 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  4 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  5 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  6 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  7 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  8 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
  9 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 10 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 11 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 12 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    +    +    +    +    + .01  .01  .01  .02
 13 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    +    +    +    + .01  .01  .02  .03  .03
 14 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    +    +    + .01  .01  .02  .03  .05  .06
 15 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    +    + .01  .01  .02  .04  .05  .07  .09
 16 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    + .01  .01  .02  .04  .06  .08  .11  .14
 17 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    + .01  .02  .04  .06  .08  .12  .16  .20
 18 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .01  .02  .03  .05  .08  .12  .16  .22  .28
 19 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .01  .02  .04  .07  .11  .15  .21  .28  .36
 20 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .02  .03  .05  .09  .13  .19  .27  .36  .46
 21 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .02  .04  .07  .11  .16  .24  .33  .43  .55
 22 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .03  .05  .08  .12  .19  .27  .38  .50  .64
 23 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .03  .05  .09  .14  .21  .31  .42  .56  .71
 24 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .03  .06  .09  .15  .23  .33  .45  .60  .76
 25 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .03  .06  .10  .15  .23  .33  .46  .62  .78
 26 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .03  .06  .10  .15  .23  .33  .46  .61  .77
 27 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .03  .05  .09  .14  .22  .31  .43  .57  .73
 28 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .03  .05  .08  .13  .20  .28  .39  .52  .66
 29 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .02  .04  .07  .11  .17  .25  .34  .45  .58
 30 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .02  .03  .06  .09  .14  .21  .28  .38  .48
 31 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .01  .03  .05  .07  .11  .16  .23  .30  .39
 32 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .01  .02  .03  .06  .09  .13  .17  .23  .30
 33 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0 .01  .01  .02  .04  .06  .09  .13  .17  .22
 34 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    + .01  .02  .03  .04  .06  .09  .12  .15
 35 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    +    + .01  .02  .03  .04  .06  .08  .10
 36 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    +    +    + .01  .02  .03  .04  .05  .07
 37 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 38 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 39 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 40 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 41 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 42 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 43 OOOO    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0    0
 44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
```

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0000000000000000000000000000000000000000000000000000												
3	0	0	0	0	0	0	0	0	0	0	0	00000	
4	0	0	0	0	0	0	0	0	0	0	0	00000	
5	0	0	0	0	0	0	0	0	0	0	0	00000	
6	0	0	0	0	0	0	0	0	0	0	0	00000	
7	0	0	0	0	0	0	0	0	0	0	0	00000	
8	0	0	0	0	0	0	0	0	0	0	0	00000	
9	0	0	0	0	0	0	0	0	0	0	0	00000	
10	0	0	0	0	0	0	0	0	0	0	0	00000	
11	0	0	0	0	0	0	0	0	0	0	0	00000	
12	.02	.03	.03	.04	.04	.04	.04	.03	.03	.02	.02	.010000	
13	.04	.05	.06	.06	.07	.07	.06	.06	.05	.04	.03	.020000	
14	.07	.09	.10	.11	.11	.11	.10	.10	.08	.07	.06	.040000	
15	.12	.14	.15	.17	.17	.17	.16	.15	.13	.11	.09	.070000	
16	.17	.20	.23	.25	.26	.26	.25	.22	.20	.17	.13	.100000	
17	.25	.29	.33	.35	.37	.37	.35	.32	.28	.24	.19	.150000	
18	.34	.40	.45	.48	.50	.50	.48	.44	.39	.33	.27	.210000	
19	.44	.52	.59	.64	.66	.66	.63	.58	.51	.43	.35	.270000	
20	.56	.66	.74	.80	.83	.83	.79	.73	.64	.54	.44	.340000	
21	.68	.79	.89	.97	1.0	1.0	.96	.88	.77	.65	.53	.410000	
22	.78	.92	1.0	1.1	1.1	1.1	1.1	1.0	.90	.76	.62	.480000	
23	.87	1.0	1.1	1.2	1.2	1.2	1.2	1.1	1.0	.84	.69	.530000	
24	.93	1.0	1.2	1.3	1.3	1.3	1.3	1.2	1.0	.90	.73	.570000	
25	.96	1.1	1.2	1.3	1.4	1.4	1.3	1.2	1.0	.93	.75	.590000	
26	.94	1.1	1.2	1.3	1.4	1.3	1.3	1.2	1.0	.91	.74	.580000	
27	.89	1.0	1.1	1.2	1.3	1.3	1.2	1.1	1.0	.86	.70	.550000	
28	.81	.95	1.0	1.1	1.2	1.1	1.1	1.0	.93	.78	.64	.500000	
29	.71	.83	.93	1.0	1.0	1.0	1.0	.91	.81	.68	.55	.430000	
30	.59	.69	.78	.84	.87	.87	.83	.76	.67	.57	.46	.360000	
31	.47	.56	.63	.68	.70	.70	.67	.61	.54	.46	.37	.290000	
32	.36	.43	.48	.52	.54	.54	.52	.47	.42	.35	.29	.220000	
33	.27	.32	.36	.39	.40	.40	.38	.35	.31	.26	.21	.160000	
34	.19	.22	.25	.27	.28	.28	.27	.25	.22	.18	.15	.110000	
35	.13	.15	.17	.18	.19	.19	.18	.17	.15	.12	.10	.080000	
36	.08	.10	.11	.12	.12	.12	.12	.11	.09	.08	.06	.050000	
37	0	0	0	0	0	0	0	0	0	0	0	00000	
38	0	0	0	0	0	0	0	0	0	0	0	00000	
39	0	0	0	0	0	0	0	0	0	0	0	00000	
40	0	0	0	0	0	0	0	0	0	0	0	00000	
41	0	0	0	0	0	0	0	0	0	0	0	00000	
42	0	0	0	0	0	0	0	0	0	0	0	00000	
43	0	0	0	0	0	0	0	0	0	0	0	00000	
44	0000000000000000000000000000000000000000000000000000												

CONCENTRATIONS ABOVE BACKGROUND OF FLUID (VOLUMETRIC RATIO OF DUMP FLUID TO AMBIENT WATER) IN THE CLOUD 14400.00 SECONDS AFTER DUMP

THESE CONCENTRATIONS ARE THE MAXIMUM THAT EVER OCCURRED IN THE WATER COLUMN DURING THE SIMULATION

...MULTIPLY DISPLAYED VALUES BY 0.1000E-02 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	+	+	+	+
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	+
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	+	+	.01	.01
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	+	+	+	+	+	.01	.01	.01	.02	.02
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	.01	.01	.02	.02	.03	.03	.03
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.02	.03	.04	.05	.05	.06	.06
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.02	.04	.06	.07	.09	.09	.10	.10	.09
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.03	.06	.10	.13	.16	.17	.17	.17	.16	.14
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.03	.08	.15	.24	.30	.33	.33	.30	.27	.24	.21
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.07	.20	.40	.62	.72	.68	.59	.49	.41	.34	.29
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.04	.15	.52	1.2	1.7	1.7	1.3	.98	.74	.58	.45	.37
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.06	.30	1.3	4.0	5.7	3.8	2.2	1.4	.98	.71	.55	.43
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.08	.38	2.1	6.5	9.2	6.2	2.8	1.6	1.1	.78	.59	.46
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.07	.33	1.6	4.9	6.9	4.6	2.4	1.4	1.0	.74	.56	.44
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	.01	.05	.19	.63	1.7	2.5	2.1	1.5	1.1	.80	.62	.48	.39
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.02	.09	.25	.54	.81	.89	.80	.68	.56	.45	.37	.31
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	.01	.04	.10	.19	.30	.38	.40	.38	.35	.30	.26	.23
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	.01	.04	.08	.12	.16	.19	.20	.20	.19	.17	.16
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	.01	.03	.05	.07	.09	.10	.11	.11	.11	.10
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.02	.03	.04	.05	.06	.06	.06	.06
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	.01	.01	.02	.02	.03	.03	.04	.04
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	.01	.01	.02	.02	.02
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	.01	.01
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+	+	+	+	+	+	+	+	+
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	+	+	+	+	+	+	+	+	+	+	+	+	0
13	+	+	+	+	+	+	+	+	+	+	+	+	0
14	+	+	.01	.01	.01	.01	.01	.01	+	+	+	+	0
15	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	+	+	0
16	.02	.02	.02	.02	.02	.02	.02	.02	.02	.01	.01	.01	0
17	.03	.03	.03	.03	.03	.03	.03	.03	.02	.02	.01	.01	0
18	.06	.06	.05	.05	.05	.05	.04	.04	.03	.03	.02	.02	0
19	.09	.08	.08	.07	.07	.06	.06	.05	.05	.04	.03	.02	0
20	.13	.12	.11	.10	.09	.08	.07	.07	.06	.05	.04	.03	0
21	.19	.16	.14	.13	.11	.10	.09	.08	.07	.06	.05	.04	0
22	.25	.21	.18	.16	.14	.12	.11	.10	.09	.07	.06	.04	0
23	.30	.25	.21	.18	.16	.14	.12	.11	.10	.08	.06	.05	0
24	.35	.29	.24	.20	.17	.15	.13	.12	.10	.09	.07	.05	0
25	.36	.30	.25	.21	.18	.16	.14	.12	.10	.09	.07	.05	0
26	.35	.29	.24	.21	.18	.15	.13	.12	.10	.09	.07	.05	0
27	.32	.26	.22	.19	.16	.14	.13	.11	.10	.08	.07	.05	0
28	.26	.22	.19	.17	.14	.13	.11	.10	.09	.07	.06	.05	0
29	.20	.18	.15	.14	.12	.11	.10	.09	.08	.06	.05	.04	0
30	.14	.13	.12	.11	.10	.09	.08	.07	.06	.05	.04	.03	0
31	.10	.09	.09	.08	.07	.07	.06	.06	.05	.04	.03	.02	0
32	.06	.06	.06	.06	.05	.05	.05	.04	.04	.03	.02	.02	0
33	.04	.04	.04	.04	.04	.04	.03	.03	.03	.02	.02	.01	0
34	.02	.02	.02	.02	.02	.02	.02	.02	.02	.01	.01	.01	0
35	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	+	0
36	+	.01	.01	.01	.01	.01	.01	.01	+	+	+	+	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0

SMALL CLOUDS AT 14400.00 SECONDS ELAPSED TIME FOR FLUID

CLOUD #	LOCATION OF CLOUD CENTROID DISTANCE FROM TOP OF GRID	LEFT OF GRID	MASS FROM DISPOSAL (CU FT)	ENTRAINED MASS (CU FT)	CLOUD X-Z DIAMETER (FT)	DEPTH OF TOP OF CLOUD (FT)	CLOUD VERT. THICKNESS (FT)	SOLIDS FALL VELOCITY (FPS)
1	8445.	0.1239E+05	0.2984E+05	0.0000E+00	6157.	27.42	17.58	0.000000E+00

FINAL DISTRIBUTIONS OF TOTAL SETTLED MATERIAL FOLLOW.....

```
TOTAL ACCUMULATED SOLID VOLUME ON BOTTOM (CU FT/GRID SQR),   14400.00 SECONDS AFTER DUMP
...MULTIPLY DISPLAYED VALUES BY   10.00         (LEGEND... + = .LT. .01   . = .LT. .0001   0 = .LT. .000001)
M N=  2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31
 2 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
 3 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 4 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 5 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 6 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 7 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
 8 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .
 9 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .
10 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .
11 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .
12 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .
13 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   .   .
14 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   .   .   +
15 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   +   +   +   +
16 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   +   +   +   +   +   +
17 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   +   +   +   +   +   +   +   +
18 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   +   +   +   +   +   +   +   +   +   +   +
19 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   +   +   +   + .01 .01   +   +   +   +   +   +
20 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   +   + .03 .07 .11 .11 .07 .03 .01   +   +   +
21 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .01 .07 .31 .79 1.1 .98 .53 .21 .06 .01   +   +
22 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .07 .54 2.6 7.4  11 8.0 3.4 1.0 .26 .05 .01   +
23 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .02 .30 2.8  16  46  65  46  17 4.1 .82 .15 .02   +
24 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .05 .81 8.5  51 150 213 147  51  11 1.7 .29 .04   +
25 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .07 1.2  13  80 239 341 231  79  15 2.3 .37 .05 .01
26 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .06 .95  10  61 180 257 176  61  12 1.9 .32 .04 .01
27 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   +   + .03 .40 3.9  23  66  94  66  24 5.4 1.0 .18 .03   +
28 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   + .01 .10 .85 4.4  12  18  13 5.3 1.5 .36 .07 .01   +
29 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .02 .12 .54 1.4 2.0 1.6 .85 .31 .09 .02   +   +
30 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   +   + .01 .05 .13 .20 .19 .11 .05 .01   +   +   +
31 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   +   +   + .01 .02 .02 .01   +   +   +   +   +
32 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   +   +   +   +   +   +   +   +   +   +   +
33 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   +   +   +   +   +   +   +   +   +
34 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   +   +   +   +   +   +
35 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   +   +   +   +
36 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   .   .   +
37 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   .   .
38 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .   .   .
39 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .   .
40 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .   .   .
41 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .   .   .   .
42 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   .   .
43 OOOO   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0
44 OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
```

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	.	.	.	.	.	.	.	.	.	0	0	0	0
9	.	.	.	.	.	.	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	.
14	+	+	+	+	+	.	.	.	.	.	.	.	.
15	+	+	+	+	+	+	+	+	.	.	.	.	.
16	+	+	+	+	+	+	+	+	+	+	.	.	.
17	+	+	+	+	+	+	+	+	+	+	+	.	.
18	+	+	+	+	+	+	+	+	+	+	+	+	+
19	+	+	+	+	+	+	+	+	+	+	+	+	+
20	+	+	+	+	+	+	+	+	+	+	+	+	+
21	+	+	+	+	+	+	+	+	+	+	+	+	+
22	+	+	+	+	+	+	+	+	+	+	+	+	+
23	+	+	+	+	+	+	+	+	+	+	+	+	+
24	+	+	+	+	+	+	+	+	+	+	+	+	+
25	+	+	+	+	+	+	+	+	+	+	+	+	+
26	+	+	+	+	+	+	+	+	+	+	+	+	+
27	+	+	+	+	+	+	+	+	+	+	+	+	+
28	+	+	+	+	+	+	+	+	+	+	+	+	+
29	+	+	+	+	+	+	+	+	+	+	+	+	+
30	+	+	+	+	+	+	+	+	+	+	+	+	+
31	+	+	+	+	+	+	+	+	+	+	+	+	+
32	+	+	+	+	+	+	+	+	+	+	+	+	+
33	+	+	+	+	+	+	+	+	+	+	+	+	.
34	+	+	+	+	+	+	+	+	+	+	.	.	.
35	+	+	+	+	+	+	+	+	.	.	.	.	.
36	+	+	+	+	+	+	.	.	.	.	.	.	.
37	.	.	.	.	.	.	.	.	.	.	.	.	.
38	.	.	.	.	.	.	.	.	.	.	.	.	.
39	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
41	.	.	.	.	.	.	.	.	.	.	.	.	.
42	.	.	.	.	.	.	.	.	.	.	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

TOTAL THICKNESS (FT) OF NEW MATERIAL ON BOTTOM, 14400.00 SECONDS AFTER DUMP

...MULTIPLY DISPLAYED VALUES BY 1.000 (LEGEND... + = .LT. .01 . = .LT. .0001 0 = .LT. .000001)

M N=	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
3	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	0	0	0	0
20	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	0	0
21	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	.	.	.	.	.
22	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	.	.	.	.
23	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	.01	.02	.01	+	+	+	.	.	.
24	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.01	.05	.07	.05	.01	+	+	+	.	.
25	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.02	.08	.12	.08	.02	+	+	+	.	.
26	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	.02	.06	.09	.06	.02	+	+	+	.	.
27	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	+	+	+	.02	.03	.02	+	+	+	.	.	.
28	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	+	+	.	.	.
29	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	+	+	+	+	+	+	.	.	.	.
30	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	0
31	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	.	.	.	.	.	0	0	0
32	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

M N=	32	33	34	35	36	37	38	39	40	41	42	43	44
2	O	O	O	O	O	O	O	O	O	O	O	O	O
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0
21	.	0	0	0	0	0	0	0	0	0	0	0	0
22	.	.	.	0	0	0	0	0	0	0	0	0	0
23	.	.	.	.	0	0	0	0	0	0	0	0	0
24	.	.	.	.	.	0	0	0	0	0	0	0	0
25	.	.	.	.	.	0	0	0	0	0	0	0	0
26	.	.	.	.	.	0	0	0	0	0	0	0	0
27	.	.	.	.	0	0	0	0	0	0	0	0	0
28	.	.	.	0	0	0	0	0	0	0	0	0	0
29	.	.	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	0	0	0	0	0	0	0	0
44	O	O	O	O	O	O	O	O	O	O	O	O	O

INITIAL MIXING COMPUTATIONS RESULTS FOR SAND :

TIME (HR)	DEPTH (FT)	MAX CONC ABOVE BACKGROUND ON ENTIRE GRID (MG/L)	X-LOC (FT)	Z-LOC (FT)	MAX CONC ABOVE BACKGROUND OUTSIDE DISPOSAL SITE (MG/L)
1.00	1.0	0.000E+00	0.	0.	0.000E+00
2.00	1.0	0.000E+00	0.	0.	0.000E+00
3.00	1.0	0.000E+00	0.	0.	0.000E+00
4.00	1.0	0.000E+00	0.	0.	0.000E+00
1.00	44.0	0.000E+00	0.	0.	0.000E+00
2.00	44.0	0.000E+00	0.	0.	0.000E+00
3.00	44.0	0.000E+00	0.	0.	0.000E+00
4.00	44.0	0.000E+00	0.	0.	0.000E+00

INITIAL MIXING COMPUTATIONS RESULTS FOR CLAY :

TIME (HR)	DEPTH (FT)	MAX CONC ABOVE BACKGROUND ON ENTIRE GRID (MG/L)	X-LOC (FT)	Z-LOC (FT)	MAX CONC ABOVE BACKGROUND OUTSIDE DISPOSAL SITE (MG/L)
1.00	1.0	0.426E-05	8400.	9100.	0.000E+00
2.00	1.0	0.274E-03	8400.	10150.	0.000E+00
3.00	1.0	0.299E-02	8400.	11550.	0.663E-03
4.00	1.0	0.170E-01	8400.	12600.	0.122E-01
1.00	44.0	0.526E+01	8400.	9100.	0.000E+00
2.00	44.0	0.191E+01	8400.	10150.	0.000E+00
3.00	44.0	0.960E+00	8400.	11200.	0.191E+00
4.00	44.0	0.584E+00	8400.	12600.	0.397E+00

INITIAL MIXING COMPUTATIONS RESULTS FOR FLUID :

TIME (HR)	DEPTH (FT)	MAX CONC ABOVE BACKGROUND ON ENTIRE GRID (PERCENT)	X-LOC (FT)	Z-LOC (FT)	MAX CONC ABOVE BACKGROUND OUTSIDE DISPOSAL SITE (PERCENT)
0.17	1.0	0.169E-37	6300.	5950.	0.000E+00
0.33	1.0	0.815E-38	5950.	5950.	0.000E+00
0.50	1.0	0.518E-38	5950.	5950.	0.000E+00
0.67	1.0	0.368E-38	5600.	5950.	0.000E+00
0.83	1.0	0.277E-38	5600.	5950.	0.000E+00
1.00	1.0	0.218E-38	5250.	5950.	0.000E+00
1.17	1.0	0.177E-38	5250.	5950.	0.000E+00
1.33	1.0	0.147E-38	5250.	5950.	0.000E+00
1.50	1.0	0.124E-38	4900.	5950.	0.000E+00
1.67	1.0	0.106E-38	4900.	6300.	0.000E+00
1.83	1.0	0.918E-39	4900.	6300.	0.000E+00
2.00	1.0	0.803E-39	4550.	6300.	0.000E+00
2.17	1.0	0.841E-39	8400.	10150.	0.000E+00
2.33	1.0	0.238E-35	8400.	10500.	0.000E+00
2.50	1.0	0.468E-32	8400.	10500.	0.000E+00
2.67	1.0	0.350E-29	8400.	10850.	0.312E-30
2.83	1.0	0.113E-26	8400.	11200.	0.152E-27
3.00	1.0	0.185E-24	8400.	11200.	0.349E-25
3.17	1.0	0.165E-22	8400.	11550.	0.421E-23
3.33	1.0	0.895E-21	8400.	11550.	0.293E-21
3.50	1.0	0.313E-19	8400.	11900.	0.127E-19
3.67	1.0	0.749E-18	8400.	11900.	0.367E-18
3.83	1.0	0.130E-16	8400.	12250.	0.741E-17
4.00	1.0	0.168E-15	8400.	12250.	0.110E-15
0.17	44.0	0.452E+00	8400.	8050.	0.000E+00
0.33	44.0	0.189E+00	8400.	8050.	0.000E+00
0.50	44.0	0.116E+00	8400.	8400.	0.000E+00
0.67	44.0	0.746E-01	8400.	8750.	0.000E+00
0.83	44.0	0.539E-01	8400.	8750.	0.000E+00
1.00	44.0	0.396E-01	8400.	9100.	0.000E+00
1.17	44.0	0.308E-01	8400.	9100.	0.000E+00
1.33	44.0	0.243E-01	8400.	9450.	0.000E+00
1.50	44.0	0.197E-01	8400.	9450.	0.000E+00
1.67	44.0	0.162E-01	8400.	9800.	0.000E+00
1.83	44.0	0.136E-01	8400.	9800.	0.000E+00
2.00	44.0	0.116E-01	8400.	10150.	0.000E+00
2.17	44.0	0.989E-02	8400.	10150.	0.000E+00
2.33	44.0	0.862E-02	8400.	10500.	0.000E+00
2.50	44.0	0.749E-02	8400.	10500.	0.000E+00
2.67	44.0	0.665E-02	8400.	10850.	0.593E-03

2.83	44.0	0.587E-02	8400.	11200.	0.790E-03
3.00	44.0	0.527E-02	8400.	11200.	0.997E-03
3.17	44.0	0.472E-02	8400.	11550.	0.120E-02
3.33	44.0	0.427E-02	8400.	11550.	0.140E-02
3.50	44.0	0.388E-02	8400.	11900.	0.158E-02
3.67	44.0	0.353E-02	8400.	11900.	0.173E-02
3.83	44.0	0.323E-02	8400.	12250.	0.185E-02
4.00	44.0	0.296E-02	8400.	12250.	0.194E-02

0.17	36.2	0.925E+00	8400.	8050.	0.000E+00
0.33	36.2	0.426E+00	8400.	8050.	0.000E+00
0.50	36.2	0.285E+00	8400.	8400.	0.000E+00
0.67	36.2	0.198E+00	8400.	8750.	0.000E+00
0.83	36.2	0.152E+00	8400.	8750.	0.000E+00
1.00	36.2	0.119E+00	8400.	9100.	0.000E+00
1.17	36.2	0.971E-01	8400.	9100.	0.000E+00
1.33	36.2	0.802E-01	8400.	9450.	0.000E+00
1.50	36.2	0.679E-01	8400.	9450.	0.000E+00
1.67	36.2	0.581E-01	8400.	9800.	0.000E+00
1.83	36.2	0.503E-01	8400.	9800.	0.000E+00
2.00	36.2	0.442E-01	8400.	10150.	0.000E+00
2.17	36.2	0.388E-01	8400.	10150.	0.000E+00
2.33	36.2	0.347E-01	8400.	10500.	0.000E+00
2.50	36.2	0.309E-01	8400.	10500.	0.000E+00
2.67	36.2	0.281E-01	8400.	10850.	0.250E-02
2.83	36.2	0.253E-01	8400.	11200.	0.340E-02
3.00	36.2	0.231E-01	8400.	11200.	0.438E-02
3.17	36.2	0.211E-01	8400.	11550.	0.538E-02
3.33	36.2	0.194E-01	8400.	11550.	0.637E-02
3.50	36.2	0.179E-01	8400.	11900.	0.728E-02
3.67	36.2	0.165E-01	8400.	11900.	0.810E-02
3.83	36.2	0.154E-01	8400.	12250.	0.878E-02
4.00	36.2	0.142E-01	8400.	12250.	0.931E-02

RESULT: THE TOXICITY CRITERIA FOR THE DISPOSAL SITE WAS NOT VIOLATED.

*** RUN COMPLETED ***