

G-3273/S-356 Field Test Groundwater Monitoring Update

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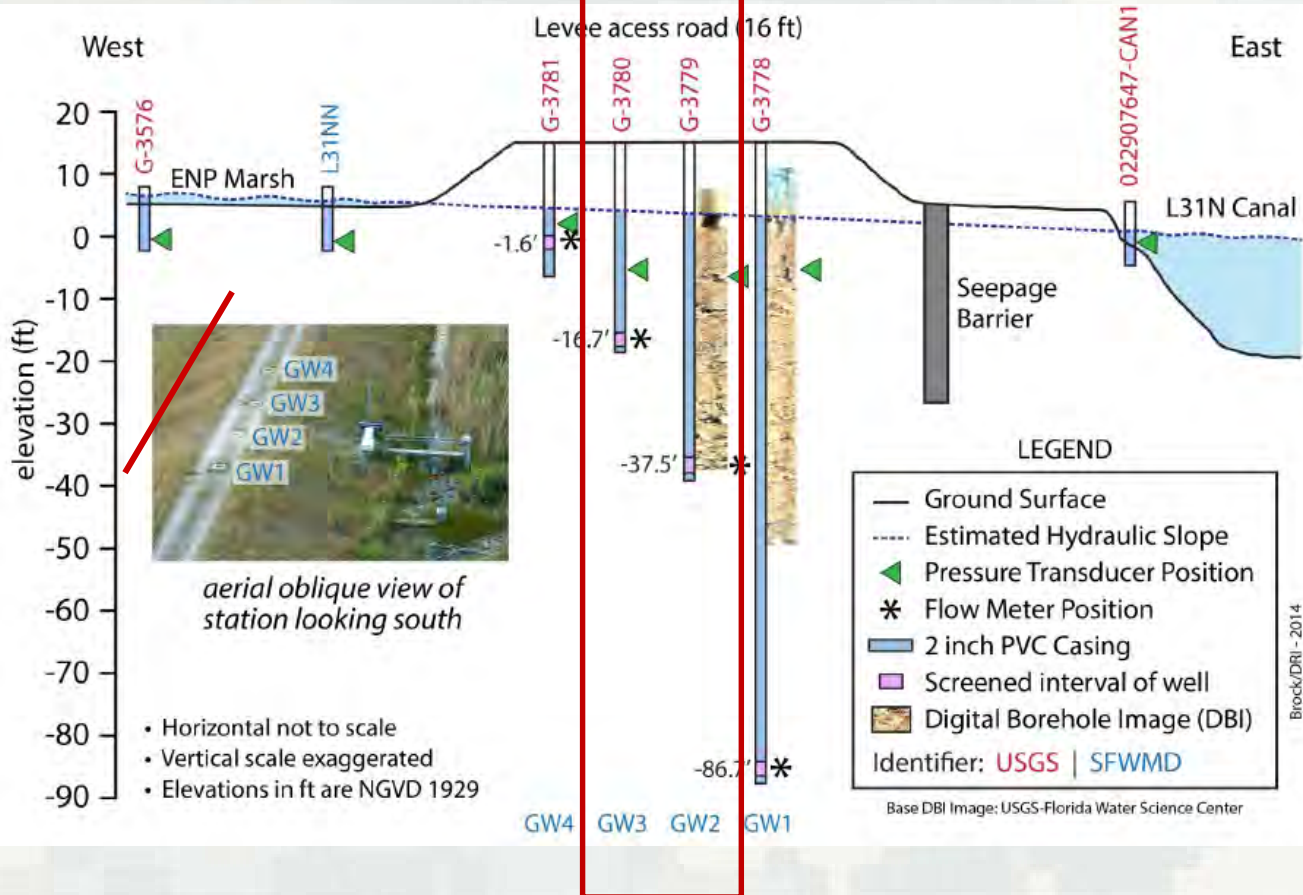
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OBJECTIVES

- Evaluate area of influence of S-356 operations in Biscayne Aquifer
- Evaluate influence of seepage barrier
- Characterize groundwater quality

L31NN Well Cluster



- Wells are located 1 mile south of Tamiami Trail
- Wells are located approx. 40 ft west of seepage barrier
- Wells equipped with sensors to measure GW level, flow rate, and flow direction

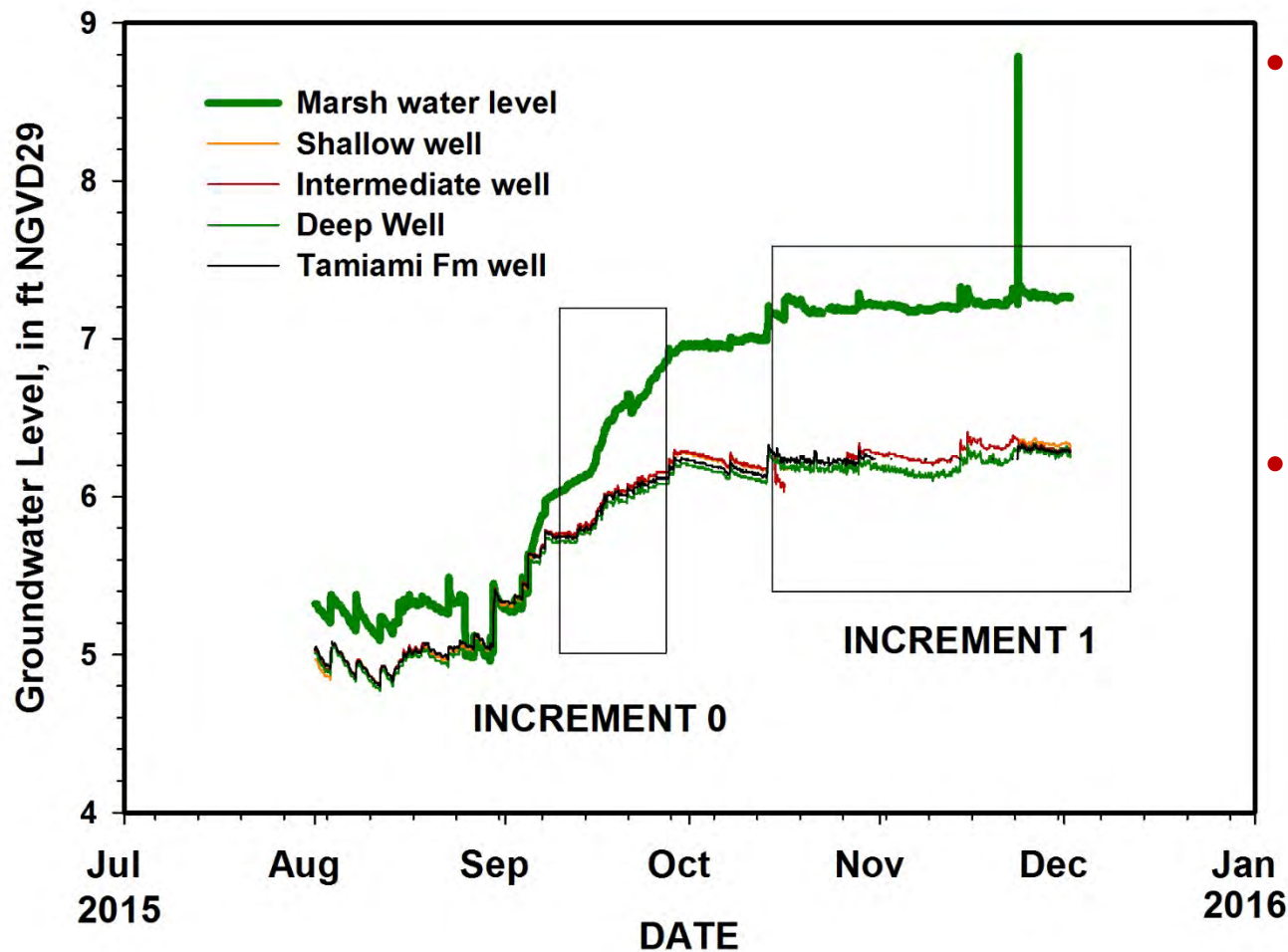


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L31NN Wells: Groundwater Levels



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- Groundwater level changes reflect regional water management and rainfall, in addition to S-356 operations
- Interpretation ongoing

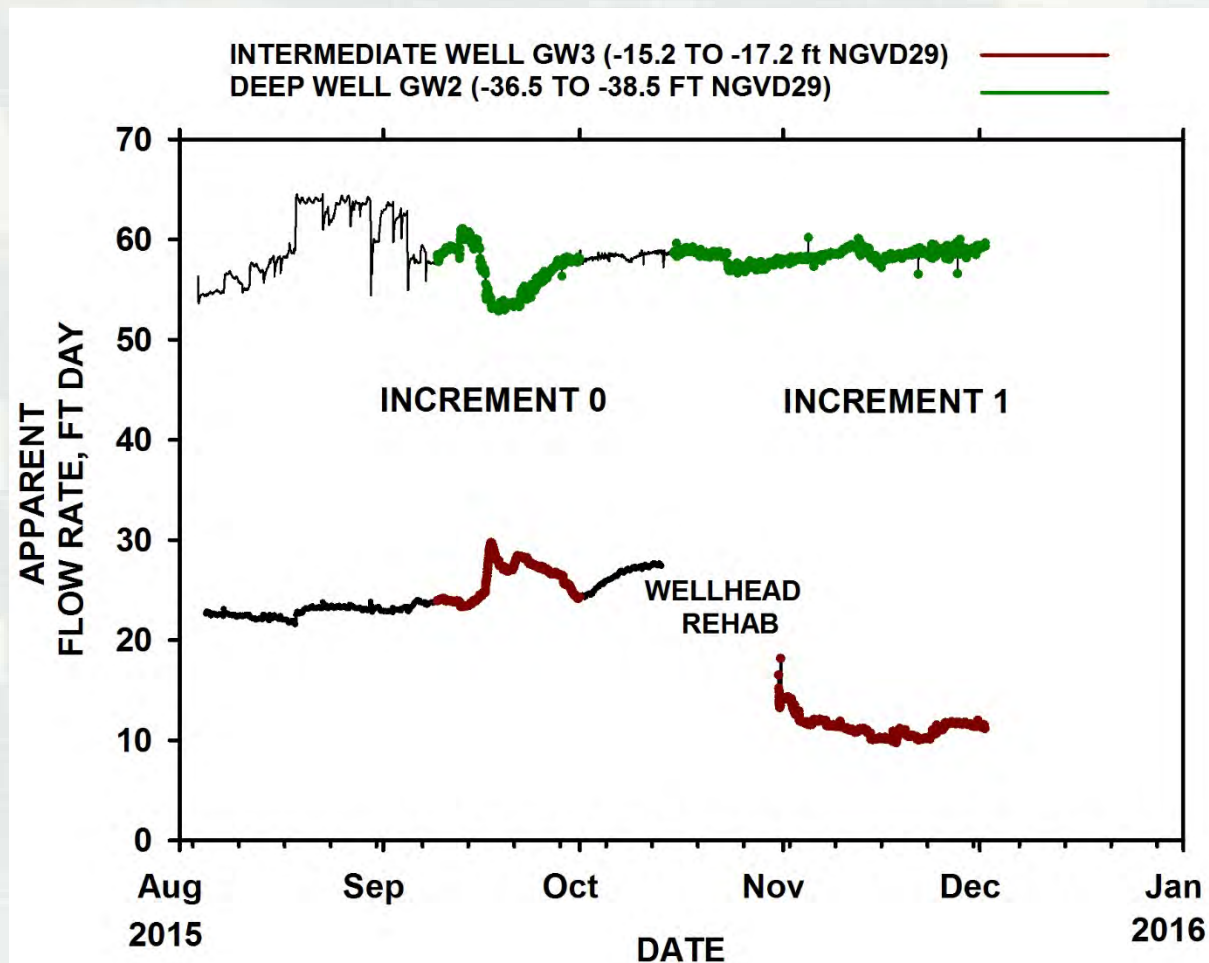


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L31NN Wells: Flow Rate



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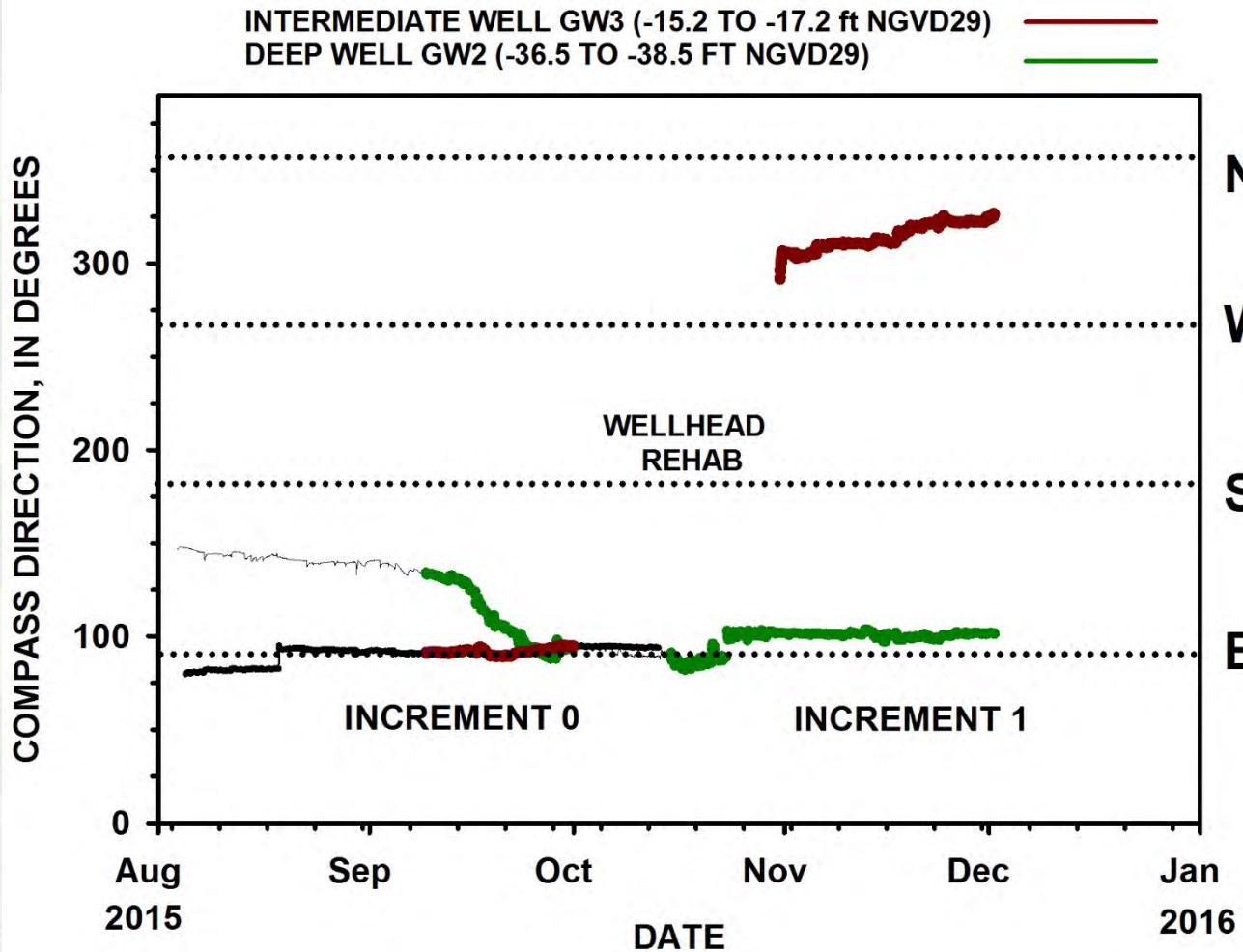
- GW flow rate at deep well below the seepage barrier not affected by S356 operation



L31NN Wells: Flow Direction



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- Flow direction in deep well to the ESE consistent with regional flow pattern
- Flow direction in intermediate well suggests capture of seepage during Increment 1, as flow direction has changed from E to NW



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Capture of Seepage?



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- Northward flowing groundwater suggests seepage capture
- Need to verify sensor performance. Sensors are not movable in the well, and are oriented to magnetic north.

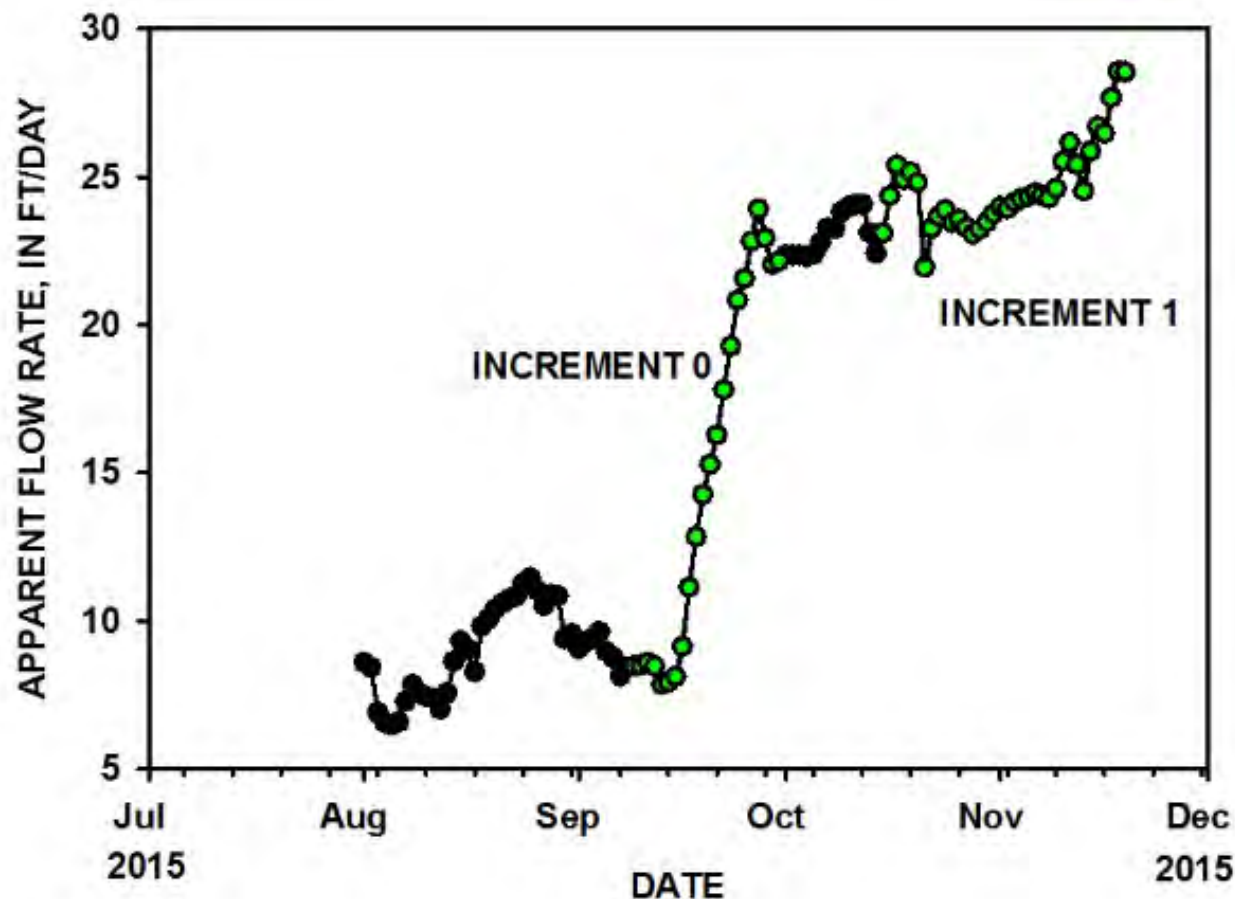


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L-30 Well MW3: Groundwater Flow Rate



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- Well is ¼-mile from S-356 pump station
- Flow rate changes reflect regional changes in water management, rainfall, and S-356 operations

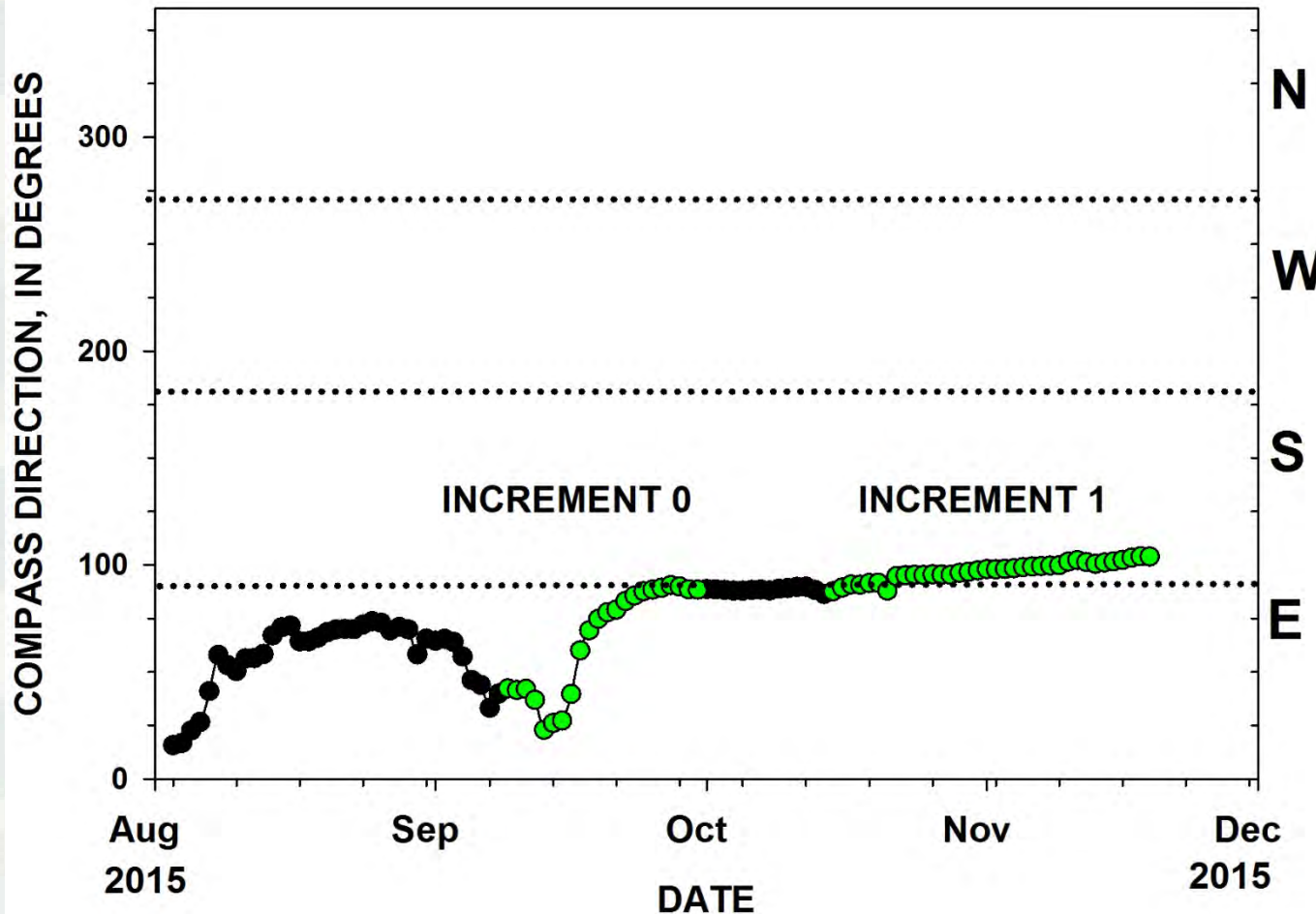


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L-30 Well MW3: Groundwater Flow Direction



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- Regional groundwater flow direction is to the East
- Subtle change to the ESE during S-356 operation



Status of Groundwater Quality Sampling



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- Baseline sampling completed in August 2015
- Monthly sampling of well subset ongoing
- 2 quarterly sampling events completed
- Data compilation and interpretation ongoing



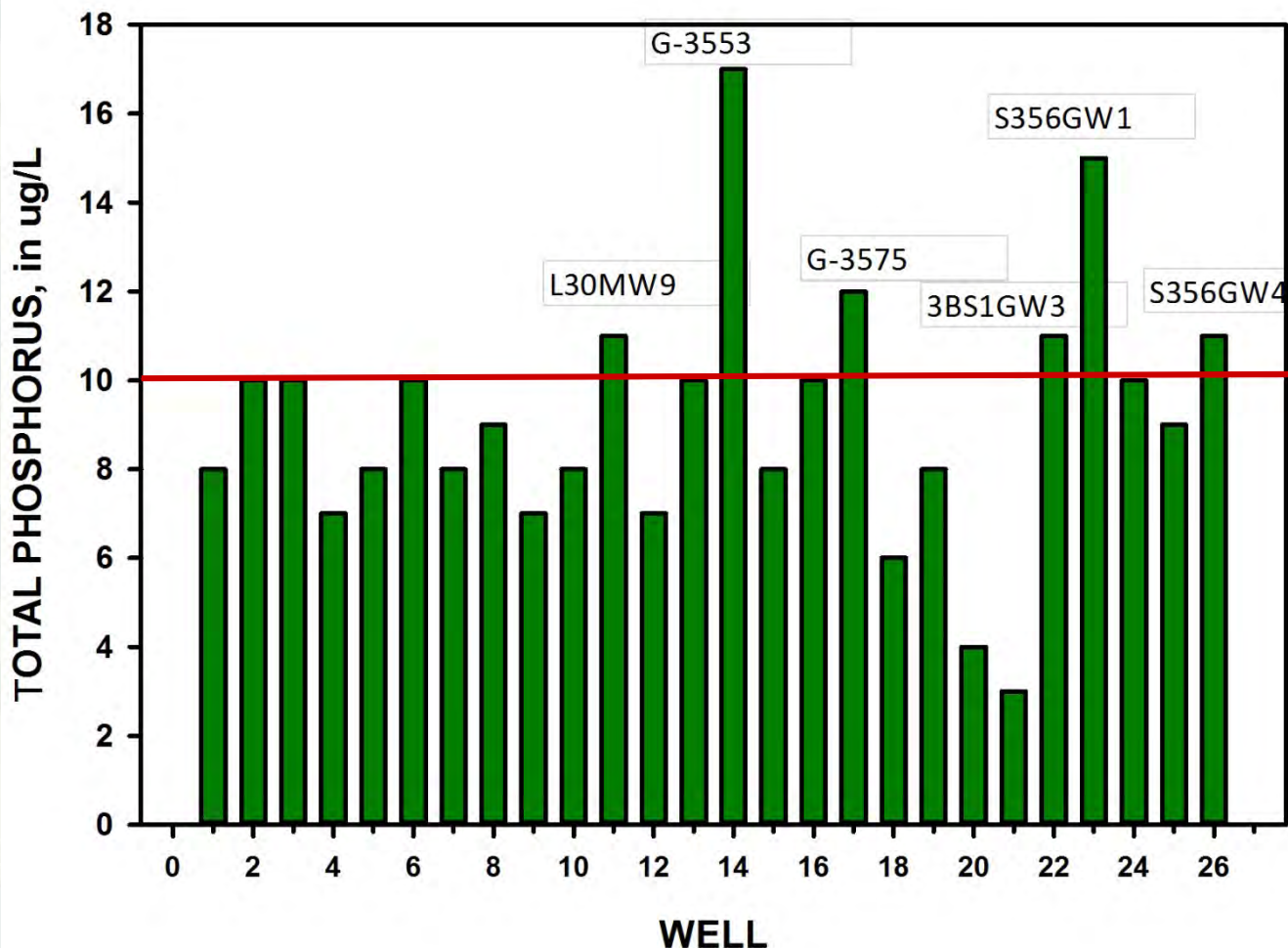


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October 2015 Total Phosphorus Data



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Samples that exceed 10 ppb TP are from wells in WCA-3B and from USGS wells in the urban area east of ENP and WCA-3B



Status Summary



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- Interpretation of groundwater flow, level, and quality data are ongoing
 - Seepage capture indicated at the L31NN wells is a testable hypothesis
- TP concentrations in excess of 10 ppb occur only in wells located in WCA-3B and east of the project area

Questions?