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IRONMENTAL LABORATORIES, INC.

March 30, 2000

. Jim Riley
ksonville District Office
S. Army Corps of Engineers
0 West Bay Street
ksonville, FL 32202

: Water Quality Monitoring Data for Weekly Surface Water Grab Samples for January 2000
Contract No. DACW17-97-D-0001, Delivery Order No. 0037
Cape Sable Seaside Sparrow Emergency Field Sampling Activities, Water Quality Monitoring Effort

ar Mr. Riley:

Enclosed are the analytical results for the weekly surface water grab samples collected January 12, and 26, 2000 at S-331 (downstream of the pump structure), S-332D (upstream of the pump structure), 332DW (downstream of the pump structure), L-31W (Taylor Slough - approximately 1.75 miles north of 332), S-332 (upstream of the pump structure), C113 (near L31), C103 (near L31), and C102 (near L31). tion locations are indicated on Figure 1. Please note that the station ID includes the date and time of nple collection. For example, station S331-011200-1600 indicates that the sample was collected at S-331 January 12, 2000 at 1600 hours.

Quality control samples are designated by two-letter suffices as follows:

EB = Equipment Blank	SS = Split Sample
FB = Field Blank	BD = Blind Duplicate

All data were determined in accordance with published procedures (EPA-600/4-79-020, *Methods for emical Analysis of Water and Wastes*, Revised March 1983). Our laboratory is certified by the Florida partment of Health (FDH No. E82001). Total phosphorus data for water collected by autosamplers have en transmitted under separate cover.

If you have any questions concerning this report, please contact me.

Sincerely,

Tom Park

Tom Park
Project Manager

TP:cms

closures

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RESP\033000COE_RileyLtr pl

Table 1. COE Water Quality Monitoring Data for Weekly Grab Samples for January 2000 (Page 1 of 2)

STATION ID	LAB NO.	COLOR	NH3	NH3_UNION	TKN	NO2_NO3	NO2	NO3
		cpu	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
S333-011200-0826EB	178145	<5	<0.002		<0.10	<0.004	<0.003	<0.004
S333-011200-0820FB	178146	<5	<0.002		<0.10	<0.004	<0.003	<0.004
S333-011200-0831SS	178147	35	0.299		0.90	<0.004	<0.003	<0.004
S333-011200-0849BD	178148	35	0.309		0.93	<0.004	<0.003	<0.004
S332-011200-0831	178149	30	0.299		0.92	<0.004	<0.003	<0.004
S332D-011200-1220	178150	40	0.379		1.13	<0.004	<0.003	<0.004
S332DW-011200-1130	178151	40	0.383		1.10	<0.004	<0.003	<0.004
C113-011200-1200	178152	25	0.276		0.73	<0.004	<0.003	<0.004
C102-011200-1435	178153	40	0.390		1.09	<0.004	<0.003	<0.004
C103-011200-1400	178154	35	0.389		1.07	<0.004	<0.003	<0.004
S331-011200-1455	178155	50	0.391		1.14	<0.004	<0.003	<0.004
S355A0122G	178156	30	<0.002	<0.002	0.60	<0.004	<0.010	<0.010
S355B0122G	178157	25	0.004	<0.002	0.64	0.004	<0.010	<0.010
L31WTS-011200-1020	178158	40	0.352		0.99	0.004	<0.003	0.004
S332-011700-0908	178323	40	0.220		0.90	<0.004	<0.003	<0.004
S333-011700-0855FB	178324	<5	<0.002		<0.10	<0.004	<0.003	<0.004
S334-011700-0905EB	178325	<5	<0.002		<0.10	<0.004	<0.003	<0.004
S335-011700-0908SS	178326	40	0.221		1.03	<0.004	<0.003	<0.004
S336-011700-0918BD	178327	40	0.235		0.98	<0.004	<0.003	<0.004
S332DW-011700-1124	178328	45	0.255		1.07	<0.004	<0.003	<0.004
L31WTS-011700-1057	178329	45	0.251		1.10	<0.004	<0.003	<0.004
S332D-011700-1200	178330	50	0.243		1.98	<0.004	<0.003	<0.004
C113-011700-1144	178331	45	0.255		1.25	<0.004	<0.003	<0.004
C103-011700-1400	178332	45	0.251		1.61	<0.004	<0.003	<0.004
C102-011700-1440	178333	50	0.245		1.19	<0.004	<0.003	<0.004
S331-011700-1500	178334	45	0.241		1.16	<0.004	<0.003	<0.004
S332-012600-0800	178875	40	0.127		1.15	0.010	0.004	0.006
S333-012600-0805FB	178876	<5	<0.002		<0.10	<0.004	<0.003	<0.004
S334-012600-0809EB	178877	<5	<0.002		0.15	<0.004	<0.003	<0.004
S335-012600-0820SS	178878	40	0.136		0.95	0.023	0.006	0.017
S336-012600-0835BD	178879	40	0.130		1.00	0.010	<0.003	0.010
S332D-012600-1115	178880	40	0.263		1.02	<0.004	<0.003	<0.004
S332DW-012600-0945	178881	40	0.177		0.96	0.008	<0.003	0.008
L31WTS-012600-1040	178882	40	0.154		0.98	0.018	<0.003	0.018
C103-012600-1215	178883	40	0.348		1.10	<0.004	<0.003	<0.004
C102-012600-1305	178884	40	0.405		1.04	<0.004	<0.003	<0.004
C113-012600-1055	178885	30	0.191		0.80	<0.004	<0.003	<0.004
S331-012600-1322	178886	40	0.409		1.10	<0.004	<0.003	<0.004

Table 1. COE Water Quality Monitoring Data for Weekly Grab Samples for January 2000 (Page 2 of 2)

STATION ID	LAB NO.	TP	OP	TSS	TURB
		mg/L	mg/L	mg/L	ntu
S333-011200-0826EB	178145	0.006	<0.002	<2	0.75
S333-011200-0820FB	178146	0.003	<0.002	<2	<0.20
S333-011200-0831SS	178147	0.028	<0.002	2	2.6
S333-011200-0849BD	178148	0.019	<0.002	<2	2.8
S332-011200-0831	178149	0.028	<0.002	<2	2.4
S332D-011200-1220	178150	0.029	<0.002	<2	2.3
S332DW-011200-1130	178151	0.030	<0.002	<2	3.8
C113-011200-1200	178152	0.029	<0.002	<2	2.9
C102-011200-1435	178153	0.019	<0.002	<2	1.6
C103-011200-1400	178154	0.017	<0.002	3	1.8
S331-011200-1455	178155	0.028	<0.002	3	2.0
S355A0122G	178156	0.027	<0.002	2	0.80
S355B0122G	178157	0.030	<0.002	<2	0.80
L31WTS-011200-1020	178158	0.040	<0.002	3	3.1
S332-011700-0908	178323	0.009	<0.002	<2	1.4
S333-011700-0855FB	178324	<0.003	<0.002	<2	0.35
S334-011700-0905EB	178325	<0.003	<0.002	9	0.40
S335-011700-0908SS	178326	0.009	<0.002	4	1.4
S336-011700-0918BD	178327	0.009	<0.002	2	1.7
S332DW-011700-1124	178328	0.012	<0.002	8	2.4
L31WTS-011700-1057	178329	0.012	<0.002	4	1.7
S332D-011700-1200	178330	0.015	<0.002	8	4.5
C113-011700-1144	178331	0.010	<0.002	<2	1.1
C103-011700-1400	178332	0.009	<0.002	2	1.4
C102-011700-1440	178333	0.012	<0.002	4	2.4
S331-011700-1500	178334	0.010	<0.002	<2	1.4
S332-012600-0800	178875	0.010	0.005	7	1.8
S333-012600-0805FB	178876	0.004	0.004	<2	<0.20
S334-012600-0809EB	178877	0.004	0.004	<2	<0.20
S335-012600-0820SS	178878	0.014	0.005	<2	1.8
S336-012600-0835BD	178879	0.007	0.005	3	1.6
S332D-012600-1115	178880	0.011	0.006	5	1.4
S332DW-012600-0945	178881	0.010	0.005	2	1.6
L31WTS-012600-1040	178882	0.011	0.005	8	1.6
C103-012600-1215	178883	0.010	0.004	9	1.4
C102-012600-1305	178884	<0.003	0.004	4	1.8
C113-012600-1055	178885	0.008	0.004	5	2.3
S331-012600-1322	178886	0.010	0.004	6	1.8

FOR US ARMY CORPS OF ENGINEERS 03/31/00 PAGE 1

cpu WA Method: EPA 110.2 Alt. Method: None

ient ID	Value 1	Value 2	Range	% RSD	QC Control Limit
33-011200-0849BD	35	35	0	0.00	NO DATA
1WTS-011200-1020	40	40	0	0.00	NO DATA
32-011700-0908	40	40	0	0.00	NO DATA
13-011700-1144	45	45	0	0.00	7.07
32DW-012600-0945	40	40	0	0.00	0.00

DATA FOUND

QC DATA FOUND

GEN mg/L WA Method: EPA 350.1 Alt. Method: None

ient ID	Value 1	Value 2	Range	% RSD	QC Control Limit
33-011200-0831SS	0.299	0.299	0	0.00	23.03
35-011700-0908SS	0.221	0.221	0	0.00	23.00
35-012600-0820SS	0.135	0.136	0.0010	0.52	19.90

ient ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
33-011200-0849BD	100	---	83 TO 115	----	----
1WTS-011200-1020	98	---	83 TO 115	----	----
36-011700-0918BD	104	---	83 TO 115	----	----
36-012600-0835BD	110	---	86 TO 114	----	----

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References

Reference ID	Target	Found	% Recovery	Control Limits
WW9983	13.1	13.6	97	90 TO 118
WW9983	13.1	14.3	109	90 TO 118

KJELDAHL NITROGEN mg/L WA Method: EPA 351.2 Alt. Method: None

Duplicates

PPB Number	Client ID	Value 1	Value 2	Range	% RSD	QC Control Limit
178146	S333-011200-0820FB	<0.10	<0.10	0	0.00	NO DATA
178158	L31WTS-011200-1020	1.02	0.96	0.060	4.29	20.06
178323	S332-011700-0908	0.90	0.90	0	0.00	18.90
178333	C102-011700-1440	1.19	1.18	0.010	0.60	NO DATA
178879	S336-012600-0835BD	1.05	0.95	0.10	7.07	19.00
178883	C103-012600-1215	1.09	1.11	0.020	1.29	NO DATA

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
178147	S333-011200-0831SS	82	---	58 TO 130	----	----
178158	L31WTS-011200-1020	103	---	59 TO 127	----	----
178324	S333-011700-0855FB	90	---	58 TO 130	----	----
178334	S331-011700-1500	99	---	58 TO 130	----	----
178879	S336-012600-0835BD	97	---	55 TO 133	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
WW9983	2.65	2.66	100	79 TO 125
WW9983	2.65	2.64	99	79 TO 125
WW9983	2.65	2.94	111	79 TO 125
WW9983	2.65	2.61	99	79 TO 125
WW9983	2.65	2.66	100	79 TO 125
WW9983	2.65	2.65	100	79 TO 124
WW9983	2.65	2.59	98	79 TO 124

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1 Limits

122

ethod: EPA 353.2 Alt. Method: None

1	Value 2	Range	% RSD	QC Control Limit
	<0.004	0	0.00	NO DATA
	<0.004	0	0.00	NO DATA
	0.024	0.0020	6.15	29.73
	<0.004	0	0.00	NO DATA

MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
---	79 TO 121	----	----
---	88 TO 112	----	----
---	88 TO 112	----	----
---	80 TO 123	----	----
---	80 TO 123	----	----

l Limits

126
125
124

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ENVIRONMENTAL LABORATORIES, INC.

NITRITE mg/L WA Method: EPA 353.3 Alt. Method: None

Duplicates

PPB Number	Client ID	Value 1	Value 2	Range	% RSD	QC Control Limit
178147	S333-011200-0831SS	<0.003	<0.003	0	0.00	NO DATA
178324	S333-011700-0855FB	<0.003	<0.003	0	0.00	NO DATA
178332	C103-011700-1400	<0.003	<0.003	0	0.00	NO DATA
178885	C113-012600-1055	<0.003	<0.003	0	0.00	NO DATA

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
178148	S333-011200-0849BD	91	---	77 TO 123	----	----
178158	L31WTS-011200-1020	82	---	76 TO 123	----	----
178325	S334-011700-0905EB	98	---	73 TO 125	----	----
178333	C102-011700-1440	94	---	73 TO 125	----	----
178877	S334-012600-0809EB	104	---	70 TO 124	----	----
178886	S331-012600-1322	96	---	70 TO 124	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
ALDRICH	107	96.4	90	86 TO 119
ALDRICH	107	106	99	85 TO 119
ALDRICH	107	109	102	85 TO 119

NITRATE mg/L WA Method: EPA 353.2 Alt. Method: None

NO DUPLICATE QC DATA FOUND

NO SPIKE QC DATA FOUND

NO REFERENCE QC DATA FOUND

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QC REPORT FOR US ARMY CORPS OF ENGINEERS 03/31/00 PAGE 5

TOTAL PHOSPHORUS mg/L WA Method: EPA 365.3 Alt. Method: None

Duplicates

PPB Number	Client ID	Value 1	Value 2	Range	% RSD	QC Control Limit
178147	S333-011200-0831SS	0.026	0.029	0.0030	7.71	18.29
178328	S332DW-011700-1124	0.012	0.013	0.0010	5.66	NO DATA
178875	S332-012600-0800	0.010	0.011	0.0010	6.73	NO DATA
178885	C113-012600-1055	0.009	0.007	0.0020	17.68	NO DATA

Spikes

PPB Number	Client ID	% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
178148	S333-011200-0849BD	111	---	74 TO 137	----	----
178158	L31WTS-011200-1020	110	---	74 TO 137	----	----
178329	L31WTS-011700-1057	104	---	80 TO 131	----	----
178886	S331-012600-1322	111	---	66 TO 134	----	----

References

Reference ID	Target	Found	% Recovery	Control Limits
WW9983	1.29	1.47	114	89 TO 124
WW9983	1.29	1.49	116	89 TO 125
WW9983	1.29	1.39	108	88 TO 124
WW9983	1.29	1.45	112	81 TO 130

ORTHO-PHOSPHORUS mg/L WA Method: EPA 365.2 Alt. Method: None

Duplicates

PPB Number	Client ID	Value 1	Value 2	Range	% RSD	QC Control Limit
178150	S332D-011200-1220	<0.002	<0.002	0	0.00	NO DATA
178155	S331-011200-1455	<0.002	<0.002	0	0.00	NO DATA
178324	S333-011700-0855FB	<0.002	<0.002	0	0.00	NO DATA
178332	C103-011700-1400	<0.002	<0.002	0	0.00	NO DATA
178877	S334-012600-0809EB	0.004	0.004	0	0.00	NO DATA
178885	C113-012600-1055	0.004	0.005	0.0010	15.71	NO DATA

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% MS	% MSD	Spike Recovery Control Limits	% RSD	% RSD Control Limit
94	---	80 TO 121	----	----
100	---	81 TO 122	----	----
99	---	81 TO 122	----	----
97	---	80 TO 121	----	----

ery Control Limits

81 TO 126
82 TO 127
81 TO 127

WA Method: EPA 160.2 Alt. Method: None

Value 1	Value 2	Range	% RSD	QC Control Limit
<2	<2	0	0.00	NO DATA
9	9	0	0.00	45.08
7	2	5.0	78.57	NO DATA

ery Control Limits

22 TO 206
27 TO 195

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d: EPA 180.1 Alt. Method: None

Value 2	Range	% RSD	QC Control Limit
.6	0.10	2.77	20.02
.6	0	0.00	19.54
.4	0	0.00	18.89
.0	0.20	12.86	18.35
.4	0	0.00	20.74

imits

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A B O R A T O R I E S , I N C.

ANALYST REPORT

ANALYSIS DATE	TIME	BY	MATRIX
/13/00	1550	PLB	WA
/18/00	1430	PLB	WA
/27/00	1530	FKE	WA
/27/00	1521	FDR	WA
/10/00	2042	FDR	WA
/13/00	1500	PLB	WA
/18/00	1500	BFC	WA
/27/00	1501	BFC	WA
/24/00	1000	AMW	WA
/28/00	0912	MNR	WA
/15/00	0930	MNR	WA
/13/00	1550	PLB	WA
/18/00	1500	BFC	WA
/27/00	1501	BFC	WA
/13/00	1500	LSL	WA
/18/00	1530	BFC	WA
/27/00	1600	JK	WA
/26/00	1000	BFC	WA
/02/00	1219	MNR	WA
/02/00	1219	MNR	WA
/10/00	1120	KDS	WA
/17/00	1216	KDS	WA
/19/00	1934	FDR	WA
/23/00	2138	FDR	WA
/01/00	1500	FDR	WA
/17/00	1600	JK	WA
/20/00	1600	JK	WA
/28/00	1015	MCF	WA
/13/00	1614	LSL	WA
/19/00	1407	LSL	WA
/27/00	1600	JK	WA

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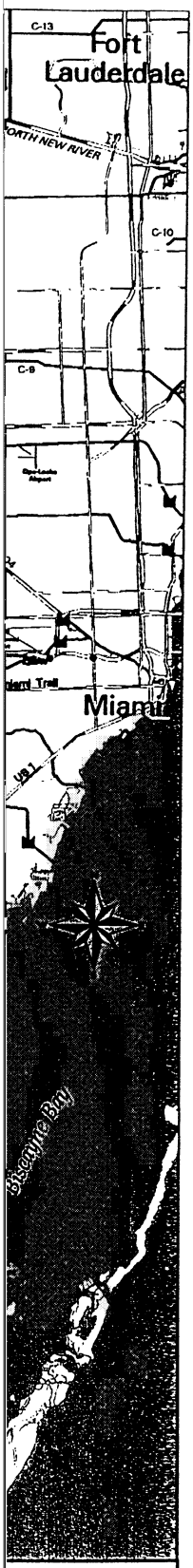

URES MAP

Deliveries to
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