

APPENDIX A:

**DRAFT QUALITY ASSURANCE
PROJECT PLAN (QAPP)
[FPL 2010] PROPOSED
MODIFICATIONS AS PROVIDED
TO
SFWMD IN NOVEMBER 2010**

Re: Proposed Text Modifications to the August 2010 QAPP.**Key Changes**

1) Proposed changes to clarify the non-automated Sample nomenclature are as follows and are in track change mode:

2.2.2 Non-Automated Samples

The nomenclature for manual samples collected for laboratory analysis and associated field measurements will follow one of the formats below, as applicable:

- MMDDYY – Sample Location;
- MMDDYY – Sample Location and– Depth (e.g. 111510-TPGW-1D, 111410-TPSWC-5T);
- MMDDYY – Sample Location and– Split ;
- MMDDYY – Sample Location and– Depth – Split.
- MMDDYY – Field QA/QC Designation (DUP, EB, FCEB) – Discrete Number (e.g. 111510-DUP1)

2) For clarification of the Quarterly and Semi-Annual sampling event analyte/location lists, FPL proposes replacing the Table 2.6.1 and 2.6.2 in the current QAPP with the following tables:

Table 2.6.1

Event	Locations	Analytes ¹
Quarterly	TPGW – 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, L-3, L-5, G-21, G-28, G-35	GW
	BBSW – 1, 2, 3, 4, 5 TPSWC – 1, 2, 3, 4, 5, 6 TPSWID – 1, 2, 3	SW
	TPSWCCS – 1, 2, 3, 4, 5, 6, 7 and anomaly ²	CCS
Semiannual	TPGW – 3, 4, 5, 6, 7, 8, 9, 11, 13, L-3, L-5, G-21, G-28, G-35	GW
	TPGW – 1, 2, 10, 13, 14	GW - quarterly analytes plus Nutrients & Trace Elements
	BBSW – 1, 2, 3, 4, 5 TPSWC – 1, 2, 3, 4, 5, 6 TPSWID – 1, 2, 3	SW - quarterly analytes plus Nutrients
	TPSWCCS – 1, 2, 3, 4, 5, 6, 7	CCS - quarterly analytes plus Nutrients and Gross Alpha ³

¹ = from Table 2.6.2 plus field parameters (temperature, specific conductivity, DO, percent oxygen saturation, pH, ORP, and salinity) at all stations including TPID-1, TPID-2 and TPID-3

2= first quarterly event only unless directed otherwise
3= for one year

Table 2.6.2

Analyte	Monitoring Plan (Table 2-1) Label	GW	SW	CCS
Metals, Total Recoverable ¹	Elements	SA	-	-
Iron and Barium ¹	Tracer	Q / SA	Q / SA	Q / SA
Chromium (VI) ²	Elements	SA	-	-
Mercury ¹	Elements	SA	-	-
Anions (Cl ⁻ , SO ₄ ²⁻ , F ⁻ , Br ⁻) ²	Ions	Q / SA	Q / SA	Q / SA
Cations (Ca ²⁺ , Na ⁺ , Mg ²⁺ , K ⁺ , Sr ²⁺ , B ⁺) ³	Ions	Q / SA	Q / SA	Q / SA
Alkalinity ²	Ions	Q / SA	Q / SA	Q / SA
Ammonia + unionized	Nutrients	SA	SA	SA
Nitrate+Nitrite ⁴	Nutrients	SA	SA	SA
Total Kjeldahl N	Nutrients	SA	SA	SA
Total Phosphorus ⁴	Nutrients	SA	SA	SA
Soluble Reactive Phosphorus	Nutrients	SA	SA	SA
Silica	Nutrients	-	-	SA
Sulfides	Ions	Q / SA	Q / SA	Q / SA
TDS	Other	Q / SA	-	-
Dissolved Inorganic Carbon	Tracer	Q / SA	Q / SA	Q / SA
³ H	Tracer	Q / SA	Q / SA	Q / SA
² H/ ¹ H	Tracer	Q / SA	Q / SA	Q / SA
¹⁸ O/ ¹⁶ O	Tracer	Q / SA	Q / SA	Q / SA
⁸⁷ Sr/ ⁸⁶ Sr	Tracer	Q / SA	Q / SA	Q / SA
¹³ C/ ¹² C	Tracer	Q / SA	Q / SA	Q / SA
Gross Alpha	Other	-	-	SA

Notes:

Q = Quarterly event

SA = Semiannual event

1 = trace elements and mercury referred to by the lab as "trace metals". Barium and Iron actually part of trace metals but broken out separately since they are included with the tracer suite.

2 = chromium, anions, and alkalinity collected in same bottle

3 = cations referred to by the lab as "metals"

4 = TP and NOX collected in same bottle

3) Propose modification to text to clarify field/equipment blank frequency requirements based on FQ 1000.

2.6.1.1 Equipment Blanks

An "equipment blank" is a sample of analyte-free water poured into, over, or through the sampling device, collected in a sample container, and transported to the laboratory for analysis. Equipment blanks are used to assess the effectiveness of equipment decontamination procedures.

Equipment blanks will be collected at a frequency of one blank per equipment type per event. An

equipment blank is required any time new equipment (tubing, filters, etc.) is used that contacts the sample stream during collection. In the event of “dedicated” equipment, field blanks shall be collected in place of the equipment blanks. Blanks (i.e. equipment or field) shall be collected at a minimum frequency of one for every twenty samples collected for an event. ~~Equipment blanks will be collected at a frequency of one blank per equipment type per matrix per day.~~ Equipment blanks will be collected the day the equipment is used prior to sampling and analyzed for all laboratory analyses requested for the environmental samples collected at the site according to DEP-SOP-001/01 FQ 1000. If equipment is cleaned in the field during an event, a field cleaned equipment blank (FCEB) is collected following procedures in the same FDEP SOP.

2.6.1.2 Field Blanks

Field blanks are required only when no other blank is collected. Field blanks consist of analyte free water poured into sample bottles and analyzed for all parameters collected during the event. Blanks (i.e. equipment or field) shall be collected at a minimum frequency of one for every twenty samples collected for an event.

4) FPL is proposing the following modifications to Table 2.6.3 and Table 2.6.6 for clarification.

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Table 2.6.3

Analyte	Analytical Method	Container	Preservation	Preferred Sample Volume	Maximum Holding Time
Metals, Total Recoverable ^a	EPA 200.7	Plastic	HNO ₃ to pH<2, or at least 24 hours prior to analysis	250 mL	180 days
Chromium (VI)	SM 3500-Cr DB	Plastic	≤6°C, NaOH to pH>9.3-9.7 ¹	500 mL	24 hours
Mercury	EPA 245.1	Plastic	≤6°C, HNO ₃ to pH<2	250 mL	28 days
Common anions (Cl ⁻ , SO ₄ ²⁻ , F ⁻ , Br ⁻)	EPA 300.0	Plastic	≤6°C, 0.45µm filtered	500 mL	28 days
Cations (Ca ²⁺ , Na ⁺ , Mg ²⁺ , K ⁺ , Sr ²⁺ , B ⁻)	EPA 6010B	Plastic	0.45µm filtered , HNO ₃ to pH<2 or none if unfiltered	250 mL	180 days (48 hrs if not filtered / preserved)
Alkalinity	SM 2320 B	Plastic	≤6°C	1L	14 days
Ammonia	SM 4500-NH3 G	Plastic	≤6°C, H ₂ SO ₄ to pH<2	250 mL	28 days
Nitrate+Nitrite	EPA 353 .2	Plastic	≤6°C, H ₂ SO ₄ to pH<2	250 mL	28 days
Total Kjeldahl N	EPA 351.2	Plastic	≤6°C, H ₂ SO ₄ to pH<2	250 mL	28 days
Total Phosphorus	EPA 365.1	Plastic	≤6°C, H ₂ SO ₄ to pH<2	250 mL	28 Days
Soluble Reactive Phosphorus	SM 4500-P E	Plastic	≤6°C, 0.45µm filtered ²	250 mL	48 hours
Silica	EPA 200.7	Plastic	≤6°C, 0.45µm filtered ²	250 mL	28 days
Sulfides	SM 4500-S ₂ F	Plastic	≤6°C, NaOH to pH>9, 2mL zinc acetate	500 mL	7 days
TDS	SM 2540 C	Plastic	≤6°C	500 mL	7 days
<u>Dissolved Organic Carbon</u>	<u>EPA 9060</u>	<u>Glass</u>	<u>≤6°C, HCl to pH<2, 0.45µm filtered¹</u>	<u>250 mL</u>	<u>28 days</u>
Dissolved Inorganic Carbon	EPA 9060	Glass	≤6°C, 0.45µm filtered ²	120 mL	28 days

Analyte	Analytical Method	Container	Preservation	Preferred Sample Volume	Maximum Holding Time
Isotope / Radiological Analyses					
³ H	EE-LSC ^a LSC ³	Plastic	N/A	250 mL	1 year
² H/ ¹ H	IRMS ^b IRMS ⁴	Plastic	5 ± 2°C	500 mL	270 days
¹⁸ O/ ¹⁶ O	IRMS ^b IRMS ⁴	Plastic	5 ± 2°C	500 mL	270 days
⁸⁷ Sr/ ⁸⁶ Sr	TIMS ^c TIMS ⁵	Plastic	0.45µm filtered ² , HNO ₃ to pH<2	125 mL	1 year
¹³ C/ ¹² C	IRMS ^b IRMS ⁴	Plastic	0.45µm filtered ² , 5 ± 2°C, 1mL Hg ₂ Cl ₂ ¹	500 mL	180 days
Gross Alpha	EPA 900.0	Plastic	HNO ₃ to pH<2	1000 mL	180 days

Notes:

¹ Preserved by the laboratory

² Filtered in the field

³ EE-LSC: Electrical Enrichment followed by Liquid Scintillation Counting.

⁴ IRMS: Isotope Ratio Mass Spectrometer.

⁵ TIMS: Thermal Ionization Mass Spectrometer

^a EE-LSC: Electrical Enrichment followed by Liquid Scintillation Counting.

^b IRMS: Isotope Ratio Mass Spectrometer.

Table 2.6.6

Analyte	Analytical Method	Container	Preservation	Minimum Sample Volume	Maximum Holding Time
Isotopes					
³ H	EE-LSC ²	Plastic	N/A	50 mL	1 year
² H/ ¹ H	IRMS ³	Plastic	5 ± 2°C	50 mL	270 days
¹⁸ O/ ¹⁶ O	IRMS ³	Plastic	5 ± 2°C		270 days
⁸⁷ Sr/ ⁸⁶ Sr	TIMS ^{4a}	Plastic	0.45µm filtered ¹ , HNO ₃ to pH<2	50 mL	1 year
¹³ C/ ¹² C	IRMS ^{3a}	Plastic	0.45µm filtered ¹ , 5 ± 2°C, 1mL Hg ₂ Cl ₂	50 mL	180 days
Ions					
Metals, Total Recoverable (Fe, Ba) ^a	EPA 200.7	Plastic	HNO ₃ to pH<2, (at least 24 hours prior to analysis)	50 mL	180 days
Common anions (Cl ⁻ , SO ₄ ²⁻ , F ⁻ , Br ⁻)	EPA 300.0	Plastic	≤6°C, 0.45µm filtered	50 mL	28 days
Cations (Ca ²⁺ , Na ⁺ , Mg ²⁺ , K ⁺ , Sr ²⁺ , B ⁺)	EPA 6010B	Plastic	0.45µm filtered, HNO ₃ to pH<2 or none if unfiltered	50 mL	180 days (48 hrs if not filtered / preserved)
Alkalinity	SM 2320 B	Plastic	≤6°C	100 mL	14 days
Sulfides	SM 4500-S ₂ F	Plastic	≤6°C, NaOH to pH>9, 2 mL zinc acetate	250 mL	7 days
Nutrients					
Total Phosphorus (TP)	EPA 365.1	Plastic	≤6°C, H ₂ SO ₄ to pH<2	50 mL	28 Days
Soluble Reactive Phosphorus (SRP)	SM 4500-P E	Plastic	≤6°C, 0.45µm filtered ¹	50 mL	48 hours
Ammonia	SM 4500 NH ₃ G	Plastic	≤6°C, H ₂ SO ₄ to pH<2	50 mL	28 days
Nitrate+Nitrite (NO _x)	EPA 353.2	Plastic	≤6°C, H ₂ SO ₄ to pH<2	50 mL	28 days
Total Kjeldahl Nitrogen (TKN)	EPA 351.2	Plastic	≤6°C, H ₂ SO ₄ to pH<2	50 mL	28 days
Dissolved Organic Carbon	EPA 9060	Glass	≤6°C, HCl to pH<2, 0.45µm	250 mL	28 days

Analyte	Analytical Method	Container	Preservation	Minimum Sample Volume	Maximum Holding Time
			<u>filtered¹</u>		
Dissolved Inorganic Carbon	EPA 9060A	Glass	≤6°C, 0.45µm filtered ¹	40 mL	28 days

Notes:

¹ Filtered in the field

² EE-LSC: Electrical Enrichment followed by Liquid Scintillation Counting.

³ IRMS: Isotope Ratio Mass Spectrometer.

⁴ TIMS: Thermal Ionization Mass Spectrometer

5) FPL is proposing the following modifications to Section 2.6.4.1 after discussion with SFWMD auditors:

2.6.4.1 Surface Water Sampling

Surface water samples shall be collected using polyethylene a peristaltic pump and polyethylene tubing attached externally to a PVC pipe, or ~~or~~ another approved sampling device (e.g. a Niskin bottle). ~~If a Niskin sampler is used,~~ enough water should be collected to completely fill the sampling container.

While sampling on- or offshore, the operating procedures described in FDEP SOP 001/01 FS 2100 shall be used to consistently collect representative surface water samples. If a Niskin[®] bottle is used, the bottle will be mounted horizontally and the sample collected in accordance with FDEP FS2110. If a tubing setup is used, the tubing will be attached to the pipe so that the sample can be collected from 1 foot above the bottom and where applicable, 1 foot below the surface. The plastic tubing will be affixed to the pipe using plastic zip ties with the sampling end curved away and not touching the PVC pipe.

Each collection event must be performed so that samples are neither contaminated nor altered from improper handling. When taking samples in a vessel, samples must be taken near the bow, away and upwind from any gasoline outboard engine. The vessel must also be oriented so that the bow is positioned in the up-current direction. When sampling while wading, samples shall be taken up-current from the body. Provisions must also be made so that sediments are not disturbed in the immediate area. If using the PVC-tubing method, once the tubing is lowered to the appropriate depth using the pipe, water will be collected from tubing located at the shallow depth first. Prior to collecting any bottom sample, the PVC pipe will remain in place for a few minutes, or until the sediment has settled.

Compositing buckets will be used when the total volume of sample water required from a sample site exceeds the volume of a single grab of the sampling equipment. Compositing the sample in a bucket prior to pouring into individual sample bottles will ensure that all water samples from a particular site are homogenized. Samples collected in the sampling device that do not require compositing will be shaken prior to pouring to ensure homogeneity. All general

protocols applicable to aqueous sampling detailed in FDEP SOP 001/01 FS 2000 must be adhered to.

6) Section 2.9.3.2 has been clarified as follows after discussion with the Agencies and initiation of fieldwork:

2.9.3.2 Ecological Assessment

Freshwater ~~Wetlands, -and Mangroves, and -Wetlands-Tree Islands~~

Vegetation in the ~~wetlands~~ plots will be classified as either woody or non-woody. Measurements at each plot level will be conducted at the frequency shown and consist of the parameters listed in Table 2.9-1. Derived parameters that will provide ecological information on the health and structure of these areas are shown in Table 2.9-2 and Table 2.9-3 (presented at the end of Section 2.9). Measurements will only be conducted in plots where this information is applicable (e.g., no herbaceous measures will be conducted if there are no herbaceous species within the mangroves and no woody species measures will be conducted where only marsh grasses/sedges are present).

Plots will be set up by marking all corners of the 20 m x 20 m plots with stakes (i.e. PVC or metal poles). The northeast corner will be flagged. The 5 m x 5 m plots will be marked and string used to demarcate the boundaries if woody plants are present and measured within. The 1 m x 1m plots will also be marked similarly in plots where herbaceous vegetation occurs.


Table 2.9-1. Frequency and Parameters Measured within each of the Plot Sizes

Parameter	Units	Preferred Method	Reference	Plot Size <u>and Measurement Frequency</u>		
				20- m <u>m</u> x 20- m <u>m</u> (1x/year)	5- m <u>m</u> x 5- m <u>m</u> (2x/year)*	1- m <u>m</u> x 1- m <u>m</u> (4x/year)
Canopy cover	%	Cover scale (5% increments)	<p>Heard, L. and B. Channon. 1997. Guide to a Native Vegetation Survey using the biological survey of south Australia methodology.</p> <p>Mueller-Dombois, D. and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. NY. Wiley and Sons. New York.</p>	X		
Canopy height	m	Extensible pole		X		
Herbaceous layer height	m	Marked 2 m pole		X		
Herbaceous cover	%	Cover scale (5% increments)	<p>Heard, L. and B. Channon. 1997. Guide to a Native Vegetation Survey using the biological survey of south Australia methodology.</p> <p>Mueller-Dombois, D. and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. NY. Wiley and Sons. New York.</p>	X		
Species composition	Number of species	Shannon-Weiner Index of Biodiversity	Kempton, R. A. 1979. The Structure of Species Abundance and Measurement of Diversity. Perspectives in Biometry. 35(1): 307-321.		(Trees) X	(Herbaceous) X
Species abundance	Number of species	Shannon-Weiner Index of Biodiversity	Kempton, R. A. 1979. The Structure of Species Abundance and Measurement of Diversity. Perspectives in Biometry. 35(1): 307-321.		(Trees) X	(Herbaceous) X

Table 2.9-1. Frequency and Parameters Measured within each of the Plot Sizes

Parameter	Units	Preferred Method	Reference	Plot Size <u>and Measurement Frequency</u>		
				20-m x 20-m (1x/year)	5-m x 5-m (2x/year)*	1-m x 1-m (4x/year)
Individual tree dimensions [height, diameter at breast height (DBH), canopy width, canopy length]	Height, canopy width and canopy length in m, DBH in cm	Extensible pole DBH tape measure	Natural Resources Conservation Service. 2004. National Forestry Handbook. Title 190. Mueller-Dombois, D. and H. Ellenberg. 1974. Aims and Methods of Vegetation Ecology. NY. Wiley and Sons. New York.		X	
Leaf and stem growth and turnover	grams/year	Ruler or meter tape	Miao, S. L. and F. H. Sklar. 1998. Biomass and Nutrient Allocation of Sawgrass and Cattail along a Nutrient Gradient in the Florida Everglades. Wetlands Ecol. Manage. 5:245-263.		X	X
Leaf morphology (length and width)	cm	Ruler or meter tape			X	
Dominant Herbaceous species leaf length	cm	Ruler or meter tape	Daoust, R. and D. Childers. 1998. Quantifying aboveground biomass and estimating net aboveground primary production for wetland macrophytes using a non-destructive phenometric technique. Aquatic Botany. 62:15-133.			X
Dominant Herbaceous species biomass turnover	grams/year	Calculation of biomass change over time. Equations to estimate biomass described in Daoust and Childers				X

Table 2.9-1. Frequency and Parameters Measured within each of the Plot Sizes

Parameter	Units	Preferred Method	Reference	Plot Size <u>and Measurement Frequency</u>		
				20- m <u>m</u> x 20- m <u>m</u> (1x/year)	5- m <u>m</u> x 5- m <u>m</u> (2x/year)*	1- m <u>m</u> x 1- m <u>m</u> (4x/year)
Water content	% water		Chiariello, N. R., H. Mooney and K. Williams. 1989. Growth, Carbon Allocation and Cost of Plant Tissues. In: Plant Physiological Ecology: Field Methods and Instrumentation. Pearcy, R. W., J. Ehleringer, H. A. Money and P. W. Rundel (eds.). Chapman and Hall, London, New York. pp. 327-365		X	
Leaf chemistry: C	% C $\left[\frac{\text{grams of carbon}}{\text{grams of biomass}} \right]$	EPA 440.0	Zimmermann, C.F., and C.W. Keefe. 1997. Method 440.0. Determination of carbon and nitrogen in sediments and particulates of estuarine/coastal waters using Elemental Analysis (rev. 1.4). National Exposure Research Laboratory. US EPA.		X	X
Leaf chemistry: N	% N $\left[\frac{\text{grams of nitrogen}}{\text{grams of biomass}} \right]$	EPA 440.0	Zimmermann, C.F., and C.W. Keefe. 1997. Method 440.0. Determination of carbon and nitrogen in sediments and particulates of estuarine/coastal waters using Elemental Analysis (rev. 1.4). National Exposure Research Laboratory. US EPA.		X	X
Leaf chemistry: P	% P $\left[\frac{\text{grams of phosphorus}}{\text{grams of biomass}} \right]$	EPA 365.1	O'Dell J.W. 1993. Method 365.1 Determination of phosphorus by semi-automated colorimetry (v. 2). Environmental Monitoring Systems Laboratory, US EPA. .		X	X
Leaf chemistry: Leaf carbon isotope ($\delta^{13}\text{C}$)	‰ 	IRMS	See Appendix B		X	X

Notes:

*. All parameters will be measured 2x/year except for individual tree dimensions which will be measured 1x/year, at the end of each growing season (October-November).

**If woody species are short (e.g. scrub mangroves), the DBH measurement will be obtained at 40cm above the ground. Due to frequently overlapping and intertwining canopies on the tree islands, the canopy width and length will be estimated.

Table 2.9-2. Calculated Ecological Parameters from the Plots Measurements

Parameter	Units	Method Reference	Plot Size and Calculation Frequency		
			20-m x 20-m (1x/year)	5-m x 5-m Woody Species (2x/year)*	1-m x 1-m Herbaceous (4x/year)
Shannon-Wiener Species Diversity Index		Ludwig, J. A. and J. F. Reynolds. 1988. Statistical Ecology: A Primer in Methods and Computing. John Wiley & Sons, Inc. New York, NY.		X	X
Species Evenness		Ludwig, J. A. and J. F. Reynolds. 1988. Statistical Ecology: A Primer in Methods and Computing. John Wiley & Sons, Inc. New York, NY.		X	X
Species Importance Value		Ludwig, J. A. and J. F. Reynolds. 1988. Statistical Ecology: A Primer in Methods and Computing. John Wiley & Sons, Inc. New York, NY.		X	X
Basal Area	m ² /ha	Snedaker, S. and J. Snedaker. 1984. The Mangrove Ecosystem: Research Methods. UNESCO, United Kingdom. pp 91-107.		X	
Total Biomass	kg/ha	<p>For 5m x 5m plots: Ross, M. S., P. L. Ruiz, G. J. Telesnicki and J. F. Meeder. 2001 Estimating Above- ground Biomass and Production in Mangrove Communities of Biscayne National Park, Florida [USA]. Wetland Ecology and Management. 9:27-37.</p> <p>Coronado-Molina, C., J. W. Day Jr., E. Reyes, and B. C. Perez. 2004. Standing Crop and Aboveground Biomass Partitioning of a Dwarf Mangrove Forest in Taylor River Slough, Florida. Wetland Ecology and Management. 12:157-164.</p> <p>For 1m x 1m plots: Daoust, R. and D. Childers. 1998. Quantifying aboveground biomass and estimating net aboveground primary production for wetland macrophytes using a non-destructive phenometric technique. Aquatic Botany. 62:115-133.</p> <p>Miao, S. L. and F. H. Sklar. 1998. Biomass and Nutrient Allocation of Sawgrass and Cattail a Nutrient Gradient in the Florida Everglades. Wetlands Ecol. Manage. 5:245-263.</p>		X	X

Comment [SE1]: Delete as parameters measured per Monitoring Plan will not provide basal area in woody plots.

Table 2.9-2. Calculated Ecological Parameters from the Plots Measurements

Parameter	Units	Method Reference	Plot Size and Calculation Frequency		
			20-m x 20-m (1x/year)	5-m x 5-m Woody Species (2x/year)*	1-m x 1-m Herbaceous (4x/year)
Plant productivity	kg/plant/yr kg/culm/yr	See references in Total Biomass.		X*	X
Stand productivity	kg/ha/year	Daoust, R. and D. Childers. 1998. Controls of Emergent Macrophyte Composition, Abundance, and Productivity in Freshwater Everglades Wetlands Communities. Wetlands 19:262-275.		X*	X
Sclerophylly	cm ² g ⁻¹	Specific leaf area (SLA) as an index of sclerophylly, as referenced in: Medina E., Garcia, V., and E Cuevas. 1990. Sclerophylly and Oligotrophic Environments: Relationships Between Leaf Structure, Mineral Nutrient Content, and Drought Resistance in Tropical Rain Forests of the Upper Rio Negro Region. Biotropica. 22(1):51-64.		X	
δ ¹³ C	‰	See Table 2.9-1		X	X
Nutrient content (C, N and P)	%	See Table 2.9-1		X	X

Note: Culm is a group or bunch of herbaceous stems.

* Plants measured 2x/year but productivity is calculated annually.

Key:

m² = meters squared

ha = hectares

kg = kilograms.

Woody and herbaceous species cover within the 20-m x 20-m plots will be determined annually using aerial imagery from RECOVER, SFWMD, FPL, or Google Earth. The type, quality, date, resolution and source of arials will be provided when available. The minimum acceptable resolution proposed for the source arials is 0.5 m. Additionally, the lag time between the aerial flight and ground verification will be noted; the maximum lag time between aerial flight and date for verification will not exceed 4-6 months and these two events will occur within one season (i.e. wet season). Photographs/images will be digitized to estimate % cover of each community type (e.g., mangroves, herbaceous species, invasive species) within a plot. The % cover values will be confirmed during field visits to determine woody species composition and abundance. Canopy cover will follow the classification scale outlined in Heard and Channon (1997).

As part of the ecological measurements (Table 2.9-1), canopy and herbaceous species cover and height within these plots will be confirmed from the ground. Canopy cover assessment from the ground will also follow Heard and Channon (1997). Vegetation canopy is defined as the average height of the woody species within the plot (includes scrub mangroves <2 meters tall). The number of individuals (i.e., abundance) and the species (i.e., composition) of woody plants within one 1 m and 5 m subplot per plot will be identified to calculate species diversity using the Shannon-Wiener Index of Biodiversity and determine species Evenness (Kempton 1979) and Importance Values (Table 2.9-2).

Subplot locations will be defined based on a fixed random design per the Monitoring Plan. There will be one 5 m x 5 m and one 1 m x 1 m subplot within each of the four quadrants of the 20 m x 20 m plot (see Monitoring Plan). The location of each subplot will be determined randomly within each quadrant at the onset of monitoring. Once determined, the same subplot locations will be measured throughout the project unless circumstances (e.g. fire) require plot relocation.

An annual survey of all woody species present will be conducted within the 5-m x 5-m subplots. Relative abundance will be assessed using percent cover of each woody species. Using the Institute for Regional Conservation's online Floristic Inventory of South Florida database, a list of trees present in Biscayne National Park will be generated. This list will serve as a baseline guide to distinguish trees from shrubs. No Class I invasive exotic species will be tagged or monitored for productivity measurements as FPL and the Agencies maintain active invasive species removal programs on their lands. Average tree height and diameter at breast height (or in scrub mangrove forests, at 40 cm aboveground, CARICOMP 2001) will be measured twice a year; canopy width and length will be determined annually for up to three trees per 5-m x 5-m subplot. Growth rates and survivorship information of each species will be derived from the data gathered. Additionally, basal area and total biomass within each plot will be determined from published allometric equations (e.g. Ross et al. 2001, Coronado-Molina et al. 2004) or from equations for species of similar growth form and habit.

Leaf and stem production will also be determined within the four 5-m x 5-m subplots by tagging (i.e., using bird bands or metal tags) six terminal branch tips on the trees selected for productivity measurements. The initial tag should encompass ~~two~~ terminal leaves on each terminal branch and the rate of leaf increase and loss from that point forward documented. This will allow for the calculation of leaf number turnover. Stem length of each marked terminal branch will be measured from the base (where it becomes the first order branch) to the base of the stem, below the terminal leaflet(s). Twice a year (i.e., once at the end of both the wet and dry season) at these 5-m x 5-m subplots, the number of branches on the tagged plants will be counted to extrapolate the number of leaves on each plant; tagged branch length will also be measured to determine stem growth.

~~If a tagged individual has died, it will be recorded. Where available, the nearest healthy neighbor (< 1 m distant for herbaceous species and < 5 m for woody species) will be tagged as a replacement. Five percent (5%) of the data will be re-measured by a second observer as a QA check.~~

~~Within~~ To determine productivity within the 1-m x 1-m subplots, all vascular plant species present will be recorded. It is understood that sometimes seedlings, damaged plants, juvenile graminoids etc. may be unidentifiable. Each ~~identified~~ taxa will be assigned a percent cover. Based on the percent covers obtained during the species inventory, dominant species will be selected for measurements used in estimating leaf productivity. If there is one clear dominant species within the plot, then only that species will be tagged and measured for leaf productivity studies. If it is determined that there are 2-3 co-dominant species within the subplot, then productivity measurements will be conducted for the co-dominant species. ~~Leaf~~ For sawgrass, leaf productivity for ~~thirty percent~~ 30% or up to 15 individuals (whichever is greater) of the dominant herbaceous species will be estimated based on leaf number, basal diameter, and length (Daoust et al. 1998). In the case of *Eleocharis* spp. and *Juncus* spp. which are more sensitive to measurements and handling, the length of the stems and diameter at the base will be measured on a minimum of ten percent of tagged individuals per subplot. For ferns and emergent aquatics (i.e. on tree islands), only the length of the leaves will be measured on 30% or up to 15 individuals in the subplot. Productivity data will be gathered twice per year (once each in wet and dry seasons) ~~but calculated annually (Table 2.9-2).~~ Species-specific biomass estimates based on leaf number and/or longest leaf length will be used where available. Where species-specific biomass equations are not available, plant biomass determination will be determined from published allometric equations or from related genera.

If a tagged individual has died, it will be recorded. Where available, the nearest healthy neighbor (< 1 m distant for herbaceous species and < 5 m for woody species) will be tagged as a replacement. Five percent (5%) of the data will be re-measured by a second observer as a QA check.

At the end of the wet and dry seasons, leaves will be collected from the dominant woody (from the 5-m x 5-m subplots) and herbaceous (from 1-m x 1-m subplots)

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species. Three leaves of each dominant species within a subplot will be collected. This collection will be made from conspecific individuals occurring outside the 20 m x 20 m plot but nearest to the subplot For both the woody and herbaceous species in the marsh, mangrove and tree island habitats, sun-exposed mature leaves Ten leaves per dominant species (collected from mature leaves generated from that season's growth will be collected), or up to 2% of the total biomass, will be collected from each 20 m x 20 m plot (for sparsely vegetated plots), and All leaves will be collected, stored in plastic bags with a moist paper towel, and put on ice. Leaves will be processed as soon as possible.

Leaf collected from each plot for morphological parameters (such as length, width, thickness (i.e. leaf area divided by dry mass) and water content (dry/wet weight)), physiological ($\delta^{13}\text{C}$), and nutrient (TC, TN, TP) analyses characteristics (Table 2.6-5) will be determined. Changes in these parameters over time will provide insight into the ecological conditions of these species. All leaves will be collected, stored in paper and immediately put on ice.

Plants from each plot will be dried at $\leq 65^\circ\text{C}$ for up to two weeks prior to being composited and ground for nutrient and isotope analyses. Average leaf weights for each species will then be used in conjunction with the leaf production data to obtain an estimated rate of biomass change (i.e., turnover) per plant for that period. This information can be scaled up to obtain whole-plant biomass and, subsequently, aboveground annual productivity for the plot.

Carbon stable isotopes ($\delta^{13}\text{C}$) will be reported per mil units (‰) and represents the ratio of ^{13}C in a sample compared to a known ^{12}C Pee Dee Belemnite (PDB) standard (details of isotopic calculations provided in Appendix B). The leaf morphological, isotope, and nutrient parameters will then be used to estimate the seasonal changes in sclerophylly (defined as Leaf Mass Area [g cm^{-2}] and incorporating a measure of leaf water content and thickness measures defined as Specific Leaf Area [g cm^{-2}]), integrated water-use efficiency [WUE] over the growing season (as based on leaf $\delta^{13}\text{C}$ values), and nutrient health (%TC, TP, TN) of the plants (Table 2.9-2).

–Differences among plots within a transect, among transects across the landscape, and changes across time will be statistically analyzed. The rationale for these analyses is to provide insight into the changing ecological (nutrients) and physiological (as determined by the SLA, WUE) of plants across the landscape over time.

Biscayne Bay

Transect locations and the general design for the benthic surveys will be as described in the Monitoring Plan (Section 2.8.8) unless the areas are inaccessible or initial porewater surveys indicate a need for change in location. Any changes will be determined in consultation with the agencies.

The sampling to determine species composition, abundance, and cover of SAV, drift and sessile macroalgae (green, red, or brown), and benthic fauna (corals, sponges) will be conducted using the Braun-Blanquet Cover Assessment (BBCA) methodology (Fourqurean et al. 2002, Table 2.9-3). The technique is a percent cover estimation

method (on a 1 to 5 non-linear scale) that is used to survey species cover over large areas rapidly. Percent cover within a plot is defined as bottom occlusion. For this monitoring effort, 0.25-~~m~~ m² PVC quadrats will be used to measure four locations each at eight random points along every transect and will be sampled two times per year. Each quadrat will be thrown away from the boat in each cardinal direction without consideration of bottom conditions. A diver/snorkeler will then be deployed to conduct the BBCA and other ecological parameters. The BBCA scores for each functional group (i.e., seagrasses, macroalgae) will be calculated and statistically analyzed for differences across time, north-south across the landscape, and with distance from Turkey Point Nuclear Power Plant. The presence of sponges, corals and gorgonians will be noted. Ecological parameters (Table 2.9-3) such as light extinction (i.e., PAR), water level, tidal conditions, porewater conductance, sediment depth (either <30 cm or >30 cm depth), and temperature for each transect will be measured, as well. To ensure within-event sampling consistency, one point per transect (4 out of 32 of the 0.25-~~m~~ m² plots along a transect) will be scored by two individuals as a QA check. If the scores are not the same, one point per transect will be selected for QA. All four quadrats will be independently scored by a second biologist. The quadrats will be left in place for review until scores are compared, discussed, and final agreement (100% agreement) is reached.

All monitoring points (eight points/transect, total of 20 2-km-long transects) will be pre-defined prior to the field event and entered into a high-precision GPS (e.g. Trimble® XT). All points will be numbered 1 to 8, starting from the north. The exact locations of these points will be defined randomly within fixed-distance sections of 250 m. Points will be re-located using the GPS as there will be no subtidal transect or point markers along these transects. Water level, tidal conditions (i.e., incoming/outgoing), porewater conductance, and temperature will also be measured at each sampling point. Tracer suite, nutrient, leaf and water quality measurements will be, and soil measurements will be conducted bi-annually as described in the Monitoring Plan using methods as described previously and as outlined in Section 2.9-3. Leaf samples will be collected from two points per transect and composited while water quality measurements will be collected from the location of highest specific conductivity.

As the BBCA method can be highly variable among observers, the same individuals and team will participate in the SFWMD annual inter-calibration exercise to ensure consistency in observations. To the extent possible, measurements within and between events will be made by the same individuals over the monitoring duration to the extent practical. Care will be taken to minimize disturbance to the sediment in shallow areas. An example datasheet is provided in Appendix C.

Faunal sampling within Biscayne Bay will be associated with the transects set up for BBCA assessment. One 1-~~m~~ m x 1-~~m~~ m faunal trap will be haphazardly thrown at four points along each transect; these points are coincident with the locations of SAV sampling at each transect. At the transect closest to shore (Transect “a”), the odd numbered points closest to shore will be measured. At the next transect, the even numbered points will be sampled. If vegetation is observed at the location, care will be taken to ensure that the bottom of the traps are well placed on the sediment to prevent fauna from escaping from the confined areas. The trap will be constructed with an

aluminum skirt, open on the bottom, with corner supports and upper aluminum frame. A fine 1/32-inch delta mesh netting will be attached on four sides between the bottom skirt and upper frame for a total height of 45 cm. Two panels of similar mesh will be attached to parallel sides of the upper frame to serve as a cover to keep organisms in when the trap is deployed. A short weighted skirt will extend along the bottom to conform to uneven substrates and prevent escape of organisms from the trap as it settles to the bottom.

The methodology of clearing the traps will be based on the Fish and Invertebrate Assessment Network (FIAN) protocols (Robblee 1998). Briefly, once the trap is firmly in place, it is cleared of animals (epibenthic fish, panaeid shrimp, and portunid crabs) with three to five separate passes with a 1-~~m~~ meter-wide framed sweep net of mesh size similar to the panels unless a significant number of organisms still remain (at which 3-5 more passes will be made until most of the organisms have been captured).

All vegetative matter and detritus collected will be placed in a livewell with running seawater and sorted by hand. All target organisms (fish, ~~caridean and~~ penaeid shrimp, and portunid crabs) will be separated. Organisms that can be identified in the field will be measured, counted, and released. Published and in-house field guides will be available on the boat to assist with field identification. Small, questionable, or problematic species will be preserved and returned to the lab for identification, measurement, and enumeration. Unidentifiable specimens will also be kept for further identification. Additionally, one individual of each species from each size class will be kept as a voucher specimen. Samples retained will be initially fixed with formaldehyde (to preserve color) and subsequently transferred to ethanol for storage once identified. Measurements of organisms will be entered in a datasheet (Appendix C). Samples will be used as a reference collection be stored at the Ecological Associates, Inc. (EAI) laboratory in Jensen Beach, Florida and transferred to the South Florida Natural Resources Center for long-term storage of the collection.

The reference collection will be verified by an independent third party; all unidentifiable specimens will be sent to third-party experts for identification (third-party credential available upon request to FPL). All vouchered specimens will be measured, photographed, and entered into the reference collection database. Specimens will be maintained in a reference collection over the life of the project; upon project completion, all samples will be transported to the South Florida Natural Resources Collection for archiving.

7) *Proposed modification to Table 3.2 are as follows:*

- Add “0.01” to MCL column for arsenic.
- Delete “0.4” from the GW (G-1) column for copper.
- Delete “1” from the GW (G-1) column for zinc.

8) Add following paragraphs (highlighted) regarding the silica analysis to Section 3.2.3.1

3.2.3.1 EPA Method 200.7 – Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma - Atomic Emission Spectrometry (ICP-AES)

Project samples are analyzed for metals (with the exception of cations, boron, and strontium) and silica using EPA Method 200.7. This method utilizes ICP-AES in the determination of trace level concentrations of elements in water samples and in waste extracts or digests. Similar standard methods include SW846-6010 and SM3110.

For the determination of total recoverable silica in aqueous samples, samples (100 mL) are not filtered, but acidified with (1+1) nitric and hydrochloric acid to pH <2. Preservation may be done at the time of collection. The sample is then digested at 85°C for several hours to a final volume of 50 mL and analyzed.

When determining silica in aqueous samples, only plastic, polytetrafluoroethylene (PTFE, or Teflon®), or quartz labware should be used from the time of sample collection to completion of analysis. When possible, borosilicate glass should be avoided to prevent contamination of this analyte.

The ICP-AES measures characteristic atomic-line emission spectra by optical spectrometry. Samples are nebulized and the resulting aerosol is transported to the plasma torch. Element specific emission spectra are produced by a radio frequency (RF) ICP. The spectra are dispersed by a grating spectrometer, and the intensities of the line spectra are monitored at specific wavelengths by a photosensitive device.

9) *Revise text in section 3.2.3.4 to reflect method selected for the project (3500 Cr B). In second paragraph, the phrase “...along with the use of internal standards” has been deleted. The method blank criteria are revised to reflect method blank criteria; the previous criteria were referring to the calibration blank correction.*

3.2.3.4 Method SM 3500-Cr ~~D-B~~ – Colorimetric Method for Hexavalent Chromium

Project samples are analyzed for Cr(VI) using Method SM 3500 Cr ~~DB~~ (21st Ed.). Cr(VI), in the absence of interfering amounts of substances such as molybdenum (Mb), Va, and Hg, may be determined colorimetrically. Diphenylcarbazide reacts with Cr(VI) in acid solution to form a colored (540 nm) complex.

Table 3.2-6 provides a summary of QC procedures for Method SM 3500 Cr ~~DB~~. Method QC includes a method blank, a LCS, and matrix spikes. MDLs are listed in Tables 3.2-1, 3.2-2, and 3.2-3.

Table 3.2-6. Summary of Calibration and QC Procedures for Method SM 3500-Cr ~~DB~~

QC Check	Minimum Frequency	Acceptance Criteria	Corrective Action
Calibration curve (minimum one standard and a blank)	Initial calibration prior to sample analysis, standards treated as samples	Correlation coefficient > 0.995 for linear regression	Correct problem then repeat initial calibration
Calibration Verification	After every 10 samples and at the end of the analysis sequence	Analytes within $\pm 10\%$ of expected value	Correct problem then repeat initial calibration and reanalyze all samples since last successful calibration
Method blank	One per analytical batch	No analyte detected in the MB above the RL. Blank absorbance subtracted from sample	Correct problem then reprep and analyze the blank and all samples in the affected analytical batch
LCS	One LCS per analytical batch	Recovery within 85-115% of expected results	Correct problem then reprep and analyze the LCS and all samples in the affected analytical batch
MS/MSD	One MS/MSD per every 20 project samples per matrix	Recovery within 85-115% of expected results - calculations are not required if the concentration added is less than 30% of the sample background concentration	Describe in case narrative

10) Propose to remove the internal standard language in section 4.1.3.1 and 4.2.3.1 regarding laboratory report deliverables. Internal standards are not utilized by the current methods selected for the project.

4.1.3.1 Laboratory reporting Requirements

Instrument Calibration Data

... The equations presented shall be complete and use enough significant figures to reproduce the analytical results during data validations.

Internal Standard (IS) Recovery Data

~~The laboratory data package shall include internal standard recovery data summaries for analyses that utilize this technique. Instrumental drift as well as suppressions or enhancements of instrument response caused by the sample matrix must be corrected by the use of internal standards (ISs). ISs are measured amounts of certain~~

~~compounds added after preparation or extraction of a sample. ISs ideally should have similar analytical behavior to the elements being determined. ISs must be present in all samples, standards, and blanks at identical levels. The masses of the internal standards selected for the analysis shall bracket the expected analyte mass range.~~

Laboratory Blank Sample Data

The laboratory data package shall include test reports or summary forms for all blank samples (e.g., method and preparation blanks) pertinent to the sample analyses. If a target analyte was detected in any of the blanks associated with an analytical and/or preparation batch that includes samples ...

4.2.3.1 Data Validation

ICP ICS for Metals

...sample result reported as detected, then the associated sample result will be qualified as estimated (“J”) with a potential high bias. Nondetectable results will not require qualification. If the concentration is reported as a negative value and the absolute value of the magnitude of the ICS sample result represents more than 25% of an associated sample result (or sample quantitation limit for non-detects), then the associated sample result will be qualified as estimated (“J”).

Internal Standards

~~The analysis of internal standards determines the existence and magnitude of instrument drift and physical interferences. The respective method specifies the QC acceptance criteria for internal standards. No other project analyses specify the use of internal standards.~~

~~The absolute response of any one internal standard must not deviate more than 60 to 125% of the original response in the calibration blank. If the internal standard recoveries are below the lower acceptance limit, then results reported as detected or not detected shall be qualified as estimated (“JH/UJ”). If the internal standard area counts are above the upper acceptance limit, then results reported as detected shall be qualified as estimated (“JL”).~~

Blanks

Criteria for evaluating blank results are provided in the DEP-EA-001/07. The results for equipment blanks, preparation blanks, and calibration blanks, and other blanks reported in the data package will be reviewed. If the associated sample matrix is a solid; positive rinsate, calibration, and other associated aqueous blank results will be converted to equivalent concentrations in the solid samples by assuming that all contamination found in the aqueous blank aliquot analyzed...

11) Propose to replace the following paragraph with the paragraph in the current QAPP Section 4.2.3.1 for matrix spike assessment.

4.2.3.1 Data Validation

Matrix Spike (MS) Analysis

Criteria for evaluating ~~blank-matrix spike~~ results are provided in the respective method. The analyte recoveries obtained for matrix spike (or matrix duplicate) analyses will be compared to the acceptance range contained in the summary tables in Section 3.2 and Tables 4.2-3 and 4.2-4, above, ~~for cases in which the native sample concentration is less than four times the spike concentration.~~ Recovery calculations are not required if the ~~spiking~~ concentration added is less than 30% of the sample background concentration. ~~The reviewer should also be aware that a matrix spike recovery may be outside acceptance limits when the parent sample is quantified by method of standard additions but the matrix spike is not.~~ In such a case, the matrix spike recovery may not be an appropriate measure of accuracy. Data associated with matrix spike recoveries that are outside the acceptance range will be qualified as follows:

12) Propose to remove selected language in the QAPP section 4.2.3.1 for Duplicate assessment. The words “five times” were removed from the first bullet and the third bullet was removed as it was redundant.

Duplicate Analysis

Criteria for evaluating field duplicate results are provided in the DEP-EA-001/07. Results for the duplicate sample (laboratory duplicate or MSD) analyses will be compared to the acceptance criteria of $\leq 20\%$ for aqueous matrices and $\leq 40\%$ for all other matrices. Precision criteria for non-standard analyses are listed in Tables 4.2-3 and 4.2-4, above. The QC RPD limits are for field duplicate pairs with concentrations reported at or

above the PQL. Sample results meeting this criterion with RPD's greater than project limits, are qualified as estimated, J.

Samples with reported analyte concentrations above the MDL but below the PQL can produce greater variability, leading to greater RPD's. RPD values are non-representative when the following conditions exist:

- One or both results are less than ~~five times~~ the PQL.
- One or both results are qualified as estimated or rejected or are suspected of blank contamination.
- ~~One or both results are not detected.~~

13) Propose to add the following language (entirely new text) at the end of Section 4.2.3.1 Laboratory Data Assessment concerning rejected data.

Corrective Actions for Rejected Data

During the validation process, data can be qualified as rejected ("??") under certain circumstances. When this occurs, the validator has the responsibility of notifying the PM as to the nature of the rejected data. If the rejected data has been determined to be critical to the projects objectives, then the following steps shall be taken:

- 1) The laboratory shall be contacted to determine if any sample remains
- 2) Determine if within holding time

If there is sample and it is still within holding time, then the lab shall reanalyze the sample for that parameter and report results to the PM.

If the sample has been depleted or is beyond the holding time, then the laboratory shall be contacted to provide additional sample containers and the matrix shall be re-sampled for the qualified parameter(s) at the next sampling event (if not already part of the analyte list for that event). The sample will be submitted and analyzed for the additional parameter and reported with the other results for that event.

Provided the re-sampled/re-analyzed results are not rejected, the acceptable result will be reported for the event in which it was collected. If the re-sampled/re-analyzed data is also rejected after review, the validator and PM shall investigate possible causes and provide corrective actions, summarized in the validation report, to minimize missing critical data points in future sampling events.

14) Propose the following language (entirely new text) be added at the end of Section 4.2 or in Section 4.3 concerning modifications made to existing reports/tables.

If any analytical data that is reported as “final” needs to be changed for any reason, a record will be kept of the old value, the corrected value and the reason for the change. The information will be included as an Appendix to the following quarterly or semi-annual report.

15) Have received laboratory SOP's for the following methods: TDS, Gross Alpha, 3500 CR B. The TDS and Gross Alpha SOPs need to be added to QAPP Appendix E and the one currently in the Appendix for CR B needs to be swapped out with the attached file.

16) Paragraph 3, page 4, Oxygen and Hydrogen Isotope Analysis in Appendix B needs to be changed to reflect that the hydrogen isotope now has a $\pm 1\%$ Control Limit.

9.1 Sample QC

For sample QC, a duplicate sample is run every 15 samples analyzed. The acceptance limit for the duplicate analysis is $\pm 20\%$ RPD.

As this method assesses the comparative isotope ratios in the samples versus the standard, there is no Minimum Detectable Limit.

The Control Limit is the statistical level of variability detected by the IRMS ($\pm 0.1\%$ and $\pm 31.0\%$ for oxygen and hydrogen isotope ratios respectively). The hydrogen isotope ratio method by Scrimageour et al. (1993) (Appendix B-9) ~~will be applied to attempt to reduce the hydrogen isotope error rate to $\pm 1\%$. However, if this method is not effective, 3% will be retained until further notice (meeting with Agency on 7/30/10; $\pm 3\%$ deemed acceptable).~~

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Minor Changes proposed (text to be added/deleted is highlighted in red)

Section	Page	Para.	Line	Original text	Change
2.1	2-2	1	2	Daily logs and data forms...	Daily logs and/or data forms...
2.1	2-2	1	6	All daily logs will be kept in a bound, waterproof notebook containing numbered pages.	All daily logs will be kept in a bound, waterproof notebooks containing numbered pages for each individual activity.
2.1.2.1	2-3	1	2	Well purging and sampling data sheets shall be created for each sample location for ease of inclusion in the final	Well purging and sampling data sheets shall be scanned and available included in the FPL electronic database.

				report.	
2.1.2.2	2-4	2	3	▪ Date received and expiration date	▪ Date received bottle opened and expiration date
2.1.2.2	2-4	2	10	▪ Vendor certifications	▪ Vendor certifications (where available)
2.4	2-18	1	1	A total of 31 automated stations (14 groundwater and 20 surface water)...	A total of 38 automated stations (14 groundwater clusters, 20 surface water stations, 1 meteorological station, and 3 flowmeter locations)...
2.4	2-18	2	4	...and data will be uploaded nightly.	...and data will be uploaded nightly daily.
2.4	2-18	3	9	...where water levels are <3 feet...	...where water levels are <3 5 feet...
2.4.1	2-20	2	7	...and a qualified estimated.	...and a qualified as estimated.
2.5.4	2-27	2	2	5. Record the result... Results should be reported to the nearest 10 units.	5. Record the result... Results should be reported to the nearest 10 units.
2.6.2.1	2-32	1	2	...in the original container in a high-density polyethylene (HDPE)...	...in the original container or in a high-density polyethylene (HDPE)...
2.6.4.3	2-38	3	1	2. The rainfall sample will be poured into an appropriately labeled 1-liter polyethylene...	2. The rainfall sample will be poured into an appropriately labeled 1-liter polyethylene...
2.6.6.1	2-43	1	6	Only one site may be listed per COC form.	For data management purposes, preferably only one site media type (e.g. surface water, groundwater, porewater) may be listed per COC form.
2.6.6.1	2-43	3	1	Sample shipping containers (coolers or boxes) are sealed in as many places as necessary to ensure security.	Sample shipping containers (coolers or boxes) are sealed in as many places as necessary to ensure security when shipped by courier.
2.6.6.1	2-43	4	4 th	▪ If required by lab	▪ If required by lab

			bullet	method, samples shall be placed on ice immediately after collection;	method, samples shall be placed on -in ice immediately after collection;
2.11	2-62	1	1	The bathymetric survey will be conducted predominately using sonar equipment...	The bathymetric survey will be conducted predomina te ntly using sonar equipment...

Items for Discussion

Item	Section	Page	Issue
1	2.5. Manual Field Measurements, table 2.5-2	2-23	FPL is proposing to include language clarifying the frequency of IC, ICV and CCVs during quarterly ecological events. See suggested changes to table 2.5-2 below.
2	2.5. Manual Field Measurements	2-23, 2-24	It is FPL's understanding that the measurement of ORP is not required per SFWMD protocols. FPL requests deleting this parameter.
3	2.6.1.3. Field Duplicates	2-31	Are Field Duplicates valid for porewater samples? Extracting too much water from a particular location will result in drawing from above or below that depth and result in non-representative data.
4	2.10. Biscayne Bay Geophysical Study	2-61	As this component of work is still being discussed, FPL proposes modifying the text to allow for changes to be included as an Appendix when the scope has been defined.

Table 2.5-2. Field Instrument Calibration Summary

Parameter	Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
pH	<ul style="list-style-type: none"> – Use at least 2 standards: pH 7 and then pH 4 and/or 10 – Standard choice other than pH 7 is dependent on station pH history – Conduct within 24-hour period prior to use for grab sample collection or if CCV fails 	<ul style="list-style-type: none"> – Read a standard as a sample – Must read within ± 0.2 standard pH units of calibration buffer TV 	<ul style="list-style-type: none"> – Read at the end of the event, no later than 24 hrs after initial calibration – Read without pressing “calibrate” – Two buffers that bracket the sample value range. Preferably use the pH 7 and one other pH 4 or 10 – Must read within ± 0.2 standard pH units of calibration buffer TV
Specific Conductance	<ul style="list-style-type: none"> – Use 1 standard at the upper end of expected sample reading range but no less than 720 $\mu\text{S}/\text{cm}$ – Conduct daily prior to use for grab sample collection or if CCV fails – Conduct within 24-hour period prior to start of quarterly Porewater Sampling event or if CCV fails during event 	<ul style="list-style-type: none"> – Read after pressing “Calibrate” – Up to 3 standards that bracket the sample range – Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> – Read at the end of the event, or within 24 hrs of initial calibration for grab sample collection. – Read only (do not press “calibrate”) – For Porewater Nutrient and Tracer Suite Sampling (Section 2.6.4.5.) events, read at start and end of each day – One standard used to verify calibration. Must be within $\pm 5\%$ of TV
Temperature			<ul style="list-style-type: none"> – Monthly verification against NIST-traceable thermometer – Must be within $\pm 0.5^\circ\text{C}$ of NIST traceable readings

APPENDIX B:

AUTOMATED MONITORING STATION PHOTOS



Figure B-1. TPGW-1.



Figure B-2. TPGW-2.



Figure B-3. TPGW-3.



Figure B-4. TPGW-4.



Figure B-5. TPGW-5.



Figure B-6. TPGW-6.



Figure B-7. TPGW-7.



Figure B-8. TPGW-8.



Figure B-9. TPGW-9



Figure B-10. TPGW-12.

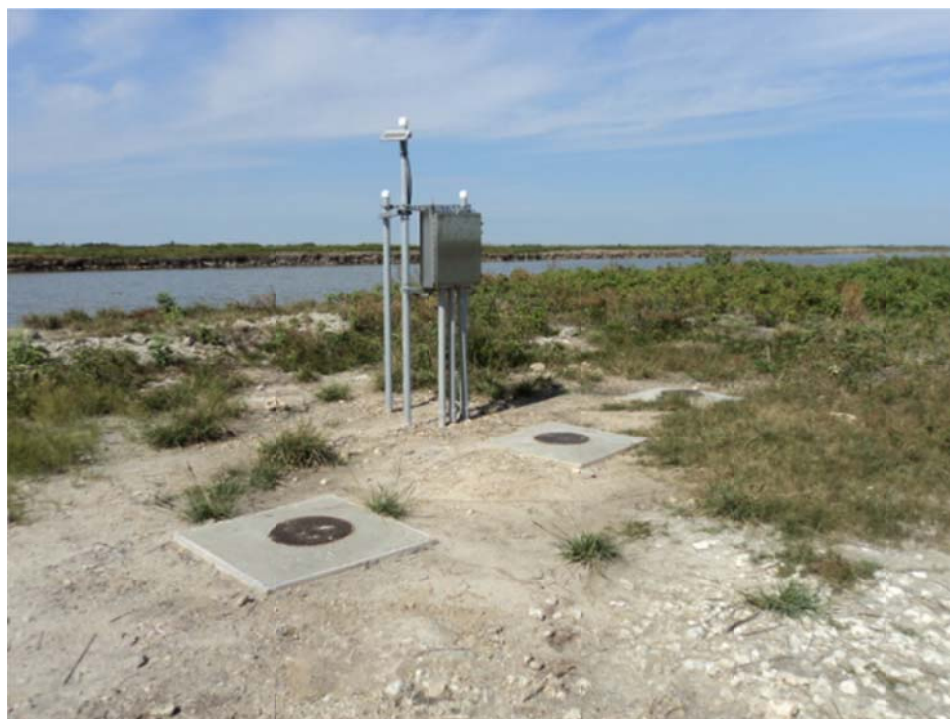


Figure B-11. TPGW-13.



Figure B-12. TPGW-14 (TPGW-10 and TPGW-11 Similar).



Figure B-13. TPSWC-1.



Figure B-14. TPSWC-2.



Figure B-15. TPSWC-3.



Figure B-16. TPSWC-4.



Figure B-17. TPSWC-5.



Figure B-18. TPSWC-6.



Figure B-19. TPSWCC-1.



Figure B-20. TPSWCC-2.



Figure B-21. TPSWCC-3.



Figure B-22. TPSWCC-4.



Figure B-23. TPWSCC-5.



Figure B-24. TPSWCC-6.



Figure B-25. TPSWCC-7.



Figure B-26. TPSWID-1.



Figure B-27. TPSWID-2.



Figure B-28. TPSWID-3.

Biscayne Bay surface water sensor



Figure B-29. BBSW-1, BBSW-2, BBSW-4 and BBSW-5 pad with sensor placed on Bottom of Biscayne Bay.

APPENDIX C:

SURVEY OF WELLS, SURFACE WATER STATIONS, AND STAFF GAUGES

APPENDIX C-1:

SURVEY OF WELLS, SURFACE WATER STATIONS, AND STAFF GAUGES

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-1**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 29/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet

NORTHING: **400370.50**

EASTING: **869224.72**

OTHER:

NORTHING: n/a

EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°26'04.7"**

LONGITUDE: (D M S) **80°21'15.8"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: A. Jones
FIELD BOOK: 1293
PAGE: 65

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **5.75 (NORTH WELL) D**

TOP OF CASING ELEVATION: **5.46 (MIDDLE WELL) M**

TOP OF CASING ELEVATION: **5.35 (SOUTH WELL) S**

ADJACENT GROUND ELEVATION: **3.70**

TOP OF WATER ELEVATION: **1.94**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **4.22 (NORTH WELL)**

TOP OF CASING ELEVATION: **3.93 (MIDDLE WELL)**

TOP OF CASING ELEVATION: **3.82 (SOUTH WELL)**

ADJACENT GROUND ELEVATION: **2.17**

TOP OF WATER ELEVATION: **0.41**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE,
PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN
OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND
INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH
AVENUE (TALLAHASSEE ROAD) FOR APPROXIMATELY .9 MILES TO A FOUR WAY
INTERSECTION OF SW 360TH STREET AND SW 137TH AVE, THENCE PROCEED
EASTERLY ALONG SW 360TH STREET APPROXIMATELY 3.6 MILES, AND THE STATION
IS ON THE RIGHT, APPROXIMATELY 365' SOUTH OF SAID DIRT ROAD.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-2**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **381474.87**
EASTING: **864215.31**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'54.2"**
LONGITUDE: (D M S) **80°22'11.4"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 37

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **2.66 (WEST WELL) D**
TOP OF CASING ELEVATION: **2.69 (MIDDLE WELL) M**
TOP OF CASING ELEVATION: **2.88 (EAST WELL) S**
ADJACENT GROUND ELEVATION: **3.15**
TOP OF WATER ELEVATION: **1.02 (@9:38 A.M.4/08/10)**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **1.13 (WEST WELL)**
TOP OF CASING ELEVATION: **1.16 (MIDDLE WELL)**
TOP OF CASING ELEVATION: **1.35 (EAST WELL)**
ADJACENT GROUND ELEVATION: **1.62**
TOP OF WATER ELEVATION: **(-)0.51 @9:38 A.M.(4/08/10)**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 4.8 MILES TO A T INTERSECTION WITH A DIRT ROAD TO THE EAST; THENCE EASTERLY ALONG SAID ROAD APPROXIMATELY 475 FEET, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-3**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **368170.17**
EASTING: **871571.52**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°20'42.1"**
LONGITUDE: (D M S) **80°20'51.9"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 38

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **2.63 (SOUTH WELL) D**
TOP OF CASING ELEVATION: **2.75 (MIDDLE WELL) M**
TOP OF CASING ELEVATION: **2.97 (NORTH WELL) S**
ADJACENT GROUND ELEVATION: **3.07**
TOP OF WATER ELEVATION: **1.02 (NO WATER; IN WETLAND)**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **1.10 (SOUTH WELL)**
TOP OF CASING ELEVATION: **1.22 (MIDDLE WELL)**
TOP OF CASING ELEVATION: **1.44 (NORTH WELL)**
ADJACENT GROUND ELEVATION: **1.54**
TOP OF WATER ELEVATION: **(-)0.51 (NO WATER; IN WETLAND)**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 4.8 MILES TO A "T" INTERSECTION WITH A DIRT ROAD TO THE EAST; THENCE EASTERLY ALONG SAID ROAD APPROXIMATELY 1250 FEET TO AN INTERSECTING NORTH - SOUTH DIRT ROAD; THENCE SOUTHERLY ALONG SAID DIRT ROAD PARALLELING A CANAL, FOR APPROXIMATELY 1.7 MILES TO THE END OF SAID CANAL; THENCE AROUND THE END OF SAID CANAL AND PROCEED EASTERLY ALONG THE SOUTH PERIMETER OF THE FLORIDA POWER AND LIGHT COOLING CANAL

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-4**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 23/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet

NORTHING: **377146.79**

EASTING: **850230.06**

OTHER:

NORTHING: n/a

EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'12.0"**

LONGITUDE: (D M S) **80°24'44.1"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 49

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **3.77 (WEST WELL) S**

TOP OF CASING ELEVATION: **3.35 (MIDDLE WELL) M**

TOP OF CASING ELEVATION: **3.45 (EAST WELL) D**

ADJACENT GROUND ELEVATION: **3.87**

TOP OF WATER ELEVATION: **1.91 (@ 1:30 P.M. 4/27/10)**

OTHER ELEVATION: **3.42 (INDUCTION WELL)**

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **2.24 (WEST WELL)**

TOP OF CASING ELEVATION: **1.82 (MIDDLE WELL)**

TOP OF CASING ELEVATION: **1.92 (EAST WELL)**

ADJACENT GROUND ELEVATION: **2.34**

TOP OF WATER ELEVATION: **0.38 (@ 1:30 P.M. 4/27/10)**

OTHER ELEVATION: **1.89 (INDUCTION WELL)**

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE (TALLAHASSEE ROAD) FOR APPROXIMATELY 5.35 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-5**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 35/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet

NORTHING: **396540.10**

EASTING: **852970.85**

OTHER:

NORTHING: n/a

EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'23.9"**

LONGITUDE: (D M S) **80°24'13.3"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: A. JONES
FIELD BOOK: 1293
PAGE: 60

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **6.75 (NORTH WELL) D**

TOP OF CASING ELEVATION: **6.60 (MIDDLE WELL) M**

TOP OF CASING ELEVATION: **6.88 (SOUTH WELL) S**

ADJACENT GROUND ELEVATION: **0.97**

TOP OF WATER ELEVATION: **2.43**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **5.22 (NORTH WELL)**

TOP OF CASING ELEVATION: **5.07 (MIDDLE WELL)**

TOP OF CASING ELEVATION: **5.35 (SOUTH WELL)**

ADJACENT GROUND ELEVATION: **-0.56**

TOP OF WATER ELEVATION: **0.90**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.6 MILES TO THE EAST SIDE OF HOMESTEAD INTERNATIONAL SPEED WAY AND THE INTERSECTION OF PALM DRIVE AND SW 132ND AVENUE; THENCE SOUTHERLY ALONG SW 132ND AVENUE APPROXIMATELY 1.7 MILES, AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-6**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 24/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet

NORTHING: **408308.23**

EASTING: **858449.71**

OTHER:

NORTHING: n/a

EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°27'20.3"**

LONGITUDE: (D M S) **80°23'13.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: A. JONES
FIELD BOOK: 1293
PAGE: 49

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **3.09 (WEST WELL) S**

TOP OF CASING ELEVATION: **3.05 (MIDDLE WELL) M**

TOP OF CASING ELEVATION: **3.12 (EAST WELL) D**

ADJACENT GROUND ELEVATION: **3.33**

TOP OF WATER ELEVATION: **2.14**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **1.56 (WEST WELL)**

TOP OF CASING ELEVATION: **1.52 (MIDDLE WELL)**

TOP OF CASING ELEVATION: **1.59 (EAST WELL)**

ADJACENT GROUND ELEVATION: **1.80**

TOP OF WATER ELEVATION: **0.61**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 6.1 MILES TO THE INTERSECTION OF PALM DRIVE AND COLONIAL ROAD; THENCE NORTHERLY ALONG COLONIAL ROAD APPROXIMATELY .5 MILES TO THE INTERSECTION OF COLONIAL ROAD AND SW 336TH STREET; THENCE WESTERLY ALONG SW 336TH STREET FOR APPROXIMATELY .45 MILE, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-7**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 27/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **400399.26**
EASTING: **844938.92**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°26'02.5"**
LONGITUDE: (D M S) **80°25'40.7"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: A. JONES
FIELD BOOK: 1293
PAGE: 54

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **2.89 (NORTH WELL) S**
TOP OF CASING ELEVATION: **2.78 (MIDDLE WELL) M**
TOP OF CASING ELEVATION: **2.72 (SOUTH WELL) D**
ADJACENT GROUND ELEVATION: **3.05**
TOP OF WATER ELEVATION: **2.62**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **1.36 (NORTH WELL)**
TOP OF CASING ELEVATION: **1.25 (MIDDLE WELL)**
TOP OF CASING ELEVATION: **1.19 (SOUTH WELL)**
ADJACENT GROUND ELEVATION: **1.52**
TOP OF WATER ELEVATION: **1.09**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY .9 MILES TO A 4-WAY INTERSECTION OF A DIRT ROAD BEING SW 137TH AVENUE AND SW 360TH AVENUE ; THENCE PROCEED WESTERLY ALONG SW 360TH STREET APPROXIMNATELY 1 MILE TO A FOUR WAY INTERSECTION BEING 3 MILE ROAD; THENCE PROCEED SOUTHERLY ALONG 3 MILE ROAD APPROXIMATELY 235 FEET, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-8**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 5/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **391668.92**
EASTING: **836914.63**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'36.4"**
LONGITUDE: (D M S) **80°27'08.7"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 56

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **1.95 (WEST WELL) S**
TOP OF CASING ELEVATION: **2.08 (MIDDLE WELL) M**
TOP OF CASING ELEVATION: **1.98 (EAST WELL) D**
ADJACENT GROUND ELEVATION: **2.29**
TOP OF WATER ELEVATION: **0.95 (@1:27 P.M. 4/29/10)**
OTHER ELEVATION: **2.48 (INDUCTION WELL)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **0.42 (WEST WELL)**
TOP OF CASING ELEVATION: **0.55 (MIDDLE WELL)**
TOP OF CASING ELEVATION: **0.45 (EAST WELL)**
ADJACENT GROUND ELEVATION: **0.76**
TOP OF WATER ELEVATION: **0.75-0.58**
OTHER ELEVATION: **0.95 (INDUCTION WELL)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 2.5 MILES; THENCE LEAVING SW 137TH AVENUE, PROCEED EASTERLY 1.30 MILES TO THE STATION.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-9**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 24/58/38
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet

NORTHING: **378736.05**

EASTING: **828416.55**

OTHER:

NORTHING: n/a

EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'28.6"**

LONGITUDE: (D M S) **80°28'41.9"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 18

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **5.05 (WEST WELL) D**

TOP OF CASING ELEVATION: **5.06 (MIDDLE WELL) M**

TOP OF CASING ELEVATION: **5.16 (EAST WELL) S**

ADJACENT GROUND ELEVATION: **5.19**

TOP OF WATER ELEVATION: **1.88**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **3.52 (WEST WELL)**

TOP OF CASING ELEVATION: **3.53 (MIDDLE WELL)**

TOP OF CASING ELEVATION: **3.63 (EAST WELL)**

ADJACENT GROUND ELEVATION: **3.66**

TOP OF WATER ELEVATION: **0.35**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND SW 424TH STREET, PROCEED WESTERLY ALONG SW 424TH STREET APPROXIMATELY .9 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-10**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: N/A
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **403068.56**
EASTING: **879007.59**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°26'27.4**
LONGITUDE: (D M S) **80°19'29.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 69

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

NOTE: ELEVATIONS SHOWN HEREON ARE GPS VALUES ONLY

TOP OF CASING ELEVATION: **10.0 (WEST WELL) M**
TOP OF CASING ELEVATION: **10.1 (SOUTH WELL) D**
TOP OF CASING ELEVATION: **10.0 (EAST WELL) S**

ADJACENT GROUND ELEVATION: n/a

TOP OF WATER ELEVATION: **1.20**

OTHER ELEVATION: **-3.8 (BOTTOM OF BAY)**

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

NOTE: ELEVATIONS SHOWN HEREON ARE GPS VALUES ONLY

TOP OF CASING ELEVATION: **8.5' (WEST WELL)**
TOP OF CASING ELEVATION: **8.6' (SOUTH WELL)**
TOP OF CASING ELEVATION: **8.4' (EAST WELL)**

ADJACENT GROUND ELEVATION: n/a

TOP OF WATER ELEVATION: **-0.30**

OTHER ELEVATION: **-5.3 (BOTTOM OF BAY)**

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

THIS STATION IS LOCATED IN BISCAYNE BAY AND IS ACCESSIBLE ONLY BY BOAT. THE STATION IS APPROXIMATELY 0.2 MILES FROM THE PICNIC AREA AT THE NORTHEAST CORNER OF THE PLANT, 0.2 MILES EASTERLY OF THE ENTERANCE TO THE PARCE CANAL., AND 0.4 MILES NORTHWESTERLY OF TURKEY POINT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-11**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: N/A
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **387153.20**
EASTING: **885870.08**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'49.4"**
LONGITUDE: (D M S) **80°18'15.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 70

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

NOTE: ELEVATIONS SHOWN HEREON ARE GPS VALUES ONLY

TOP OF CASING ELEVATION: **10.0 (NORTH WELL) M**
TOP OF CASING ELEVATION: **10.0 (SOUTH WELL) S**
TOP OF CASING ELEVATION: **10.0 (EAST WELL) D**
ADJACENT GROUND ELEVATION: n/a
TOP OF WATER ELEVATION: **1.40**
OTHER ELEVATION: **-5.1 (BOTTOM OF BAY)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

NOTE: ELEVATIONS SHOWN HEREON ARE GPS VALUES ONLY

TOP OF CASING ELEVATION: **8.5' (NORTH WELL)**
TOP OF CASING ELEVATION: **8.5' (SOUTH WELL)**
TOP OF CASING ELEVATION: **8.5' (EAST WELL)**
ADJACENT GROUND ELEVATION: n/a
TOP OF WATER ELEVATION: **-0.10**
OTHER ELEVATION: **-6.7 (BOTTOM OF BAY)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

THIS STATION IS LOCATED IN BISCAYNE BAY AND IS ACCESSIBLE ONLY BY BOAT. THE STATION IS APPROXIMATELY 1.5 MILES FROM THE EASTERLY PERIMETER ROAD SURROUNDING THE COOLING CANALS, 3.8 MILES FROM THE SOUTHERLY OUTFALL OF SAID COOLING CANALS, AND .6 MILES NORTHEASTERLY OF MANGROVE KEY, AND .50 MILES SOUTHWESTERLY OF WEST ARSENIKER KEY, AS SHOWN ON ARSENIKER KEYS QUADRANGLE, 1997.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-12**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 21/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet

NORTHING: **405872.31**

EASTING: **874044.91**

OTHER:

NORTHING: n/a

EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°26'55.4"**

LONGITUDE: (D M S) **80°20'22.9"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: A. JONES
FIELD BOOK: 1293
PAGE: 52

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **2.05 (NORTHWEST WELL) S**

TOP OF CASING ELEVATION: **2.26 (MIDDLE WELL) M**

TOP OF CASING ELEVATION: **2.29 (SOUTHEAST WELL) D**

ADJACENT GROUND ELEVATION: **2.43**

TOP OF WATER ELEVATION: **1.28**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **0.52 (NORTHWEST WELL)**

TOP OF CASING ELEVATION: **0.73 (MIDDLE WELL)**

TOP OF CASING ELEVATION: **0.76 (SOUTHEAST WELL)**

ADJACENT GROUND ELEVATION: **0.90**

TOP OF WATER ELEVATION: **-0.25**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.1 MILES TO A DIRT ROAD HEADING NORTHWESTERLY ALONG A FLORIDA POWER AND LIGHT TRANSMISSION POWERLINE CORRIDOR; THENCE NORTHWESTERLY ALONG SAID ROAD APPROXIMATELY .8 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-13**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet

NORTHING: **386028.29**

EASTING: **870094.12**

OTHER:

NORTHING: n/a

EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'39.0"**

LONGITUDE: (D M S) **80°21'07.1"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 53

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF CASING ELEVATION: **3.72 (NORTH WELL) S**

TOP OF CASING ELEVATION: **3.66 (MIDDLE WELL) M**

TOP OF CASING ELEVATION: **3.71 (SOUTH WELL) D**

ADJACENT GROUND ELEVATION: **3.94**

TOP OF WATER ELEVATION: **1.34 (@9:00 A.M. 4/29/10)**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF CASING ELEVATION: **2.19 (NORTH WELL)**

TOP OF CASING ELEVATION: **2.13 (MIDDLE WELL)**

TOP OF CASING ELEVATION: **2.18 (SOUTH WELL)**

ADJACENT GROUND ELEVATION: **2.41**

TOP OF WATER ELEVATION: **(-0.19) (@9:00 A.M. 4/29/10)**

OTHER ELEVATION:

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

THIS STATION IS LOCATED IN THE FLORIDA POWER AND LIGHT COOLING CANALS, AND IS ACCESSIBLE ONLY BY BOAT. THE STATION IS APPROXIMATELY 2.7 MILES NORTHERLY (ALONG THE WEST PERIMETER ROAD OF THE FLORIDA POWER AND LIGHT COOLING CANALS) OF THE SOUTHWEST CORNER OF SAID CANALS; THE STATION IS APPROXIMATELY .8 MILES WEST OF SAID WEST PERIMETER ROAD, AND IS LOCATED ON THE TOP OF BANK

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPGW-14**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: N/A
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **371583.02**
EASTING: **878660.59**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'15.5**
LONGITUDE: (D M S) **80°19'34.5"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 71

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

NOTE: ELEVATIONS SHOWN HEREON ARE GPS VALUES ONLY

TOP OF CASING ELEVATION: **10.4 (WEST WELL) M**
TOP OF CASING ELEVATION: **10.4 (SOUTH WELL) D**
TOP OF CASING ELEVATION: **10.2 (EAST WELL) S**

ADJACENT GROUND ELEVATION: n/a

TOP OF WATER ELEVATION: **1.9'**

OTHER ELEVATION: **-6.0 (BOTTOM OF BAY)**

ORDER: 3rd

CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

NOTE: ELEVATIONS SHOWN HEREON ARE GPS VALUES ONLY

TOP OF CASING ELEVATION: **8.9' (WEST WELL)**
TOP OF CASING ELEVATION: **8.9' (SOUTH WELL)**
TOP OF CASING ELEVATION: **8.7' (EAST WELL)**

ADJACENT GROUND ELEVATION: n/a

TOP OF WATER ELEVATION: **0.4'**

OTHER ELEVATION: **-7.4 (BOTTOM OF BAY)**

ORDER: 3rd

CLASS: n/a

HOW TO REACH DESCRIPTION:

THIS STATION IS LOCATED IN BISCAYNE BAY AND IS ACCESSIBLE ONLY BY BOAT. THE STATION IS APPROXIMATELY 650 FEET EAST OF SHORE, APPROXIMATELY .4 MILES SOUTHEASTERLY OF THE SOUTHEAST CORNER OF THE EASTERLY PERIMETER ROAD SURROUNDING THE COOLING CANALS, AND .6 MILES NORTHEASTERLY OF THE OUTFALL FOR SAID COOLING CANALS.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **L-3**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395174.77
EASTING: 868070.48

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'09.7"
LONGITUDE: (D M S) 80°21'28.7"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 35

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: 8.62
ADJACENT GROUND ELEVATION: 6.26
TOP OF WATER ELEVATION: 1.12
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: 7.09
ADJACENT GROUND ELEVATION: 4.73
TOP OF WATER ELEVATION: -0.41
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 140 FEET AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **L-5**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **384172.12**
EASTING: **864578.87**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'20.9"**
LONGITUDE: (D M S) **80°22'07.3"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 36

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: **8.08**
ADJACENT GROUND ELEVATION: **8.65**
TOP OF WATER ELEVATION: **1.13**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: **6.55**
ADJACENT GROUND ELEVATION: **7.12**
TOP OF WATER ELEVATION: **-0.39**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 1.6 MILES AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **G-21**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 35/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 397623.99
EASTING: 850250.19

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'34.8"
LONGITUDE: (D M S) 80°24'42.9"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 50

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: 7.22
ADJACENT GROUND ELEVATION: 4.83
TOP OF WATER ELEVATION: n/a
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: 5.64
ADJACENT GROUND ELEVATION: 3.3
TOP OF WATER ELEVATION: n/a
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 1.48 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **G-28**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 11/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 384570.36
EASTING: 850249.12

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:

NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'25.5"
LONGITUDE: (D M S) 80°24'43.6"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 14

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: 5.89'
ADJACENT GROUND ELEVATION: 3.96
TOP OF WATER ELEVATION: 1.95
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: 4.36'
ADJACENT GROUND ELEVATION: 2.43
TOP OF WATER ELEVATION: 0.42
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 3.95 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **G-35**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 9/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 384137.81
EASTING: 839650.48

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'21.7"
LONGITUDE: (D M S) 80°26'39.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 39

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: 4.19'
ADJACENT GROUND ELEVATION: 3.87
TOP OF WATER ELEVATION: 2.21
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: 2.66'
ADJACENT GROUND ELEVATION: 2.34
TOP OF WATER ELEVATION: 0.68
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND
OLD CARD SOUND ROAD, PROCEED SOUTHEASTERLY
APPROXIMATELY 3.68 MILES TO THE INTERSECTION OF SW 408TH
STREET AND THE ENTRANCE TO A CEMEX CONCRETE PLANT AND
THE STATION IS ON THE LEFT

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWCCS-1**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **399856.46**
EASTING: **870602.49**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'56.0"**
LONGITUDE: (D M S) **80°21'00.8"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 75

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF WELL ELEVATION: **8.87**
ADJACENT GROUND ELEVATION: **7.5**
TOP OF WATER ELEVATION: **1.63**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF WELL ELEVATION: **7.34**
ADJACENT GROUND ELEVATION: **6.0**
TOP OF WATER ELEVATION: **0.10**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PAL
PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEN
ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POIN
FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1
A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILI
NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPR
1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST COR
FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHE
A DIKE ROAD FOR APPROXIMATELY 700 FEET AND THE STATION IS ON

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWCCS-2**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 386024.05
EASTING: 870128.37

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'39.0"
LONGITUDE: (D M S) 80°21'06.7"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK:
PAGE:

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF WELL ELEVATION: 8.01
ADJACENT GROUND ELEVATION: 3.6
TOP OF WATER ELEVATION: 0.96
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF WELL ELEVATION: 6.48
ADJACENT GROUND ELEVATION: 2.1
TOP OF WATER ELEVATION: -0.57
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

THIS STATION IS LOCATED IN THE FLORIDA POWER AND LIGHT COOLING CANALS AND IS ACCESSIBLE ONLY BY BOAT. THE STATION IS APPROXIMATELY NORTHERLY (ALONG THE WEST PERIMETER ROAD OF THE FLORIDA POWER AND LIGHT COOLING CANALS) OF THE SOUTHWEST CORNER OF SAID CANAL. STATION IS APPROXIMATELY .8 MILES WEST OF SAID WEST PERIMETER ROAD. STATION IS LOCATED ON THE TOP OF BANK.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWCCS-3**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **375234.90**
EASTING: **865072.64**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'52.4"**
LONGITUDE: (D M S) **80°22'02.4"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK:
PAGE:

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF WELL ELEVATION: **6.56**
ADJACENT GROUND ELEVATION: **5.1**
TOP OF WATER ELEVATION: **1.51**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF WELL ELEVATION: **5.03**
ADJACENT GROUND ELEVATION: **3.5**
TOP OF WATER ELEVATION: **-0.02**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE,
EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND TH-
TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONT-
SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE
HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BI
WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WE
NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPRC
MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APP
4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND TAKE AN IMME
THENCE HEADING WEST, PRCEED 1.75 MILES, TO A DIKE ROAD TO THE NORTH
NROTHERLY ALONG SAID ROAD FOR APPROXIMATELY .5 MILES, AND THE STATIO
LEFT

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWCCS-4**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 28/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 372552.01
EASTING: 874190.45

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'25.3"
LONGITUDE: (D M S) 80°20'23.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK:
PAGE:

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF WELL ELEVATION: 8.97
ADJACENT GROUND ELEVATION: 6.0
TOP OF WATER ELEVATION: 1.31
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF WELL ELEVATION: 7.44
ADJACENT GROUND ELEVATION: 4.5
TOP OF WATER ELEVATION: -0.22
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THENCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BIWAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 4.4 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 125 FEET, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWCCS-5**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 16/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 383975.98
EASTING: 876770.87

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'18.4"
LONGITUDE: (D M S) 80°19'54.4"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK:
PAGE:

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF WELL ELEVATION: 9.64
ADJACENT GROUND ELEVATION: 5.0
TOP OF WATER ELEVATION: 1.09
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF WELL ELEVATION: 8.11
ADJACENT GROUND ELEVATION: 3.5
TOP OF WATER ELEVATION: -0.44
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THENCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE CONTINUE HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BIWAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 4.4 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND GO LEFT HEADING NORTH FOR APPROXIMATELY .45 MILES TO A 90 DEGREE BEND IN THE ROAD; THENCE NORTH APPROXIMATELY 2.2 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWCCS-6**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 27/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING:
EASTING:

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'56.2"
LONGITUDE: (D M S) 80°19'40.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK:
PAGE:

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF WELL ELEVATION: 8.1
ADJACENT GROUND ELEVATION: 4.2
TOP OF WATER ELEVATION: 0.44
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF WELL ELEVATION: 6.57
ADJACENT GROUND ELEVATION: 2.7
TOP OF WATER ELEVATION: -1.09
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE,
EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND TH
TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONT
SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION AND A
CROSSING A COOLING CANAL; THENCE ACROSS SAID BRIDGE TO ANOTHER
INTERSECTION; THENCE ACCROSS SAID INTERSECTION TO A 3-WAY INTERSECTI
EASTERLY ALONG THE SOUTHERN PERIMETER OF THE POWER PLANT BUILDINGS
TO THE NORTH; THENCE NORTHERLY ALONG SAID CURVETO THE APPROXIMATE
TANGENT; THENCE NORTHERLY APPROXIMATELY 385 FEET AND THE STATION IS O

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWCCS-7**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 388895.22
EASTING: 867117.10

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°24'07.6"
LONGITUDE: (D M S) 80°21'39.4"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 76

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

TOP OF WELL ELEVATION: 8.64
ADJACENT GROUND ELEVATION: 7.1
TOP OF WATER ELEVATION: 1.59
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

TOP OF WELL ELEVATION: 7.11
ADJACENT GROUND ELEVATION: 5.6
TOP OF WATER ELEVATION: 0.06
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE,
EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND TH
TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONT
SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE
HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THEN
WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NO
CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTH
A DIKE ROAD FOR APPROXIMATELY 2.2 MILES AND THE STATION IS ON THE

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWC-1**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 29/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **400382.84**
EASTING: **869695.21**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°26'01.2"**
LONGITUDE: (D M S) **80°21'10.7"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 72

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: **8.94**
ADJACENT GROUND ELEVATION: **9.1**
TOP OF WATER ELEVATION: **2.36**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: **7.41**
ADJACENT GROUND ELEVATION: **7.6**
TOP OF WATER ELEVATION: **0.83**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED
EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER
MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH
STREET; THENCE SOUTHERLY ALONG SW 376TH STREET APPROXIMATELY 1.0 MILES, AND THE
STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWC-2**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 5/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **390267.80**
EASTING: **866475.79**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'21.2"**
LONGITUDE: (D M S) **80°21'46.3"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 73

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: **8.92**
ADJACENT GROUND ELEVATION: **7.4**
TOP OF WATER ELEVATION: **2.34**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: **7.39**
ADJACENT GROUND ELEVATION: **5.9**
TOP OF WATER ELEVATION: **0.81**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED
EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER
MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH
STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER
CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY
2.7 MILES TO A "T" INTERSECTION; THENCE EASTERLY APPROXIMATELY . 2 MILES TO AN
INTERSECTION WITH A NORTH SOUTH ROAD; THENCE PROCEED NORTHERLY ALONG SAID
ROAD FOR APPROXIMATELY 1.6 MILES, AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWC-3**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **377048.39**
EASTING: **862275.73**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'10.4"**
LONGITUDE: (D M S) **80°22'32.8"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 74

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: **8.71**
ADJACENT GROUND ELEVATION: **7.9**
TOP OF WATER ELEVATION: **2.35**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: **7.18**
ADJACENT GROUND ELEVATION: **6.4**
TOP OF WATER ELEVATION: **0.82**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED
EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER
MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH
STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER
CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY
3.8 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWC-4**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 21/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **372380.36**
EASTING: **865031.68**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'24.1"**
LONGITUDE: (D M S) **80°22'03.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 78

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: **6.67**
ADJACENT GROUND ELEVATION: **2.6**
TOP OF WATER ELEVATION: **1.62**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: **5.14**
ADJACENT GROUND ELEVATION: **1.1**
TOP OF WATER ELEVATION: **0.09**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED
EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE
TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG
SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT,
HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-
WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A
NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0
MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY
4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND PROCEED WESTERLY
APPROXIMATELY 1.8 MILES, AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **TPSWC-5**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 28/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **372480.15**
EASTING: **874597.16**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'24.62"**
LONGITUDE: (D M S) **80°20'18.7"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE:
STAMPING
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 80

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
TOP OF WELL ELEVATION: **7.15**
ADJACENT GROUND ELEVATION: **3.4**
TOP OF WATER ELEVATION: **1.33**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
TOP OF WELL ELEVATION: **5.62**
ADJACENT GROUND ELEVATION: **1.89**
TOP OF WATER ELEVATION: **-0.2**
OTHER ELEVATION:
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND GO LEFT HEADING EAST FOR APPROXIMATELY 385 FEET; THENCE SOUTH APPROXIMATELY 150 FEET AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-1 (TRANSECT "A" WEST -NORTHERN-)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Arsenicker Keys
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	32/57/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **400101.36**
EASTING: **869604.09**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'58.4"**
LONGITUDE: (D M S) **80°21'11.7"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	25

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.0' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.47' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET APPROXIMATELY 1.1 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-1A (TRANSECT "A" WEST -SOUTHERN-)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **400101.36**
EASTING: **869604.09**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'58.4"**
LONGITUDE: (D M S) **80°21'11.7"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010 (Verified)
TYPE: n/a
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 25

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.92' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.39' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET APPROXIMATELY 1.1 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-2 (TRANSECT "A" MIDDLE)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **399888.30**
EASTING: **870530.43**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'56.3**
LONGITUDE: (D M S) **80°21'01.6**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010 (Verified)
TYPE: n/a
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 30

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.99' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.46' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 775 FEET AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-3 (TRANSECT "A" EAST)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Arsenicker Keys
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	32/57/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **399858.03**
EASTING: **870597.03**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'56.0"**
LONGITUDE: (D M S) **80°21'00.9"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	30

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.97' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.44' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 775 FEET AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-4 (TRANSECT "B" WEST)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Arsenicker Keys
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	32/57/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **395176.46**
EASTING: **868034.56**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'09.7"**
LONGITUDE: (D M S) **80°21'29".1"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	26

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.01 (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.48' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 175 FEET AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-5 (TRANSECT "B" MIDDLE)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **395226.72**
EASTING: **869041.68**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'10.2"**
LONGITUDE: (D M S) **80°21'18.1"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010 (Verified)
TYPE: n/a
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 31

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.00' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.47' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 1.1 MILES AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-6 (TRANSECT "B" EAST)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **395217.34**
EASTING: **869112.44**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'10.1"**
LONGITUDE: (D M S) **80°21'17.3"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010 (Verified)
TYPE: n/a
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 31

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.00' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.47' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 1.1 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-7(TRANSECT "C" WEST)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Arsenicker Keys
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	7/58/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **389266.72**
EASTING: **866157.38**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'11.3"**
LONGITUDE: (D M S) **80°21'49.9"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	27

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.01 (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.48' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 1.2 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-8 (TRANSECT "C" MIDDLE)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Arsenicker Keys
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	8/58/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **388958.10**
EASTING: **867049.03**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'08.2"**
LONGITUDE: (D M S) **80°21'40.1"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	32

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.03' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.50' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 2.3 MILES AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-9 (TRANSECT "C" EAST)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Arsenicker Keys
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	8/58/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **388899.74**
EASTING: **867104.76**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'07.6"**
LONGITUDE: (D M S) **80°21'39.5"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	32

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.97' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.44' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 2.3 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-10 (TRANSECT "D" WEST)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Arsenicker Keys
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	18/58/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **382608.82**
EASTING: **864038.48**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'05.4"**
LONGITUDE: (D M S) **80°22'13.3"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	28

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.02 (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.49' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 2.5 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-11 (TRANSECT "D" MIDDLE)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **382285.25**
EASTING: **865079.61**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'02.2"**
LONGITUDE: (D M S) **80°22'02.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010 (Verified)
TYPE: n/a
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 33

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.00' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.47' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 3.6 MILES AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-12 (TRANSECT "D" EAST)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **382255.01**
EASTING: **865162.73**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'01.9"**
LONGITUDE: (D M S) **80°22'01.1"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010 (Verified)
TYPE: n/a
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 33

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.00' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.47' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 3.6 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-13 (TRANSECT "E" WEST)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Card Sound
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	19/58/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **376296.35**
EASTING: **862037.84**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'03.0"**
LONGITUDE: (D M S) **80°22'35.4"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	29

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.00' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.47' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 3.8 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-14 (TRANSECT "E" MIDDLE)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **375234.34**
EASTING: **865077.67**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'52.3"**
LONGITUDE: (D M S) **80°22'02.4"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010 (Verified)
TYPE: n/a
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 34

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.02' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.49' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 5.0 MILES AND THE STATION IS ON THE RIGHT.

APPENDIX C-1
SUMMARY FORM

DESIGNATION:	STAFF GAUGE-15 (TRANSECT "E" EAST)
COUNTY:	Miami-Dade
NAME OF USGS QUADRANGLE:	Card Sound
PROJECT:	Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE:	19/58/40
STATUS:	Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **375241.46**
EASTING: **865173.60**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'52.4"**
LONGITUDE: (D M S) **80°22'01.3"**

MONUMENTED BY:	CivilSurv Design Group Inc.
YEAR SET:	2010 (Verified)
TYPE:	n/a
STAMPING	n/a
PARTY CHIEF:	T. Corbett
FIELD BOOK:	785
PAGE:	34

VERTICAL DATA
NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.00' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.47' (AT 3' MARK)**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 5.0 MILES AND THE STATION IS ON THE LEFT.

APPENDIX C-2: BENCHMARK BOOKS

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-1A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 29/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 400730.07
EASTING: 869631.52

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°26'04.7"
LONGITUDE: (D M S) 80°21'11.4"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 5

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: 3.85
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: 2.32
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY .5 MILES TO IN INTERSECTING DIRT ROAD (SW 352ND STREET); THENCE CONTINUE SOUTHERLY ALONG SW 137TH AVENUE TO ANOTHER INTERSECTING DIRT ROAD (SW 360TH STREET); THENCE PROCEED EASTERLY ON SAID ROAD APPROXIMATELY 3.7 MILES AND THE STATION IS ON THE LEFT. SAID STATION IS APPROXIMATELY 27 FET EAST OF THE L-31 CANAL AND 75 FEET NORTH OF THE INTERSECTION WITH L-31 AND SW 360TH STREET.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPGW-1B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 29/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **400704.26**
EASTING: **869627.21**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°26'04.4"**
LONGITUDE: (D M S) **80°21'11.4"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 5

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: **3.58**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: **2.05**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY .5 MILES TO IN INTERSECTING DIRT ROAD (SW 352ND STREET); THENCE CONTINUE SOUTHERLY ALONG SW 137TH AVENUE TO ANOTHER INTERSECTING DIRT ROAD (SW 360TH STREET); THENCE PROCEED EASTERLY ON SAID ROAD APPROXIMATELY 3.7 MILES AND THE STATION IS ON THE LEFT.SAID STATION IS APPROXIMATELY 27 FET EAST OF THE L-31 CANAL AND 50 FEET NORTH OF THE INTERSECTION WITH L-31 AND SW 360TH STREET.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-2A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 381499.19
EASTING: 863730.91

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°22'54.5"
LONGITUDE: (D M S) 80°22'16.7"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 76

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 8.08
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 6.55
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 4.8 MILES TO A T INTERSECTION WITH A DIRT ROAD TO THE EAST; THENCE EASTERLY ALONG SAID ROAD APPROXIMATELY 475 FEET, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPGW-2B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **381479.01**
EASTING: **863932.85**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'54.3"**
LONGITUDE: (D M S) **80°22'14.5"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 76

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: **3.01**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: **1.48**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 4.8 MILES TO A T INTERSECTION WITH A DIRT ROAD TO THE EAST; THENCE EASTERLY ALONG SAID ROAD APPROXIMATELY 475 FEET, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-3A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 368267.56
EASTING: 871556.38

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°20'43.0"
LONGITUDE: (D M S) 80°20'52.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 70

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 2.68
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 1.15
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY 2.0 MILES TO A WATER CONTROL STRUCTURE; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 4.8 MILES TO A "T" INTERSECTION WITH A DIRT ROAD TO THE EAST; THENCE EASTERLY ALONG SAID ROAD APPROXIMATELY 1250 FEET TO AN INTERSECTING NORTH - SOUTH DIRT ROAD; THENCE SOUTHERLY ALONG SAID DIRT ROAD PARALLELING A CANAL, FOR APPROXIMATELY 1.7 MILES TO THE END OF SAID CANAL; THENCE AROUND THE END OF SAID CANAL AND PROCEED EASTERLY ALONG THE SOUTH PERIMETER OF THE FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM FOR APPROXIMATELY 1.2 MILES TO AN INTERSECTION

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-3B*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 368060.33
EASTING: 871557.92

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°20'41.0"
LONGITUDE: (D M S) 80°20'52.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 70

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 3.20
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 1.67
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY 2.0 MILES TO A WATER CONTROL STRUCTURE; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 4.8 MILES TO A "T" INTERSECTION WITH A DIRT ROAD TO THE EAST; THENCE EASTERLY ALONG SAID ROAD APPROXIMATELY 1250 FEET TO AN INTERSECTING NORTH - SOUTH DIRT ROAD; THENCE SOUTHERLY ALONG SAID DIRT ROAD PARALLELING A CANAL, FOR APPROXIMATELY 1.7 MILES TO THE END OF SAID CANAL; THENCE AROUND THE END OF SAID CANAL AND PROCEED EASTERLY ALONG THE SOUTH PERIMETER OF THE FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM FOR APPROXIMATELY 1.2 MILES TO AN INTERSECTION

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-4A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 22/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 377052.28
EASTING: 850203.35

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°22'11.0"
LONGITUDE: (D M S) 80°24'44.4"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 11

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 3.89
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 2.36
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE (TALLAHASSEE ROAD) FOR APPROXIMATELY 5.35 MILES AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPGW-4B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 22/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 377171.27
EASTING: 850191.25

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°22'12.2"
LONGITUDE: (D M S) 80°24'44.5"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 11

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)
ELEVATION: 3.64
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)
ELEVATION: 2.11
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE (TALLAHASSEE ROAD) FOR APPROXIMATELY 5.35 MILES AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPGW-5A**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 35/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **396573.90**
EASTING: **852939.45**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'24.3"**
LONGITUDE: (D M S) **80°24'13.6"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 55

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.98**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.45**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.6 MILES TO THE EAST SIDE OF HOMESTEAD INTERNATIONAL SPEED WAY AND THE INTERSECTION OF PALM DRIVE AND SW 132ND AVENUE; THENCE SOUTHERLY ALONG SW 132ND AVENUE APPROXIMATELY 1.7 MILES, AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPGW-5B**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 35/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 396466.33
EASTING: 852938.56

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'23.2"
LONGITUDE: (D M S) 80°24'13.7"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 55

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 2.77
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 1.24
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.6 MILES TO THE EAST SIDE OF HOMESTEAD INTERNATIONAL SPEED WAY AND THE INTERSECTION OF PALM DRIVE AND SW 132ND AVENUE; THENCE SOUTHERLY ALONG SW 132ND AVENUE APPROXIMATELY 1.7 MILES, AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-6A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 24/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 408306.64
EASTING: 858085.66

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°27'20.3"
LONGITUDE: (D M S) 80°23'16.9"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 61

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 3.61
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 2.08
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 6.1 MILES TO THE INTERSECTION OF PALM DRIVE AND COLONIAL ROAD; THENCE NORTHERLY ALONG COLONIAL ROAD APPROXIMATELY .5 MILES TO THE INTERSECTION OF COLONIAL ROAD AND SW 336TH STREET; THENCE WESTERLY ALONG SW 336TH STREET FOR APPROXIMATELY .45 MILE, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPGW-6B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 24/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **408281.99**
EASTING: **858505.36**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°27'20.0"**
LONGITUDE: (D M S) **80°23'12.3"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 61

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: **2.40**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: **0.87**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 6.1 MILES TO THE INTERSECTION OF PALM DRIVE AND COLONIAL ROAD; THENCE NORTHERLY ALONG COLONIAL ROAD APPROXIMATELY .5 MILES TO THE INTERSECTION OF COLONIAL ROAD AND SW 336TH STREET; THENCE WESTERLY ALONG SW 336TH STREET FOR APPROXIMATELY .45 MILE, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-7A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 27/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 400642.00
EASTING: 844919.33

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°26'04.9"
LONGITUDE: (D M S) 80°25'40.9"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 47

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 3.68
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 2.15
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY .9 MILES TO A 4-WAY INTERSECTION OF A DIRT ROAD BEING SW 137TH AVENUE AND SW 360TH AVENUE ; THENCE PROCEED WESTERLY ALONG SW 360TH STREET APPROXIMNATELY 1 MILE TO A FOUR WAY INTERSECTION BEING 3 MILE ROAD; THENCE PROCEED SOUTHERLY ALONG 3 MILE ROAD APPROXIMATELY 235 FEET, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPGW-7B**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 27/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **400417.70**
EASTING: **844922.67**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°26'02.7"**
LONGITUDE: (D M S) **80°25'40.9"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 47

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.88**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.35**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY .9 MILES TO A 4-WAY INTERSECTION OF A DIRT ROAD BEING SW 137TH AVENUE AND SW 360TH AVENUE ; THENCE PROCEED WESTERLY ALONG SW 360TH STREET APPROXIMNATELY 1 MILE TO A FOUR WAY INTERSECTION BEING 3 MILE ROAD; THENCE PROCEED SOUTHERLY ALONG 3 MILE ROAD APPROXIMATELY 235 FEET, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-8A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 5/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 390968.53
EASTING: 836864.91

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°24'29.4"
LONGITUDE: (D M S) 80°27'09.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 40

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 3.14
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 1.61
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 2.5 MILES; THENCE LEAVING SW 137TH AVENUE, PROCEED EASTERLY 1.30 MILES TO THE STATION.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPGW-8B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 5/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **391668.12**
EASTING: **836878.23**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'36.4"**
LONGITUDE: (D M S) **80°27'09.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 40

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: **3.78**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: **2.25**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 2.5 MILES; THENCE LEAVING SW 137TH AVENUE, PROCEED EASTERLY 1.30 MILES TO THE STATION.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-9A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 24/58/38
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 378760.06
EASTING: 828362.79

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°22'28.8"
LONGITUDE: (D M S) 80°28'42.5"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: NAIL & DISK
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 18

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: 5.61
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: 4.08
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND SW 424TH STREET, PROCEED WESTERLY ALONG SW 424TH STREET APPROXIMATELY .9 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPGW-9B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 24/58/38
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **378765.39**
EASTING: **828791.81**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'28.9"**
LONGITUDE: (D M S) **80°28'37.8"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: NAIL & DISK
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 18

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: **5.75**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: **4.22**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND SW 424TH STREET, PROCEED WESTERLY ALONG SW 424TH STREET APPROXIMATELY .9 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-12A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 21/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 406110.75
EASTING: 873935.70

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°26'57.8"
LONGITUDE: (D M S) 80°20'24.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 22

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 2.27
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 0.74
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.1 MILES TO A DIRT ROAD HEADING NORTHWESTERLY ALONG A FLORIDA POWER AND LIGHT TRANSMISSION POWERLINE CORRIDOR; THENCE NORTHWESTERLY ALONG SAID ROAD APPROXIMATELY .8 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPGW-12B*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 21/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 406114.70
EASTING: 873949.08

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°26'57.8"
LONGITUDE: (D M S) 80°20'24.0"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 22

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 2.32
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 0.79
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.1 MILES TO A DIRT ROAD HEADING NORTHWESTERLY ALONG A FLORIDA POWER AND LIGHT TRANSMISSION POWERLINE CORRIDOR; THENCE NORTHWESTERLY ALONG SAID ROAD APPROXIMATELY .8 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPGW-13A**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **387083.10**
EASTING: **870087.29**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'49.5"**
LONGITUDE: (D M S) **80°21'07.1"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 41

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **5.56**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **4.03**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

THIS STATION IS LOCATED IN THE FLORIDA POWER AND LIGHT COOLING CANALS, AND IS ACCESSIBLE ONLY BY BOAT. THE STATION IS APPROXIMATELY 2.7 MILES NORTHERLY (ALONG THE WEST PERIMETER ROAD OF THE FLORIDA POWER AND LIGHT COOLING CANALS) OF THE SOUTHWEST CORNER OF SAID CANALS; THE STATION IS APPROXIMATELY .8 MILES WEST OF SAID WEST PERIMETER ROAD, AND IS LOCATED ON THE TOP OF BANK

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPGW-13B**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **386517.79**
EASTING: **870078.62**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'43.9"**
LONGITUDE: (D M S) **80°21'07.2"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 41

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **4.73**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **3.20**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

THIS STATION IS LOCATED IN THE FLORIDA POWER AND LIGHT COOLING CANALS, AND IS ACCESSIBLE ONLY BY BOAT. THE STATION IS APPROXIMATELY 2.7 MILES NORTHERLY (ALONG THE WEST PERIMETER ROAD OF THE FLORIDA POWER AND LIGHT COOLING CANALS) OF THE SOUTHWEST CORNER OF SAID CANALS; THE STATION IS APPROXIMATELY .8 MILES WEST OF SAID WEST PERIMETER ROAD, AND IS LOCATED ON THE TOP OF BANK

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **L-3A**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395060.24
EASTING: 868069.44

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'08.6"
LONGITUDE: (D M S) 80°21'28.7"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 3

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: 3.36
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: 1.83
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 140 FEET AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **L-3B (LM2)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395164.37
EASTING: 868038.91

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'09.6"
LONGITUDE: (D M S) 80°21'29.0"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF:
FIELD BOOK: 785
PAGE: 3

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 3.01
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 1.48
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 140 FEET AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **L-5A**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 383880.56
EASTING: 864485.31

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'18.0"
LONGITUDE: (D M S) 80°22'08.4"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 77

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: 8.04
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: 6.51
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 1.6 MILES AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *L-5B*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 7/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 384265.52
EASTING: 864607.83

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'21.8"
LONGITUDE: (D M S) 80°22'07.0"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 77

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)
ELEVATION: 8.66
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)
ELEVATION: 7.13
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 1.6 MILES AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **G-21A**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 35/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 397621.26
EASTING: 850231.36

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'34.8"
LONGITUDE: (D M S) 80°24'43.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 50

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: 4.63
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: 3.10
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 1.48 MILES AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **G-21B**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 35/57/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 397726.89
EASTING: 850223.41

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'35.8"
LONGITUDE: (D M S) 80°24'43.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 50

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*
ELEVATION: 4.57
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*
ELEVATION: 3.04
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 1.48 MILES AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **G-28A**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 11/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **384328.33**
EASTING: **850236.33**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'23.1"**
LONGITUDE: (D M S) **80°24'43.7"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 14

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **4.63**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **3.10**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 3.95 MILES AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **G-28B**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 11/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 384731.07
EASTING: 850210.56

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'27.1"
LONGITUDE: (D M S) 80°24'44.0"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 14

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 4.32
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 2.79
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 4.1 MILES TO THE EAST SIDE OF AN OVERFLOW PARKING LOT FOR THE HOMESTEAD INTERNATIONAL SPEED WAY AND INTERSECTION OF SW 137TH AVENUE; THENCE SOUTHERLY ALONG SW 137TH AVENUE FOR APPROXIMATELY 3.95 MILES AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **G-35A**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 9/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 385269.60
EASTING: 838913.78

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'32.9"
LONGITUDE: (D M S) 80°26'47.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2011
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE:

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: 2.82
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: 1.29
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND OLD CARD SOUND ROAD, PROCEED SOUTHEASTERLY APPROXIMATELY 3.68 MILES TO THE INTERSECTION OF SW 408TH STREET AND THE ENTRANCE TO A CEMEX CONCRETE PLANT AND THE STATION IS ON THE LEFT

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **G-35 (NGS T316)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Homestead
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 9/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **384054.21**
EASTING: **839459.38**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'20.8"**
LONGITUDE: (D M S) **80°26'41.2"**

MONUMENTED BY: NGS
YEAR SET: 1970
TYPE: DISK ON COPPER COATED STEEL ROD
STAMPING: T 316 1970
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 39

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.82**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.29**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND OLD CARD SOUND ROAD, PROCEED SOUTHEASTERLY APPROXIMATELY 3.68 MILES TO THE INTERSECTION OF SW 408TH STREET AND THE ENTRANCE TO A CEMEX CONCRETE PLANT AND THE STATION IS ON THE LEFT

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-1A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 399832.99
EASTING: 870449.25

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'55.7"
LONGITUDE: (D M S) 80°21'02.5"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 4

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 3.03
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 1.50
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM; THENCE AROUND A PARALLELING CANAL WEST OF SAID FPL CANAL SYSTEM AND SOUTHERLY PARALLELING A DIKE ROAD FOR APPROXIMATELY 950 FEET AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPSWCCS-1B(lm6)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **399865.68**
EASTING: **870399.37**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'56.1"**
LONGITUDE: (D M S) **80°21'03.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 4

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **4.73**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **3.20**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM; THENCE AROUND A PARALLELING CANAL WEST OF SAID FPL CANAL SYSTEM AND SOUTHERLY PARALLELING A DIKE ROAD FOR APPROXIMATELY 950 FEET AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-3A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395164.37
EASTING: 868038.91

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'50.9"
LONGITUDE: (D M S) 80°22'02.9"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 6

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 5.71
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 4.18
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND TAKE AN IMMEDIATE RIGHT; THENCE HEADING WEST, PROCEED 1.75 MILES, TO AN "S" SHAPE CURVE WHERE THE ROAD TURNS

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-3B(LM10)*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 375238.20
EASTING: 864977.64

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'52.4"
LONGITUDE: (D M S) 80°22'03.4"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 6

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 7.46
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 5.93
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND TAKE AN IMMEDIATE RIGHT; THENCE HEADING WEST, PROCEED 1.75 MILES, TO AN "S" SHAPE CURVE WHERE THE ROAD TURNS

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-4A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 28/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 372707.73
EASTING: 874378.16

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'26.9"
LONGITUDE: (D M S) 80°20'21.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 65

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 14.02
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 12.49
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE, AND THE STATION IS ON THE RIGHT. SAID STATION IS APPROXIMATELY 50 FEET NORHT OF SAID BRIDGE.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPSWCCS-4B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 28/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **372696.71**
EASTING: **874447.37**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'26.8"**
LONGITUDE: (D M S) **80°20'20.3"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 65

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: **9.05**
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: **7.52**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE, AND THE STATION IS ON THE LEFT, APPROXIMATELY 50 FEET EAST OF THE ROAD.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-5A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 16/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 383772.12
EASTING: 876789.57

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'16.3"
LONGITUDE: (D M S) 80°19'54.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 63

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 5.31
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 3.78
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND GO LEFT HEADING EAST FOR APPROXIMATELY .45 MILES TO A 90 DEGREE BEND IN THE ROAD; THENCE

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-5B*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 16/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 383773.01
EASTING: 876846.35

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'16.3"
LONGITUDE: (D M S) 80°19'53.6"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE: 63

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 5.70
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 4.17
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND GO LEFT HEADING EAST FOR APPROXIMATELY .45 MILES TO A 90 DEGREE BEND IN THE ROAD; THENCE

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-6A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 27/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 335965.6
EASTING: 922539.2

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'56.5"
LONGITUDE: (D M S) 80°19'40.3"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE:

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 5.32
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 3.79
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION AND A BRIDGE CROSSING A COOLING CANAL; THENCE ACROSS SAID BRIDGE TO ANOTHER 4-WAY INTERSECTION; THENCE ACCROSS SAID INTERSECTION TO A 3-WAY INTERSECTION; THENCE EASTERLY ALONG THE SOUTHERN PERIMETER OF THE POWER PLANT BUILDINGS TO A CURVE TO THE NORTH; THENCE NORTHERLY ALONG SAID CURVETO THE APPROXIMATE POINT OF TANGENT; THENCE NORTHERLY APPROXIMATELY 385 FEET AND THE STATION IS ON THE RIGHT. SAID STATION IS APPROXIMATELY 25 FEET NORTH OF A MONITORING WELL STATION.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-6B*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 27/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 335947.4
EASTING: 922542.6

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'56.0"
LONGITUDE: (D M S) 80°19'40.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 690
PAGE:

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 5.33
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 3.80
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION AND A BRIDGE CROSSING A COOLING CANAL; THENCE ACROSS SAID BRIDGE TO ANOTHER 4-WAY INTERSECTION; THENCE ACCROSS SAID INTERSECTION TO A 3-WAY INTERSECTION; THENCE EASTERLY ALONG THE SOUTHERN PERIMETER OF THE POWER PLANT BUILDINGS TO A CURVE TO THE NORTH; THENCE NORTHERLY ALONG SAID CURVETO THE APPROXIMATE POINT OF TANGENT; THENCE NORTHERLY APPROXIMATELY 385 FEET AND THE STATION IS ON THE RIGHT. SAID STATION IS APPROXIMATELY 25 FEET SOUTH OF A MONITORING WELL STATION.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWCCS-7A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 388917.68
EASTING: 866972.04

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°24'07.8"
LONGITUDE: (D M S) 80°21'41.0"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 79

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 8.47
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 6.94
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 2.7 MILES TO A "T" INTERSECTION; THENCE EASTERLY APPROXIMATELY . 2 MILES TO AN INTERSEXTION WITH A NORTH SOUTH ROAD; THENCE PROCEED NORTHERLY ALONG SAID ROAD FOR APPROXIMATELY 1.5 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPSWCCS-7B(LM8)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **388992.39**
EASTING: **866960.52**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'08.5"**
LONGITUDE: (D M S) **80°21'41.1"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 79

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **9.99**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **8.46**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 2.7 MILES TO A "T" INTERSECTION; THENCE EASTERLY APPROXIMATELY . 2 MILES TO AN INTERSEXTION WITH A NORTH SOUTH ROAD; THENCE PROCEED NORTHERLY ALONG SAID ROAD FOR APPROXIMATELY 1.5 MILES, AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWC-1A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 29/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 400077.13
EASTING: 869632.32

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'58.2"
LONGITUDE: (D M S) 80°21'11.4"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 4

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 8.55
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 7.02
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET APPROXIMATELY 1.0 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPSWC-1B (LM1)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 29/57/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **399865.63**
EASTING: **870399.354**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°25'56.1"**
LONGITUDE: (D M S) **80°21'03.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 4

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **2.95**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.42**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET APPROXIMATELY 1.0 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWC-2A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 5/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 389209.73
EASTING: 866209.95

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°24'10.7"
LONGITUDE: (D M S) 80°21'49.3"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 79

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 3.16
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 1.63
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 2.7 MILES TO A "T" INTERSECTION; THENCE EASTERLY APPROXIMATELY . 2 MILES TO AN INTERSEXTION WITH A NORTH SOUTH ROAD; THENCE PROCEED NORTHERLY ALONG SAID ROAD FOR APPROXIMATELY 1.6 MILES, AND THE STATION IS APPROXIMATELY 185 FEET TO THE WEST.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPSWC-2B(LM 3)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 5/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **389292.94**
EASTING: **866175.92**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'11.5"**
LONGITUDE: (D M S) **80°21'49.6"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 79

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.70**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **2.17**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 2.7 MILES TO A "T" INTERSECTION; THENCE EASTERLY APPROXIMATELY . 2 MILES TO AN INTERSEXTION WITH A NORTH SOUTH ROAD; THENCE PROCEED NORTHERLY ALONG SAID ROAD FOR APPROXIMATELY 1.6 MILES, AND THE STATION IS APPROXIMATELY 185 FEET TO THE WEST.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPSWC-3A***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **376265.48**
EASTING: **862059.26**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°22'02.7"**
LONGITUDE: (D M S) **80°22'35.2"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 74

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: **6.93**
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: **5.40**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 3.8 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **TPSWC-3B(LM5)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 376382.11
EASTING: 862066.08

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°22'03.9"
LONGITUDE: (D M S) 80°22'35.1"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 74

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 4.00
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 2.47
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 3.8 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWC-4A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 21/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 372609.46
EASTING: 865028.06

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'26.3"
LONGITUDE: (D M S) 80°22'03.0"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 7

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 5.37
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 3.84
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWR AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND TAKE AN IMMEDIATE RIGHT; THENCE HEADING WEST, PRCEED 1.75 MILES, TO AN "S" SHAPE CURVE WHERE THE ROAD TURNS

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: ***TPSWC-4B***
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Glades
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 21/58/39
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **372517.34**
EASTING: **865192.59**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°21'25.4"**
LONGITUDE: (D M S) **80°22'01.2"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 7

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: **3.92**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: **2.39**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND TAKE AN IMMEDIATE RIGHT; THENCE HEADING WEST, PROCEED 1.75 MILES, TO AN "S" SHAPE CURVE WHERE THE ROAD TURNS

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWC-5A*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 28/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 372519.01
EASTING: 874648.81

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'25.0"
LONGITUDE: (D M S) 80°20'18.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 10

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 6.61
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 5.08
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND GO LEFT HEADING EAST FOR APPROXIMATELY 385 FEET; THENCE SOUTH APPROXIMATELY 150 FEET AND THE STATION IS ON THE

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: *TPSWC-5B*
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 28/58/40
STATUS:

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 372319.26
EASTING: 874738.88

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'23.0"
LONGITUDE: (D M S) 80°20'17.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 10

VERTICAL DATA

NGVD 1929 (*subtract 1.53 to get to '88*)

ELEVATION: 4.79
ORDER: 3rd
CLASS: n/a

NAVD 1988 (*add 1.53 to get to '29*)

ELEVATION: 3.26
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .25 MILES PASSING A SWITCH STATION AND CROSSING OVER A BRIDGE TO A 4-WAY INTERSECTION; THENCE TURN RIGHT HEADING WEST .25 MILES TO THE WEST SIDE OF A NORTH-SOUTH CANAL; THENCE PROCEED SOUTHERLY ALONG SAID ROAD APPROXIMATELY 8.0 MILES TO A BUILDING ON A HILL ON THE RIGHT, CONTINUE SOUTHWESTERLY APPROXIMATELY 4.4 MILES TO A METAL BRIDGE; THENCE ACROSS SAID BRIDGE AND GO LEFT HEADING EAST FOR APPROXIMATELY 385 FEET; THENCE SOUTH APPROXIMATELY 150 FEET AND THE STATION IS ON THE

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-1B (LM1)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 400093.77
EASTING: 869604.21

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'58.4"
LONGITUDE: (D M S) 80°21'11.7"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 25

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 2.95
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 1.42
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET APPROXIMATELY 1.1 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-1A (WC1A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING:
EASTING:

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S)
LONGITUDE: (D M S)

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 25

VERTICAL DATA

NGVD 1929 *(subtract 1.53 to get to '88)*

ELEVATION: 8.55
ORDER: 3rd
CLASS: n/a

NAVD 1988 *(add 1.53 to get to '29)*

ELEVATION: 7.02
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET APPROXIMATELY 1.1 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-2A(LM6)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 399865.63
EASTING: 870399.35

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'56.1"
LONGITUDE: (D M S) 80°21'03.0"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 30

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 4.73
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 3.20
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 775 FEET AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-2B(CCS1A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 399832.87
EASTING: 870449.43

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'55.7"
LONGITUDE: (D M S) 80°21'02.5"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 30

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 3.03
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 1.50
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 775 FEET AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-3A(LM6)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 399865.63
EASTING: 870399.35

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'56.1"
LONGITUDE: (D M S) 80°21'03.0"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 30

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 4.73
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 3.20
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 775 FEET AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-3B(CCS1A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 399832.87
EASTING: 870449.43

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'55.7"
LONGITUDE: (D M S) 80°21'02.5"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 30

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 3.03
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 1.50
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 775 FEET AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-4A(L3A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395060.24
EASTING: 868069.44

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'08.6"
LONGITUDE: (D M S) 80°21'28.7"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 26

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 3.36
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 1.83
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 175 FEET AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-4B(LM2)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395164.37
EASTING: 868038.91

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'09.6"
LONGITUDE: (D M S) 80°21'29.0"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 26

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 3.01
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 1.48
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 175 FEET AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-5(LM7)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395293.11
EASTING: 868964.21

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'10.8"
LONGITUDE: (D M S) 80°21'18.9"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 31

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 8.57
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 7.04
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 1.1 MILES AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-6(LM7)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 32/57/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 395293.11
EASTING: 868964.21

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°25'10.8"
LONGITUDE: (D M S) 80°21'18.9"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 31

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 8.57
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 7.04
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 1.1 MILES AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-7A(LM3)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 7/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 389292.94
EASTING: 866175.92

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°24'11.5"
LONGITUDE: (D M S) 80°21'49.6"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 27

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
ELEVATION: 3.70
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
ELEVATION: 2.17
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 1.2 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-7B(WC2A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 7/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **389209.73**
EASTING: **866209.95**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'10.7"**
LONGITUDE: (D M S) **80°21'49.3"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 79

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
ELEVATION: **3.16**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
ELEVATION: **1.63**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 1.2 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-8A(LM8)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 388992.39
EASTING: 866960.52

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°24'08.5"
LONGITUDE: (D M S) 80°21'41.1"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 32

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 9.99
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 8.46
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 2.3 MILES AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-8B(CCS7A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **388917.68**
EASTING: **866972.04**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'07.8"**
LONGITUDE: (D M S) **80°21'41.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 32

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **8.47**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **6.94**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 2.3 MILES AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-9A(LM8)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 388992.39
EASTING: 866960.52

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°24'08.5"
LONGITUDE: (D M S) 80°21'41.1"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 32

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 9.99
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 8.46
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 2.3 MILES AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-9B(CCS7A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 8/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **388917.68**
EASTING: **866972.04**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°24'07.8"**
LONGITUDE: (D M S) **80°21'41.0"**

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 32

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **8.47**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **6.94**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 2.3 MILES AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-10(LM4)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: **382600.36**
EASTING: **864041.75**

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) **25°23'05.4"**
LONGITUDE: (D M S) **80°22'13.3"**

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 28

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: **3.51**
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: **1.98**
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 2.5 MILES, AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-11(LM9)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 382294.09
EASTING: 864969.32

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'02.3"
LONGITUDE: (D M S) 80°22'03.2"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 33

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 8.74
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 7.21
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 3.6 MILES AND THE STATION IS ON THE RIGHT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-12(LM9)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Arsenicker Keys
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 18/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 382294.09
EASTING: 864969.32

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°23'02.3"
LONGITUDE: (D M S) 80°22'03.2"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 33

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 8.74
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 7.21
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 3.6 MILES AND THE STATION IS ON THE LEFT.

APPENDIX B-2
SUMMARY FORM

DESIGNATION: **STAFF GAUGE-13A(LM5)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 376382.11
EASTING: 862066.08

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°22'03.9"
LONGITUDE: (D M S) 80°22'35.1"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 29

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
ELEVATION: 4.00
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
ELEVATION: 2.47
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 3.8 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-13B(WC3A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 376265.48
EASTING: 862059.26

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°22'02.7"
LONGITUDE: (D M S) 80°22'35.2"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 544
PAGE: 74

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 6.93
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 5.40
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.0 MILES TO THE INTERSECTION OF SOUTH FLORIDA WATER MANAGEMENT DISTRICT L-31 E CANAL AND PALM DRIVE BEING THE INTERSECTION OF SW 376TH STREET; THENCE SOUTHERLY ALONG SW 376TH STREET, PROCEED 2.0 MILES TO A WATER CONTROL STRUCTURE ; THENCE ACROSS SAID STRUCTURE AND CONTINUE APPROXIMATELY 3.8 MILES, AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-14A(LM10)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 375238.20
EASTING: 864977.64

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'52.4"
LONGITUDE: (D M S) 80°22'03.4"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 34

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
ELEVATION: 7.46
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
ELEVATION: 5.93
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 5.0 MILES AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-14B(CCS3A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 375087.00
EASTING: 865030.49

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'50.9"
LONGITUDE: (D M S) 80°22'02.9"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 34

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 5.71
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 4.18
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 5.0 MILES AND THE STATION IS ON THE RIGHT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-15A(LM10)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 375238.20
EASTING: 864977.64

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'52.4"
LONGITUDE: (D M S) 80°22'03.4"

MONUMENTED BY: PROVIDED BY CLIENT
YEAR SET: n/a
TYPE: 3/4" BOLT & WASHER IN CONC MONUMENT
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 34

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)
ELEVATION: 7.46
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)
ELEVATION: 5.93
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 5.0 MILES AND THE STATION IS ON THE LEFT.

**APPENDIX B-2
SUMMARY FORM**

DESIGNATION: **STAFF GAUGE-15B(CCS3A)**
COUNTY: Miami-Dade
NAME OF USGS QUADRANGLE: Card Sound
PROJECT: Turkey Point Monitoring Station Survey
SECTION/TOWNSHIP/RANGE: 19/58/40
STATUS: Complete

STATE PLANE COORDINATES:
NAD1983

ADJUSTMENT: Florida East / US Survey Feet
NORTHING: 375087.00
EASTING: 865030.49

OTHER:

NORTHING: n/a
EASTING: n/a

GEOGRAPHIC COORDINATES:
NAD1983 (CORPSCON V6.0.1)

LATITUDE: (D M S) 25°21'50.9"
LONGITUDE: (D M S) 80°22'02.9"

MONUMENTED BY: CivilSurv Design Group Inc.
YEAR SET: 2010
TYPE: 5/8" IRON ROD
STAMPING: n/a
PARTY CHIEF: T. Corbett
FIELD BOOK: 785
PAGE: 34

VERTICAL DATA

NGVD 1929 (subtract 1.53 to get to '88)

ELEVATION: 5.71
ORDER: 3rd
CLASS: n/a

NAVD 1988 (add 1.53 to get to '29)

ELEVATION: 4.18
ORDER: 3rd
CLASS: n/a

HOW TO REACH DESCRIPTION:

FROM THE INTERSECTION OF US HIGHWAY NO.1 (DIXIE HWY) AND PALM DRIVE, PROCEED EASTERLY APPROXIMATELY 8.1 MILES TO A 90 DEGREE BEND IN THE ROAD AND THE ENTRANCE TO FLORIDA POWER AND LIGHT TURKEY POINT NUCLEAR FACILITY; THENCE CONTINUE ALONG SAID ROAD FOR APPROXIMATELY 1.2 MILES TO A 4-WAY INTERSECTION; THENCE TURN RIGHT, HEADING SOUTH .2 MILES TO THE NORTH SIDE OF AN FPL COOLING CANAL; THENCE PROCEED WEST APPROXIMATELY 1.0 MILES TO THE EAST SIDE OF A CANAL AND THE NORTHWEST CORNER OF FLORIDA POWER AND LIGHT COOLING CANAL SYSTEM THENCE SOUTHERLY ALONG A DIKE ROAD FOR APPROXIMATELY 5.0 MILES AND THE STATION IS ON THE LEFT.

APPENDIX D:

AUTOMATED STATION PROBE CALIBRATION LOGS

AUGUST 2010

August 17, 2010
TPCW-6

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
8/17	1440	IC	Probe # 155878	In-Situ Lot # 9AL 311	12,890 μ S	PCC=1.01	yes	probe # 155878 (6s)	JA
"	1454	ICV	FPL unit 2	Lot # 9AL 316	147	161.2	no *	"	JA
"	1457	ICV	FPL unit 2	Lot # 9AL 315	58,670	58,114.6	yes	"	JA
"	1525	IC	FPL unit 2	Lot # 9AL 311	12,890 μ S	PCC=1.003	yes	probe # 155915 (6m)	JA
"	1530	ICV	FPL unit 2	Lot # 9AL 316	147	167	no *	"	JA
"	1533	ICV	FPL unit 2	Lot # 9AL 315	58,670	58,570	yes	"	JA
"	1601	IC	FPL unit 2	Lot # 9AL 311	12,890	12,991.17 μ S PCC=1.002	yes	probe # 155907	JA
"	1607	ICV	FPL unit 2	Lot # 9AL 316	147	160.32	no *	"	
"	1614	ICV	FPL unit 2	Lot # 9AL 315	58,670	57,920.22	yes	"	

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

* Reference probe calibrated w/in 24 hrs reads solution to be $\sim 165 \mu$ S.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
8/17	1444	FPL unit 2	91314089	37.11	37.5	yes	Probe # 155878	JA
"	1526	FPL unit 2	"	37.45	37.6	yes	Probe # 155915	JA
"	1604	FPL unit 2	"	42.80	42.8	yes	probe # 155907	JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

August 17, 20.
TPCW-9

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
8/16/17	1052	IC	FPL unit 2	In-Situ Lot # 9AL 311	12,890 μ S	12,917 μ S pcc = 1.002	yes	Probe S/N 155889 (9S)	JA
"	1135	IC	FPL unit 2	"	12,890 μ S	12,992 μ S pcc = 1.009	yes	Probe S/N 156175 (9m)	JA
"	1143	ICV	FPL unit 2	In-Situ Lot # 9AL 315	58,670	58,774 μ S	yes	"	JA
"	1148	ICV	FPL unit 2	Lot # 9AL 316	147 μ S	154 μ S	yes	"	JA
"	1217	IC	FPL unit 2	Lot # 9AL 311	12,890	pcc = 1.05	yes	probe 155879 (9D)	JA
"	1221	ICV	"	Lot # 9AL 315	58,670	58,834	yes	"	JA
"	1234	ICV	"	Lot # 9AL 316	147	157	no *	"	JA
"	1245	ICV	"	Lot # 9AL 315	58,670	58,669.5	yes	9S	JA
"	1255	ICV	"	Lot # 9AL 316	147	161.5	no *	9S	JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

pcc = proposed cell constant

* Reference probe calibrated w/in 24 hrs reads solution to be $\sim 165 \mu$ S.

FPL Turkey Point Monitoring Plan **Field Instrument Calibration Form**

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
 Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
 Quarterly verification at temperatures above and below the range
 of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
8/17	1056	Probe 155889	91314089	26.53	26.5	yes		AA
"	1140	Probe 156175	"	36.56	36.6	yes		AA
	1219	Probe 155879	"	33.92	33.9	yes		AA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPC-W-2

08/25/10

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
08/25	1626	CCV	FPL unit 2	Lot: 9AL311	12,890 μ S	13,078.36		probe # 156123	JA
	1630	IC	"	"	"		Y	probe # 156123 cell const = 1.002	JA
	1648	CCV	"	"	"	13,263.3		probe # 155882	JA
	1650	IC	"	"	"	PCC = 0.993	Y	"	JA
	1659	CCV				PCC 13,084.55		probe # 155887	JA
	1702	IC	"	"	"	PCC = 1.008	Y	"	JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC-12

08/26/10

FPL Turkey Point Monitoring Plan **Field Instrument Calibration Form**

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none">- Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm- Conduct daily prior to use or if CCV fails	<ul style="list-style-type: none">- Read after pressing "Calibrate"- 1 standard at the low end of expected sample reading range but no less than 100 uS/cm- Must be within $\pm 5\%$ of TV	<ul style="list-style-type: none">- Read at the end of the event, or within 24 hrs of initial calibration, whichever is less.- Read only (do not press "calibrate")- Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
8/26	1525	CCV	FPL Unit 2	Greenwich OAC 103	447 μ S	557.86	N	Probe # 155925	JA
"	1528	CCV	"	Greenwich OAC 218	100,000 58,670 μ S	99,191.21 μ S	Y	"	JA
"	1632	IC	"	Inst. # Lot # 9AL 311	12,890 μ S	PCC = 0.984	Y	"	JA
"	1535	ICV	"	OAC # 218	100,000	97,917.82	Y	"	JA
"	1556	CCV	"	See Above	447	532.24	N	Probe # 157272	JA
"	1559	CCV	"	"	100,000	99,249.52	Y	"	JA
"	1602	IC	"	"	12,890	PCC = 0.973	Y	"	JA
"	1604	ICV	"	"	100,000	97,089.73	Y	"	JA
"	1623	CCV	"	"	447	656.90	N	Probe # 155922	JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

" 1625 CCV

" 100,000 96,591.33 Y

" JA

" 1629 IC

" 12,890 PCC = 1.000 Y

" JA

" 1631 ICV

" 100,000 99,348.09 Y

" JA

(

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range of sample readings for the quarter

[illegible]

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-13
8/26/10

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
8/26	1016	CCV	FPL unit 2		447 _{ms}	478.44	N	Probe # 154952	JA
"	1020	CCV			58,670 _{ms}	58,534.9	Y	"	JA
"	1028	IC			12,890 _{ms}	PCC = 1.017	Y	"	JA
"	1031	ICV			58,670	58,507.79	Y	"	JA
"	1114	CCV			447	533 _{ms}	N	Probe # 155897	JA
"	1121	CCV			58,670	58,642.09	Y	"	JA
"	1124	IC			12,890	PCC = 1.009	Y	"	JA
"	1129	ICV			58,670	57,790.4	Y	"	JA
	1234	CCV			447	493.95	N	Probe # 155892	JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1236 CCV

58,670 57,373.34 Y

" JA

1238 IC

12,890 PCC = 1.005 Y

" JA

1241 ICV

58,670 59,714.76 Y

" JA

FPL Turkey Point Monitoring Plan **Field Instrument Calibration Form**

Parameter: **Temperature, water**

FDEP-SOP Reference: **FT1400**

QAPP Requirements: Monthly verification against NIST-traceable thermometer
 Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
 Quarterly verification at temperatures above and below the range
 of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
8/26	1033	FPL unit 2	91314089 101746998	33.50	33.7	Y	Probe # 154952	JA
"	1141	"	91314089	31.76	32.6	N	Probe # 155897	JA
"	1245	"	101746998	32.85	33.3	Y	Probe # 155892	JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPC12-3

08/27/20

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
08/27	1330	CCV	FPL unit 2		447 μ S	499.30	N	Probe # 156184	JA
"	1333	CCV	"		100,000 μ S	98,250.56	Y	"	JA
"	1336	IC	"		12,890 μ S	PCC = 1.003	Y	PCC = "	JA
"	1338	ICV	"		100,000 μ S	98,405.11	Y	"	JA
"	1351	CCV	"		447	476.28	N	Probe # 156003	JA
"	1353	CCV	"		100,000	98,470.48	Y	"	JA
"	1357	IC	"		12,890	PCC = 1.002	Y	"	JA
"	1359	ICV	"		100,000	98,114.02	Y	"	JA
"	1416	CCV	"		447	487.66	N	Probe # 157230	JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

" 1418 CCV "

100,000 99,770.95 Y

" JA

" 1422 IC "

12,890 PCC = .978 Y

" JA

" 1424 ICV "

100,000 96,805.80 Y

" JA

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: **FT1400**

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

[illegible]

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

OCTOBER/NOVEMBER 2010

TPCW-25

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> Read after pressing "Calibrate" 1 standard at the low end of expected sample reading range but no less than 100 uS/cm Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. Read only (do not press "calibrate") Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/21	11:03	CCV	FPL unit 2 AT 100		12,890 μ S	12,776.95	y		JA
10/22	14:45	IC/ICV	FPL unit 3 AT 100		12,890 μ S	PCC = 1.0	y	verified reading of 12,918.37	JA
	14:47	CCV	"		100,000 μ S	100,163.01	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPGW-98

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/25	14:15	CCV	P232 155889 A-T100		12,890	12,886.63	y		JA
	14:18	ICV	"		"	PCL = 1,003	y	verified to read 12,867.95	JA
	14:20	ICV	"		100,000	99441.13	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

7/10/20 - 9m

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/28	15:48	CCV	port # 150175		12,890	13,016.70			JA
	15:52	IC	"		"	PCL = 1.005	y	verified reading @ 12,812.14	JA
	15:56	ICV	"		100,000	99,500.00	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments¹	Calibration verified by
10/25	16:02	SN 156175	10174898	30.4	31.4 30.9	y	Temp dropped 31.4 → 30.4	JJ

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/25	10:33	CCV	probe # 155879		12,890	12,997.78	Y		JA
	10:37	IC	"		"	PCC = 1,024 1.015	Y	verified to 12,820.10 recalibrate for better pcc	JA
	10:41	ICV	"		100,000	98,780.19	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

[illegible]

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	16:35	Initial Reading	Probe		12890 mS	12,784.26			JS
	16:38	IC	"		"	PCC = 1.004	Y	verified @ 12,841.25	JS
	16:40	ICV	"		100,600 mS	100,870 "	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-7m

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	17:05	initial reading	Probe 155886		12,890 mS	13,000.69			JA
	17:07	IC	"		"	PCC = 1.015	Y	verified @ 12,847.06	JA
	17:09	ICV	"		100,000 mS	101,329.06	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC7W-7D

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	17:23	initial CCV	probe 157236		12,890	13,144.29			JA
	17:29	IC	"		"	PCC = 10231.010	y	verified @ 12,772.88	JA
	17:31	ICV	"		100,000	99,339.04	y		JA

rec'd to drop cell const.

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

Calib w/ laptop

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	17:38	Probe 157236	101746998	30.36	30.6	y		AA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPGW-65

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	13:42	initial reading			12,890 uS	12,589.54			JA
	13:44	IC			"	PCL = 1.012	y	verified reading @ 12,873.58	JA
	13:48	ICV			100,000 uS	99,393.55	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

[illegible]

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	14:42	initial reading	Probe # 155915		12,890.8	12,745.06			aj
	14:45	IC	"		"	PCC = 1.0	y	verified reading @ 12,894.84	aj
	14:47	ICV	"		100,000 μ S	98,773.18	y		aj

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

[illegible]

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/20	15:21	initial reading	probe 155907		12,890 uS	12,617.40			jj
	15:23	IC	"		"	pcc = 1.001	y	verified reading @ 12,866.72	jj
	15:25	ICV	"		100,000 uS	100,626.50	y		jj

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	15:31	probe 155907	101740998	31.28	31.7°C	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

Maintenance

TPGW-85

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	09:53	CCV	probe 1555890		12,890 μ S	12,810.59	y		JA
	09:56	IC	"		"	PCC = 1.013	y	write @ 12,941.88	JA
	09:58	ICV	"		100,000 μ S	100,736.81	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

Parameter: Temperature, water

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

[illegible]

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPGW-8m

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	10:11	Initial reading	Probe 154937		12,810	12,965.18	Y		JA
	10:13	IC	"		"	PLC = 1.008	Y	adjusted to 12,860.95	JA
	10:17	ICV	"		100,000	98,595.13	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	10:27	Probe 154937	S/N 101746998	30.768	31.2°C	Y		JD

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC-80

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/26	10:37	initial reading	probe 154926		12,890 _{ms}	12,747.33	Y		JS
	10:38	IC	"		"	PCC = 1.001	Y	verified @ 12,851.13	JS
	10:41	ICV	"		100,000 _{ms}	100,665.23	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/22	14:50	AT100 SN- 156123	10746998	34.06	33.9	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPGW-2

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/20	14:32	Initial reading	Probe 155882	5873109 Lot 10E	50,000 μ S	49,033.80			JA
	14:35	IC	"	1003500 "	50,000 μ S	PCC = 1.012	Y	verified @ 50,132.00	JA
	14:38	ICV	"		100,000 μ S	100,530.38	Y		JA
		Initial reading							
		IC							
		ICV							

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

[illegible]

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPCW-20

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/20	15:26	initial reading	Probe 155887		50,000 uS	49,129.14			JS
	15:28	IC	"		"	PCE = 1.013	Y	verified @ 50,039.00	JS
	15:30	ICV	"		100,000 uS	99,465.03	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan

Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/28	15:39	Probe 155887	101796918	32.09	31.9	Y		JH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/28	13:11	Initial reading	Probe 156026		50,000 _{NS}	49,629.91			JS
	13:14	IC	"		50,000 _{NS}	PCC = 1.007	Y	w. Red @ 49,872.71	JS
	13:18	ICV	"		100,000 _{NS}	99,474.2	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

[illegible]

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPSWC - 4

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/28	10:01	initial reading	AT 200 156034	12,890		12,786.96			JA
"	10:03	IC	"	"		PCC = 1.011	Y	verified @ 12,902.95	JA
"	10:07	ICV	"	50,000		49,136.96	Y		JA
"	10:13	initial reading	AT 100 156155		12,890	12,651.72			JA
"	10:17	IC	"		"	PCC = 1.019	Y	verified @ 12,895.89	JA
"	10:18	ICV	"		50,000	49,065.00	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPSWIO-3

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> Read after pressing "Calibrate" 1 standard at the low end of expected sample reading range but no less than 100 uS/cm Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. Read only (do not press "calibrate") Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
10/28	12:17	AT1200 probe 156 1200V	Initial Ready		12,890 uS	12,878.06			aj
"	12:19	"	IC		"	PCC = 0.999	y	verified @ 12,851.02	aj
"	12:24	"	ICV		50,000 uS	48,699.7	y		aj
"	12:33	Initial Ready	AT200 probe 156		12,890 uS	12,556.0			aj
"	12:39	IC	"		"	PCC = 1.015	y	verified @ 12,776.8	aj
"	12:42	ICV	"		50,000	48,042.4	y		aj

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

CCS-6

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/5	15:16	initial reading	probe 156297		50,000 μ S	50,933.92			JS
	15:18	IC	"		"	PLC = 1.006	y	verified @ 50,104.67	JS
	15:22	ICV	"		100,000 μ S	101,116.67	y		JS
	15:28	initial reading	probe 164475		50,000 μ S	50,468.00			JS
	15:31	IC	"		"	PLC = 1.001	y	verified @ 50,206.70	JS
	15:33	ICV	"		100,000 μ S	100,232.02	y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

[illegible]

TPSWCCS-1

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/05	17:23	initial reading	probe 155385		50,000	50,458.21			AA
	17:25	IC	"		"	PC = 0.993	Y	written @ 49,934.42	AA
	17:26	ICV	"		100,000	100,699.36	Y		AA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-125

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/5	12:18	Initial probe ready	155925	12,810		12,986.70			JA
	12:22	IC	"	"		PCC = 1.071	Y	verified @ 12,990.35	JA
	12:24	ICV	"	59,000		49.928.71	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPCW-12 m

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/5	13:02	Initial Calibration	Probe 157272		12,890 μ S	13,214.67			JA
	13:04	IC	"		"	PCC = .993	Y	verified @ 12,933.16	JA
	13:06	ICV	"		50,000 μ S	49,480.4	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPCW-120

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/5	13:45	Initial reading	probe 155922		12,890 uS	12,875.90			JA
	13:48	IC	"		"	PCC = 1010	Y	verified @ 12,798.66	JA
	13:54	ICV	"		50,000 uS	49,499.73	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

[illegible]

TPSW ID-1

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
12/5	16:38	Initial reading	probe 156062		12,890	12,591.97			JA
	16:41	IC	"		"	PCC = 1.020	Y	verified @ 12,855.86	JA
	16:43	ICV	"		50,000	50,274.45	Y		JA
	16:49	Initial reading	probe 155421		12,890	12,627.24			JA
	16:52	IC	"		"	PCC = 1.011	Y	verified @ 12,940.63	JA
	16:54	ICV	"		50,000	49,963.23	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

[illegible]

TPSWCCS-4

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> Read after pressing "Calibrate" 1 standard at the low end of expected sample reading range but no less than 100 uS/cm Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. Read only (do not press "calibrate") Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/8	13:30	initial ready	AT100 probe 155834		50,000 μ S	49,305.26			JA
	13:33	IC	"		"	PCC = 995	Y	verified @ 49,944.62	JA
	13:36	ICV	"		100,000	101,482.39	Y		JA
	13:38	initial ready	AT200 probe 156473		50,000 μ S	49,977.04			JA
	13:41	IC	"		"	PCC = .992	Y	verified @ 49,941.10	JA
	13:44	ICV	"		100,000 μ S	100,755.38	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPSWC-5

FPL Turkey Point Monitoring Plan **Field Instrument Calibration Form**

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/8	15:39	Initial reading	Probe 144508 AT100		50,000 uS	50,807.71			JA
	15:42	IC	"		"	PCC = 1.003	y	verified @ 50,042.22	JA
	15:44	ICV	"		100,000 uS	100,648.29	y		JA
	15:55	Initial reading	Probe AT200 155425		50,000 uS	49,325.98			JA
	16:08	IC	"		"	current reading 49,876.57	y	verified @ 49,963.36	JA
	16:10	ICV	"		100,000 uS	99,592.02	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

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QAPP Requirements:	<p>Monthly verification against NIST-traceable thermometer</p> <p>Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings</p> <p>Quarterly verification at temperatures above and below the range of sample readings for the quarter</p>
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[illegible]

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 PCW-35

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
4/8	11:21	initial reading	probe 156184		50,000 μ S	50,153.72			df
	11:24	IC	"		"	PCC = .999	y	verified @ 49,997.86	df
	11:27	ICV	"		100,000 μ S	100,721.57	y		df

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC72-3m

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/8	11:50	Initial Reading	Probe 156003		50,000 μ S	49,561.00			JS
	11:53	IC	"		"	PCC = 1.005	Y	verified @ 49,977.90	JS
	11:55	ICV	"		100,000 μ S	99,670.03	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPCW-30

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/8	12:14	initial reading	probe 157230		50,000	99,776.20			JA
	12:28	IC	"		"	800 = 0.985 1.000	Y	verified @ 30,422.26	JA
	12:32	ICV	"		100,000	100,933.31	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
4/8	12:30	probe 157230	101746998	22.68	22.4	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPSWCCS-5

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/8	14:40	initial reading	probe 164536 AT100		50,000 uS	51,300.64			JS
	14:46	IC	"		"	PCC = 0.991	Y	verified @ 48,646.02	JS
	14:49	ICV	"		100,000 uS	100,003.82	Y		JS
	15:03	initial reading	probe 156471 AT200		50,000 uS	50,686.50			JS
	15:07	IC	"		"	PCC = 0.996	Y	verified @ 49,915.02	JS
	15:08	ICV	"		100,000 uS	99,231.78	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

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QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

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FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

TPSWC-2

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	16:05	Initial reading	Probe 156188		12,890 μ S	13,048.30			JS
	16:07	IC	"		"	PCC = 1.001	y	ver: Rec @ 12,850.02	JS
	16:12	ICV	"		50,000 μ S	48,641.85	y		JS
	16:25	Initial reading	Probe 156485		12,890 μ S	12,840.0			JS
	16:27	IC	"		"	PCC = 1.019	y	ver: Rec @ 12,843.05	JS
	16:33	ICV	"		50,000 μ S	48,945.97	y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPSWC-1

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 $\mu\text{S}/\text{cm}$ - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 $\mu\text{S}/\text{cm}$ - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading ($\mu\text{S}/\text{cm}$)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	17:03	initial reading	probe 155896		12,890 μS	13,073.12			JS
	17:06	IC	"		"	12,998	Y	verified @ 12,847.04	JS
	17:08	ICV	"		50,000 μS	49,061.36 Y			JS
	17:19	initial reading	probe 155906		12,840 μS	12,084.89			JS
	17:25	IC	"		"	12,577	Y	verified @ 12,753.63	JS
	17:30	ICV	"		50,000 μS	49,213.46 Y			JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-45

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	12:48	ENTIRE probe reading	probe		12,890 50,000 uS	12,929.84			JA
	12:51	IC			"	1.013	Y	verified @ 12,948.02	JA
	12:59	ICV			50,000 150,000 uS	49,859.22	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC 20-4-01

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	12:20	initial reading	probe 155929		50,000	50,023.03			JS
	12:22	IC			"	900 = 0.998	Y	verified @ 50,013.08	JS
	12:26	ICV			100,000	98,636.25	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-40

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	11:54	MTF-9 reading	P/862 156127		50,000 _{ms}	59544.06			JA
	11:56	IC	"		"	PLC = .997	Y	verified @ 49,255.0	JA
	12:02	ICV	"		100,000 _{ms}	99,639.78	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan

Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	11:59	probe 156127	601746998	30.82	31.2	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-15

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/8	10:27	Initial ready	probe 156275		50,000 μ S	52,969.93			JS
	10:30	IC	"		"	PLC = 1.004	y	verified @ 50,238.18	JS
	10:33	ICV	"		100,000 μ S	101,918.70	y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

Parameter:	Temperature, water
FDEP-SOP Reference:	FT1400
QAPP Requirements:	Monthly verification against NIST-traceable thermometer Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings Quarterly verification at temperatures above and below the range of sample readings for the quarter

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-1m

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11-9-10	9:58	Initial reading	156595		50,000 uS	51434.88			SH
11-9-10	10:02	IC	156595		50,000 uS	PLC-1.008	Y	Verified @ 50,453.72	SH
11-9-10	10:07	ICV	4		100,000 uS	99,604	Y		SH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

[illegible]

TPC1W-10

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	09:03	Initial reading	Probe 156132		50,000 uS	50,148			JS
	09:08	IC	"		"	PLC = 997	Y	writes @ 49,915.87	JS
	09:13	ICV	"		100,000 uS	98,841.02 604.47	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form

TPSWC-3

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9	15:00	Initial reading	Probe AT100 156316		12,890	12,955.95			JA
	15:04	IC	"		"	PCC = 1.008	Y	verified @ 12,964.94	JA
	15:08	ICV	"		50,000	49,459.72	Y		JA
	15:21	Initial reading	Probe AT200 155379		12,890	12,903.65			JA
	15:23	IC	"		"	PCC = 1.006	Y	verified @ 12,911.78	JA
	15:33	ICV	"		50,000	48,931.93	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPSWCCS-7

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	12:48	Initial Reading	Probe 155247		59,000	49,943.40			JA
	12:51	IC	"		"	0.987	Y	verified @ 49,972.31	JA
	13:00	ICV	"		109,000	98,603.40	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan

Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST-Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	12:56	P.D. one 155247	1017416998	30.23	30.2	J		JH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPSWCCS-2

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/9/10	11:16	Initial reading	probe 156491		50,000 uS	49,991.26			JS
	11:19	IC	"		"	PCC = 1.018	y	verified @ 50,249.44	JS
	11:22	ICV	"		100,000 uS	98,920.57	y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-135

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	10:43	Initial reading	Probe 155892		50,000	48813.50			
11/10	10:48	IC	155892		"	PCC = 1.016	Y	verified @ 50,168.00	SH
11/10	10:50	ICV	155892		100,000	100,301.63	Y		SH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan **Field Instrument Calibration Form**

TPC7W-13 m

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11-10	9:59	Initial Reading	155897		50,000	49,151.67			SH
11-10	10:05	IC	155897		50,000	PC-1016	Y	verified @ 50,185.03	SH
11-10	10:10	ICV	155897		100,000	101,612.70	Y		SH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-130

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11-10	9:24	Initial Reading	154952		50,000	48,839.29			SH
11-10	9:28	IC	154952		50,000	PIC 7.019	Y	verified @ 50,103.42	SH
11-10	9:30	ICV	154952		100,000	99,307.99	Y		SH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

TPM-55

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	16:50	initial reading	P222 156157		12,890 uS	13,045.83			AA
	17:02	IC	"		"	PLC = 1.019	Y	verified @ 12,838.84	AA
	17:28	ICV	"		50,000 uS	48,043.22	Y		AA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

TPCW-5m

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	16:36	initial ready	Probe 155936		12,890	13,082.52			JA
	16:38	IC			"	PLC = 1.002	y	verified @ 13,863.50	JA
	16:40	ICV			50,000	49,231.60	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC7W-50

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	16:13	Initial reading	probe 15583		12,890	13,053.98			JA
	16:14	IC	"		"	PCC = 1.006	Y	verified @ 12062.32	JA
	16:19	ICV	"		50,000	49,097.10	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

QAPP Requirements:	Monthly verification against NIST-traceable thermometer Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings Quarterly verification at temperatures above and below the range of sample readings for the quarter
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TPSW IO-2

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	13:17	initial ready	probe 151997		50,000 12,890.5	12,919.46			JA
	13:19	IC	"		"	PCC = 1.011	y	verified @ 12,830.38	JA
	13:24	ICV	"		50,000 uS	49,393.42	y		JA
	13:28	initial ready	probe 155346		12,890 uS	12,703.47			JA
	13:33	IC	"		"	PCC = 1.015	y	verified @ 12,834.58	JA
	13:36	ICV	"		50,000 uS	49,379.62	y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

Biscayne
Bay -
Removed

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/10	13:54	initial reading	Probe # 155924		50,000 uS	50,450.41		BB SW-1	df
	15:02	"	156326		"	49,477.54		BB SW-5	df
	16:26	"	155993		"	49,491.71		BB SW-2	df
11/14	16:00	"	156279		"	49,920.36		BB SW-4	df

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range
of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST- Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/16	13:57	95002 155924	101746998	27.9 28	27.4	Y		JA
	15:02	156326	"	27.85	28.1	Y		JA
	16:26	155993	"	28.05	28.6	N		JA
11/17	16:01	156279	"	28.38	28.8	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC700-115

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
4/17	13:22	Initial reading	probe 165269		50,000	50,804.57			JS
	13:24	IC	"		"	PCC = 1.010	Y	wireless 49,858.33	JS
	13:27	ICV	"		100,000	100,579.06	Y		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPGW-11m

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	11:32	Initial reading	165283		500.00	51,591.86			JA
	11:34	IC	"		"	PLC = 0.999	Y	checked @ 49,417.64	JA
	11:39	ICV	"		100,000	99,006.72	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPCW-110

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 $\mu\text{S}/\text{cm}$ - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 $\mu\text{S}/\text{cm}$ - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading ($\mu\text{S}/\text{cm}$)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	11:58	in. test (loading)	Probe 165277		50,000 μS	50,086.55			JA
	12:01	IC	"		"	PCL = 1.003	Y	verified @ 489,814.24	JA
	12:05	ICV	"		100,000 μS	98,627.50	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TP6W-105

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	9:29	Initial Reading	165871		50,000	51,784.31			SH
11/17	9:34	IC	165871		50,000	P.C.C. = 0.991	Y	Verified @ 49,949.81	SH
11/17	9:38	ICV	165871		100,000	98,818.82	Y		SH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TP6W-10M

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	9:04	Initial Reading	164529		50,000	50,498.28			SH
11/17	9:09	IC	164529		50,000	PCL = 1.006	Y	Verified @ 50,257.66	SH
11/17	9:11	ICV	164529		100,000	99,507.77	Y		SH

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

FPL Turkey Point Monitoring Plan

Field Instrument Calibration Form

Parameter: Temperature, water

FDEP-SOP Reference: FT1400

QAPP Requirements: Monthly verification against NIST-traceable thermometer
Must be within $\pm 0.5^{\circ}\text{C}$ of NIST-traceable readings
Quarterly verification at temperatures above and below the range of sample readings for the quarter

Date	Time	Instrument or meter ID	NIST-Traceable Thermometer ID	Instrument or meter reading (Deg C)	NIST Thermometer reading (Deg C)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	9:08	164529	101746998	28.64	28.8°C	Y		SM

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC7W-100

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> Read after pressing "Calibrate" 1 standard at the low end of expected sample reading range but no less than 100 uS/cm Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. Read only (do not press "calibrate") Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	8:30	Initial Calibration	PDR 168177		50,000 μ S	50,357.59			JF
11/17	8:35	IC	"		"	PCC = 1.005	Y	wireless @ 50,011.11	JF
11/17	8:43	ICV	"		100,000 μ S	99,817.16	Y		JF

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

**FPL Turkey Point Monitoring Plan
Field Instrument Calibration Form**

TPM-145

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	15:10	initial reading	probe 156173		50,000 _{us}	51,109.37			JA
	15:12	IC			"	PCC = 1.012	Y	verified @ 49,937.86	JA
	15:16	ICV			104000 _{us}	99,591.15	Y		JA

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPGW-14m

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: Specific conductance

FDEP-SOP Reference: FT1200

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> Read after pressing "Calibrate" 1 standard at the low end of expected sample reading range but no less than 100 uS/cm Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. Read only (do not press "calibrate") Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	14:44	initial reading	probe 156137		50,000 uS	50,795.91			jj
	14:45	IC			10	PCC = 1.001	y	unmarked @ 99,768.34	jj
	14:52	ICV			100,000 uS	95,002.12	y		jj

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

1 = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

TPC 2-140

FPL Turkey Point Monitoring Plan Field Instrument Calibration Form

Parameter: **Specific conductance**

FDEP-SOP Reference: **FT1200**

QAPP Requirements:

Initial Calibration	Initial Calibration Verification (ICV)	Continuing Calibration Verification (CCV)
<ul style="list-style-type: none"> - Use 1 standard at the upper end of expected sample reading range but no less than 720 uS/cm - Conduct daily prior to use or if CCV fails 	<ul style="list-style-type: none"> - Read after pressing "Calibrate" - 1 standard at the low end of expected sample reading range but no less than 100 uS/cm - Must be within $\pm 5\%$ of TV 	<ul style="list-style-type: none"> - Read at the end of the event, or within 24 hrs of initial calibration, whichever is less. - Read only (do not press "calibrate") - Two standards that bracket the sample value range. Must be within $\pm 5\%$ of TV

Date	Time	Operation (IC, ICV, CCV)	Instrument or meter ID	Calibration Standard (ID & Lot#)	Calibration Standard Reference Value (TV)	Instrument or Meter Reading (uS/cm)	Acceptance Criteria Met? (Y/N)	Comments ¹	Calibration verified by
11/17	14:23	Initial reading	probe 156192		50,000	50,607.87			JS
	14:24	IC	"		"	PLC = 0.999	J	verified @ 50,115.39	JS
	14:26	ICV	"		100,000	98,659.56	J		JS

¹ = Indicate any failed verifications; all corrective actions taken; any maintenance performed.

APPENDIX E:

**NON-QUALIFIED
AUTOMATED WATER QUALITY
AND STAGE DATA
TIME SERIES GRAPHS**

NON-QUALIFIED AUTOMATED WATER QUALITY TIME SERIES GRAPHS

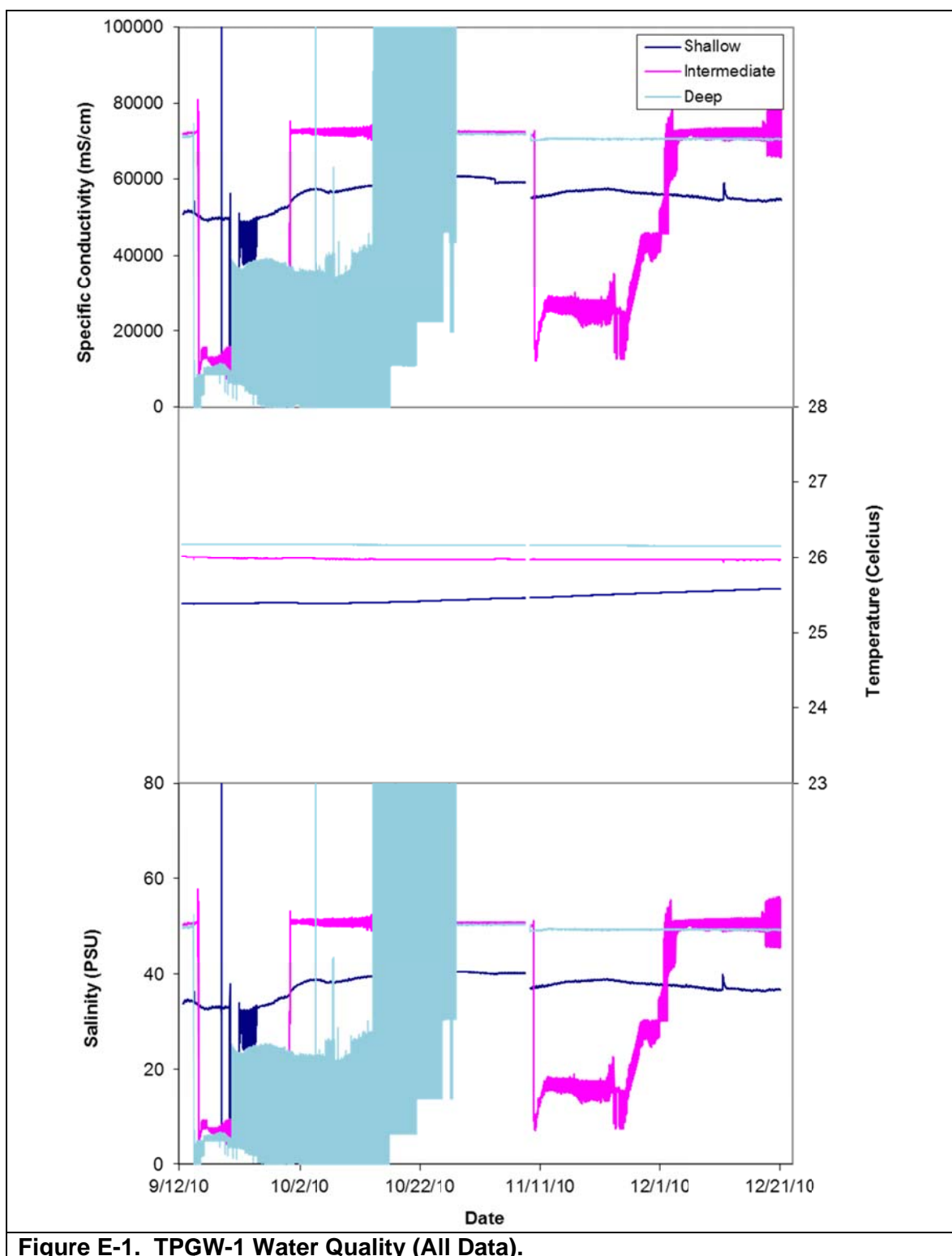


Figure E-1. TPGW-1 Water Quality (All Data).

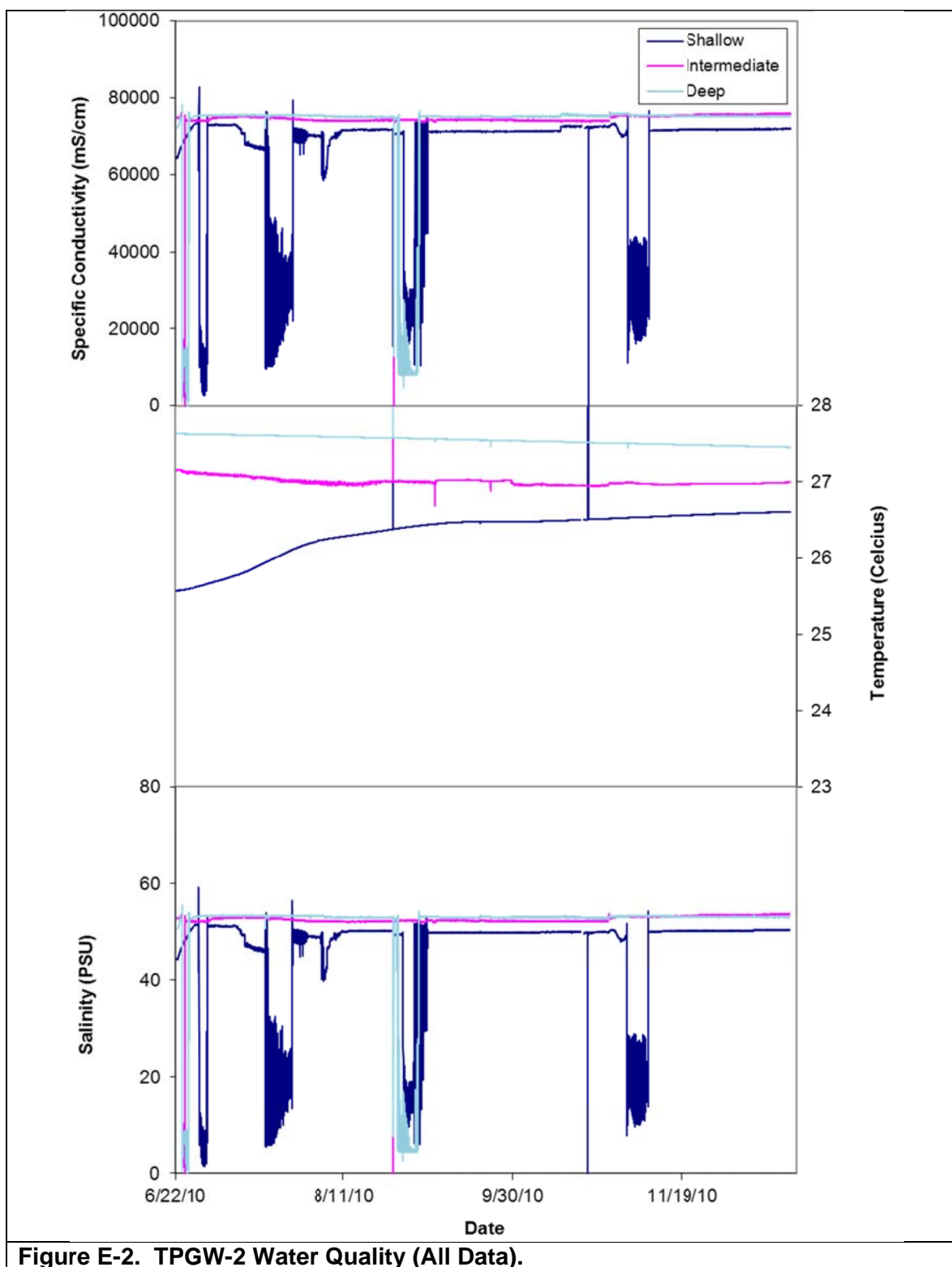
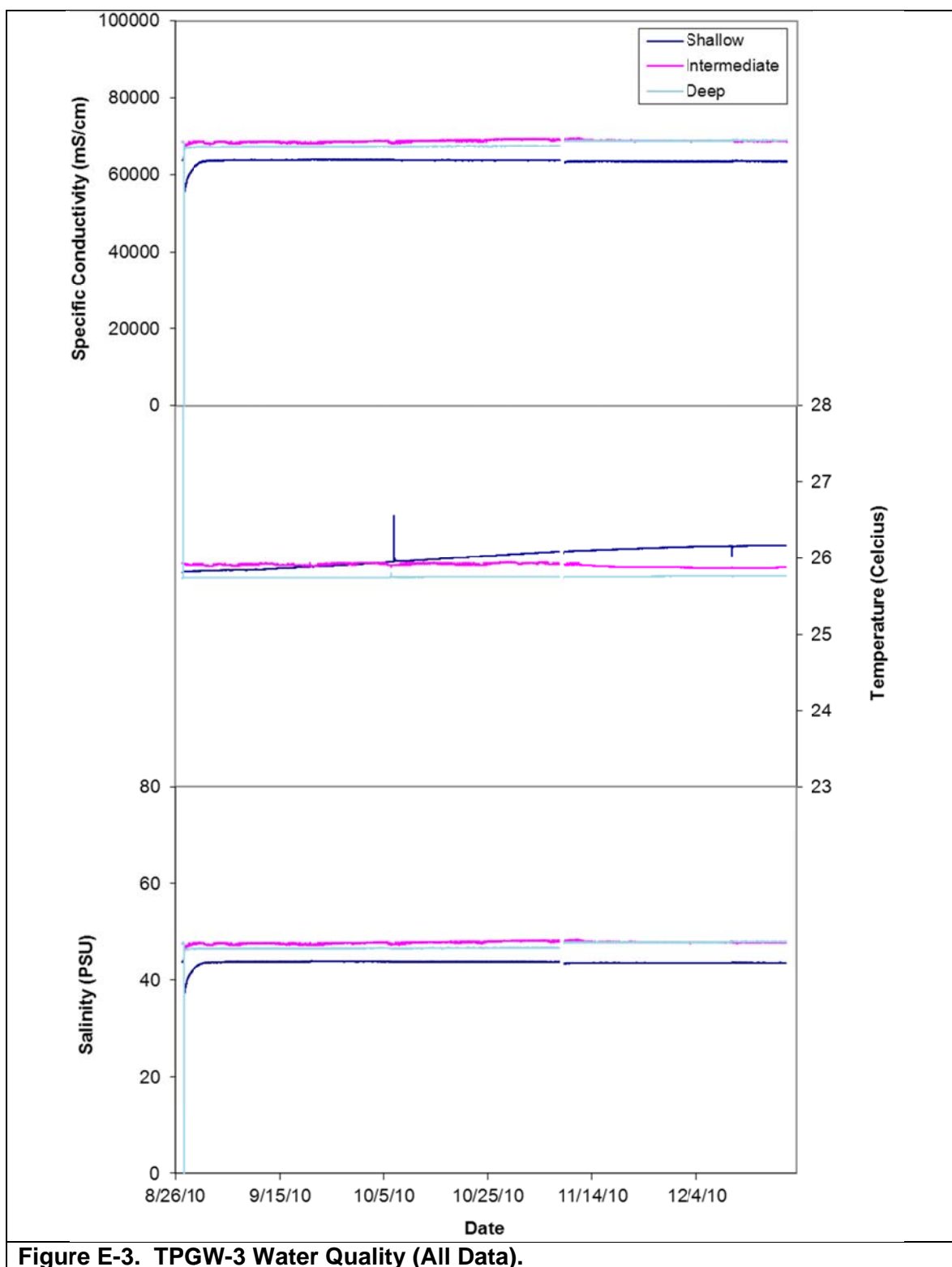


Figure E-2. TPGW-2 Water Quality (All Data).



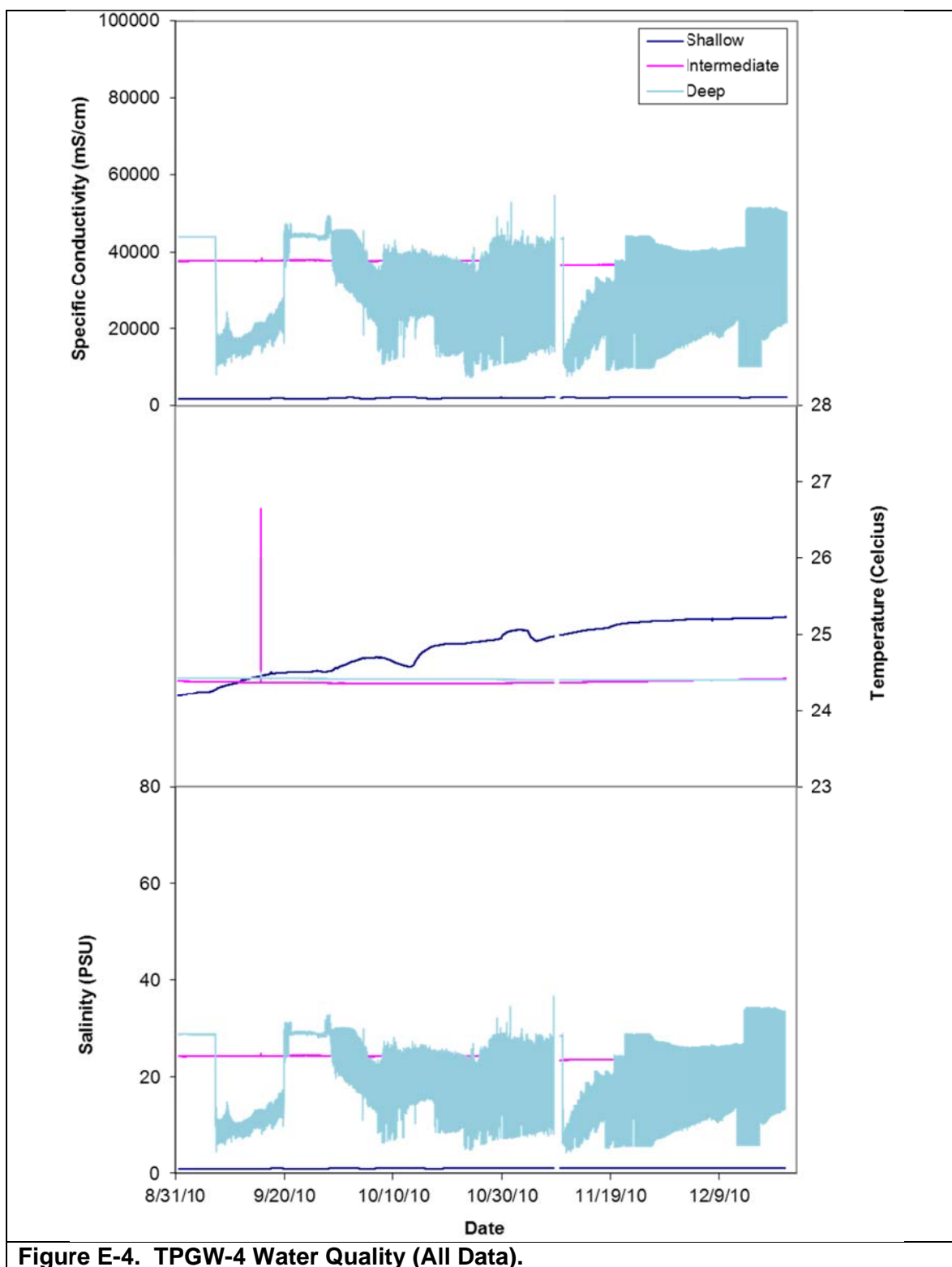
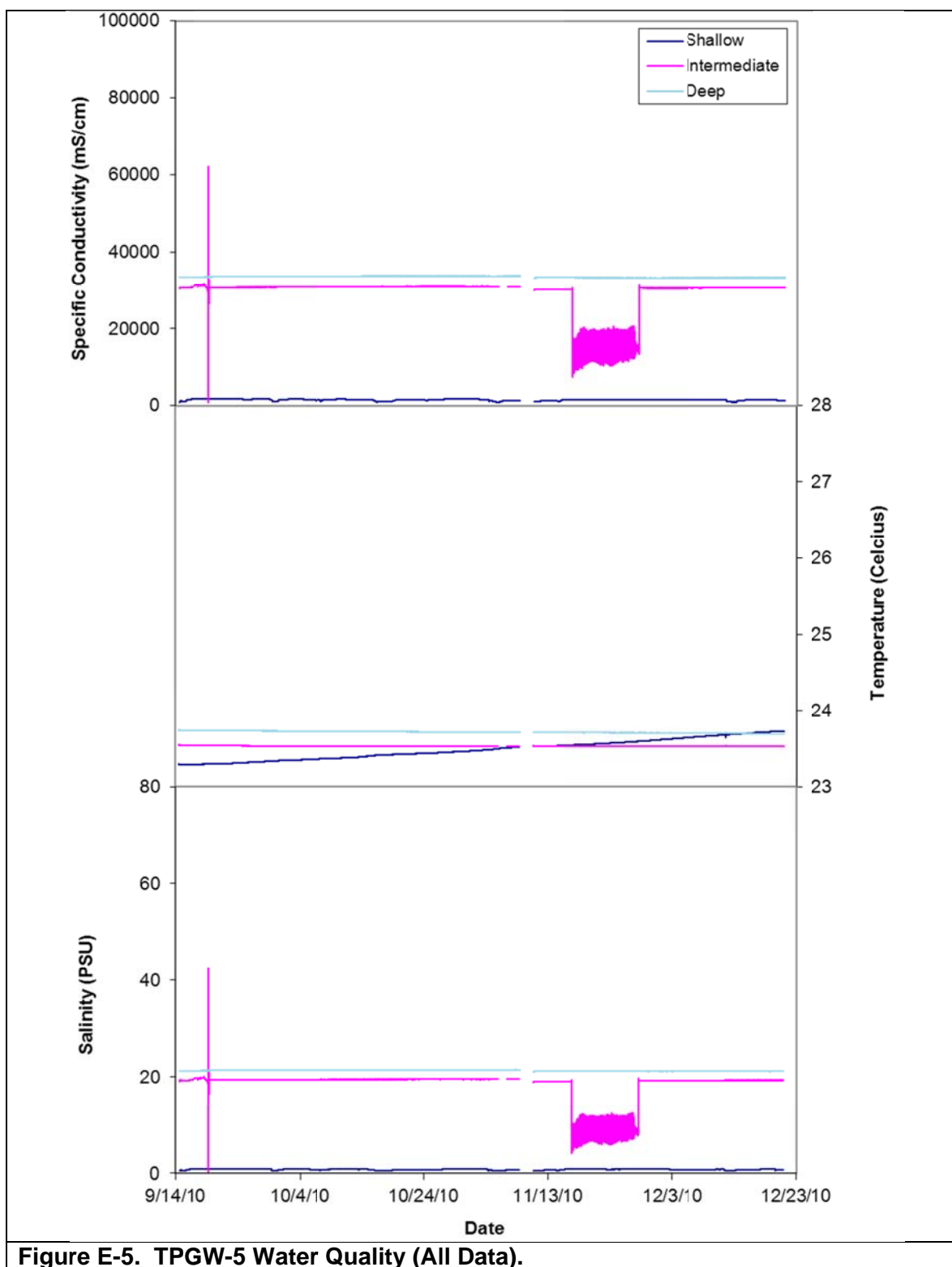
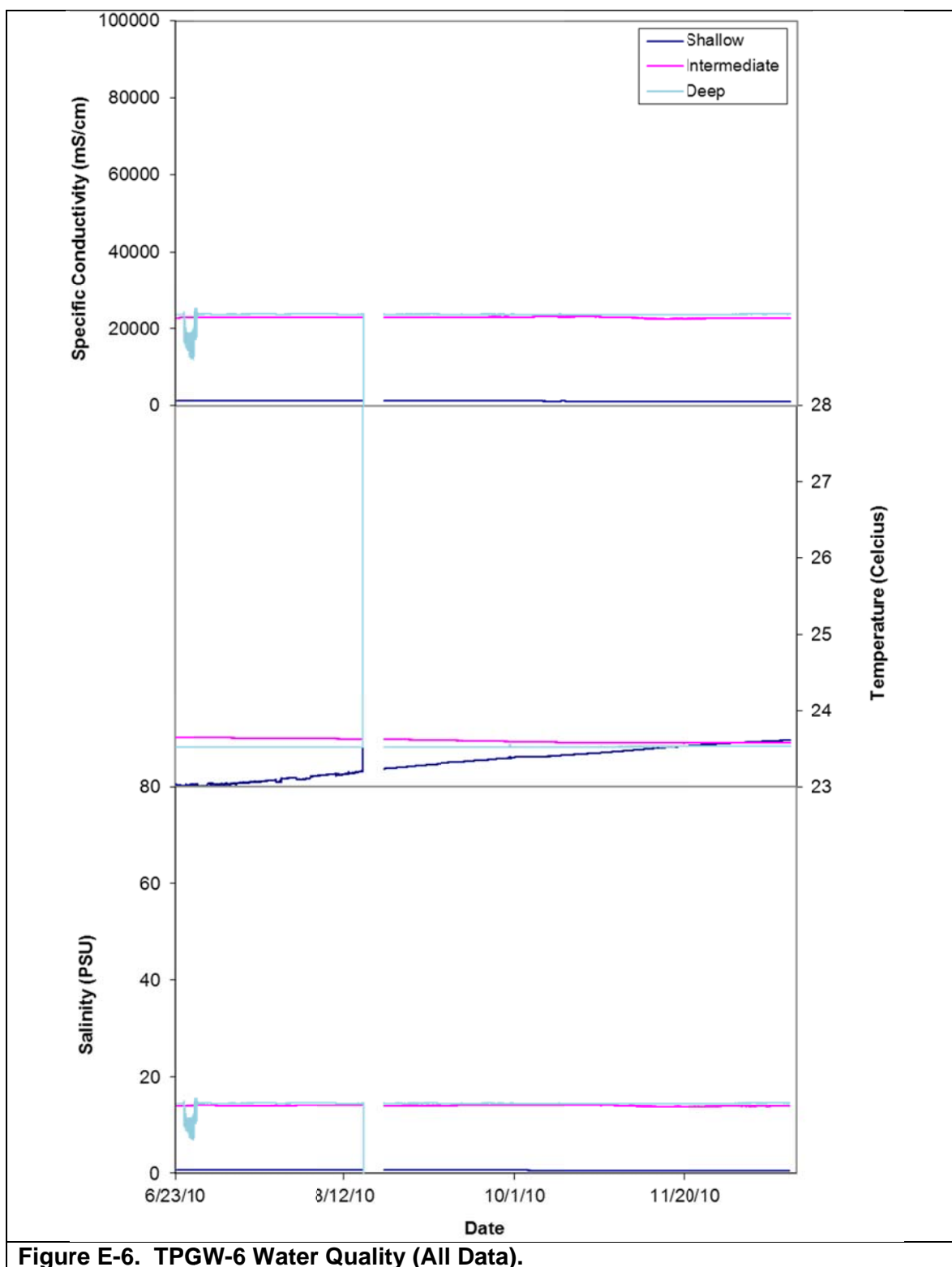


Figure E-4. TPGW-4 Water Quality (All Data).





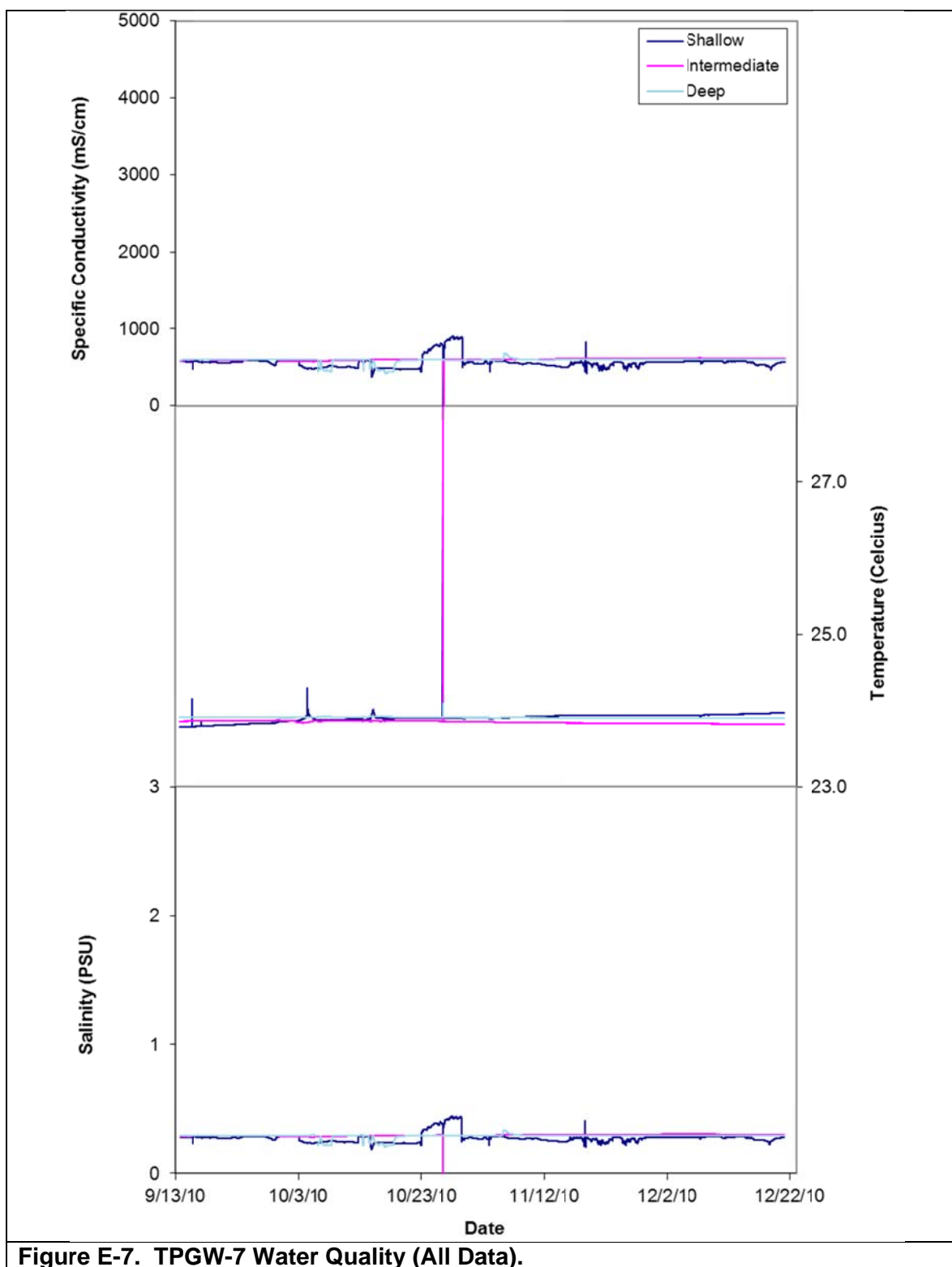
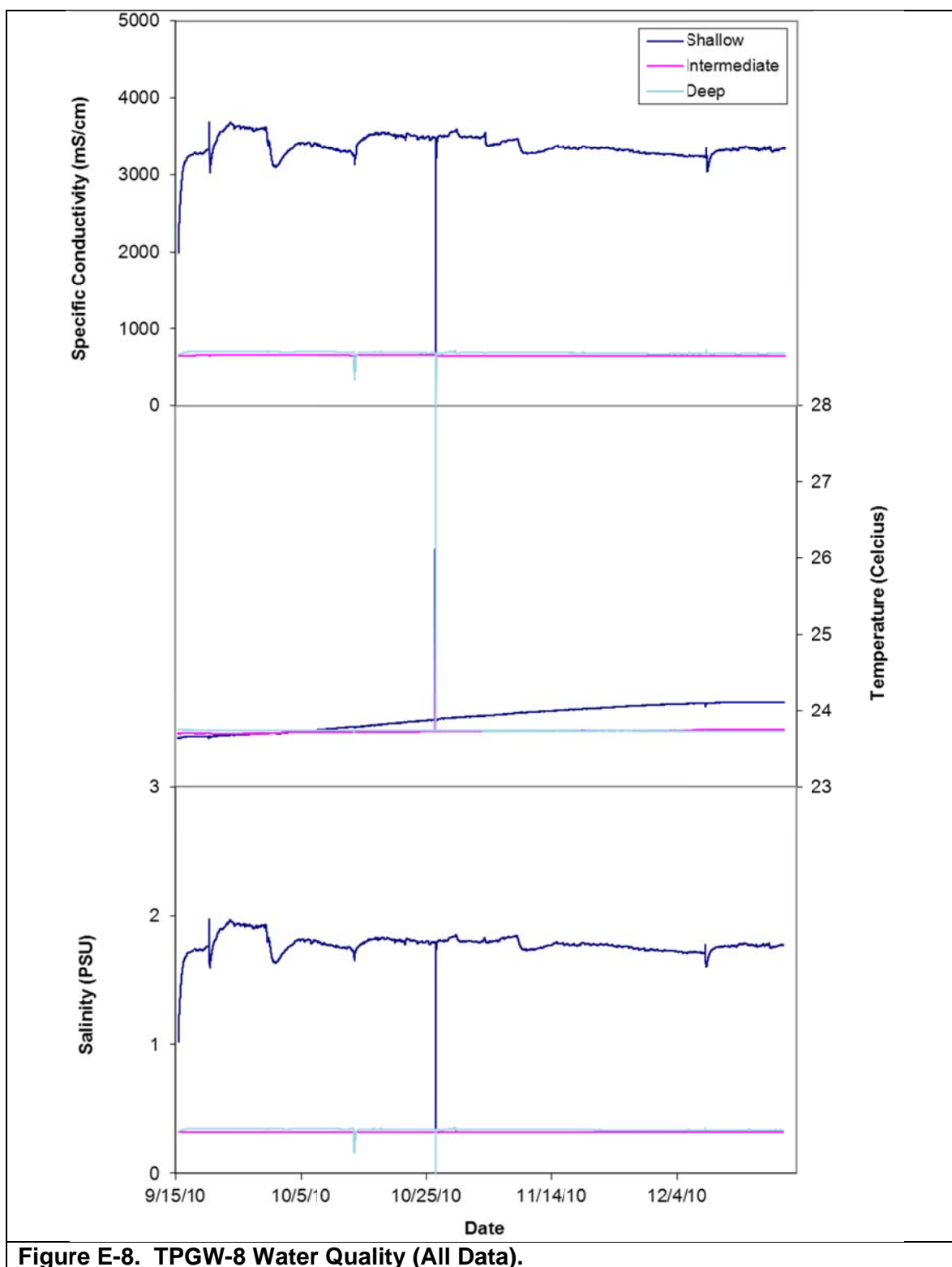


Figure E-7. TPGW-7 Water Quality (All Data).



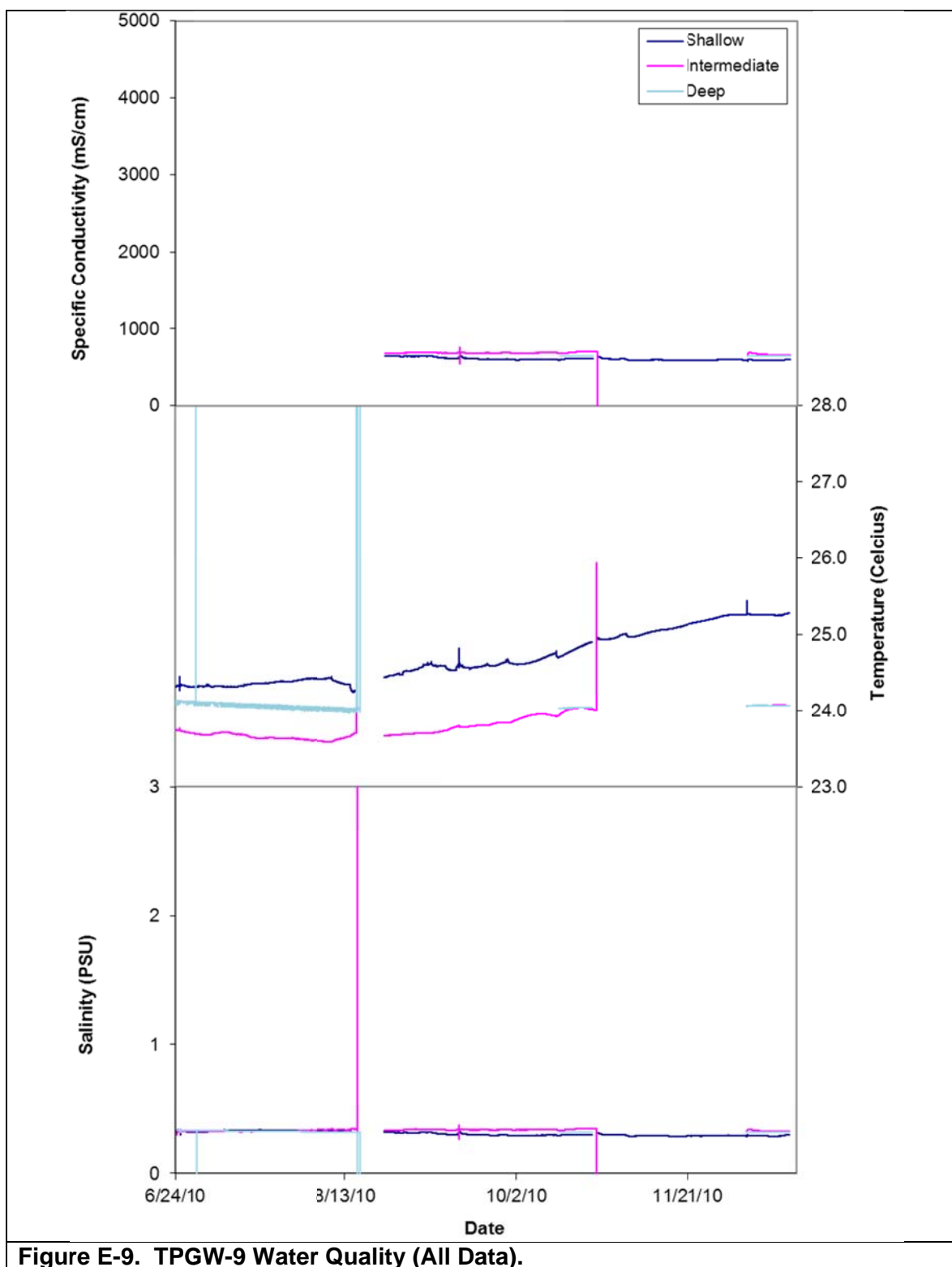
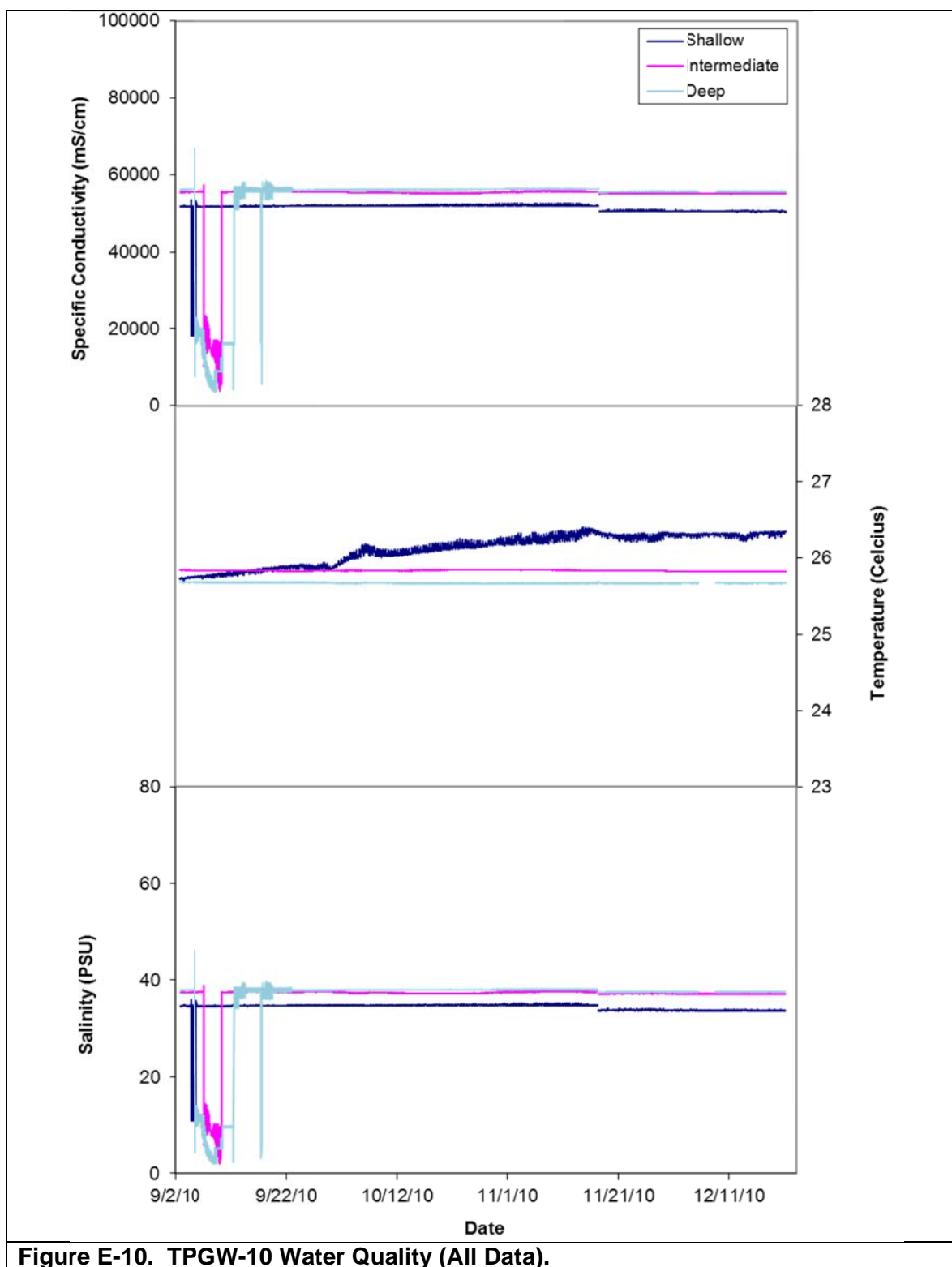


Figure E-9. TPGW-9 Water Quality (All Data).



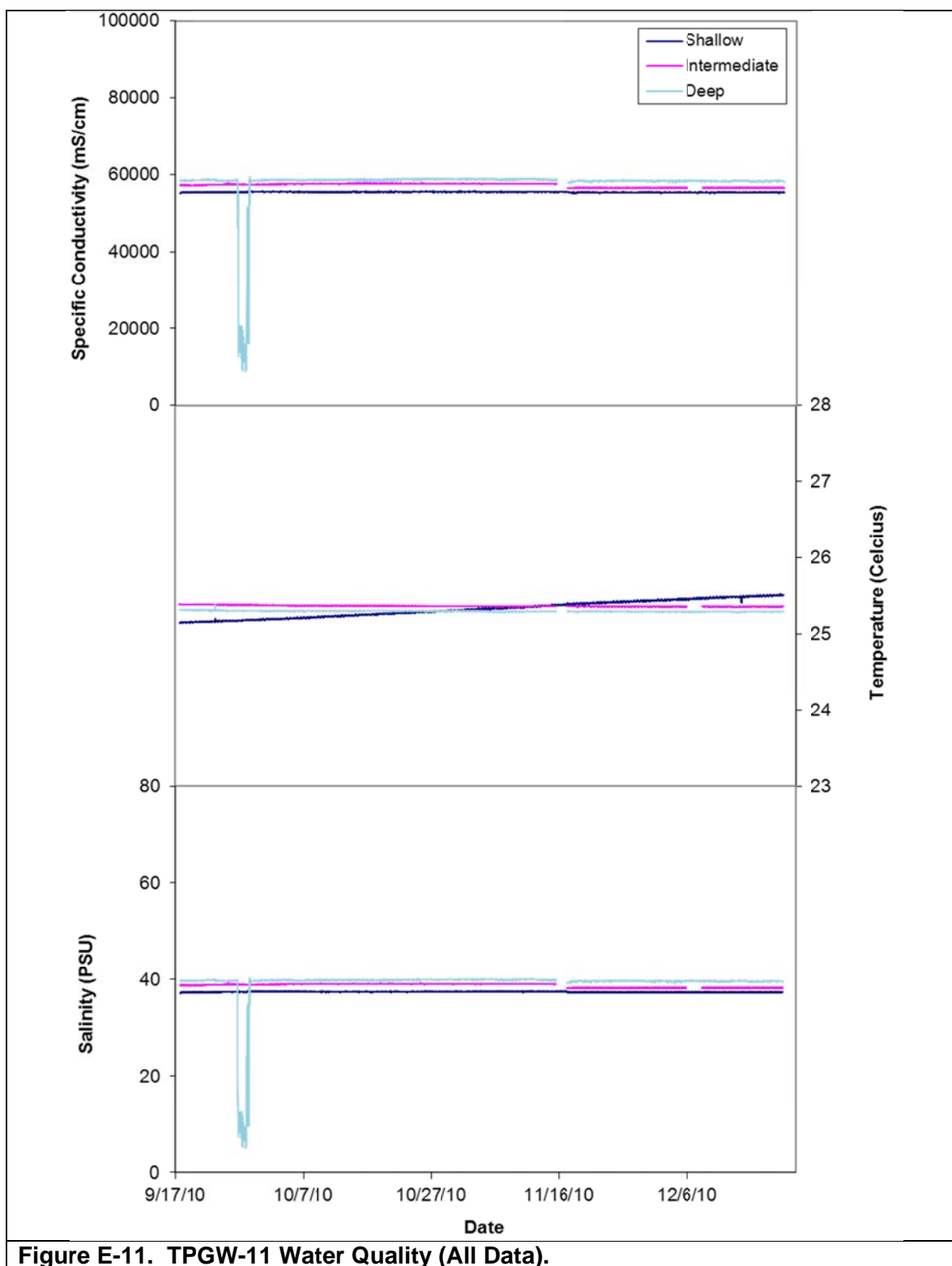


Figure E-11. TPGW-11 Water Quality (All Data).

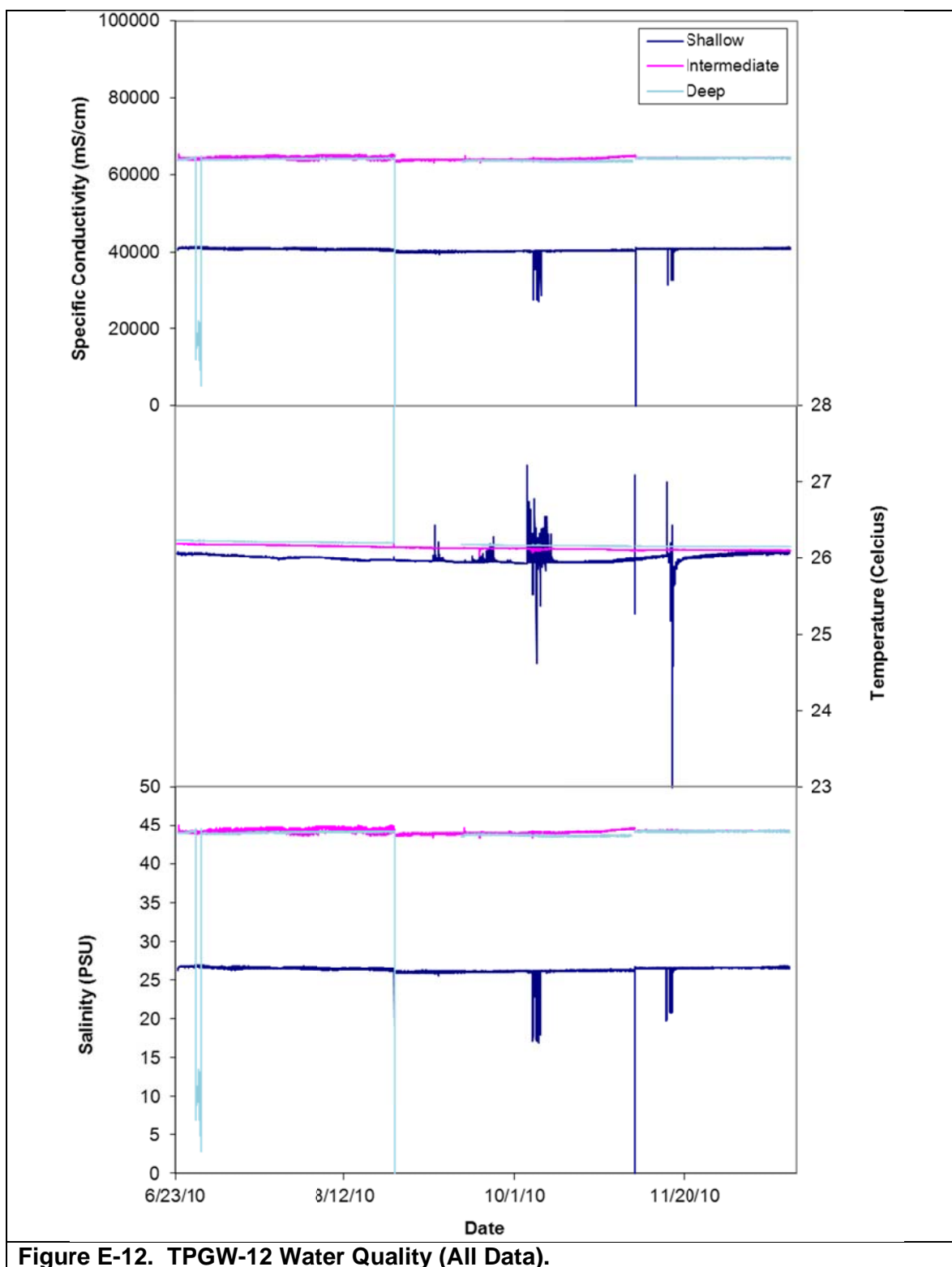
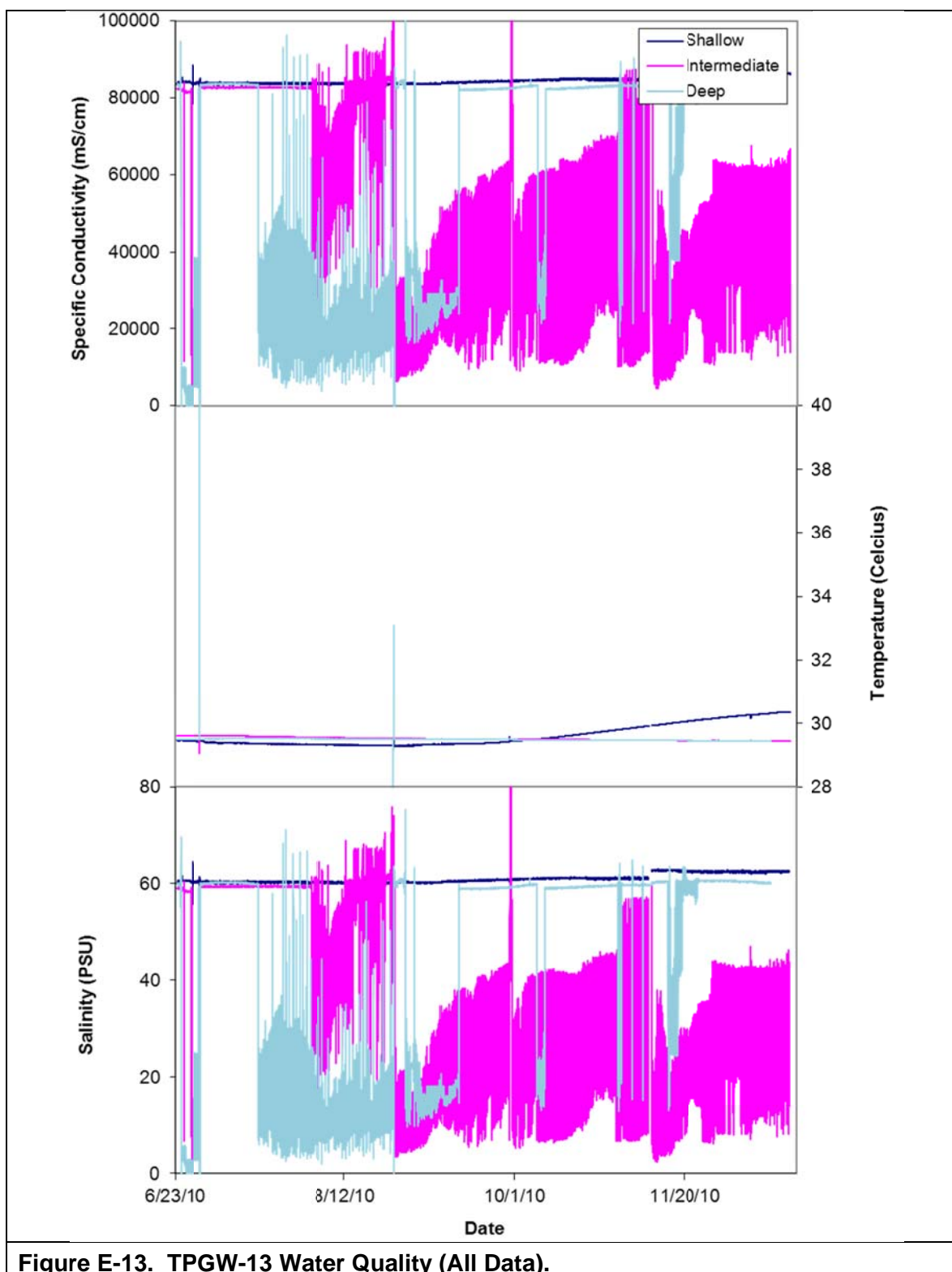


Figure E-12. TPGW-12 Water Quality (All Data).



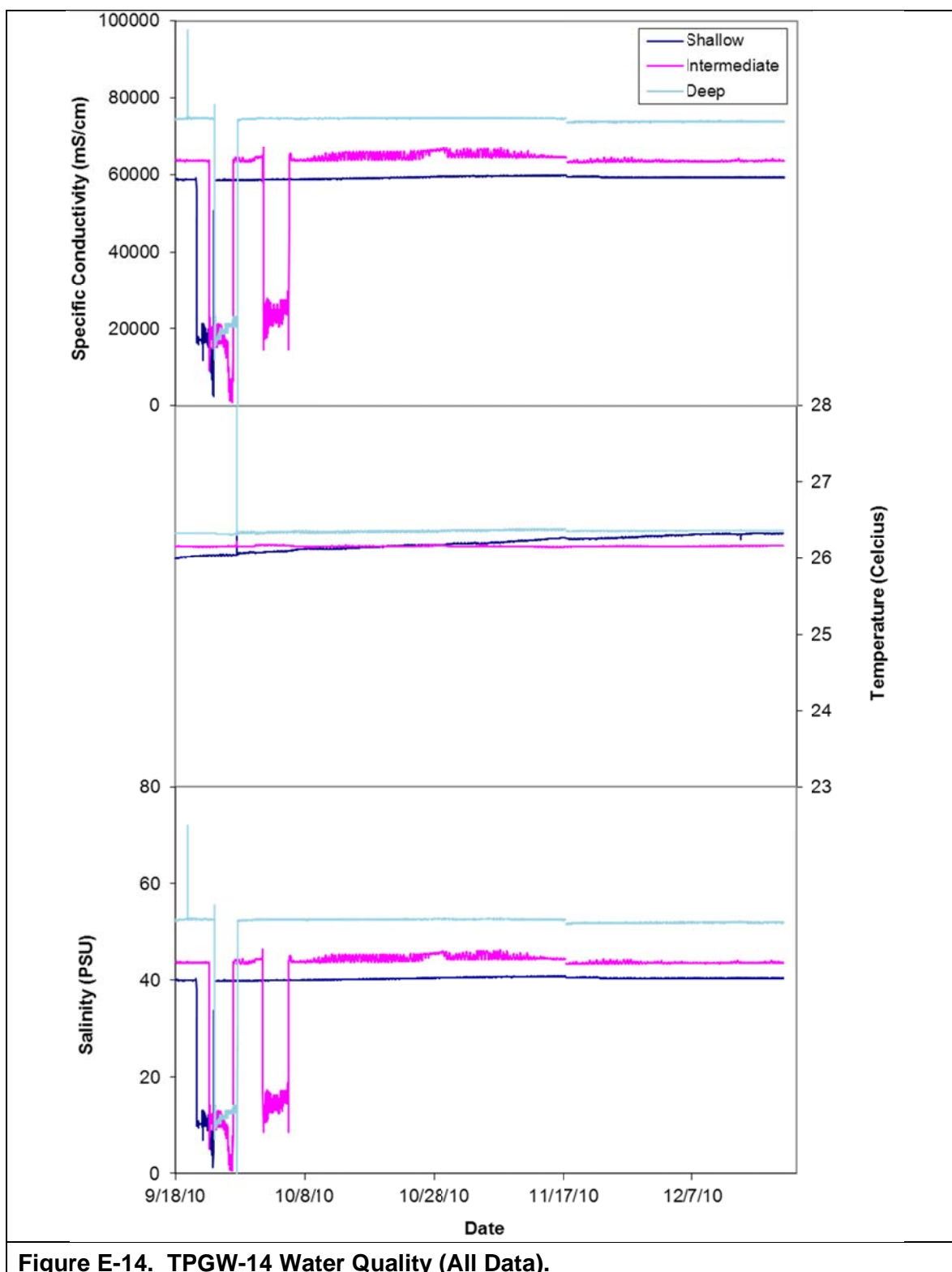


Figure E-14. TPGW-14 Water Quality (All Data).

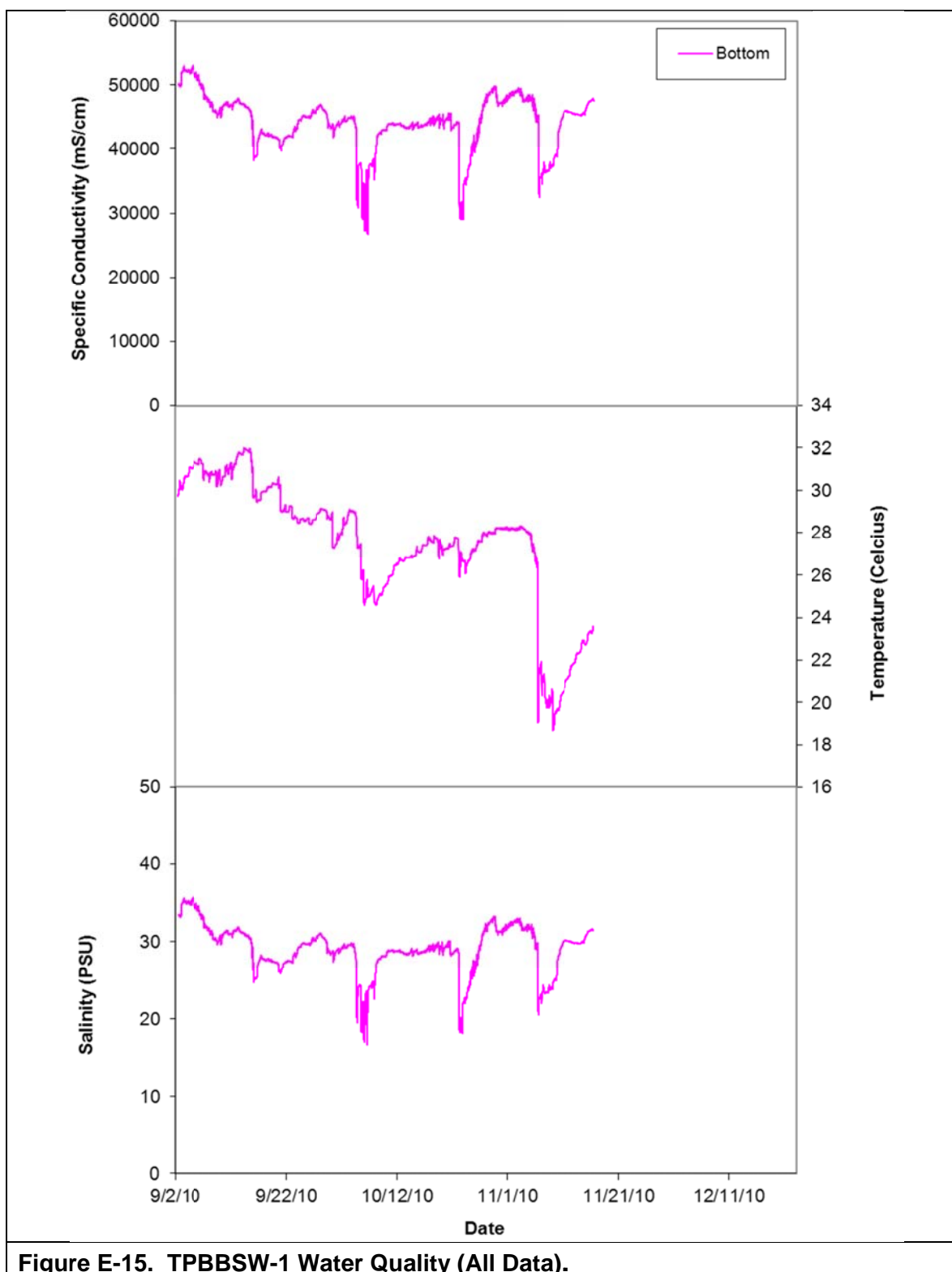
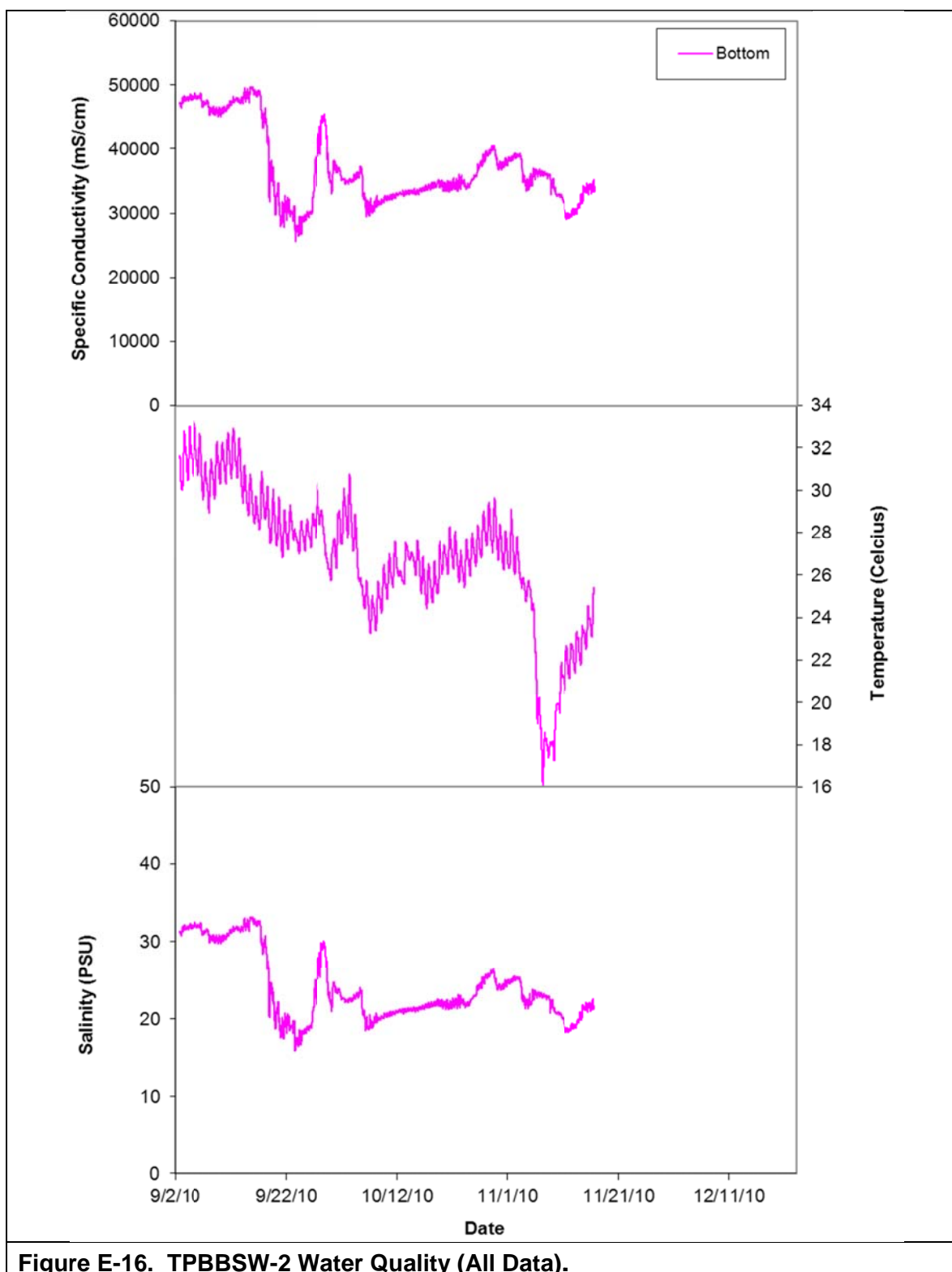


Figure E-15. TPBBSW-1 Water Quality (All Data).



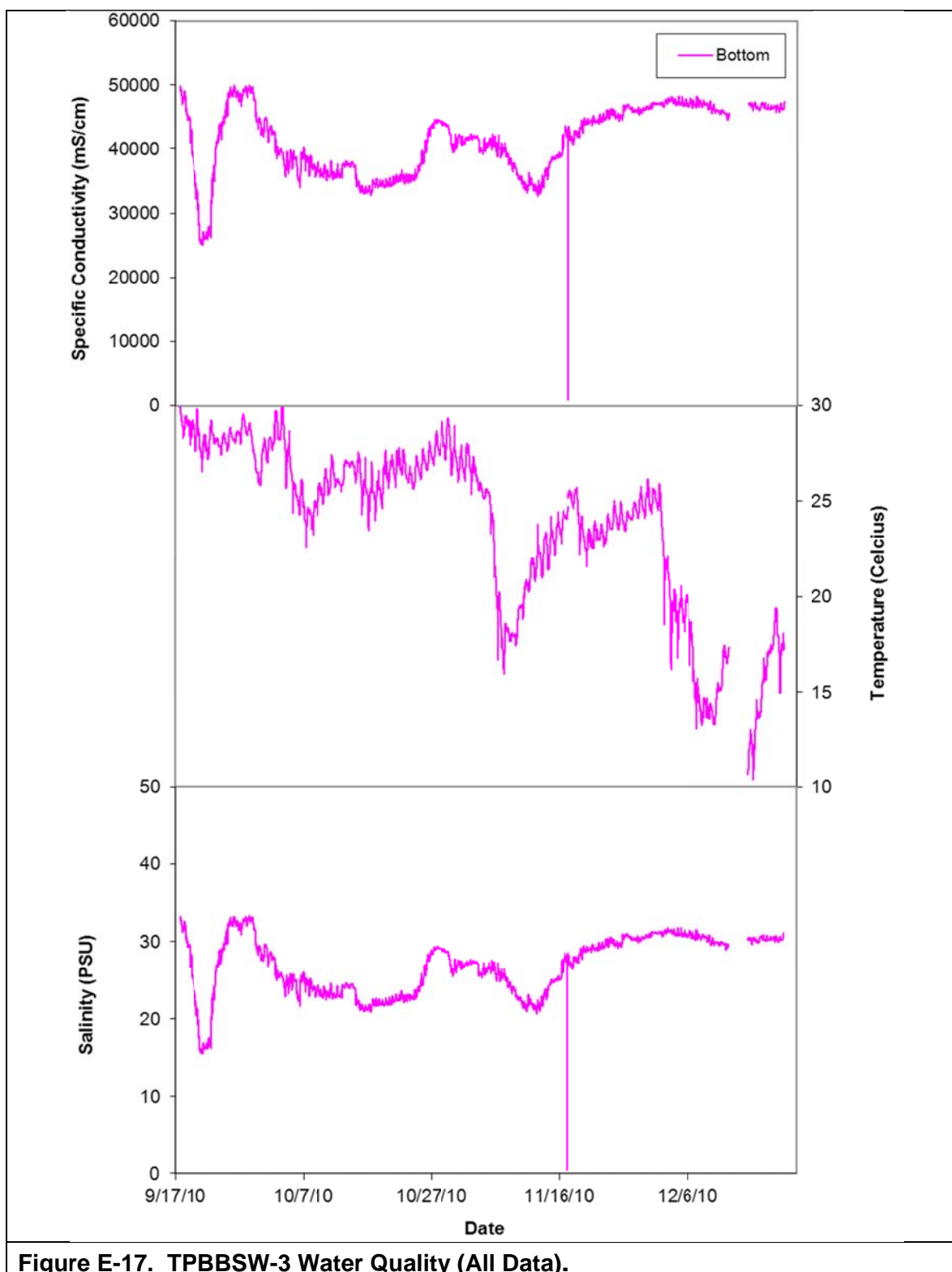


Figure E-17. TPBBSW-3 Water Quality (All Data).

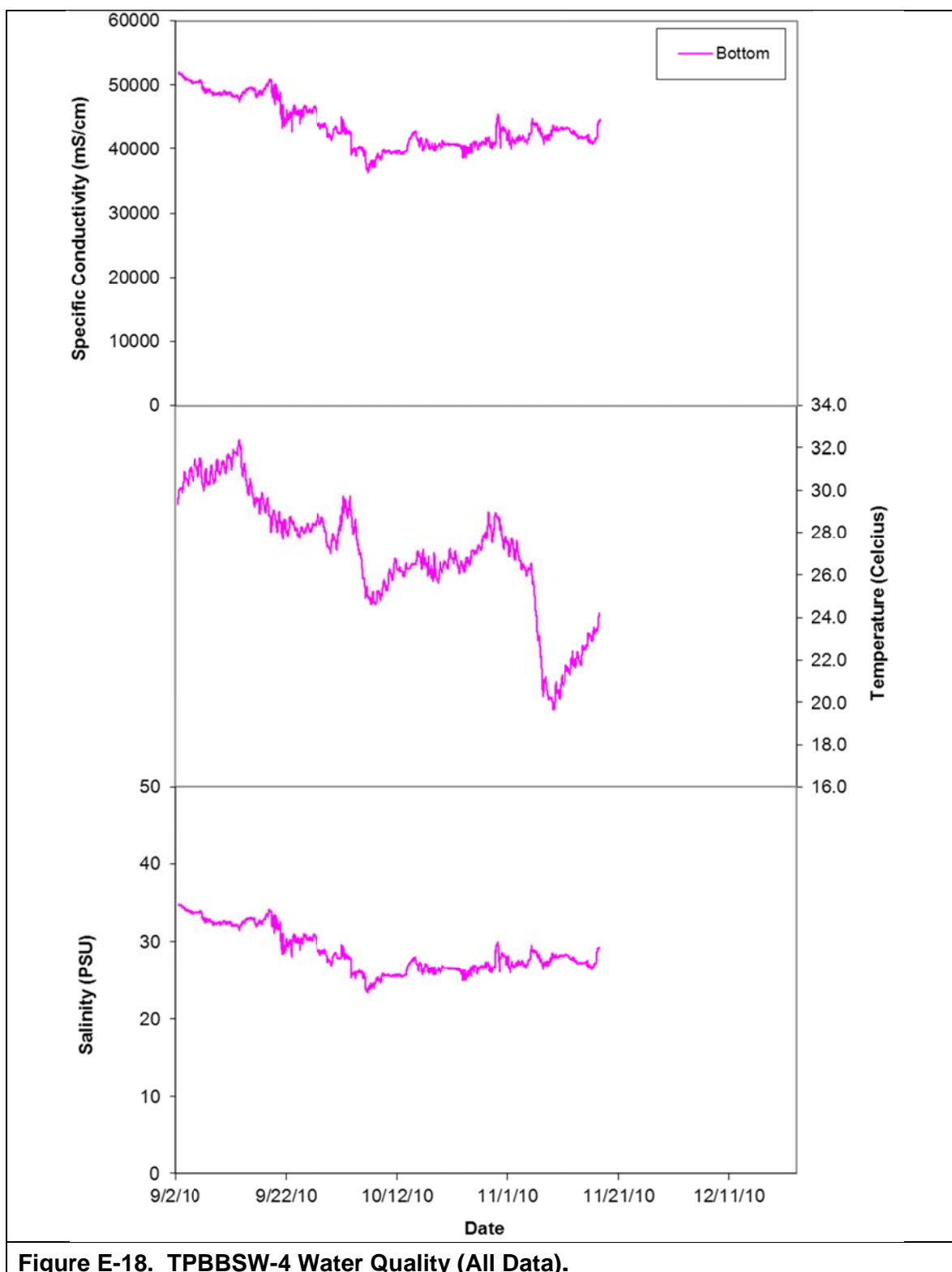


Figure E-18. TPBBSW-4 Water Quality (All Data).

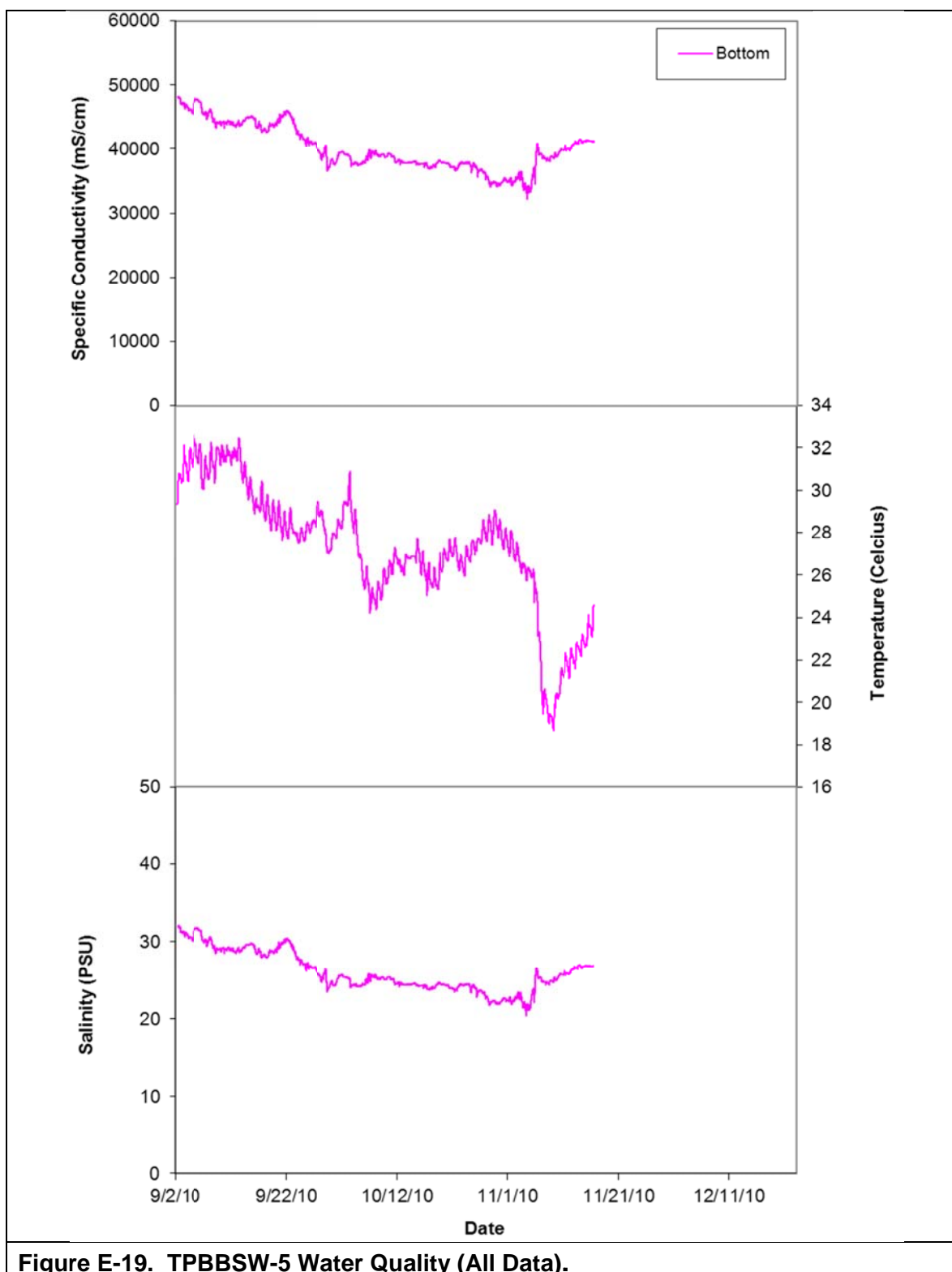


Figure E-19. TPBBSW-5 Water Quality (All Data).

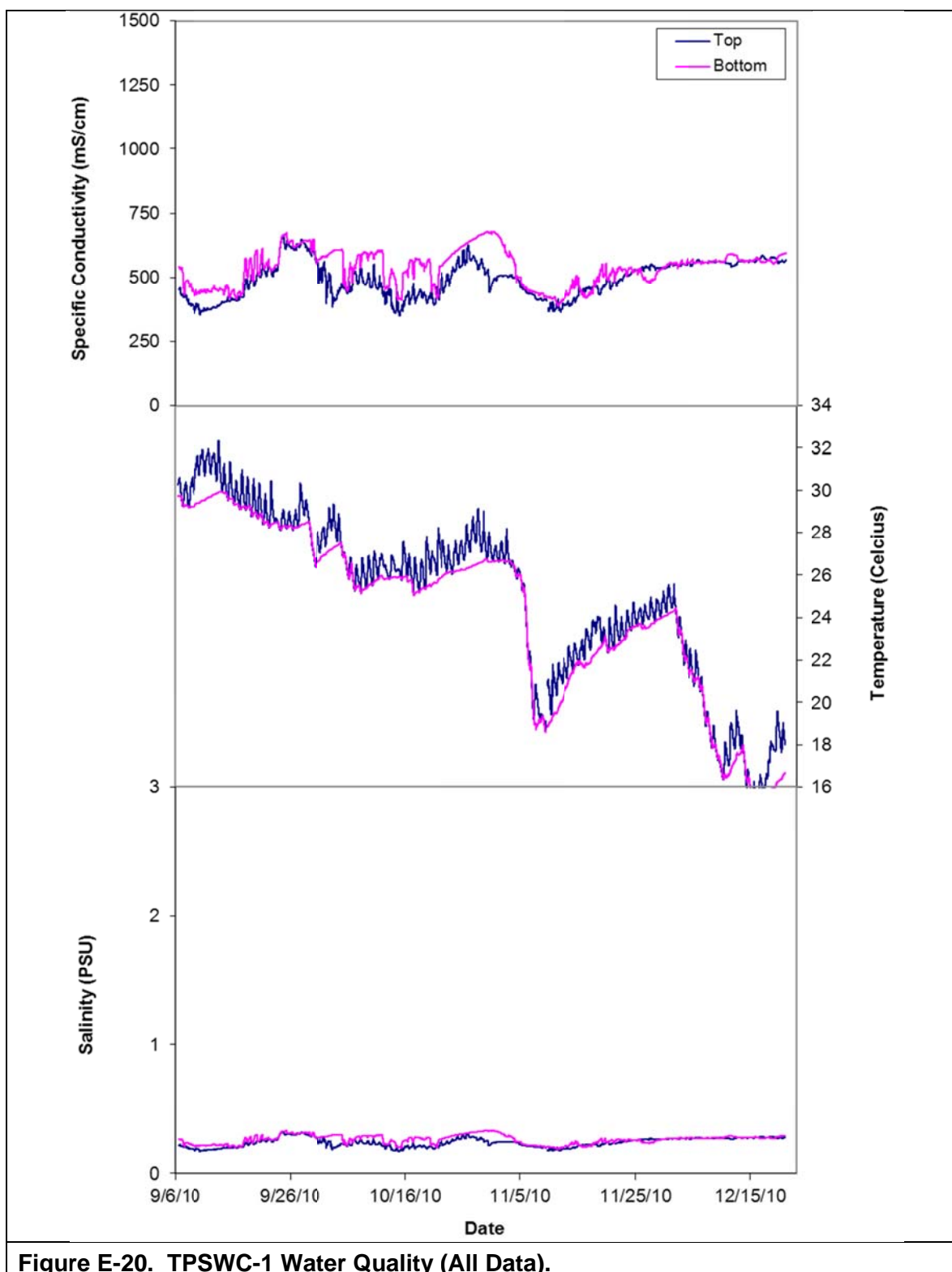


Figure E-20. TPSWC-1 Water Quality (All Data).

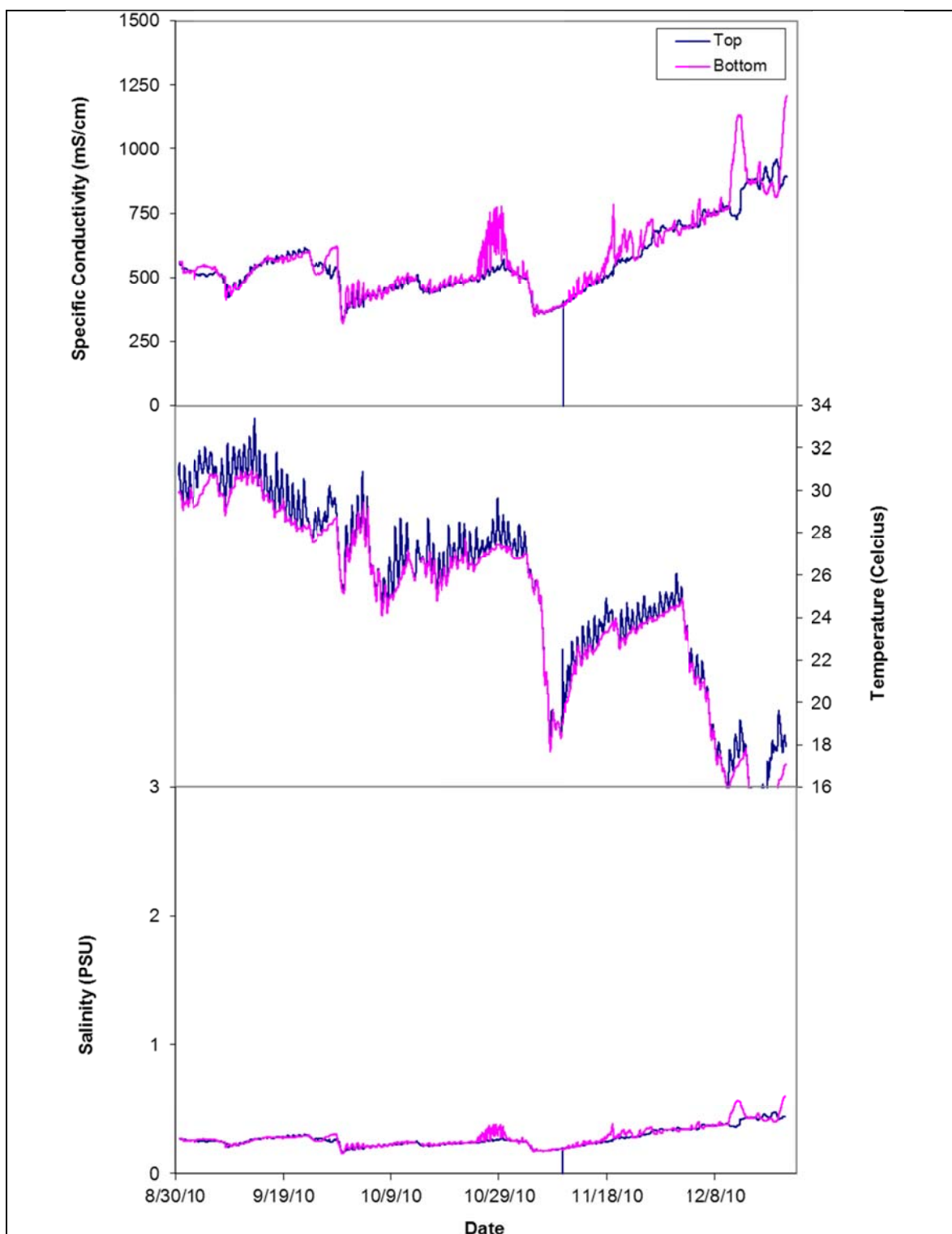


Figure E-21. TPSWC-2 Water Quality (All Data).

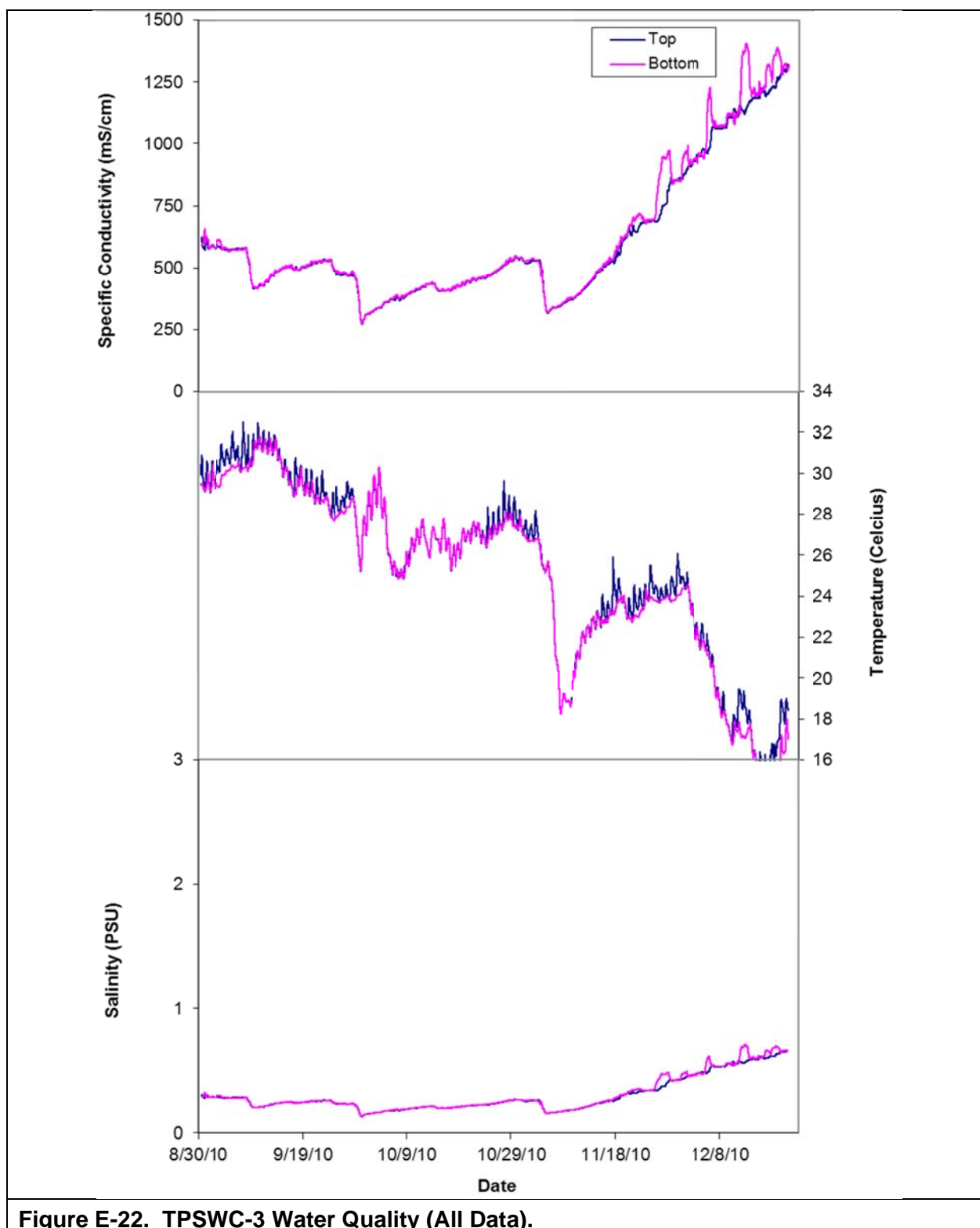


Figure E-22. TPSWC-3 Water Quality (All Data).

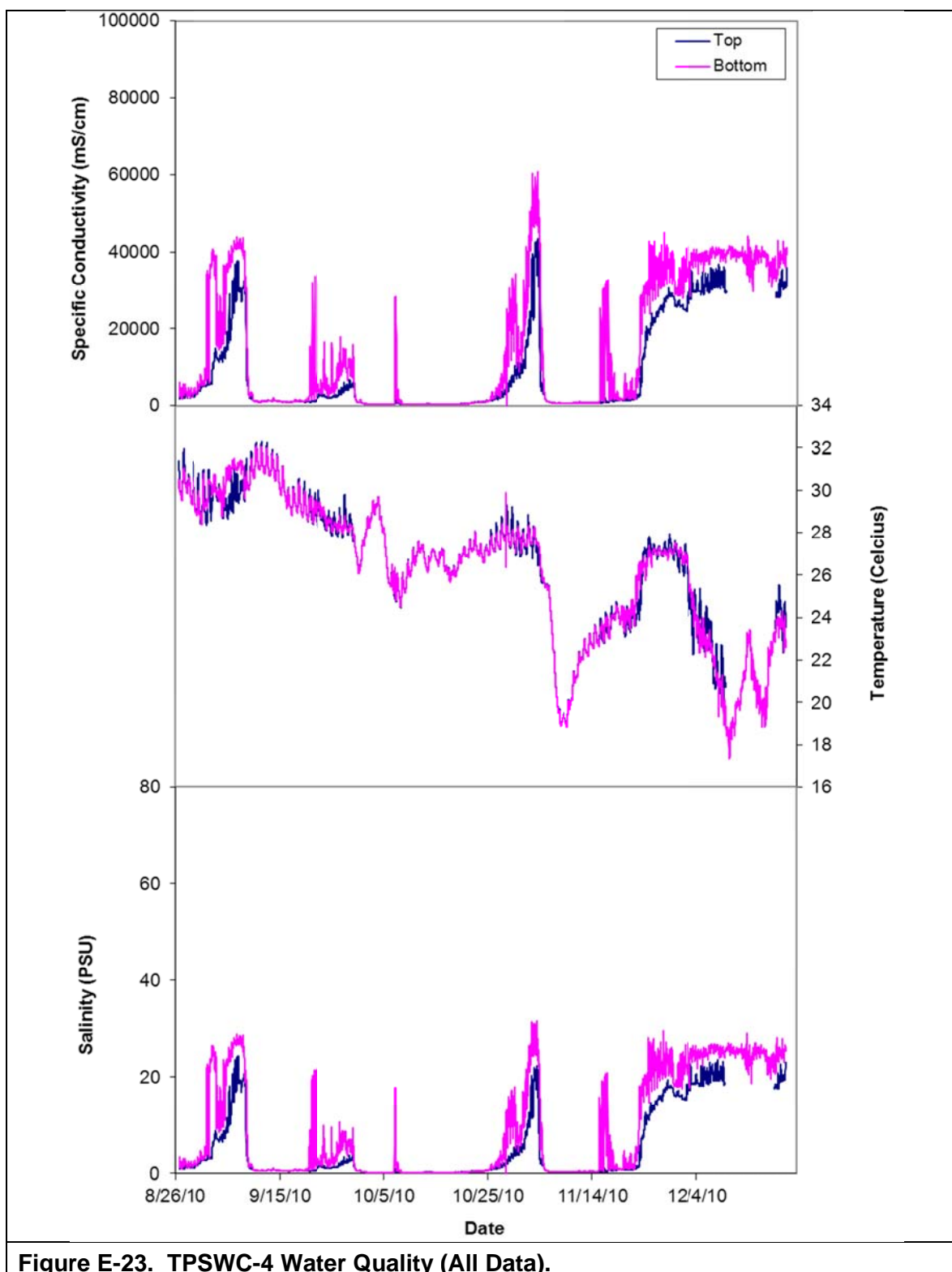


Figure E-23. TPSWC-4 Water Quality (All Data).

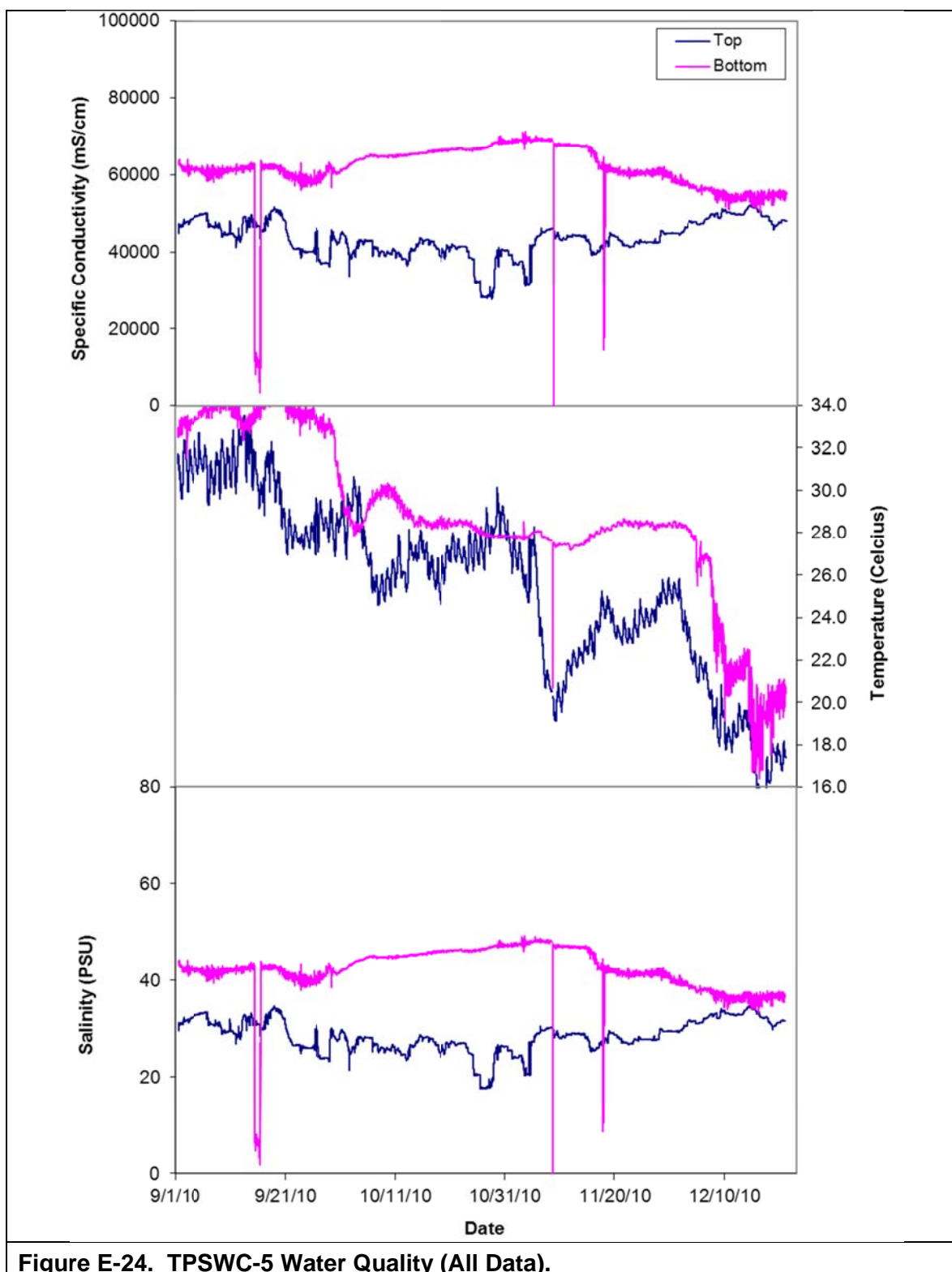


Figure E-24. TPSWC-5 Water Quality (All Data).

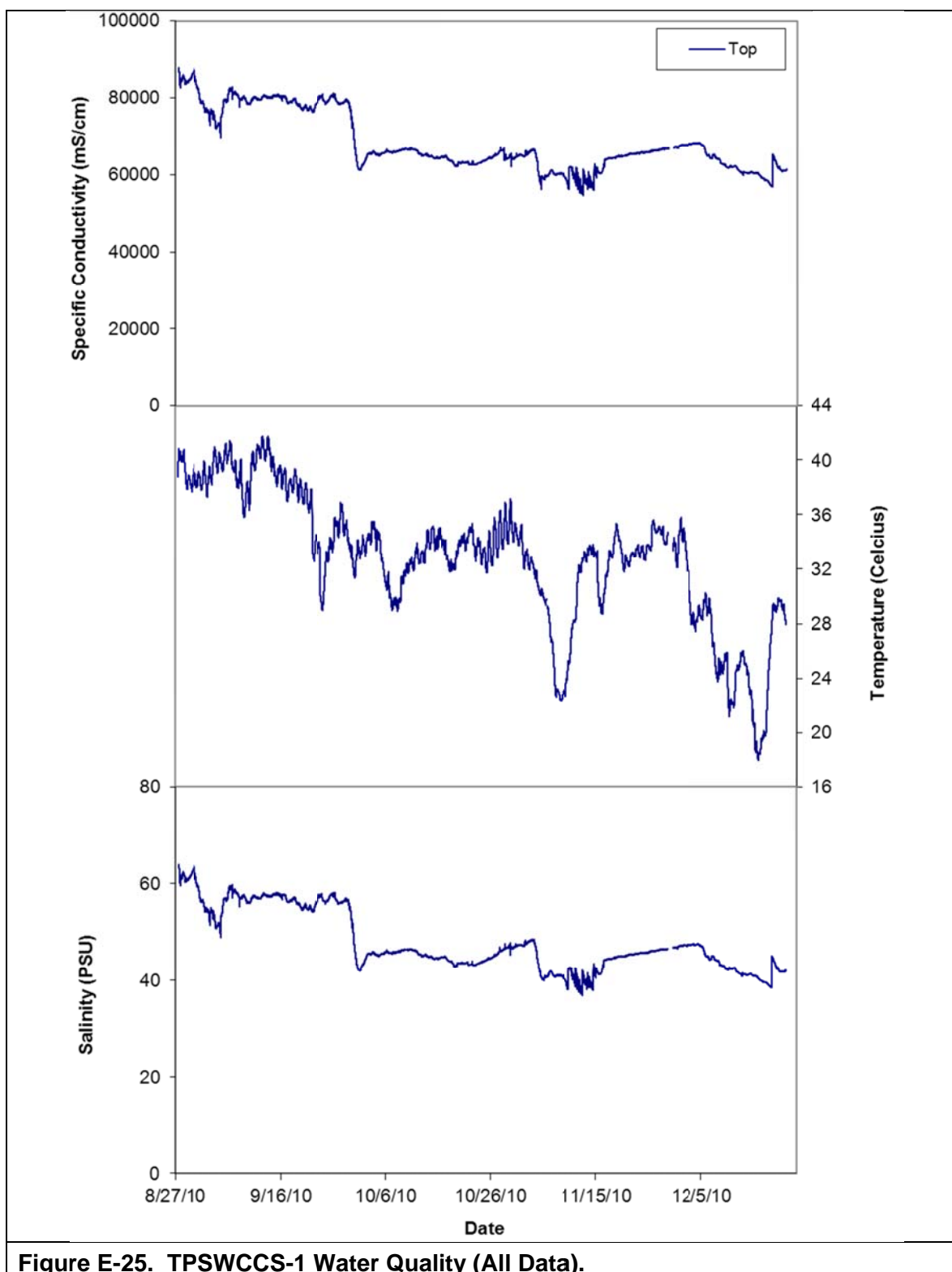
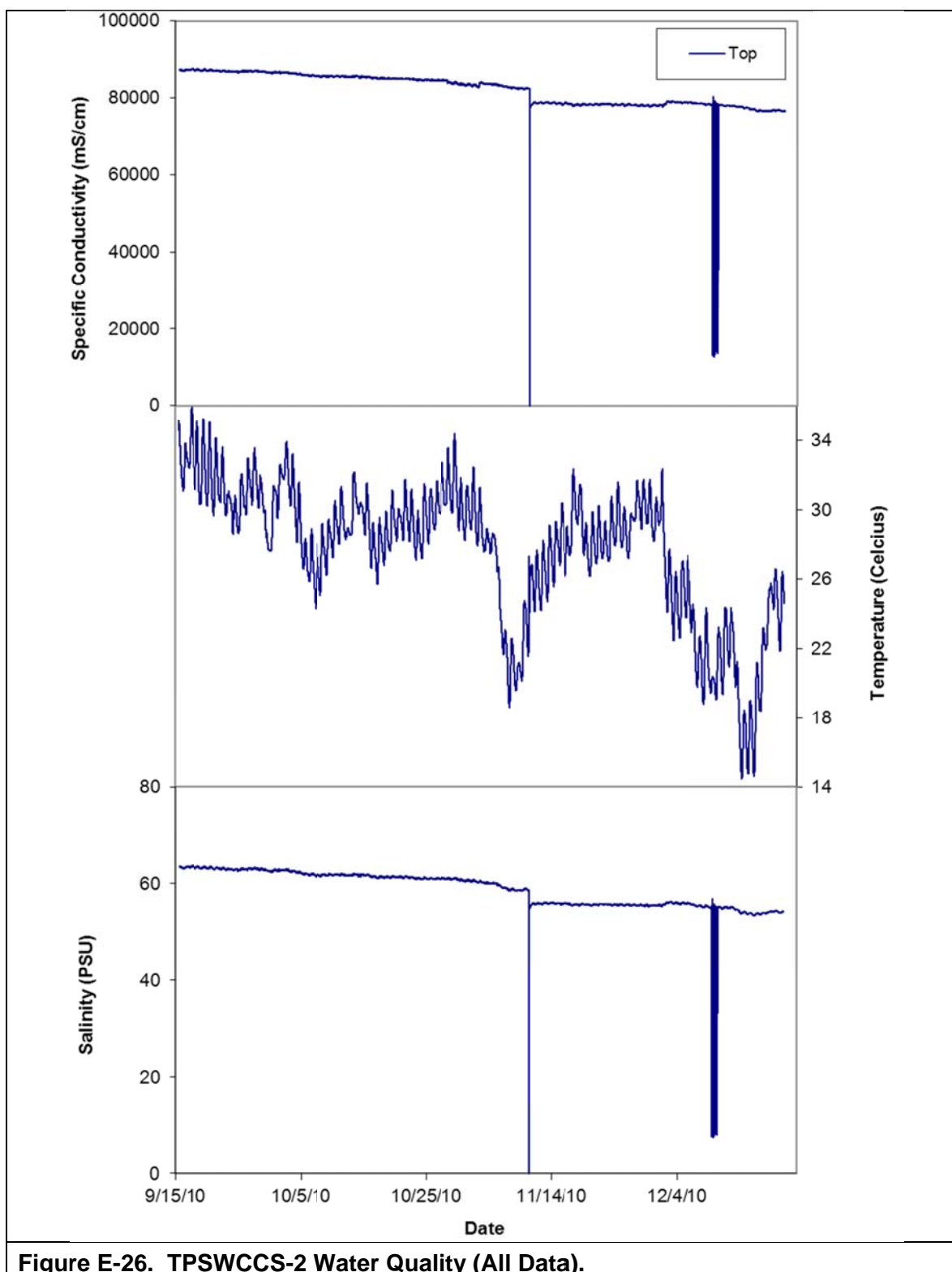
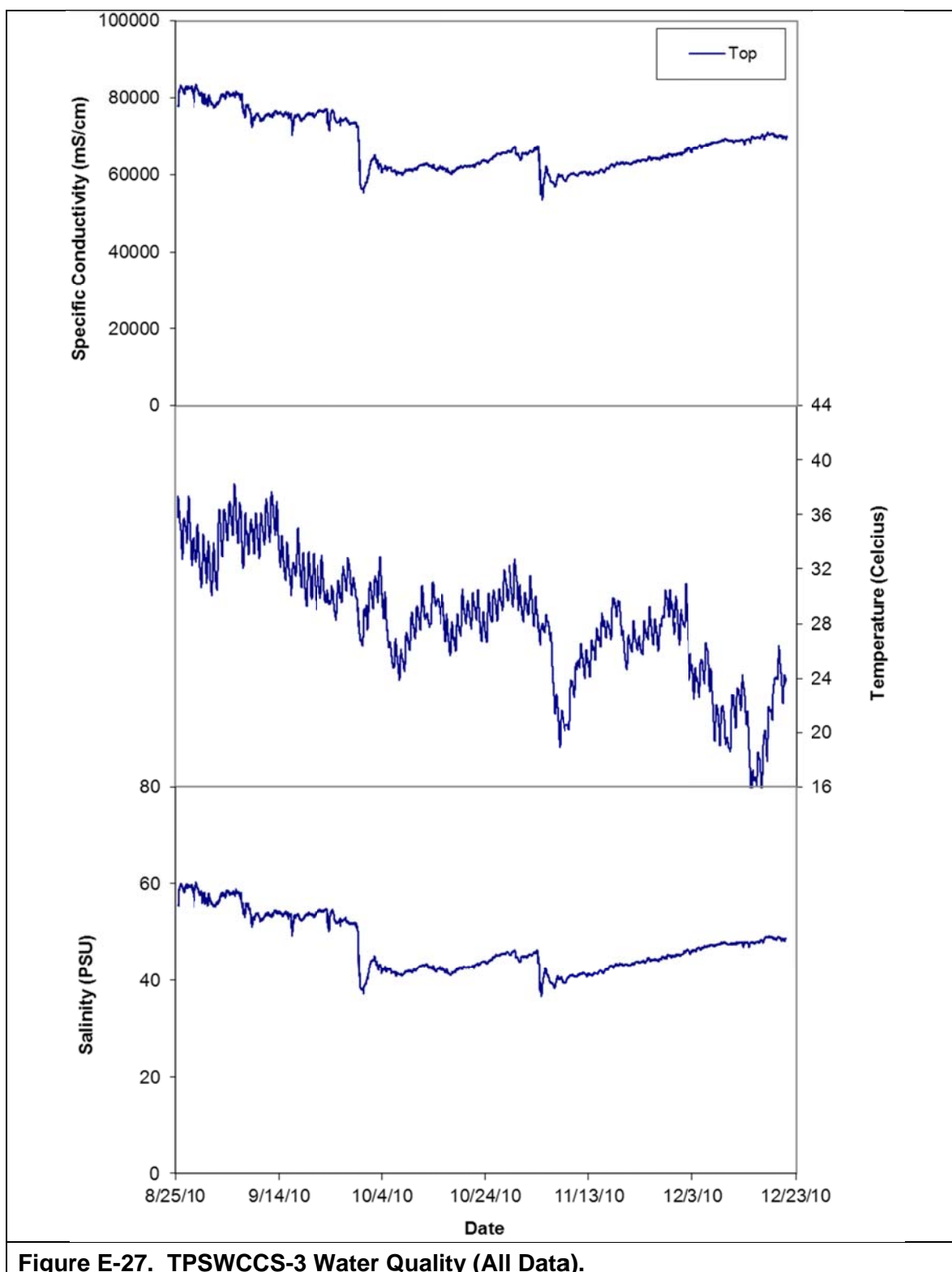
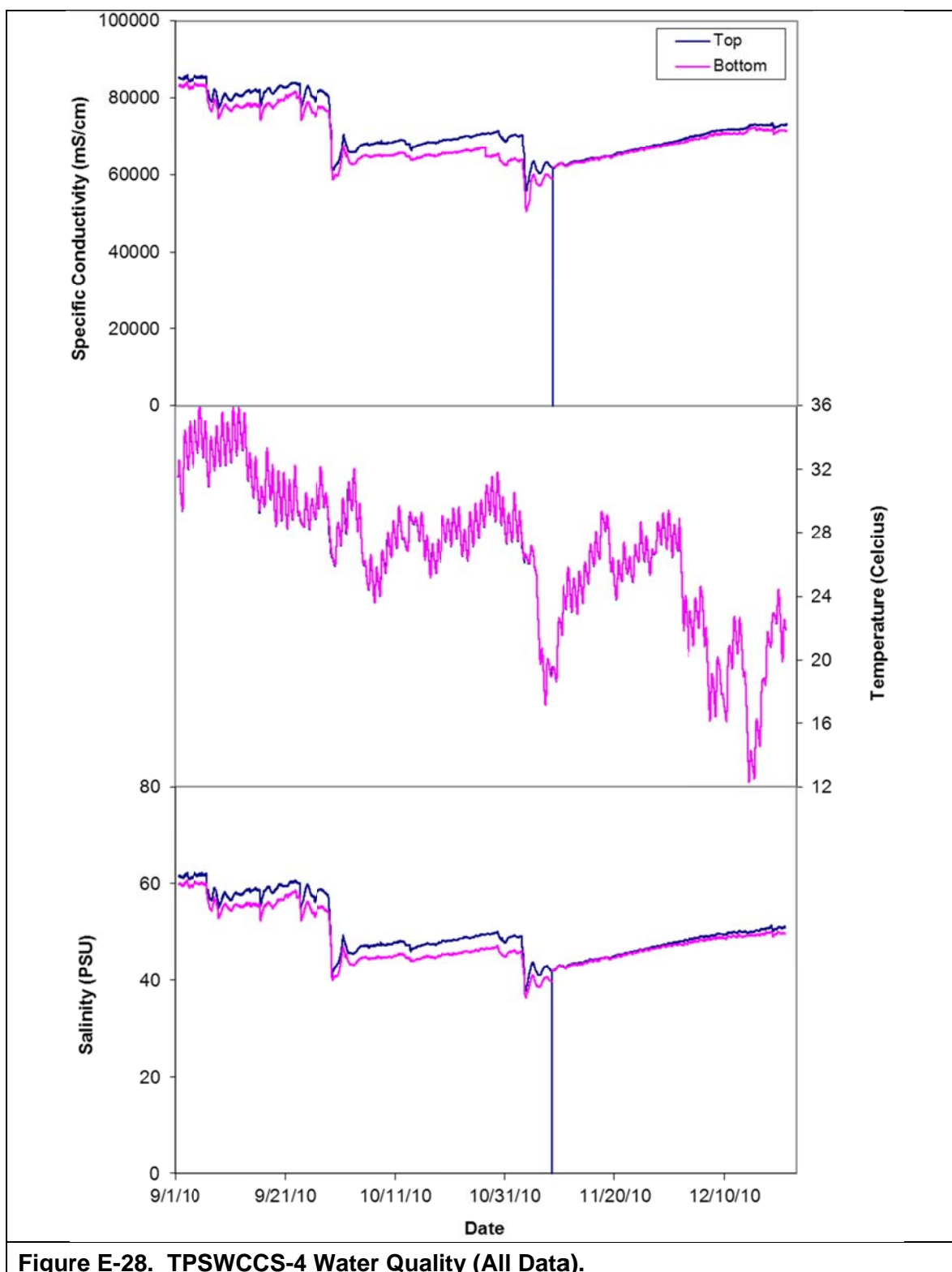
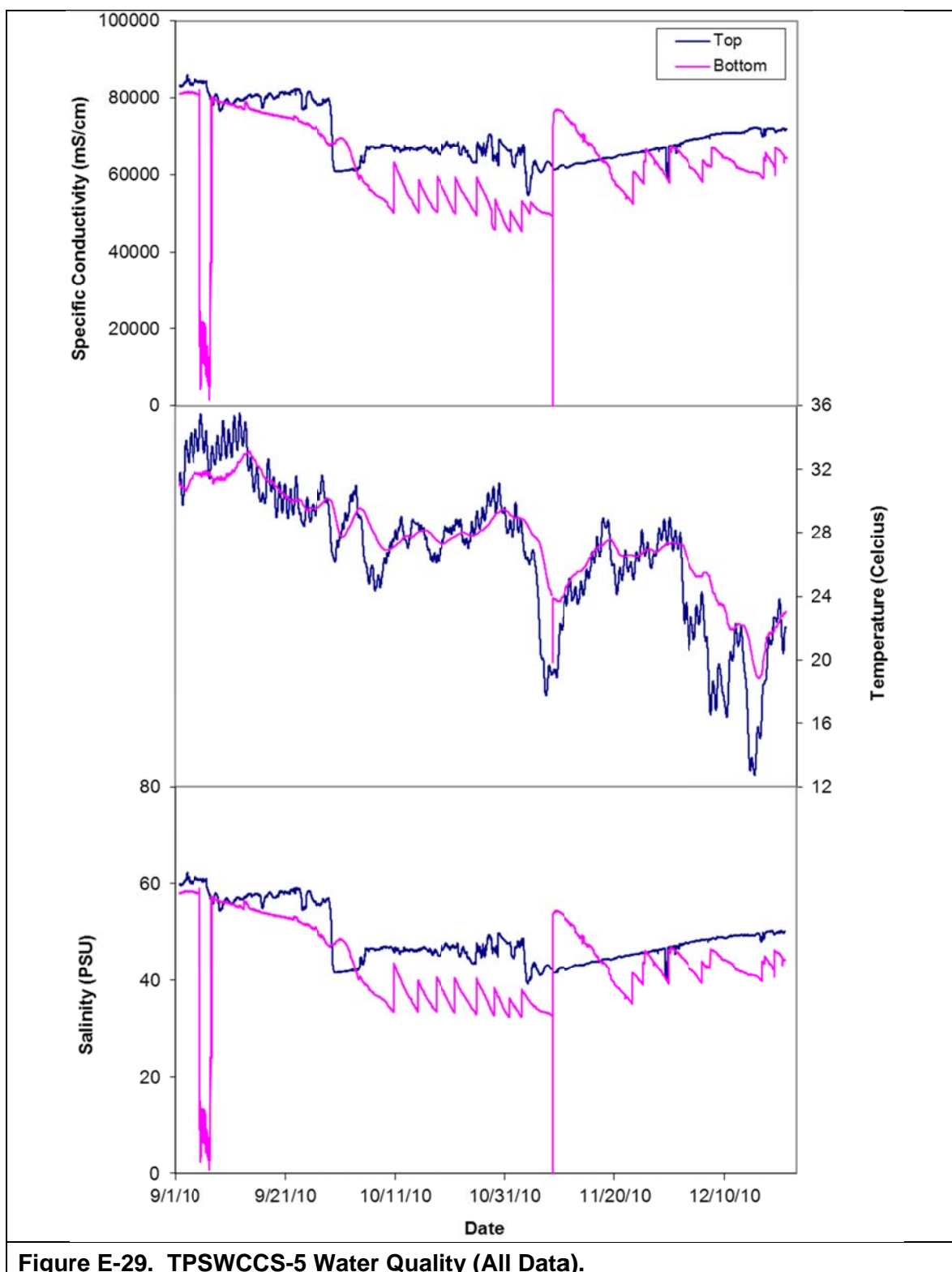


Figure E-25. TPSWCCS-1 Water Quality (All Data).









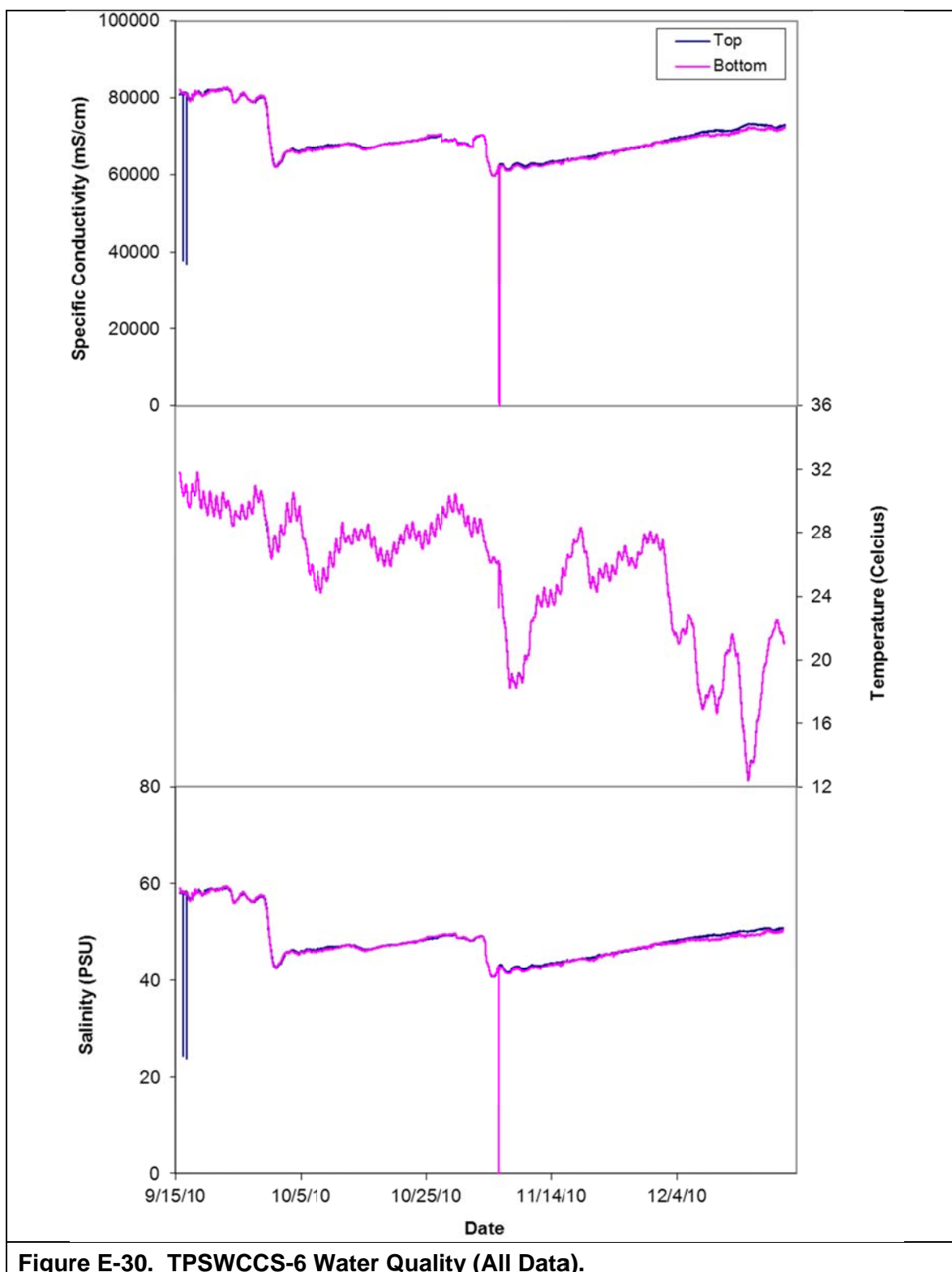


Figure E-30. TPSWCCS-6 Water Quality (All Data).

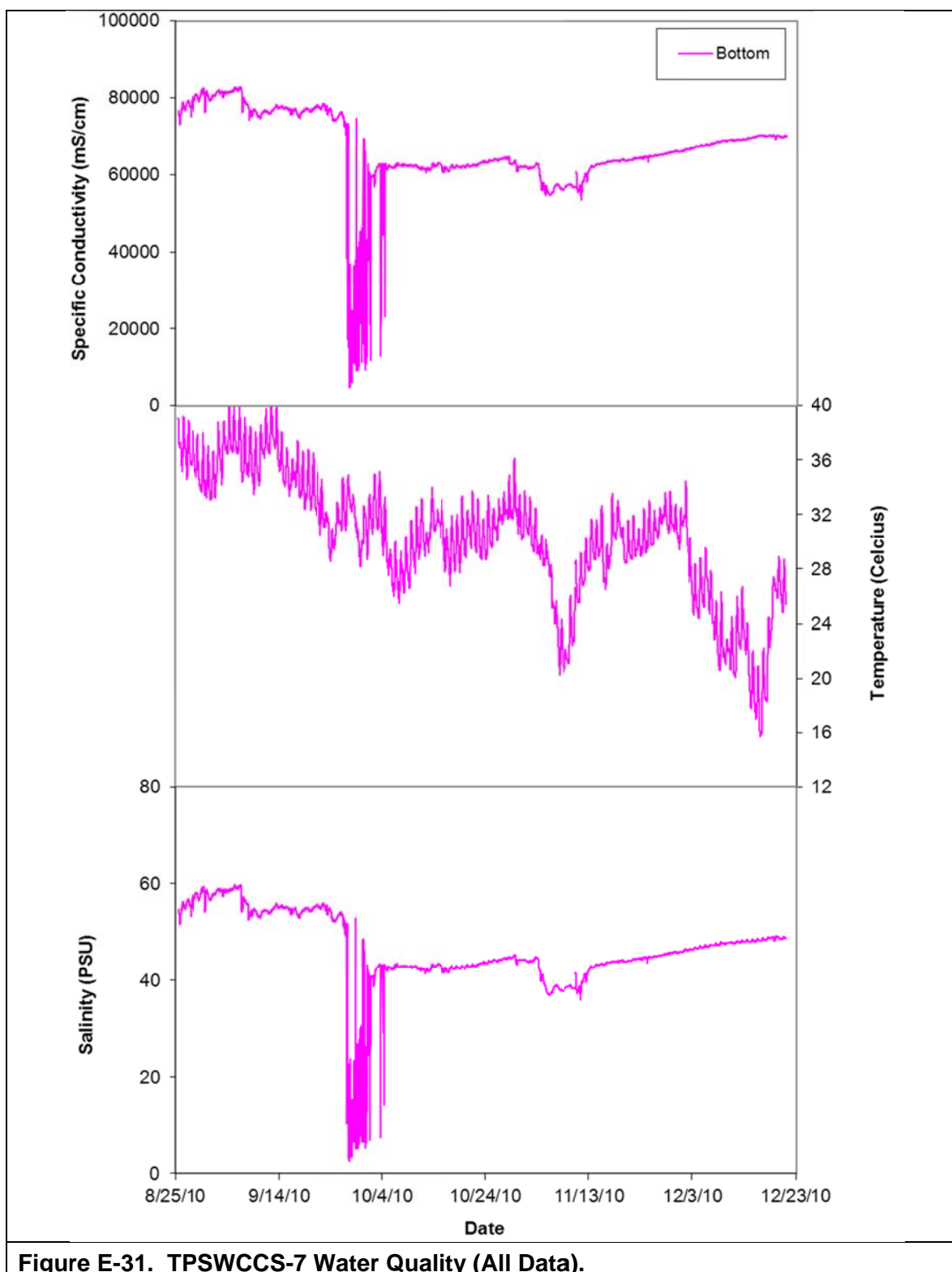


Figure E-31. TPSWCCS-7 Water Quality (All Data).

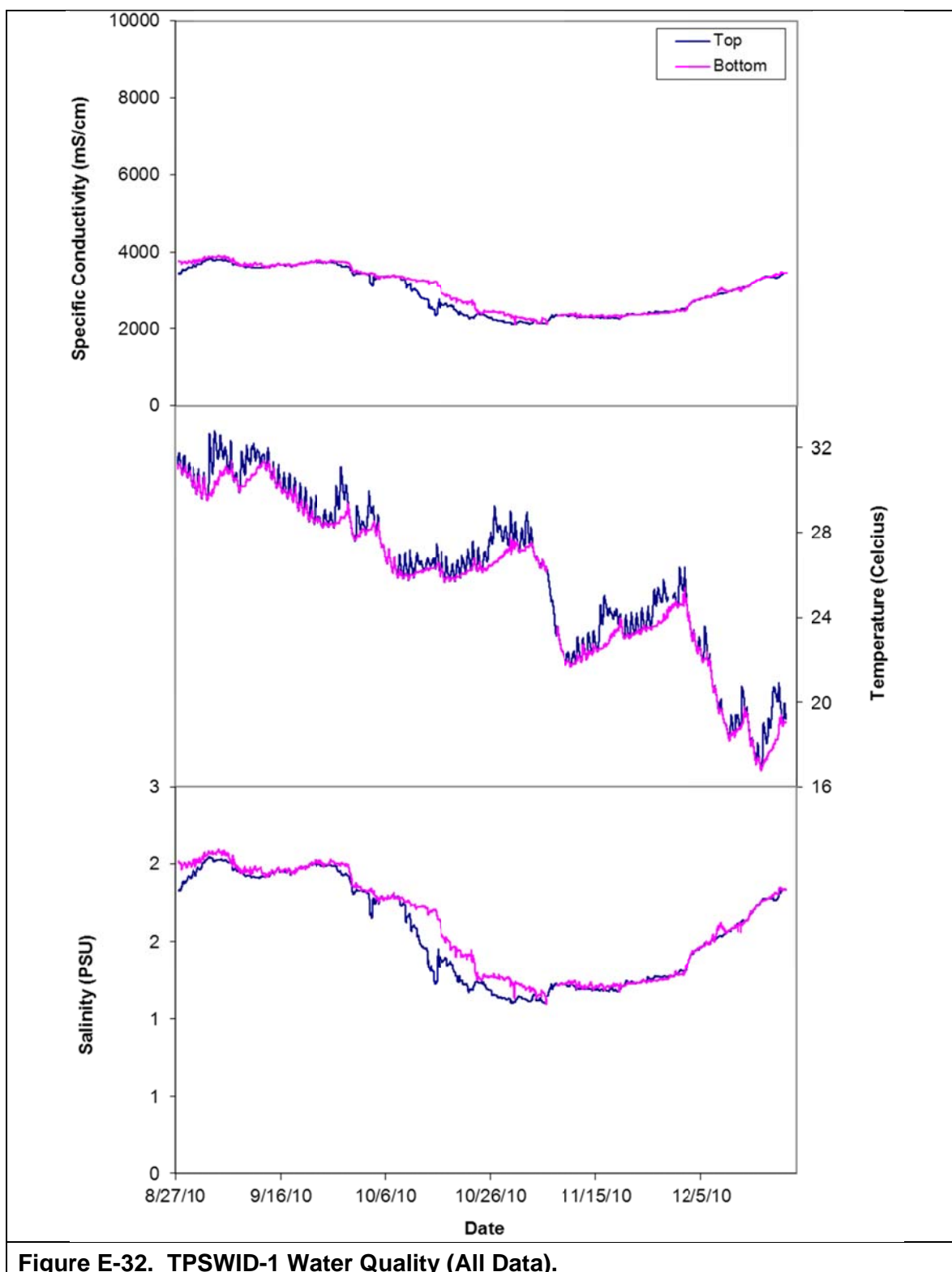


Figure E-32. TPSWID-1 Water Quality (All Data).

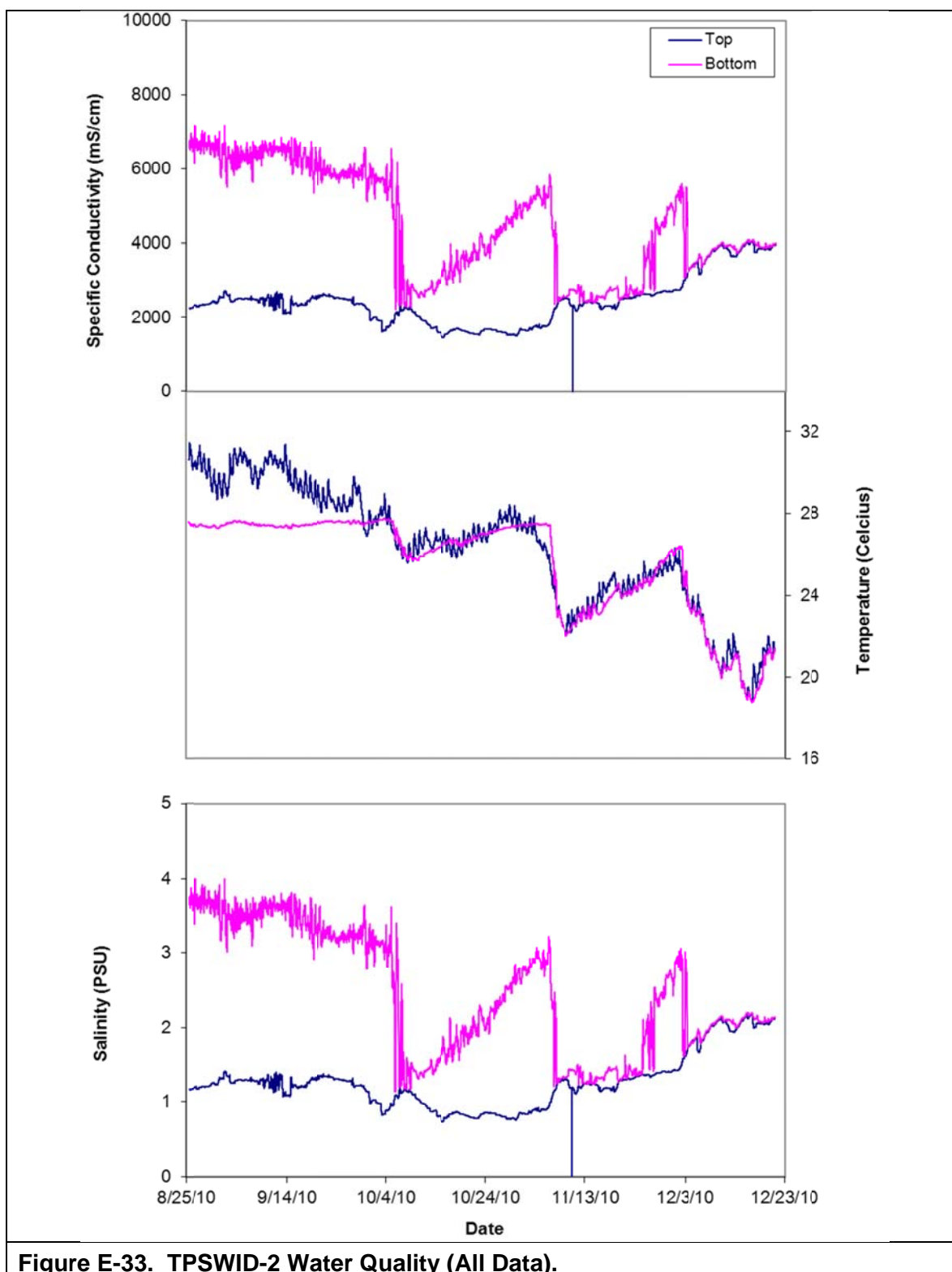


Figure E-33. TPSWID-2 Water Quality (All Data).

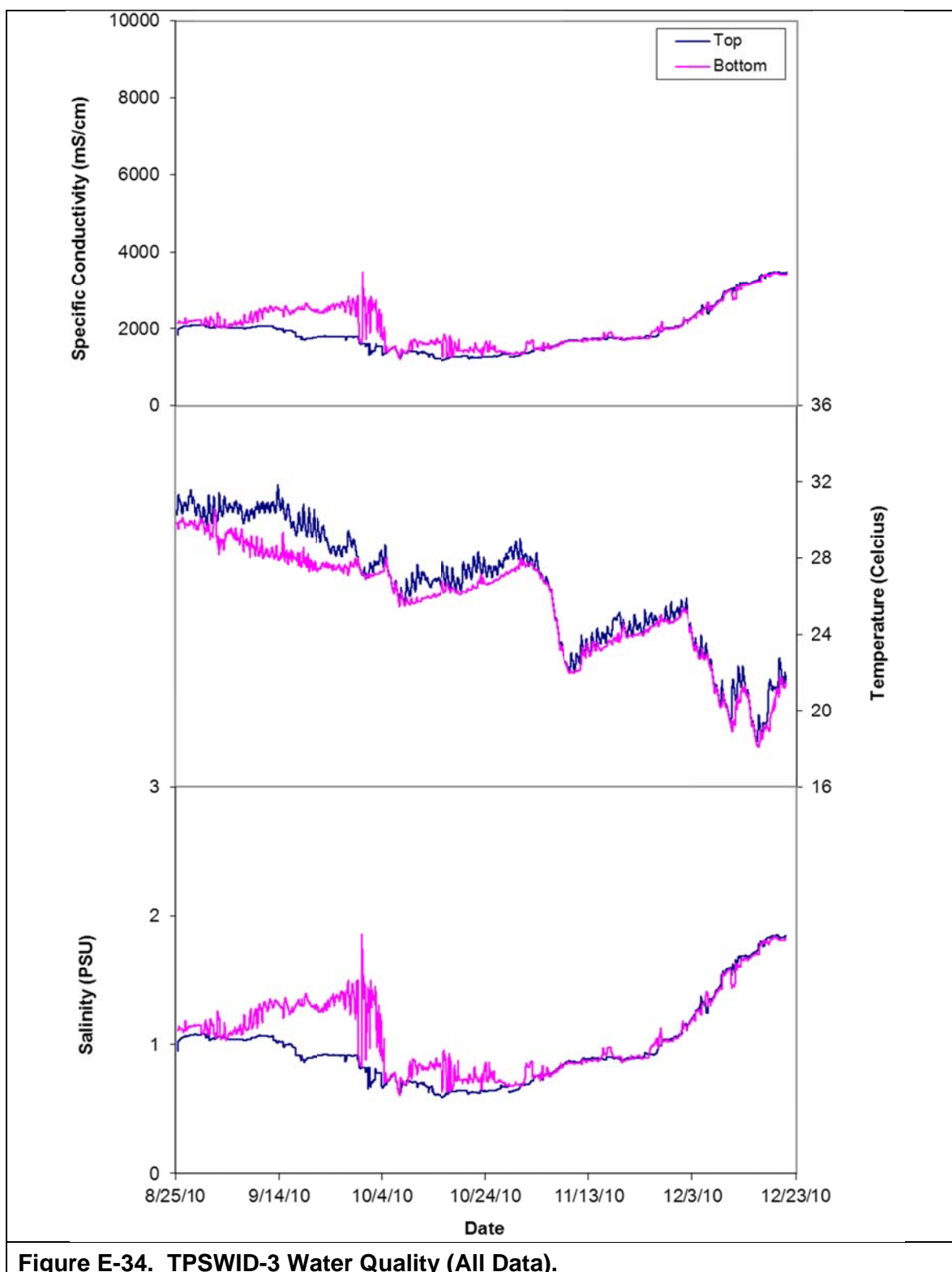
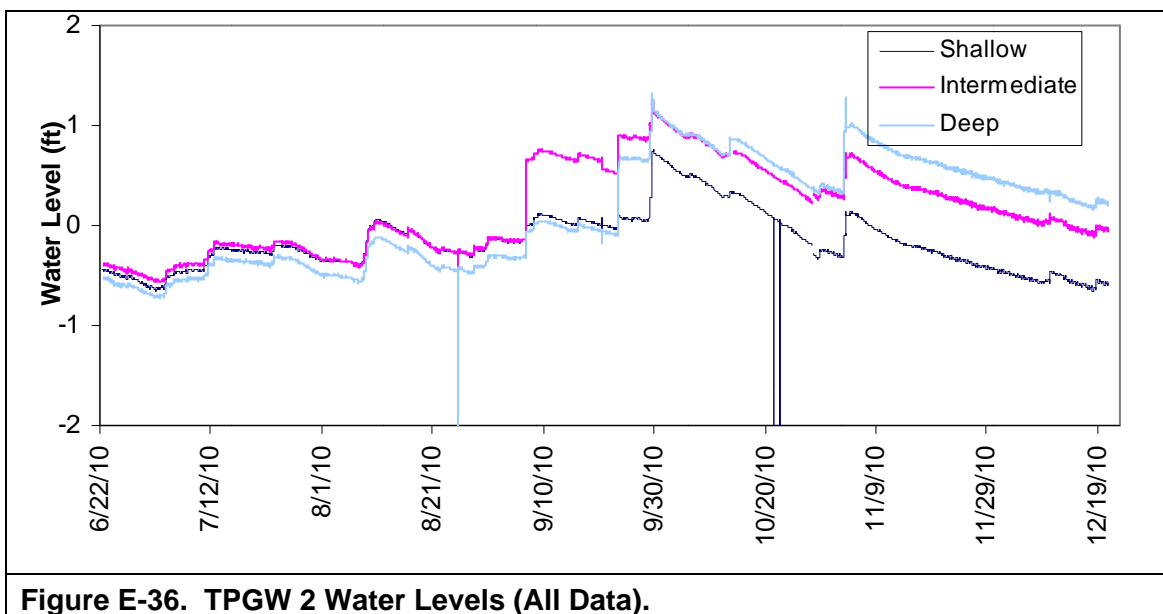
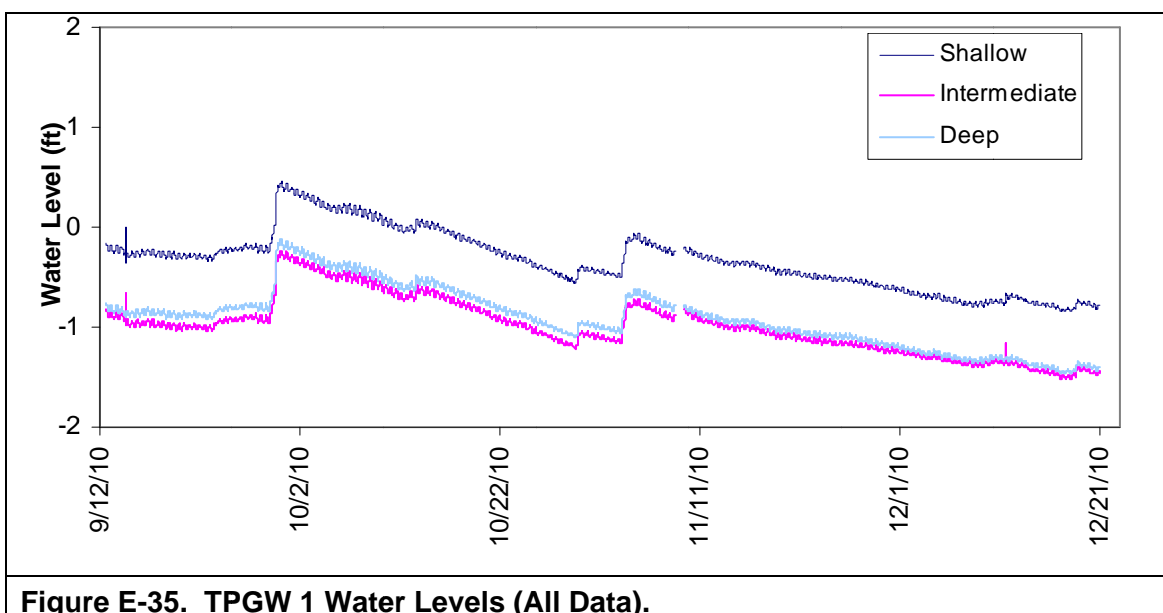
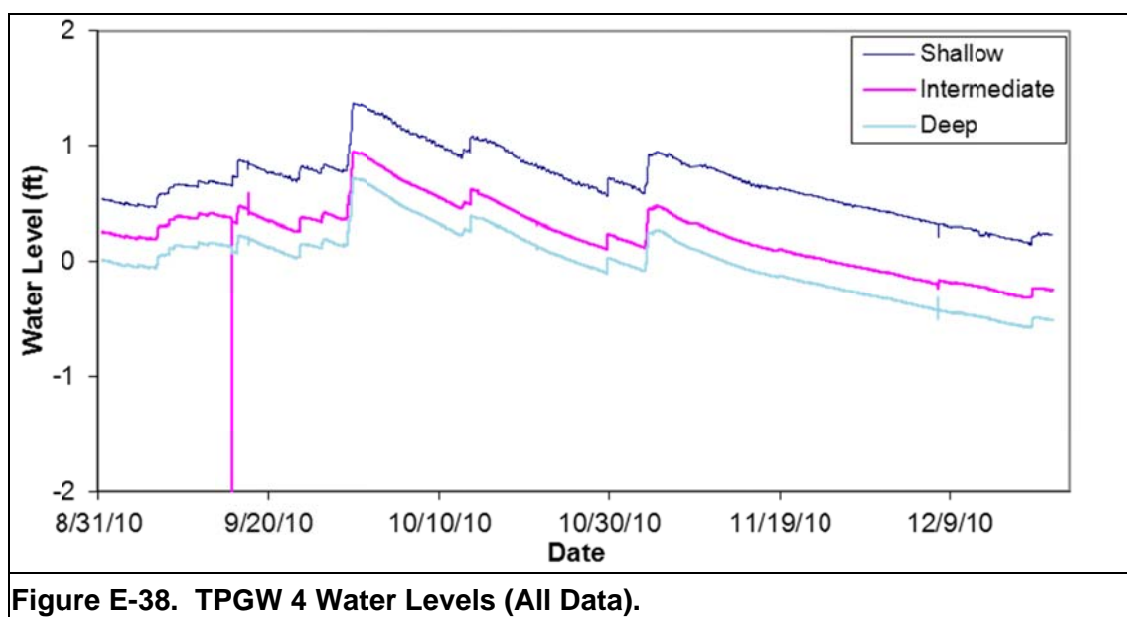
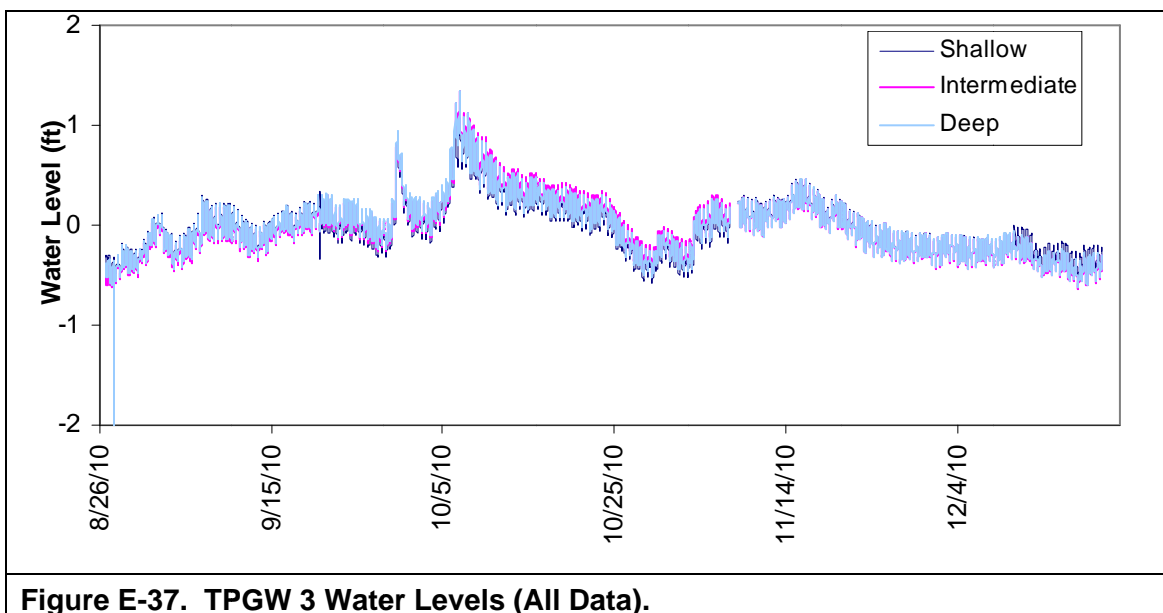
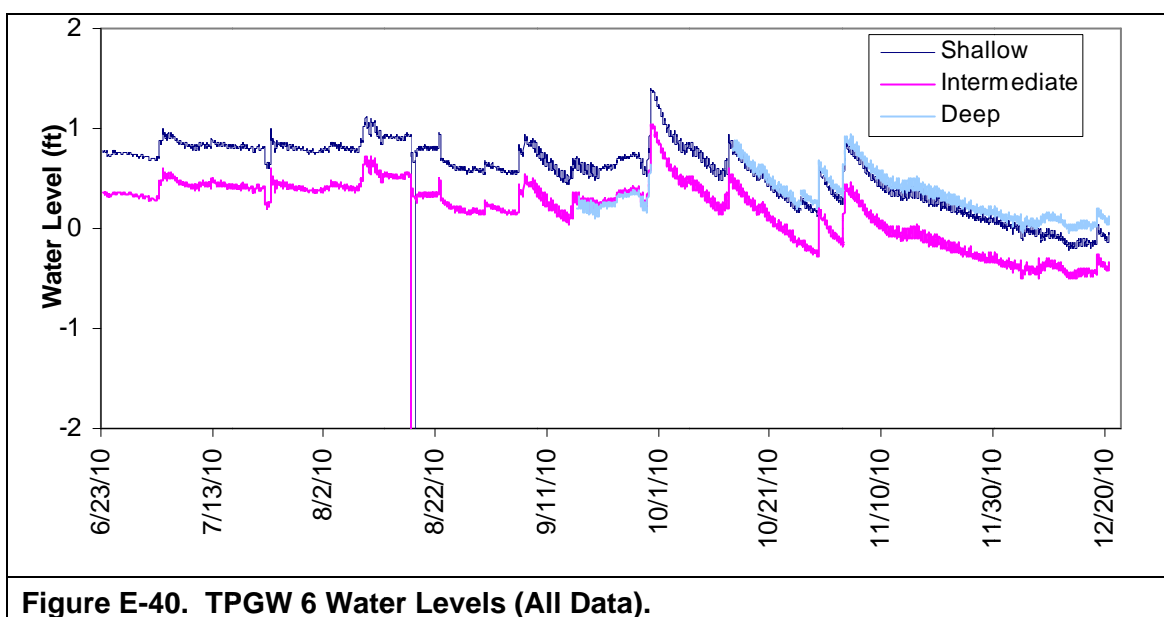
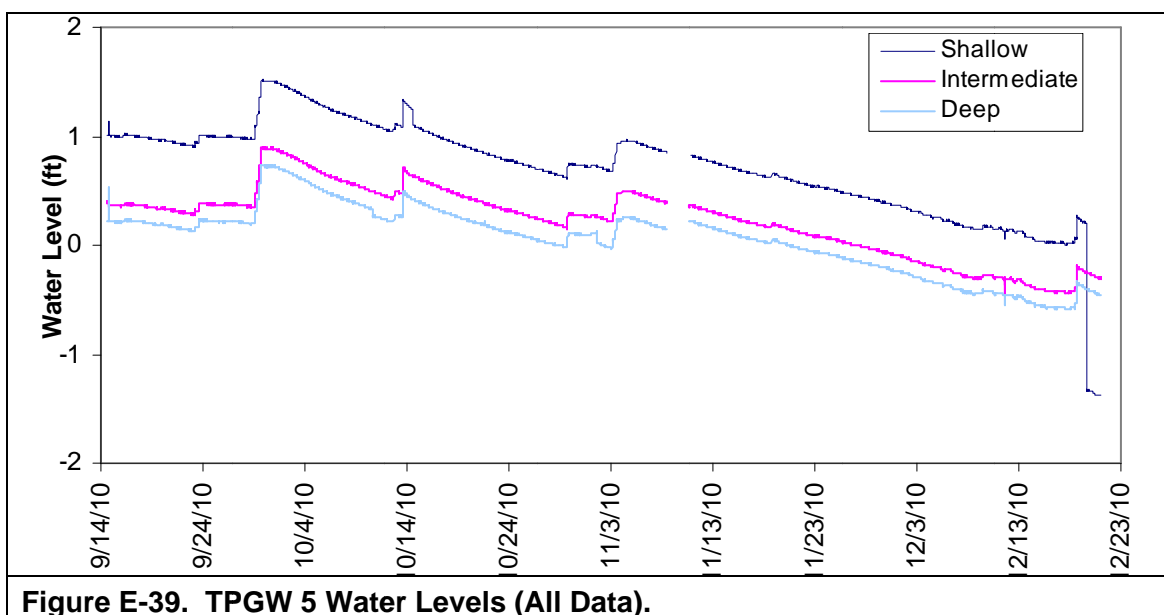


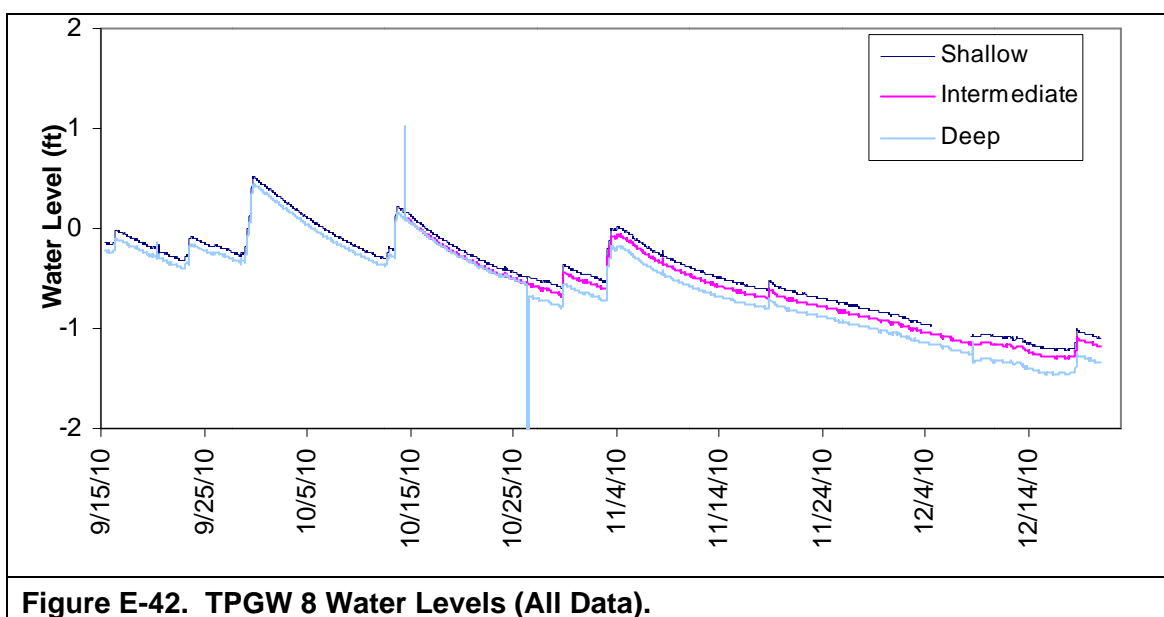
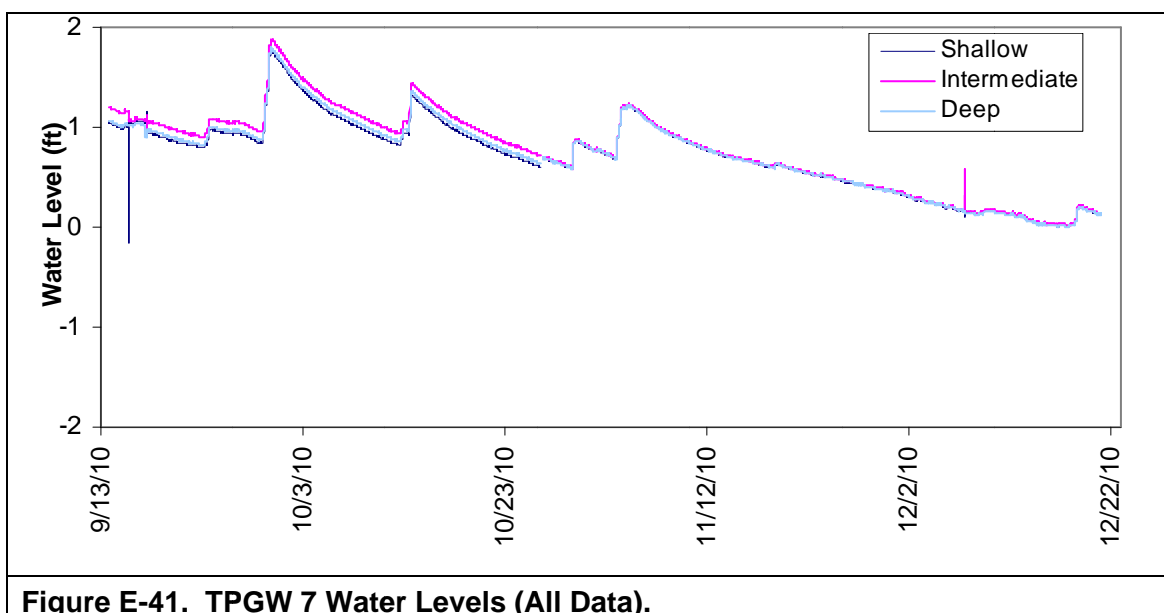
Figure E-34. TPSWID-3 Water Quality (All Data).

NON-QUALIFIED AUTOMATED STAGE DATA TIME SERIES GRAPHS









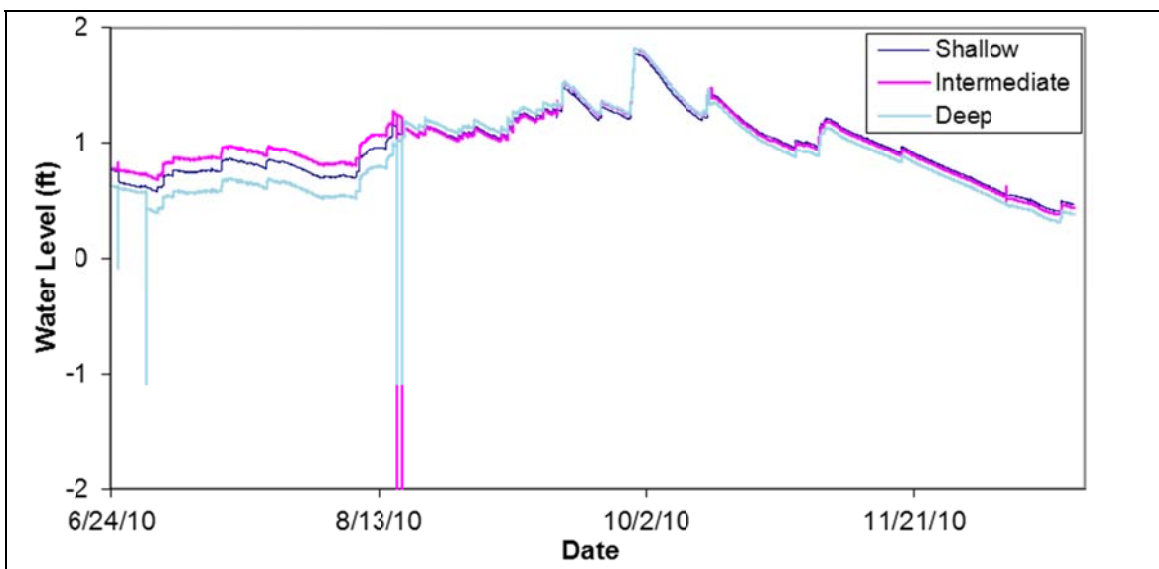


Figure E-43. TPGW 9 Water Levels (All Data).

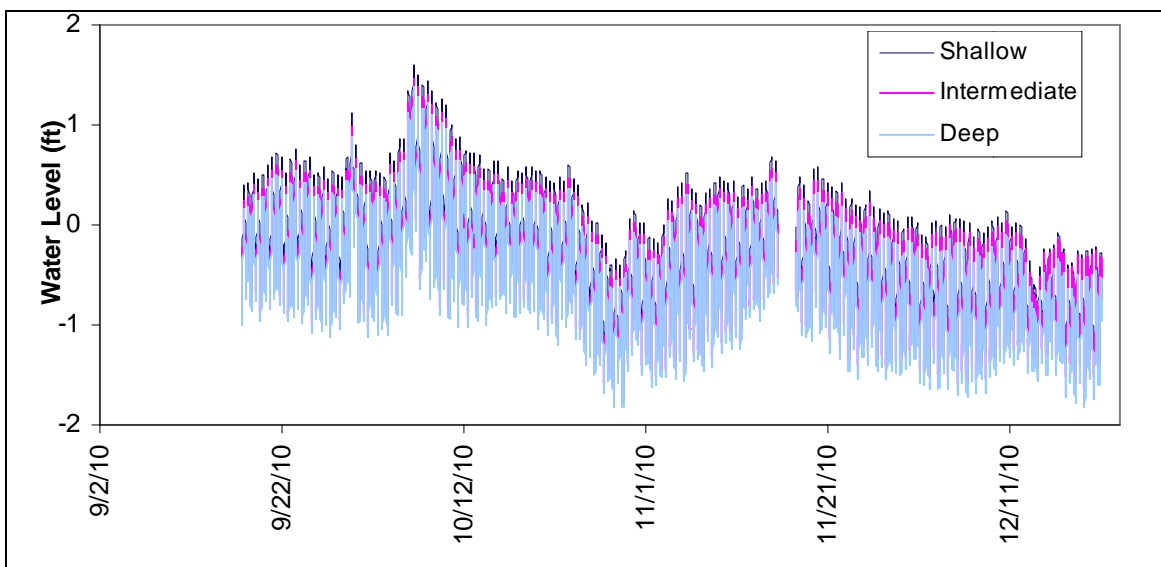
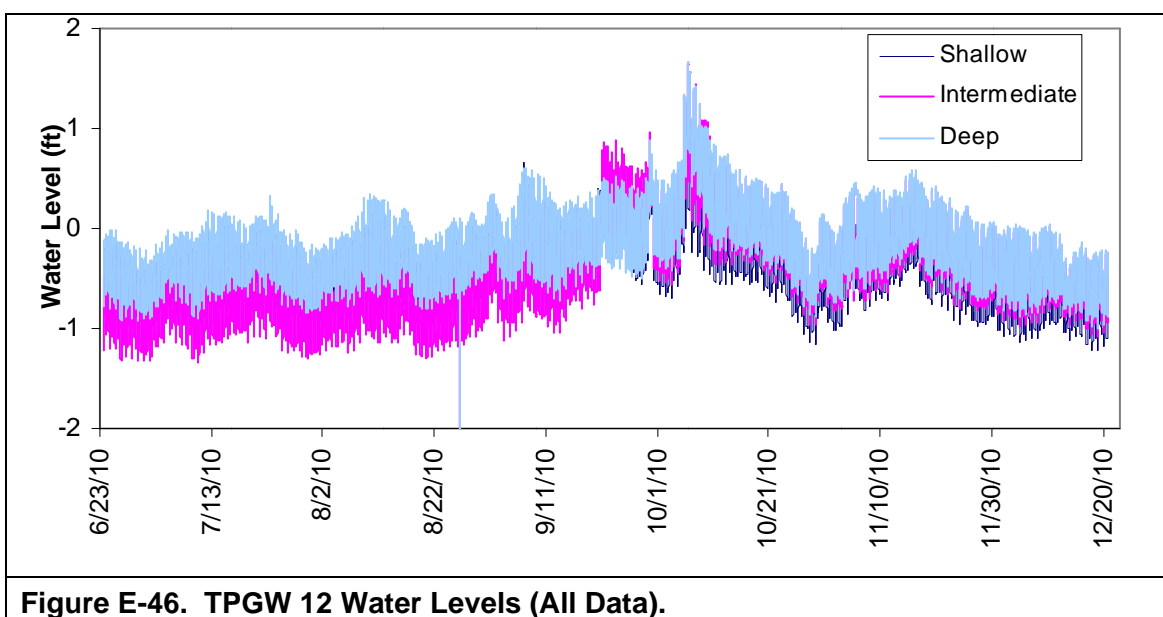
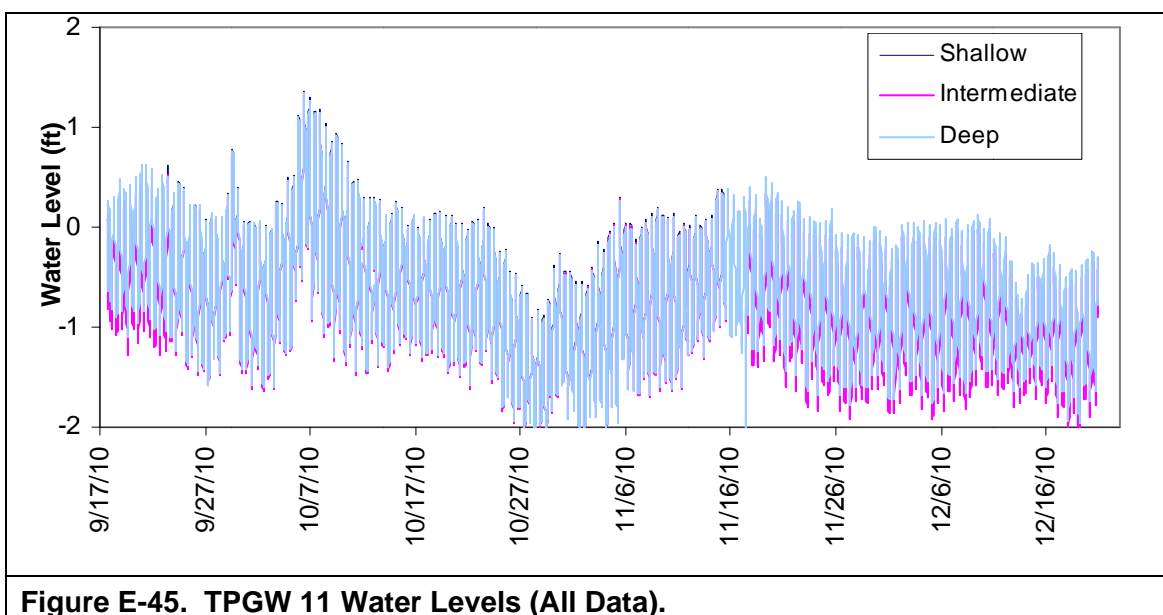
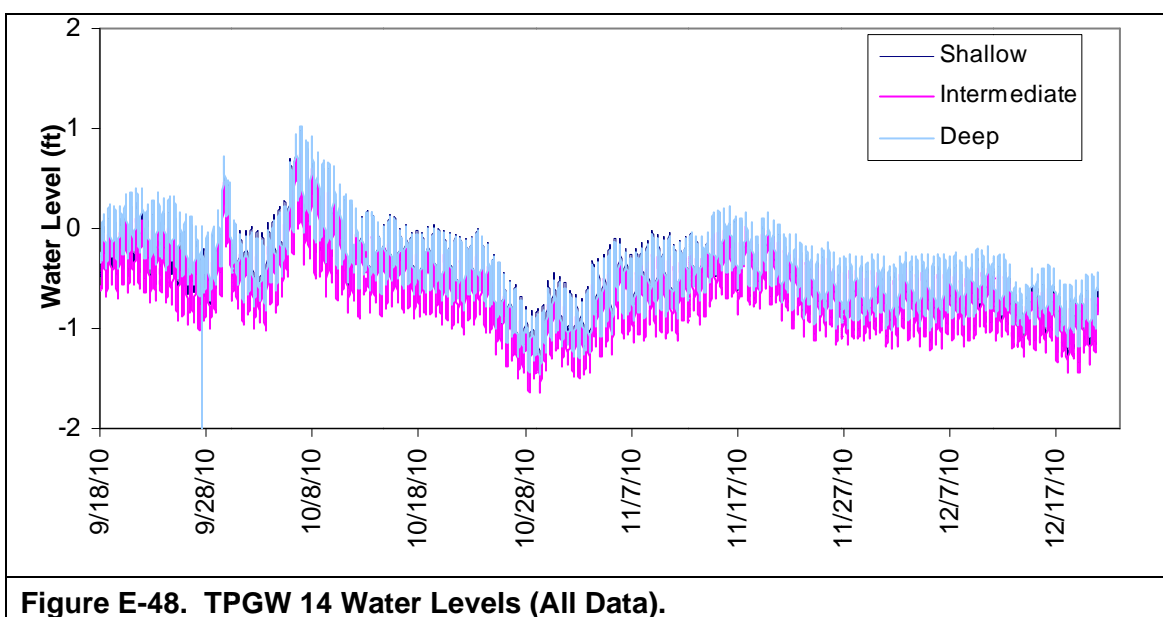
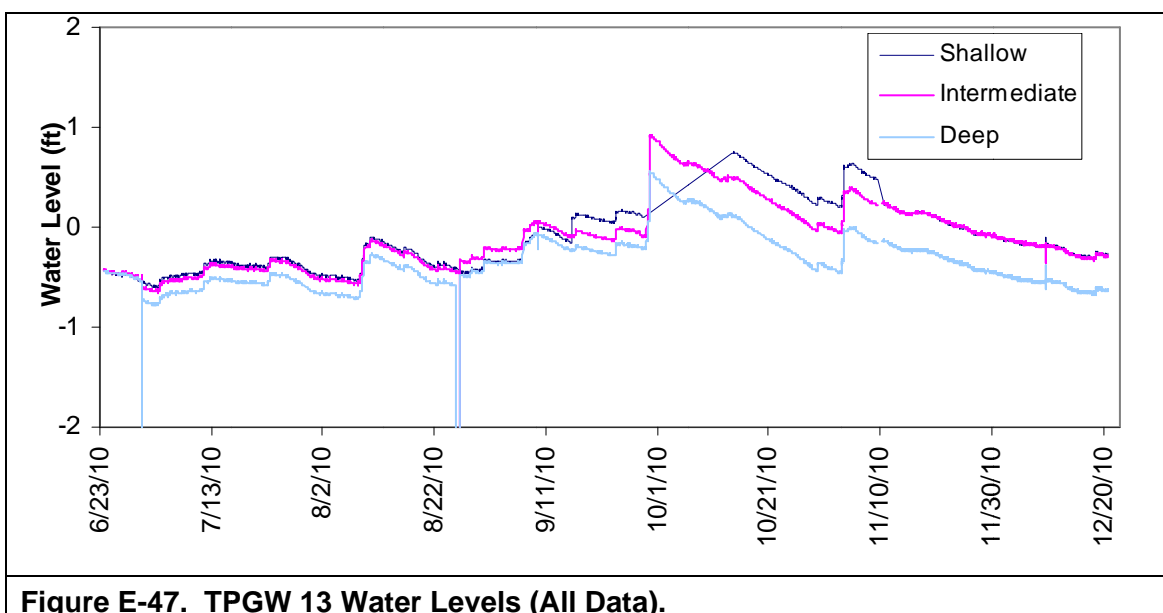
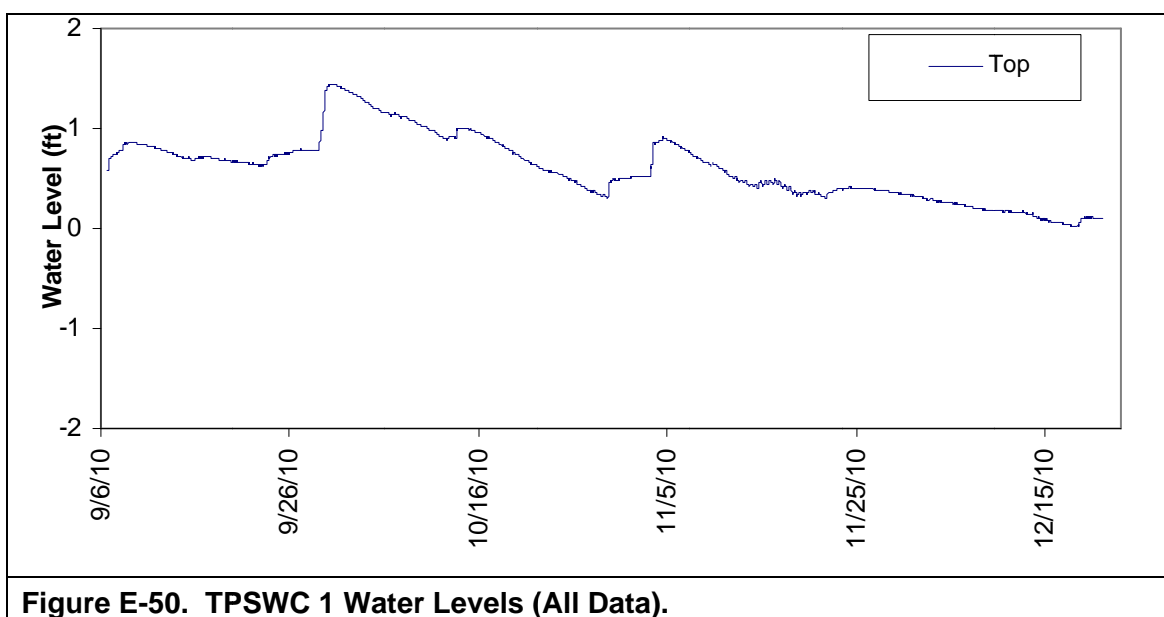
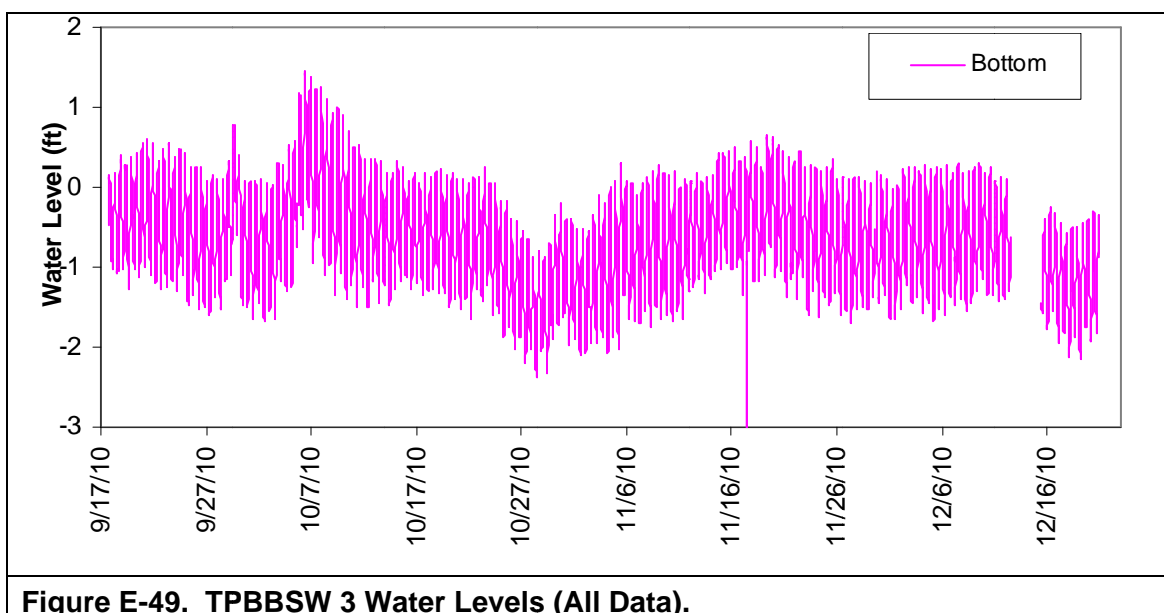


Figure E-44. TPGW 10 Water Levels (All Data).







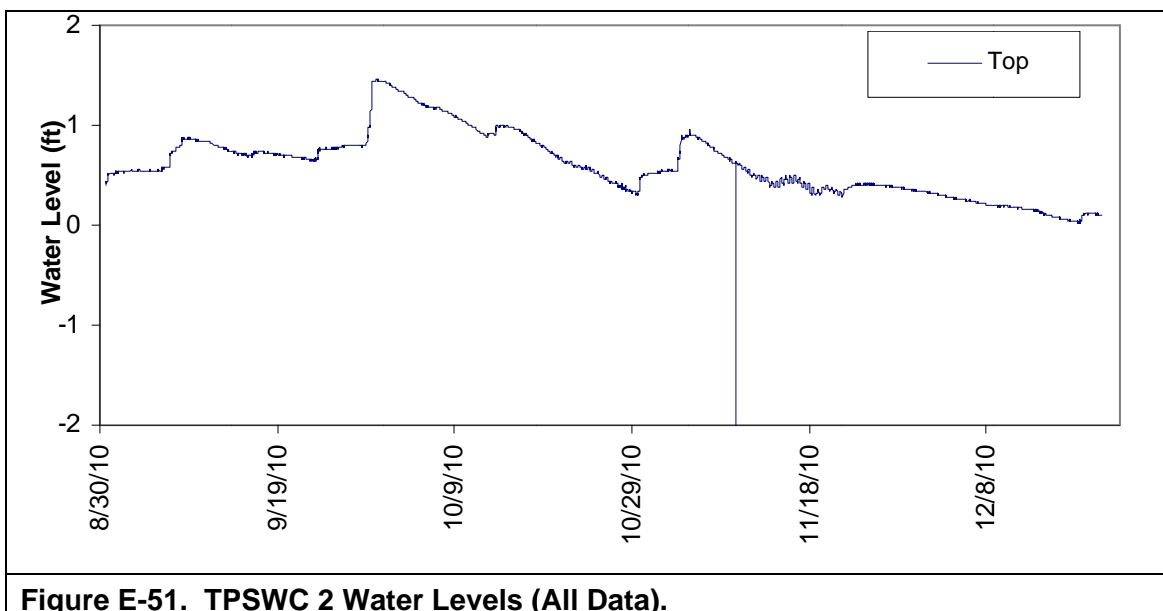


Figure E-51. TPSWC 2 Water Levels (All Data).

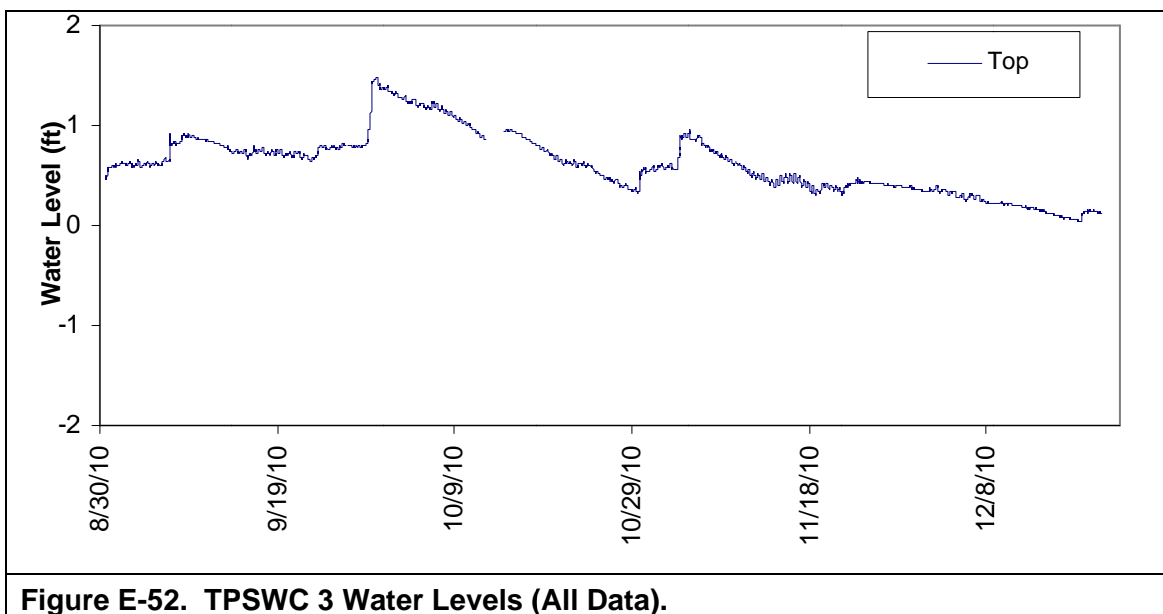
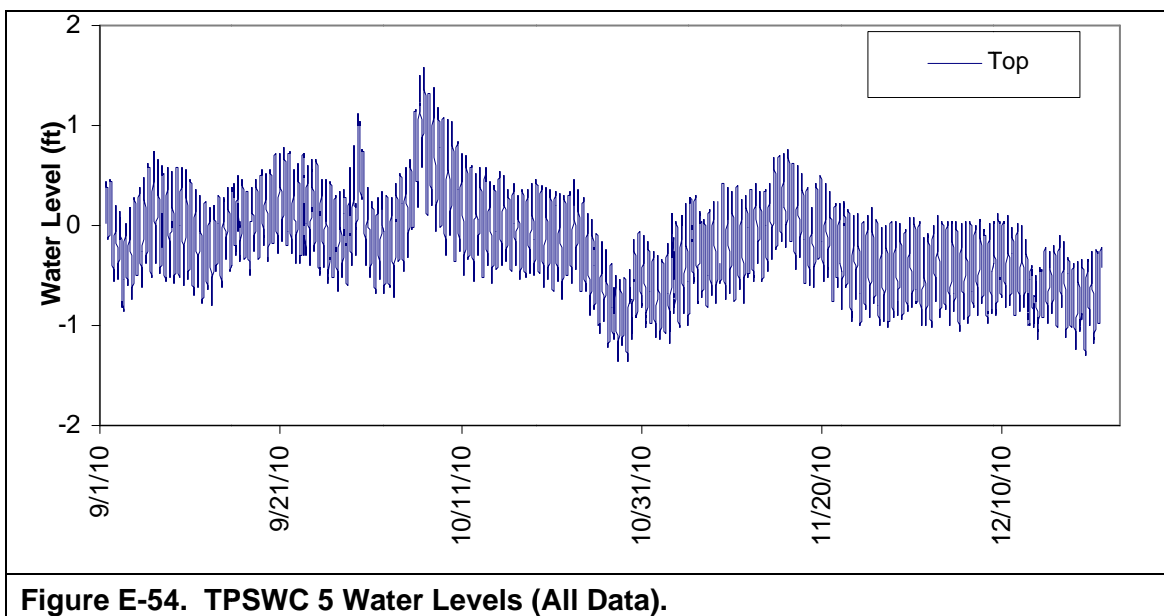
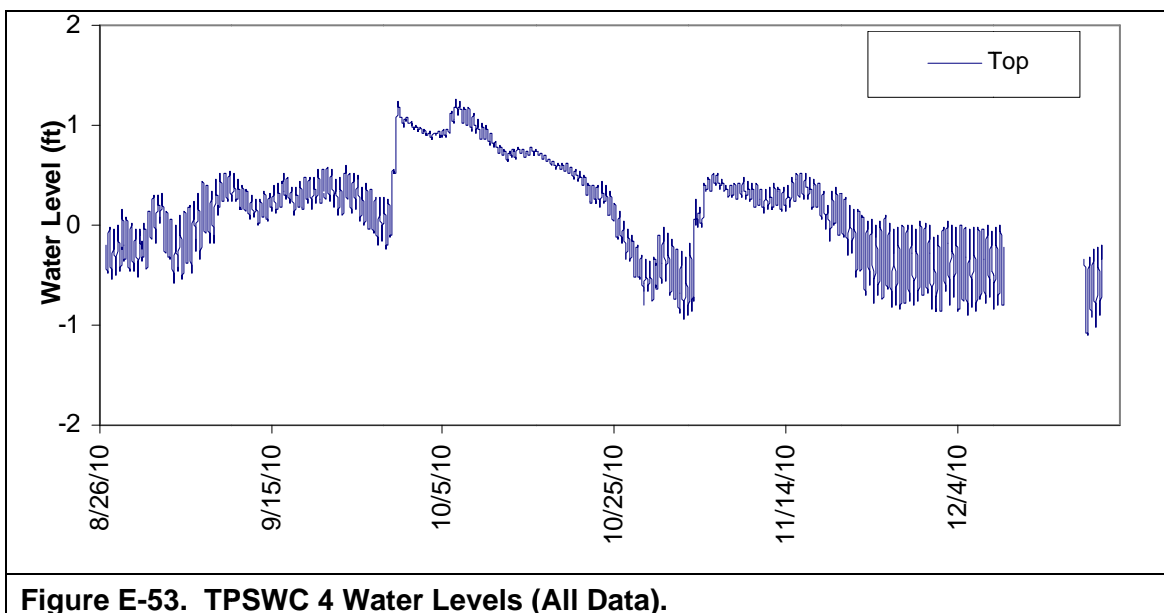
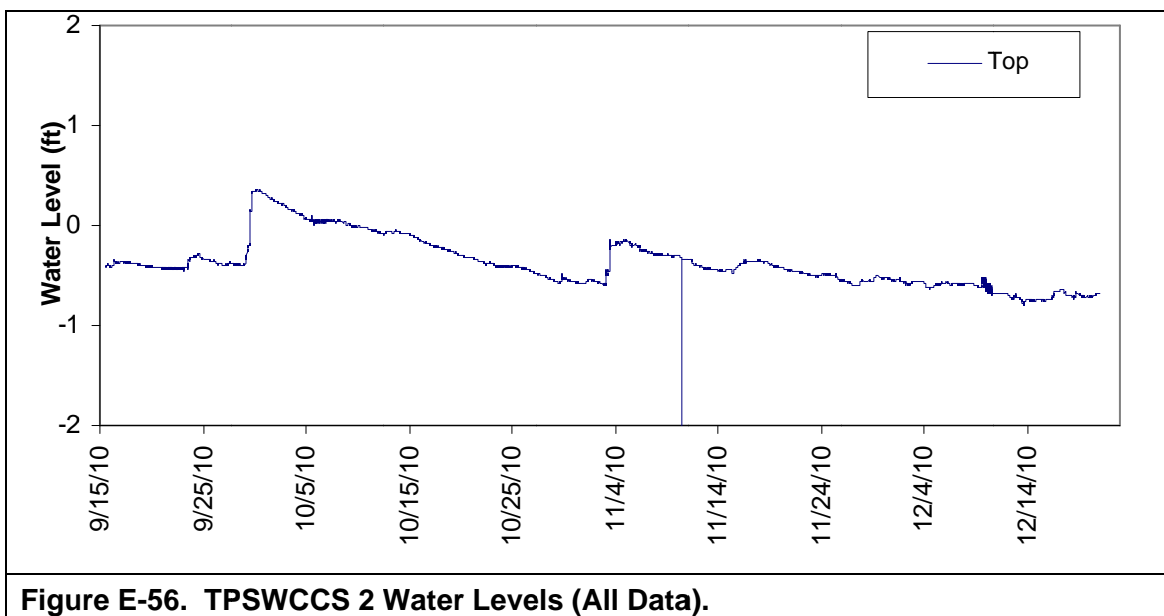
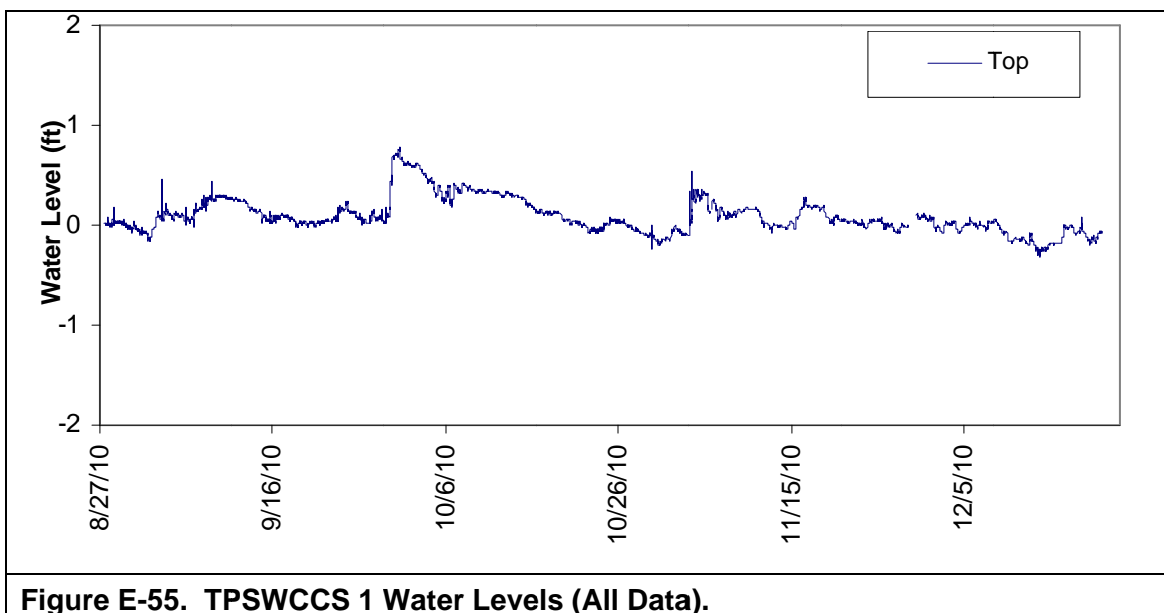
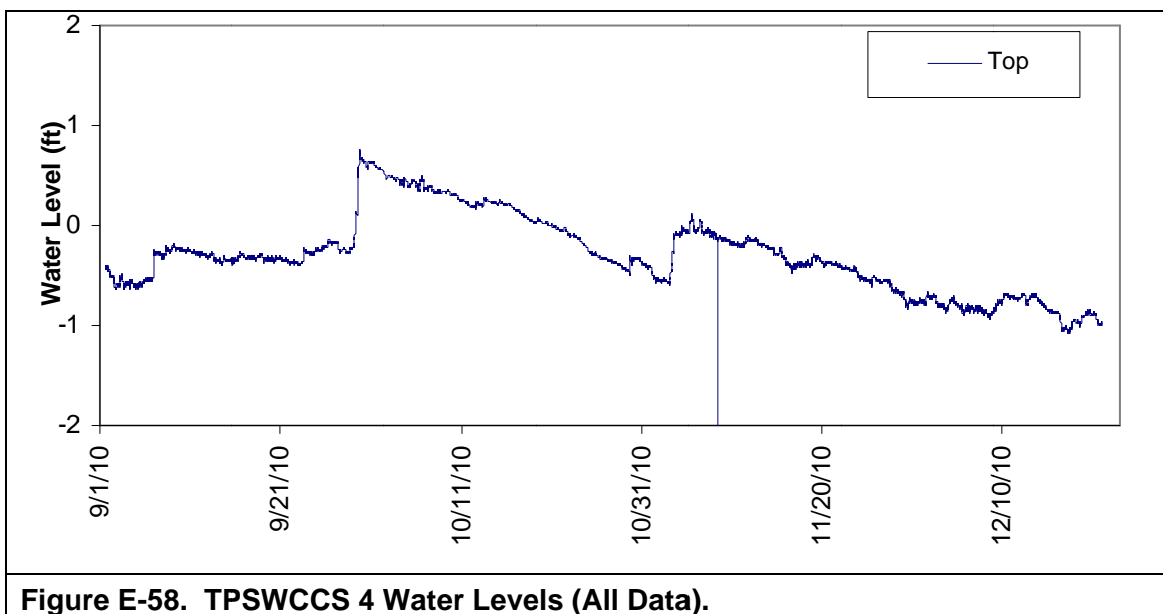
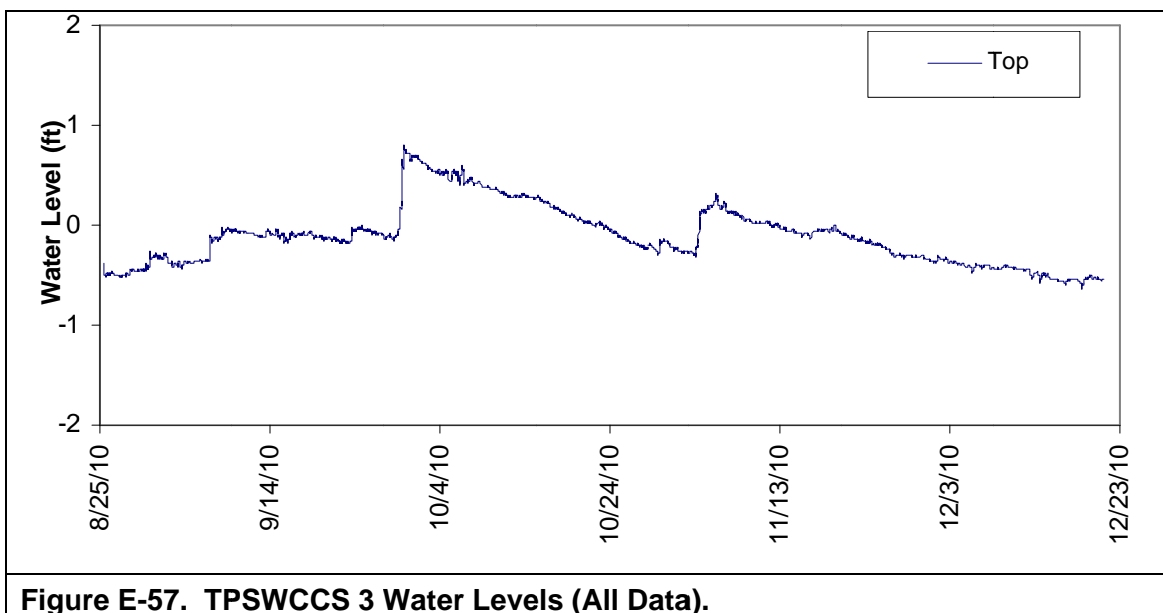
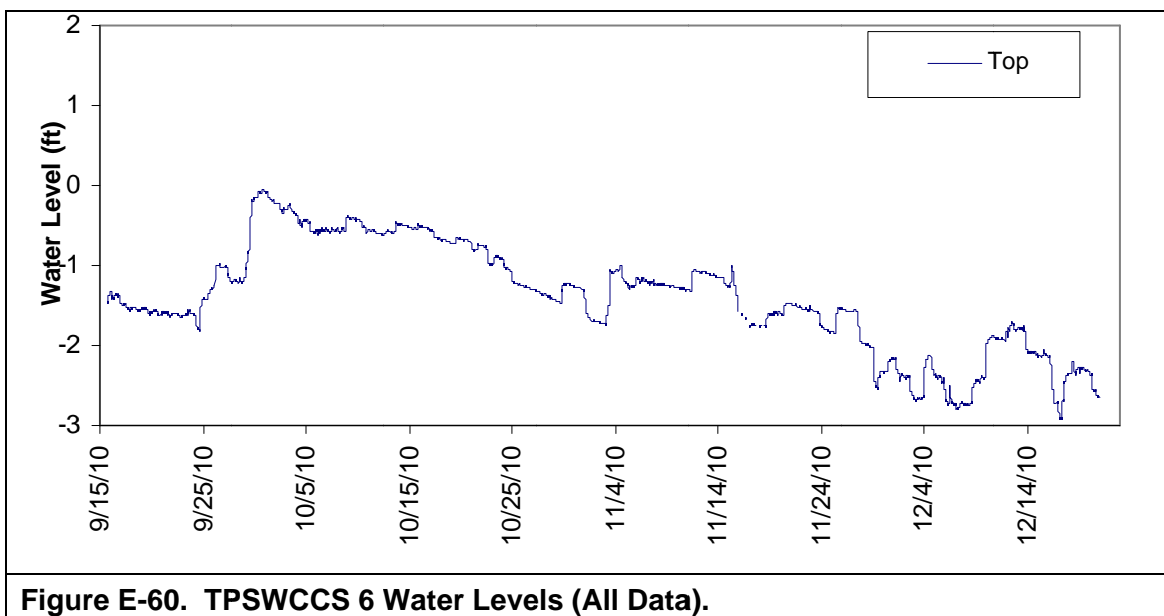
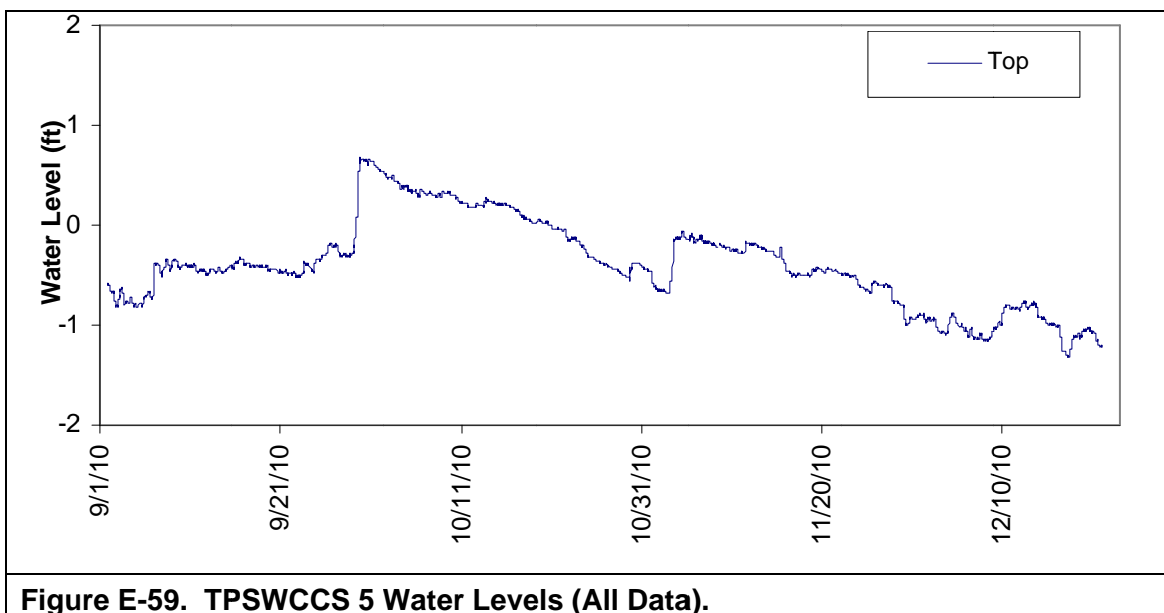


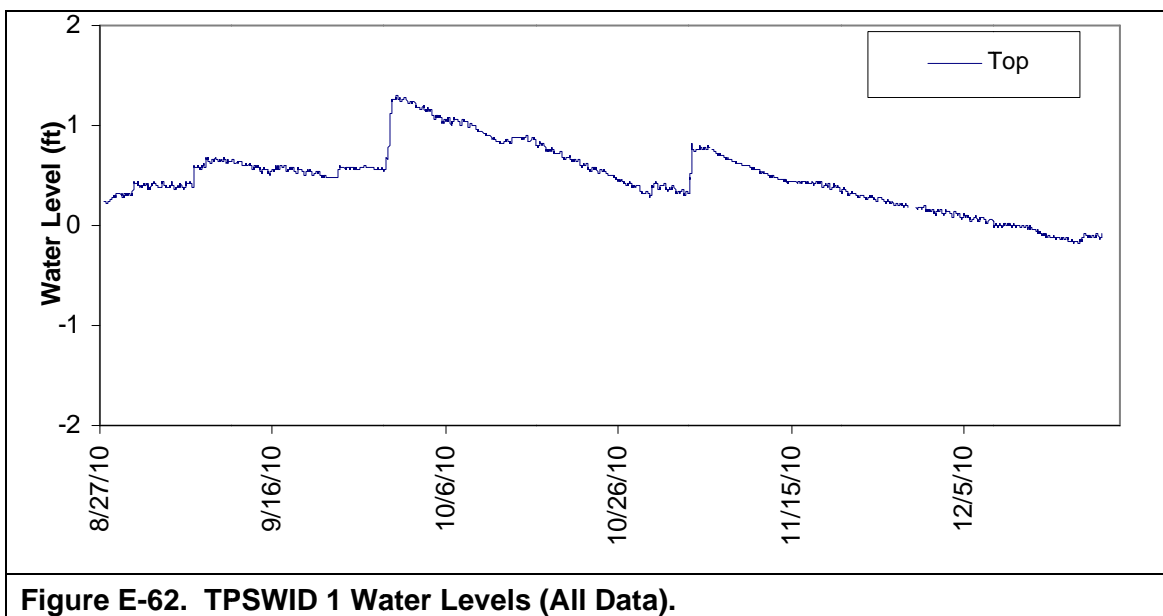
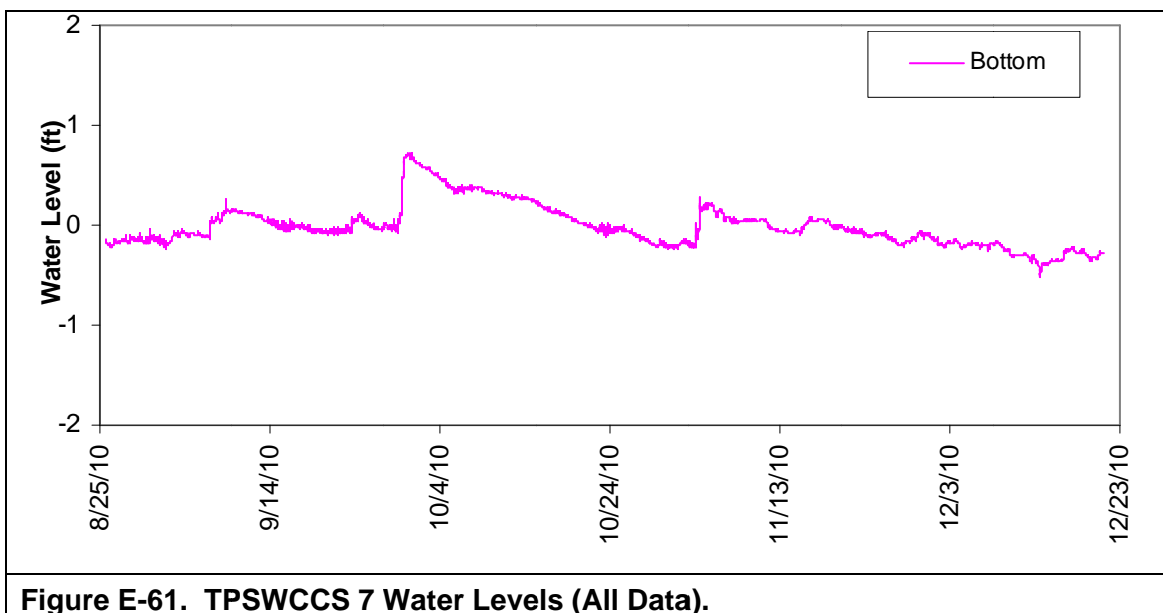
Figure E-52. TPSWC 3 Water Levels (All Data).

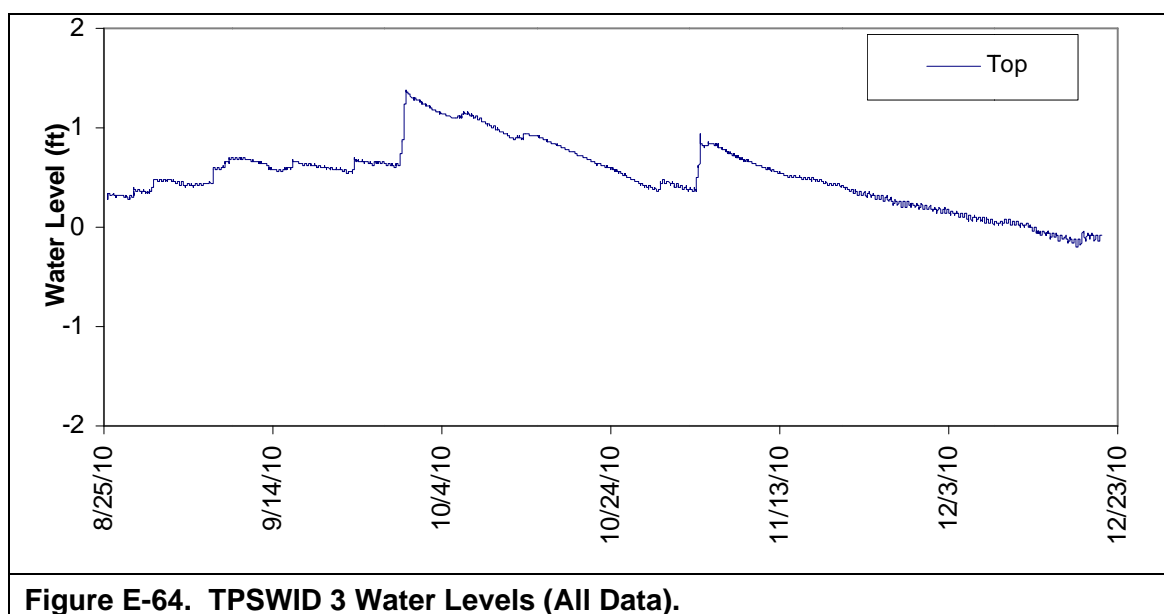
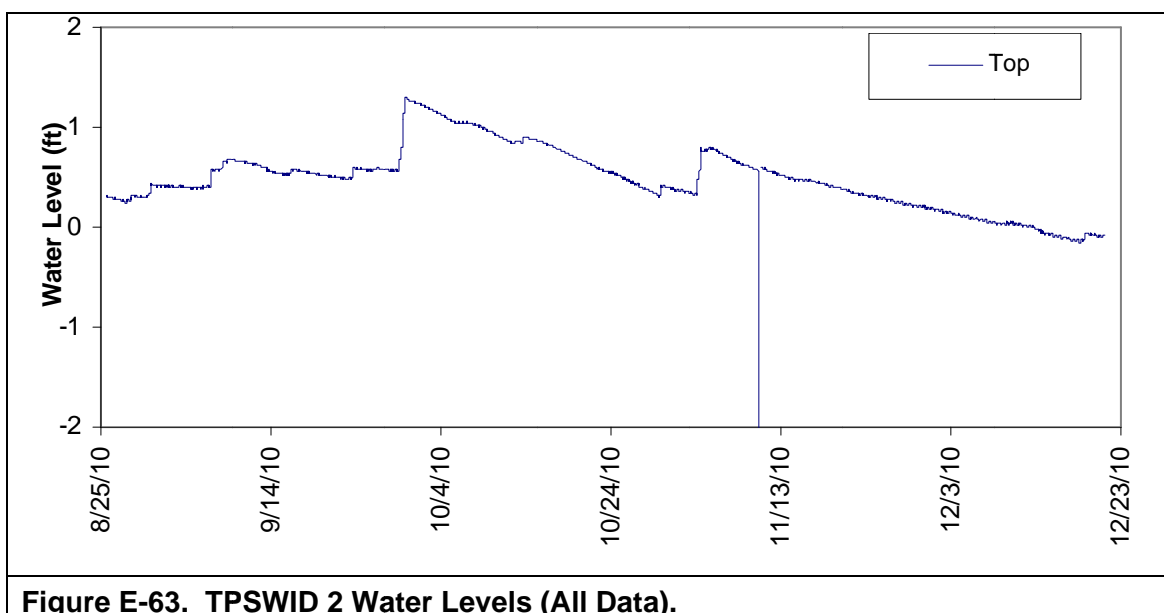












APPENDIX F:

FIELD SAMPLE LOGS FOR GROUNDWATER AND SURFACE WATER

JUNE/JULY 2010

FIELD SAMPLE LOGS

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: FPL - Turkey Point

METER MODEL# YSI 556 MPS

SAMPLERS/ORGANIZATION: Jessica Jacobs

METER SERIAL# 100101277

Stephen Hodges

Pump # 1322

Steven Elliott

Station#	Date	Time	Total Depth	Sample Depth	Water Temp	DO	DO	Cond	Salinity	pH	Turbidity	Comments
	Yy/mm/dd	Hr:min	Ft	Ft	Deg C	Mg/L	% Sat	µS/cm	ppt	S.U.	NTU	
062110-TPSWC-65	10/06/21	1451	8	1	28.18	1.95	25%	0.839	0	7.32	0.55	
062110-TPSWC-60	10/06/21	1520	8	7	27.71	2.02	25.8	0.892		7.27	1.25	
062810-TPSWCS-13	10/06/28	1108	6	5	38.84	4.63	92.6	76.05		8.22	9.19	ORP - 241.6
062810-TPSWCS-78	10/06/28	1214	3	2	36.89	5.62	109.9	75.94		8.24	6.42	ORP - 239.1
062810-TPSWCS-38	10/06/28	1340	2.5	1.5	34.88	7.61	140.8	70.26		8.19	8.57	ORP - 179.5
062910-TPSWCS-10	10/06/29	1151	10	9	31.65	6.46	89.1	5.317		8.09	1.08	ORP - 205.6
062910-TPSWCS-11	10/06/29	1235	10	1	31.97	7.10	98.7	5.287		8.14	1.15	ORP - 241.7
062910-TPSWCS-12	10/06/29	1328	13	12	29.00	0.86	11.5	7.524		6.86	5.06	ORP - 222.9
062910-TPSWCS-21	10/06/29	1400	13	1	31.60	7.91	108.6	2.994		7.88	2.03	ORP - 184.8
063010-TPSWCS-23	10/06/30	1420	3	2	36.68	6.31	123.4	76.91		8.25	8.46	ORP - -76.4
063010-TPSWCS-88	10/06/30	1514	2.5	1.5	37.87	7.14	142.7	78.06		8.29	14.14	ORP - 40.2

P# 1325
M# 1277
P# 1322
M# 1277
P# 1325
M# 1277

NOTES:

30

ORP	Station #	Date	Hour	Total Depth	Sample Depth	H ₂ O Temp	DO mg/L	DO % SAT	mS/cm Cond	pH	Tw
90.0	063010-TPSWCCS-5B	10/06/30	10:37	3.0	2.0	34.68	7.84	148.9	77.57	8.32	5
173.0	070110-TPSWCCS-5B	10/07/01	11:25	12.0	11.0	30.05	4.14	55.5	2.42	7.37	
168.8	070110-TPSWCCS-3T	10/07/01	11:55	12.0	11.0	31.72	7.15	98.0	2.437	7.64	
64.2	070110-TPSWC-4B	10/07/01	12:45	4.5	3.5	28.64	0.27	3.9	32.30	6.86	
70.0	070120-TPSWC-4T	10/07/01	13:20	4.5	1.0	31.96	4.90	72.3	23.04	7.31	
147.1	070110-TPSWCCS-4B	10/07/01	14:17	16 ft	15 ft	34.41	8.76	166.0	77.59	8.28	
162.3	070110-TPSWCCS-4T	10/07/01	15:15	16+ ft	1 ft	34.93	9.82	187.5	77.50	8.33	
196.3	070110-TPSWC-5B	10/07/01	16:20	14 ft	13 ft	32.35	3.40	55.6	49.20	7.70	
182.3	070110-TPSWC-5T	10/07/01	17:10	14 ft	1 ft	32.81	6.63	109.2	47.36	7.96	
124.6	070710-TPSWC-1B	10/07/07	12:12	12 ft	11 ft	28.89	5.54	71.9	0.47	7.59	
163.0	070710-TPSWC-1T	10/07/07	12:47	12 ft	1 ft	30.53	4.59	61.3	.512	7.6	
156.6	070710-TPSWC-2B	10/07/07	13:50	10 ft	9 ft	30.25	5.28	70.2	.596	7.82	
186.7	070710-TPSWC-2T	10/07/07	14:18	10 ft	1 ft	31.96	6.61	90.5	.597	7.93	
192.5	070710-TPSWC-3B	10/07/07	15:20	10 ft	9 ft	30.54	5.77	77.1	1.019	7.6	
199.3	070710-TPSWC-3T	10/07/07	15:47	10 ft	1 ft	32.58	8.04	111.3	0.877	8.08	

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: FPL Turkey Point Water MonitoringMETER MODEL# JSL 556 MPS

SAMPLERS/ORGANIZATION:

Jessica Jacobs } Ecology & Enviro.
Stephen Hodges } Inc.
Steven Elliott

METER SERIAL# 10A101789

Station#	Date	Time	Total Depth	Sample Depth	Water Temp	DO	DO	Cond	Salinity	pH	Turbidity	Comments
	Yy/mm/dd	Hr:min	Ft	Ft	Deg C	Mg/L	% Sat	ns/cm	ppt	S.U.	NTU	
BBSW-1s	10/06/22	13:30	4.1	1 ft	31.36	6.45	101.9	45.27		8.45	0.94	
BBSW-1D	10/06/22	14:14	4.1	3.1 ft	32.91	7.65	121.7	45.67		8.51	0.90	
BBSW-2D	10/06/22	15:30	2.9	1.9 ft	31.91	7.80	126.2	48.64		8.65	0.91	
BBSW-5s	10/06/23	11:08	6.3	1.0 ft	30.00	5.71	88.7	45.03		8.37	1.17	
BBSW-5D	10/06/23	11:45	6.3	5.0 ft	30.2	6.10	95.0	45.04		8.41	1.27	
BBSW-4s	10/06/23	12:58	8.3	1.0 ft	30.78	6.23	99.1	47.75		8.52	3.41	
BBSW-4D	10/06/23	13:29	8.3	7.0	30.84	5.86	93.4	47.86		8.53	3.68	
BBSW-3D	10/06/23	15:45	2.9	1.9	31.51	7.63	122.0	48.30		8.57	1.12	
070610-TPSWCCS- 6T												
070610-TPSWCCS- 6B												

NOTES:

GROUNDWATER SAMPLING LOG

SITE NAME:	060810-TEOW-25	SITE LOCATION:	
WELL NO:		SAMPLE ID:	DATE: 06/18/10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs S. Hodges				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 13:00		SAMPLING ENDED AT: 13:25	
PUMP OR TUBING DEPTH IN WELL (feet): 28				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="radio"/> N		FILTER SIZE: 40 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (Replaced)							DUPLICATE: Y <input checked="" type="radio"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PE	1 L	—	1 L	—	ALK, Br, Cl, F, H ₂ O		APP 5.08	
	2	PE	125 mL	—	125 mL	—	OP, H ₂ O ₂		APP .08	
	3	PE	500 mL	1/2 nitric acid	500 mL	19/2	TOS / sulfuric acid		APP .08	
	1	CG	40 mL	—	40 mL	—	DTC		APP .08	
	1	AG	250 mL	HCl	250 mL	2	DOC		APP .08	
	2	PE	250 mL	1/2 nitric acid	250 mL	1/2	nit / sulfuric		APP .08	
REMARKS: 6 PE 250 mL 1/2 nitric acid sulfuric acid							2 1/2 sulfuric acid / nitric acid		APP .08	
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 061810-TPGW-2m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06/18/10	

[illegible]

SAMPLED BY (PRINT) / AFFILIATION: <i>J. Jacobs</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SPRINKLING INITIATED AT: <i>13:35</i>		SPRINKLING ENDED AT: <i>13:55</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>52</i>				TUBING MATERIAL CODE: <i>T</i>		FIELD-FILTERED: <input checked="" type="radio"/> N		FILTER SIZE: <i>45</i> μ m			
FIELD DECONTAMINATION: PUMP <input checked="" type="radio"/> Y <input checked="" type="radio"/> N TUBING <input checked="" type="radio"/> Y <input checked="" type="radio"/> N (replaced)						DUPLICATE: <input checked="" type="radio"/> Y <input checked="" type="radio"/> N					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	<i>1</i>	<i>PE</i>	<i>1 L</i>	<i>—</i>	<i>1 L</i>	<i>—</i>	<i>Alk, Br, Cl, Cr6</i>		<i>APP</i>		<i>.10</i>
	<i>2</i>	<i>PE</i>	<i>125 mL</i>	<i>—</i>	<i>125 mL</i>	<i>—</i>	<i>OP / Hg²⁺ Cr6</i>		<i>APP</i>		<i>.10</i>
	<i>3</i>	<i>PE</i>	<i>500 mL</i>	<i>1/2 NaOH</i>	<i>500 mL</i>	<i>-9/1</i>	<i>TDS / Ba / F / NH₃</i>		<i>APP</i>		<i>.10</i>
	<i>1</i>	<i>CG</i>	<i>40 mL</i>	<i>—</i>	<i>40 mL</i>	<i>—</i>	<i>DIC</i>		<i>APP</i>		<i>.10</i>
	<i>1</i>	<i>AG</i>	<i>250 mL</i>	<i>HCl</i>	<i>250 mL</i>	<i>2</i>	<i>DOC</i>		<i>APP</i>		<i>.10</i>
	<i>2</i>	<i>PE</i>	<i>250 mL</i>	<i>1/2 NaOH</i>	<i>250 mL</i>	<i>—</i>	<i>Tot / Stront</i>		<i>APP</i>		<i>.10</i>
REMARKS: <i>6 PE 250 mL 1/2 NaOH 250 mL -7/1 SDO₂ / Cr6 / Hg²⁺ / NH₃ / TKN APP .10</i>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 0618/0 - TPCW - 2D	SITE LOCATION: 06/21/10
WELL NO:	SAMPLE ID: DATE: 86112/10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs S. Hodges Fine				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 1145		SAMPLING ENDED AT: 12:12		
PUMP OR TUBING DEPTH IN WELL (feet): 87.0				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (Replaced)							DUPLICATE: <input checked="" type="checkbox"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL. ADDED IN FIELD (mL)	FINAL pH					
	1	PE	1L	—	1L	—	ALK/CO/CF		APP		0.10
	3	PE	500mL	—/SAF/BA/ESP	500mL	7.1/10	TDS/NH3/BUL/CE		APP		0.10
	5	PE	250mL	NIT/SAF/SAF	250mL	2.1/1	MET/B/TEN/TP		APP		0.10
	3	PE	125mL	—	125mL	—	TRACE METALS/S-DZ		APP		0.10
	2	PE	250mL	NIT/CL/—	250mL	1/—	Carbon/DO/Hg/As/OP		APP		0.10
	1	CG	40mL	—	40mL	—	Strat/Triton		APP		0.10
REMARKS: 1 AG 125mL HCl 125mL 1 DOC APP 0.10											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: TPGW-3m		SITE LOCATION: FPL-Turkey Point	
WELL NO:	SAMPLE ID:	DATE: 06-17-10	

PURGING DATA

WELL DIAMETER (inches):		TUBING DIAMETER (inches):		WELL SCREEN INTERVAL DEPTH:		STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:			
2"		3/16"		55 feet to 59 feet		1.78		Peristaltic			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (feet - feet) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (.0014 gallons/foot X feet) + gallons = gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):		FINAL PUMP OR TUBING DEPTH IN WELL (feet):		PURGING INITIATED AT:		PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):			
58.3		58.3		10:20am		10:50		3.0			
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:29	1.6 g	1.6	.07		7.00	26.84	62.14	4.8(0.30)	0.22	hint of yellow	-
10:39	.65	2.25	.07		7.00	26.93	62.21	2.8(-18)	0.17	"	-
10:49	.75	3.00	.07		6.99	27.04	62.25	2.7(17)	0.53	"	-
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): <i>J. Jacobs</i>			SPRINKLING INITIATED AT: 11:30		SPRINKLING ENDED AT: 12:01	
PUMP OR TUBING DEPTH IN WELL (feet): 58.3				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (Replaced)							DUPLICATE: Y <input checked="" type="radio"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PE	1 L	—	1 L	—	ALK Br/Cr/Sg APP	A PP	.07	
	3	PE	500 mL	$\frac{2}{3}$ HCl / $\frac{1}{3}$ H ₂ O ₂	500 mL	10/2/-	Sa/H ₂ /N/K ₂ /A PP	A PP	.07	
	5	PE	250 mL	-1/2 Nitric	250 mL		S/O ₂ /K ₂ /N ₂ /A PP	A PP	.07	
	3	PE	125 mL	—	125 mL		OP/Cr/Sg/A PP	A PP	.07	
	1	AG	125 mL	HCL	125 mL	2	DOL	A PP	.07	
	1	CG	40 mL	—	40 mL	—	DIC	A PP	.07	
REMARKS: 2 PE 250 mL NALC/- 250 mL Strong/Tot APP .07										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: TPL7W - 3S		SITE LOCATION: FPL - Turkey Point	
WELL NO:	SAMPLE ID:	DATE: 06-17-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): J. Jacobs				SPRINKLING INITIATED AT: 11:05		SPRINKLING ENDED AT: 11:33	
PUMP OR TUBING DEPTH IN WELL (feet): 30				TUBING MATERIAL CODE: T		FIELD-FILTERED: (Y) N			FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)						DUPLICATE: Y (N)					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PE	1L	—	1L	—	D15 B.C.U.S. 4E		APP		
	23	PE	200mL	— / Silica	500mL	—	1/1/95 T-05 / NH ₃ / Silica		APP		
	45	PE	250mL	— / Nitric	250mL	—	1/12/25 O ₂ / mercuric / Teflon		APP		
	3	PE	125mL	— / —	125mL	—	Carbon / D.E. / mercuric		APP		
	1	AG	125mL	Hydrochloric	125mL	4	DOC		APP		
	1	CG	40mL	—	40mL	—	DIC		APP		
REMARKS: 2 PE 250mL — / Nitric 250mL — / 3 Teflon / Start APP .10											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TPCW-30		SITE LOCATION: FPL-Turkey Point	
WELL NO:		DATE: 06-17-10	
SAMPLE ID:			

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: 12:25		SAMPLING ENDED AT: 1:52	
PUMP OR TUBING DEPTH IN WELL (feet): 80				TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 45 µm			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (Replaced)						DUPLICATE: Y <input checked="" type="checkbox"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					SAMPLE PUMP FLOW RATE (mL per minute)
	1	PE	1L		1L	-	Alk Br, Cl, Si, Cr		PE		0.08
	23	PE	500 mL	200 mL	500 mL	10/2	Surf. / Nit.		PE		0.08
	5	PE	250 mL	250 mL	250	11/2	met. / nit. / pH		PE		0.08
	3	PE	125 mL	-	125	-	pH / Carb.		PE		0.08
	1	AG	125 mL	Hydrochloric	125	2	DOC		PE		0.08
	1	CG	40 mL	-	40 mL	-	DIC		PE		0.08
REMARKS: 2 PE 250 mL - / nit. 250 mL - / 2 TCA / 8000 PE 0.08											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 062410-TPGW-4S		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 06/24/10

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:							
2"	3/16"	22.5 feet to 24.5 feet	1.94	PP							
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (feet - feet) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (.0014 gallons/foot X 28.5 feet) + gallons = .04 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):							
23.5	23.5	1433	1456	278							
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm <i>or</i> mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1440	1.10	1.10	.10	1.9	7.44	24.89	1.79	2.0(1.6)	1.58	Clear	-
1446	.90	2.0	.15	1.95	7.37	25.02	1.76	1.6(.13)	2.52	"	-
1502	.52	2.52	.08	1.95	7.31	24.99	1.75	1.4(.12)	2.52	"	-
WELL CAPACITY (Gallons Per Foot): .75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1500		SAMPLING ENDED AT: 1514	
PUMP OR TUBING DEPTH IN WELL (feet): 23.5				TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N		FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)						DUPLICATE: Y <input checked="" type="radio"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PE	250 mL	N. Tric	250	2	metals	APP	1.08	
	1	PE	500 mL	NaOH / Zn Met	500	10	full size	APP	1.08	
	1	PE	250 mL	N. Tric	250	1	Strontium	APP	1.08	
	1	AG	125 mL	HCl	125	1	DOC	APP	1.08	
REMARKS: Please see Analyte Sample Cost for CW w/out nitrate for remaining samples.										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 062410-TPCW-4m	SITE LOCATION:
WELL NO:	SAMPLE ID: DATE: 06/24/10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>J. Jacobs / S. Hodges</i>				SAMPLER(S) SIGNATURE(S): <i>J. Jacobs</i> <i>S. Hodges</i>			SPRINKLING INITIATED AT: <i>1330</i>		SPRINKLING ENDED AT: <i>1344</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>41 ft</i>				TUBING MATERIAL CODE: <i>T</i>			FIELD-FILTERED: <i>0</i> N Filtration Equipment Type:		FILTER SIZE: <i>46</i> µm		
FIELD DECONTAMINATION: PUMP <i>Y</i> <i>(N)</i>				TUBING <i>Y</i> <i>(N)</i> <i>(replaced)</i>				DUPLICATE: <i>Y</i> <i>(N)</i>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (ml. per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	<i>1</i>	<i>PE</i>	<i>250mL</i>	<i>N.HrCl</i>	<i>250</i>	<i>2</i>	<i>metals</i>		<i>APP</i>		<i>5.11</i>
	<i>1</i>	<i>PE</i>	<i>600mL</i>	<i>NaOH / Zn Acetate</i>	<i>600</i>	<i>9</i>	<i>surface</i>		<i>APP</i>		<i>.11</i>
	<i>1</i>	<i>PE</i>	<i>250mL</i>	<i>N.HrCl</i>	<i>250</i>	<i>1</i>	<i>strontium</i>		<i>APP</i>		<i>.11</i>
	<i>1</i>	<i>AG</i>	<i>125mL</i>	<i>HCl</i>	<i>125</i>	<i>1</i>	<i>DOL</i>		<i>APP</i>		<i>.11</i>
REMARKS: <i>please see analytical sample list for C70 w/out nutrients for remaining samples.</i>											
MATERIAL CODES: AG = Amber Glass; GG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 062410-TPGW-40		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06-24-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / Siltages				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			PROBING INITIATED AT: 1300		SAMPLING ENDED AT: 1314		
PUMP OR TUBING DEPTH IN WELL (feet): 65				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="radio"/> N		FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)							DUPLICATE: Y <input checked="" type="radio"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PE	250mL	HNO ₃	250mL	2	metals		APP		0.25
	1	PE	500mL	NaOH, <i>filtered</i>	500mL	9	Sulfate		APP		0.25
	1	PE	250mL	Nitric	250	1	Strontium		APP		11
	1	AG	125mL	HCl	125	2	DOC		APP		11
REMARKS: Please see Analyze sample list for GW w/out nutrients for remaining samples											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME:		SITE LOCATION: <u>Turkey Point</u>	
WELL NO: <u>TPGW-55</u>	SAMPLE ID: <u>06610-TPGW-55</u>	DATE: <u>6/16/10</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2"</u>	TUBING DIAMETER (inches): <u>3/16" 50' x 4"</u>	WELL SCREEN INTERVAL DEPTH: <u>24</u> feet to <u>28</u> feet	STATIC DEPTH TO WATER (feet): <u>4.69</u>	PURGE PUMP TYPE OR BAILER: <u>Pump (peristaltic)</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)	<u>30 ft tubing</u> = gallons + (<u>0.014</u> gallons/foot X <u>30</u> feet) + gallons = <u>0.42</u> gallons
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INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: <u>1100</u>	PURGING ENDED AT: <u>1228</u>	TOTAL VOLUME PURGED (gallons): <u>6.25</u>
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TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or MS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	DRP
1115	1 gal	1 gal	0.2	4.69	9.65	27.90	0.739	2.11 (0.17)		Colorless	none	-88.1
1122	0.55 gal	1.55 gal	0.2	4.69	8.67	25.51	0.820	1.27 (0.10)				-203.4
1133	1 gal	2.55 gal	0.2	4.69	8.29	25.84	0.908	1.07 (0.08)	9.36 um			-247.8
1145	.75 gal	3.25 gal	0.2	4.69	8.04	25.81	0.938	2.27 (0.17)	8.37 um			-215.3
1153	.75 gal	4.0 gal	0.2	4.70	7.77	25.67	0.949	1.07 (0.08)	5.86 um			-188.3
1202	.25 gal	4.25	0.2	4.69	7.58	25.78	0.950	0.9 (0.07)	6.58 um			-176.1
1227	2.00	6.25	0.2		7.47	25.80	0.958	1.2 (0.10)	5.27 um			-175.0

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Jessica Jacobs / E & E, INC.</u>		SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>		SAMPLING INITIATED AT: <u>1230</u>	SAMPLING ENDED AT: <u>1300</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>26</u>		TUBING MATERIAL CODE: <u>T</u>		FIELD-FILTERED: <u>(Y)</u> N	FILTER SIZE: <u>45</u> μm
FIELD DECONTAMINATION: PUMP <u>Y</u> <u>(N)</u>		TUBING <u>Y</u> <u>(N)</u> (replaced)		DUPLICATE: <u>Y</u> <u>(N)</u>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	<u>1</u>	<u>PE</u>	<u>1 L</u>	<u>—</u>	<u>1 L</u>	<u>10</u>	<u>Alk, Cl, SO4, F, B</u>	<u>APP</u>	<u>0.2</u>
	<u>2</u>	<u>PE</u>	<u>500 mL</u>	<u>2N Acetic Acid</u>	<u>500 mL</u>	<u>10</u>	<u>Sulfide / TDS</u>	<u>APP</u>	<u>0.2</u>
	<u>2</u>	<u>PE</u>	<u>125 mL</u>	<u>—</u>	<u>125 mL</u>	<u>—</u>	<u>Carbon / H2O2 / O3</u>	<u>APP</u>	<u>0.2</u>
	<u>1</u>	<u>PE</u>	<u>250 mL</u>	<u>N. Tric Acid</u>	<u>250 mL</u>	<u>2</u>	<u>Metals</u>	<u>APP</u>	<u>0.2</u>
	<u>2</u>	<u>PE</u>	<u>250</u>	<u>— / H2O2</u>	<u>250 mL</u>	<u>—</u>	<u>Tric / H2O2 / Swank</u>	<u>APP</u>	<u>0.2</u>
	<u>1</u>	<u>AG</u>	<u>250 mL</u>	<u>HCL</u>	<u>250 mL</u>	<u>3</u>	<u>DOC</u>	<u>APP</u>	<u>0.2</u>
REMARKS:	<u>1</u>	<u>CG</u>	<u>40 mL</u>	<u>—</u>	<u>40 mL</u>	<u>—</u>	<u>DIC</u>	<u>APP</u>	<u>0.2</u>

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: TPGW-5m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06-16-10	

PURGING DATA

WELL DIAMETER (inches):	2"	TUBING DIAMETER (inches):	3/16"	WELL SCREEN INTERVAL DEPTH:	825 45 feet to 50 feet	STATIC DEPTH TO WATER (feet):		PURGE PUMP TYPE OR BAILER:	Peristaltic
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= (\quad \text{feet} - \quad \text{feet}) \times \quad \text{gallons/foot} = \quad \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY · X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{gallons} + (0.014 \text{ gallons/foot} \times 60 \text{ feet}) + \text{gallons} = 0.084 \text{ gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1400	PURGING ENDED AT: 1440	TOTAL VOLUME PURGED (gallons): 4.8
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[illegible]


WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump: ESP = Electric Submersible Pump: PP = Peristaltic Pump: O = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump: ESP = Electric Submersible Pump: PP = Peristaltic Pump: O = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump: ESP = Electric Submersible Pump: PP = Peristaltic Pump: O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges E+E	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: 14:45	SAMPLING ENDED AT: 15:15
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PUMP OR TUBING DEPTH IN WELL (feet): <u>40</u>	TUBING MATERIAL CODE: <u>T</u>	FIELD-FILTERED: <u>(Y)</u> N Filtration Equipment Type:	FILTER SIZE: <u>45</u> μ m
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FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PE	1 L	—	1 L		Alk, SO ₄ U.S.	APP	0.2
	2	PE	125 mL	—	125 mL		Cu ²⁺ /H ₂ O ₂	APP	0.2
	2	PE	500 mL	- 1% acetic acid NaOH	500 mL		TDS/Si/PO ₄	APP	0.2
	1	PE	250 mL	NH ₄ SCN	250 mL		metals	APP	0.2
	2	PE	250 mL	- 1% NH ₄ SCN	250 mL		TDS/Si/PO ₄	APP	0.2
	1	AGI	250 mL	H ₂ SO ₄ /H ₂ O ₂	250 mL		DOL	APP	0.2

REMARKS: I CG 40m J 700 40m L DIC APP

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME:		SITE LOCATION: <u>Turkey Point</u>	
WELL NO: <u>TP6W-5D</u>	SAMPLE ID: <u>061610-TP6W-5D</u>	DATE: <u>6/16/10</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2"</u>	TUBING DIAMETER (inches): <u>3/16" to 1/4"</u>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: <u>Pump (peristaltic)</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)
<u>soft tubing</u> = gallons + (0.014 gallons/foot X <u>70</u> feet) + gallons = <u>0.98</u> gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: <u>12:15</u>	PURGING ENDED AT: <u>13:09</u>	TOTAL VOLUME PURGED (gallons): <u>4.5</u>
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TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
12:31	1 gal	1 gal	0.1	4.9	6.82	24.85	30.20	3.5	3.58	clear	None
12:39	0.6	1.6	0.1		6.82	24.80	30.20	4.2 (0.31 mg/L)	0.04	clear	None
12:45	0.8	2.4	0.12		6.83	24.80	30.20	6.9 (0.49 mg/L)	0.01	clear	None
12:51	0.45	2.85	0.12	5.13	6.84	24.81	30.19	4.7 (0.35 mg/L)	0.11	clear	None
12:56	0.5	3.20	0.10	5.14	6.85	24.84	30.18	4.3 (0.32 mg/L)	0.15	clear	None
1:02	0.4	3.6	0.08	5.14	6.85	24.76	30.17	4.3 (0.32 mg/L)	0.27	clear	None
1:07	0.6	4.2	0.1	5.14	6.85	24.69	29.98	4.0 (0.30 mg/L)	0.46	clear	None

ORP
1.1
-1.8
-3.4
-5.7
-7.1
-8.5

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>Jessica Jacobs/Steve Hodges</u>	SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>	SAMPLING INITIATED AT: <u>13:36</u>	SAMPLING ENDED AT: <u>14:00</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>70 ft</u>	TUBING MATERIAL CODE: <u>T</u>	FIELD-FILTERED: <u>0</u> N	FILTER SIZE: <u>45</u> μm
FIELD DECONTAMINATION: PUMP <u>Y</u> (N) TUBING <u>Y</u> (N) (replaced)		DUPLICATE: <u>Y</u> (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PE	1L	—	1L		Alk, Cl, SO ₄ , Br	APP	50.1
	2	PE	125mL	—	125mL		Carbon / Hydroxy	APP	0.1
	2	PE	500mL	— / <u>Ascorbic acid</u>	500mL	10	TDS / Sulfate	APP	0.1
	1	PE	250mL	Nitric	250mL	2	Metals	APP	0.1
	2	PE	250mL	— / Nitric	250mL		Trifluoromethane	APP	0.1
	1	AG	250mL	Hydrochloric	250mL	3	DOC	APP	0.1
REMARKS:	<u>+ 1 CG 40mL</u> <u>1 CG 40mL</u> <u>40mL</u> <u>40mL</u> <u>DIC</u> <u>APP</u> <u>0.1</u>								

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 062110-TPGW-65		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06-21-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs S. Hodges E+ E, inc				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 1000		SAMPLING ENDED AT: 198	
PUMP OR TUBING DEPTH IN WELL (feet): 235				TUBING MATERIAL CODE: T		FIELD-FILTERED: (Y) N			FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced)						DUPLICATE: Y (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PE	1L	-	1L	-	Alk, Cl, F, Sa		APP	0.06
	2	PE	500mL	- / 2mL NaOH	500 mL	- / 8	TDS / 2mL		APP	0.06
	2	PE	250mL	- / Nitric	250 mL	- / 2	Tot / Stront		APP	0.06
	2	PE	125mL	-	125 mL	-	Carbon / 2mL		APP	0.06
	1	CG	40mL	-	40 mL	-	DIC		APP	0.06
	1	AG	250mL	HCl	125 mL	0.1	DOC		APP	0.06
REMARKS: 1 PE 250mL Nitric 250 mL 1 met 4 APP 0.06										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME:	062110-TPGW-6m	SITE LOCATION:	
WELL NO:		SAMPLE ID:	DATE: 06-21-10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs S. Hodges E+ Inc				SAMPLER(S) SIGNATURE(S): [Signatures]			SAMPLING INITIATED AT: 0915		SAMPLING ENDED AT: 0932		
PUMP OR TUBING DEPTH IN WELL (feet): 51				TUBING MATERIAL CODE: T			FIELD-FILTERED: (Y) N		FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N) (replaced)			DUPLICATE: Y (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PE	1L	—	1L	—	Alk, Cl, Br, F	APP	0.08		
	1	PE	500 ml	—	500 ml	—	TDS	APP	.08		
	1	PE	250 ml	Nitric	250 ml	2	metals	APP	.08		
	2	PE	125 ml	—	125 ml	—	Carbon / ^{oxy} / ^{phos}	APP	.08		
	2	PE	250 ml	-Nitric	250 ml	-1/2	Trit / Stron	APP	.08		
	1	AG	250 ml	HCl	250 ml	4	DOC	APP	.08		
REMARKS: 1 (CG) 40 ml — 40 ml — DIC APP .08											
1 PE 500 ml 2N Acetic No OH 500 ml 8.5 Sulfate APP .08											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: TPGW-6D	SITE LOCATION:
WELL NO: 200 062110-TPGW-6D	SAMPLE ID: DATE: 06-21-10

PURGING DATA

WELL DIAMETER (inches): <u>2"</u>	TUBING DIAMETER (inches): <u>3/6"</u>	WELL SCREEN INTERVAL DEPTH: <u>82</u> feet to <u>86</u> feet	STATIC DEPTH TO WATER (feet): <u>1.35</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (feet - feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (<u>.0014</u> gallons/foot X <u>89.5</u> feet) + gallons = <u>.1253</u> gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>84.5</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>84.5</u>	PURGING INITIATED AT: <u>0820</u>	PURGING ENDED AT: <u>0858</u>	TOTAL VOLUME PURGED (gallons): <u>2.44</u>

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges ^{ET} E. Inc.				SAMPLER(S) SIGNATURE(S): <i>J. Jacobs</i> <i>St. H.</i>			SAMPLING INITIATED AT: 0900		SAMPLING ENDED AT: 0914			
PUMP OR TUBING DEPTH IN WELL (feet): 84.5				TUBING MATERIAL CODE: T			FIELD-FILTERED: (Y) N		FILTER SIZE: 45 µm			
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N) (replaced)				DUPLICATE: Y (N)				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE		# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
		1	PE	1 L	—	1 L	—	Al, Cl, Br, F		APP		0.05
		1	PE	500 mL	N	500 mL	—	Metals IDS		APP		.05
		1	PE	250 mL	N:tr:ic	250 mL	2	Metals		APP		.05
		2	PE	125 mL	—	125 mL	—	Carbon, Hydrogen, Oxygen		APP		.05
		2	PE	250 mL	— / N:tr:ic	250 mL	- / 1	Tr:itum / Stant		APP		.05
		1	AG	250 mL	X HCl	250 mL	9	DOC		APP		.05
REMARKS:												
		1	CG	40 mL	—	40 mL	—	DIC		APP		.05
		1	PE	500 mL	Zn Acetate	500 mL	9	Sulfate		APP		.05
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 062410-TPCW-7s	SITE LOCATION:
WELL NO:	SAMPLE ID: DATE: 06-24-10

PURGING DATA

WELL DIAMETER (inches): <u>2ⁿ</u>	TUBING DIAMETER (inches): <u>3¹/₁₆</u>	WELL SCREEN INTERVAL DEPTH: <u>22</u> feet to <u>26</u> feet	STATIC DEPTH TO WATER (feet): <u>5</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

WELL VOLUME T (GAL)
(only fill out if applicable)

$$= (\quad \text{feet} - \quad \text{feet}) \times \quad \text{gallons/foot} = \quad \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{gallons} + (.0014 \text{ gallons/foot} \times 29 \text{ feet}) + \text{gallons} = .09 \text{ gallons}$$

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 24	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 24	PURGING INITIATED AT: 1617	PURGING ENDED AT: 1641	TOTAL VOLUME PURGED (gallons): 250
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump: ESP = Electric Submersible Pump: PP = Peristaltic Pump: O = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump: ESP = Electric Submersible Pump: PP = Peristaltic Pump: O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. J. G. S. B.	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: 1655	SAMPLING ENDED AT: 1710
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PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: 7	FIELD-FILTERED: <input checked="" type="radio"/> N Filtration Equipment Type:	FILTER SIZE: 45 µm
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FIELD DECONTAMINATION:	PUMP	Y	(N)	TUBING	Y	(N) (replaced)	DUPLICATE:	Y	(N)
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[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass: CG = Clear Glass: PE = Polyethylene: PP = Polypropylene: S = Silicone: T = Teflon: O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

10 - TPCW

PURGING DATA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= (\text{feet} - \text{feet}) \times \text{gallons/foot} = \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{gallons} + (.0014 \text{ gallons/foot} \times 54 \text{ feet}) + \text{gallons} = .076 \text{ gallons}$$

[illegible]

ORP

-106.7

-102

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: <u>I</u>	FIELD-FILTERED: <input checked="" type="radio"/> N Filtration Equipment Type:	FILTER SIZE: <u>45</u> μ m
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DEPTH IN WELL (feet):			MATERIAL CODE:			Pneum. Equipment Type:		
FIELD DECONTAMINATION:	PUMP	Y <input checked="" type="radio"/> N	TUBING	Y <input checked="" type="radio"/> N (replaced)		DUPLICATE:	Y <input checked="" type="radio"/> N	

[illegible]

REMARKS: please see Analyte Samples 1787 for C20 w/out nutrients for remaining 8 samples.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 0624W-7P4W-70		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06-24-20	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacoby				SAMPLER(S) SIGNATURE(S): J. Jacoby			SAMPLING INITIATED AT: 1800		SAMPLING ENDED AT: 1812	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="radio"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (Replaced)							DUPLICATE: Y <input checked="" type="radio"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			SAMPLE PUMP FLOW RATE (mL per minute)	
	1	PE	500 mL	Nitric	500 mL	10	SWR2		APP	1.12
	1	PE	250 mL	Nitric	250 mL	2	Stronium		APP	2.2
	1	PE	250 mL	Nitric	250 mL	1	Metals		APP	1.1
	1	AG	125 mL	HCl	125 mL	1	DOC		APP	1.1
REMARKS: Please see analysis sample 1787 for GW w/out nutrients for remaining samples.										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

0706

SITE NAME: <u>062510-TPCW-85</u>		SITE LOCATION: <u>07-06</u>	
WELL NO:	SAMPLE ID:	DATE: <u>06-25-10</u>	

PURGING DATA

WELL DIAMETER (inches): <u>2"</u>	TUBING DIAMETER (inches): <u>3/16"</u>	WELL SCREEN INTERVAL DEPTH: <u>17</u> feet to <u>25</u> feet	STATIC DEPTH TO WATER (feet): <u>.9</u>	PURGE PUMP TYPE OR BAILER: <u>PP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (feet - feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (.0014 gallons/foot X 24 feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>19</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>19</u>	PURGING INITIATED AT: <u>12:10</u>	PURGING ENDED AT: <u>13:05</u>	TOTAL VOLUME PURGED (gallons): <u>8.5</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μ mhos/cm or μ S/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
1227	1.25	1.25	.114	1.0	11.84	24.95	1.52	1.2(1.10)	40.81	Clear	none	-220.7
1239	2.0	3.25	.167	1.2	11.82	24.77	1.34	0.7(1.06)	15.94	"	"	-235.1
1244	.30	3.55	.06	1.2	11.78	24.71	1.32	0.7(1.06)	14.73	"	"	-235.8
1251	.70	4.25	0.1	1.2	11.78	24.69	1.25	0.7(1.06)	10.67	"	"	-236.1
1257	.25	4.50	0.042	1.2	11.75	24.70	1.20	0.8(1.06)	10.60	"	"	-233.5
1258	1.5	1.5	.136	0.9	11.72	24.78	1.18	4.8(1.40)	6.43	"	—	75.1
1304	.75	2.25	.125	0.9	11.70	24.92	1.20	15.7(1.28)	7.50	"	—	58.1
1310	.75	3.0	.125	0.9	11.67	24.99	1.14	5.3(1.43)		"	—	47.5

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>J. Jacobs</u>		SAMPLER(S) SIGNATURE(S): <u>J. Jacobs</u>		SAMPLING INITIATED AT: <u>13:15</u>	SAMPLING ENDED AT: <u>13:25</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>19</u>		TUBING MATERIAL CODE: <u>T</u>		FIELD-FILTERED: <u>(X)</u> N	FILTER SIZE: <u>45</u> μ m
FIELD DECONTAMINATION: PUMP <u>Y</u> TUBING <u>Y</u> (replaced)		DUPLICATE: <u>Y</u>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PE	250mL	N ₂ HL	250	3	metals	APP	.125
	1	PE	500mL	NaOH/trace	500	12	silica	APP	"
	1	AG	125mL	HCl	125	1	DOC	APP	"
	1	PE	250mL	N ₂ HL	250	4	Stratium	APP	"

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 062510-TPC2W-8m		SITE LOCATION:	
WELL NO:		DATE: 06-25-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) & AFFILIATION: S. JACOBS				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			DRAINING INITIATED AT: 1225		SAMPLING ENDED AT: 1250	
PUMP OR TUBING DEPTH IN WELL (feet): 36				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="radio"/> N		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/>				TUBING Y <input checked="" type="radio"/> (replaced)			DUPLICATE: Y <input checked="" type="radio"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PE	500 mL	NaOH/Bn Acetate	500	10	Sub Bn		APP	5.125
	1	PE	250 mL	Nitric	250	1	Stratum		APP	11
	1	PE	250 mL	Nitric	250	2	Methyls		APP	11
	1	AG	125 mL	HCl	125	2	DOC		APP	11
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 062510-TPCW-80	SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06/25/10

[illegible]

SAMPLED BY (PRINT) / AFFILIATION: <i>J. Jacobs</i>				SAMPLER(S) SIGNATURE(S): <i>J. Jacobs</i> <i>[Signature]</i>				SAMPLING INITIATED AT: <i>1200</i>		SAMPLING ENDED AT: <i>1212</i>			
PUMP OR TUBING DEPTH IN WELL (feet): <i>51</i>				TUBING MATERIAL CODE: <i>T</i>		FIELD-FILTERED: <input checked="" type="radio"/> YES <input type="radio"/> NO		FILTER SIZE: <i>45</i> μ m					
FIELD DECONTAMINATION: PUMP <input type="radio"/> Y <input checked="" type="radio"/> NO TUBING <input type="radio"/> Y <input checked="" type="radio"/> NO (Replaced)						DUPLICATE: <input type="radio"/> Y <input checked="" type="radio"/> NO							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE		# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)		FINAL pH					
		<i>1</i>	<i>PE</i>	<i>500 mL</i>	<i>none / 2% HCL</i>	<i>500</i>		<i>10</i>	<i>Sulfide</i>		<i>APP</i>	<i>50 mL</i>	
		<i>1</i>	<i>PE</i>	<i>250 mL</i>	<i>NITRIL</i>	<i>250</i>		<i>1</i>	<i>Straw</i>		<i>APP</i>	<i>"</i>	
		<i>1</i>	<i>PE</i>	<i>250 mL</i>	<i>NITRIL</i>	<i>250</i>		<i>1</i>	<i>metal</i>		<i>APP</i>	<i>"</i>	
		<i>1</i>	<i>AG</i>	<i>125 mL</i>	<i>HCL</i>	<i>125</i>		<i>2</i>	<i>Doc</i>		<i>APP</i>	<i>"</i>	
REMARKS:													
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)													
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)													

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

062510-

PURGING DATA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= (\quad \text{feet} - \quad \text{feet}) \times \quad \text{gallons/foot} = \quad \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

$$= \text{gallons} + (.0614 \text{ gallons/foot} \times 23 \text{ feet}) + \text{gallons} = 0.03 \text{ gallons}$$

TIME	VOLUME PURGED	CUMUL. VOLUME PURGED	PURGE RATE	DEPTH TO WATER	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm	DISSOLVED OXYGEN (circle units) mg/l	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
------	------------------	----------------------------	---------------	----------------------	---------------------------	---------------	-------------------------------------	---	---------------------	---------------------	--------------------

ORP

-7863

-95-

98

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

PUMP OR TUBING	TUBING	FIELD-FILTERED: <input checked="" type="radio"/> N	FILTER SIZE: <u>45</u> μ m
DEPTH IN WELL (feet): <u>13</u>	MATERIAL CODE: <u>7</u>	Filtration Equipment Type:	

FIELD DECONTAMINATION: PUMP Y ☒ TUBING Y ☒ (Displaced) DUPLICATE: Y ☒

REMARKS: Please see analyze sample 188+ for Cr70+ nutrients for remaining samples

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 062510-TPGW-9M		SITE LOCATION:	
WELL NO:		DATE: 06/25/10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>J. Jacobs, S. Hodges</i> <i>EVE inc</i>				SAMPLER(S) SIGNATURE(S) <i>[Signature]</i> <i>[Signature]</i>				SAMPLING INITIATED AT: <i>0955</i>		SAMPLING ENDED AT:			
PUMP OR TUBING DEPTH IN WELL (feet): <i>35</i>				TUBING MATERIAL CODE: <i>T</i>		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N Filtration Equipment Type:			FILTER SIZE: <i>45</i> μ m				
FIELD DECONTAMINATION: PUMP <i>Y</i> <input checked="" type="radio"/> TUBING <i>Y</i> <input checked="" type="radio"/> (Replaced)						DUPLICATE: <i>Y</i> <input checked="" type="radio"/>							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH							
	<i>1</i>	<i>PE</i>	<i>1500 mL</i>	<i>NaOH / Zn Acet.</i>	<i>1000-500</i>	<i>10</i>	<i>ful H₂e</i>	<i>APP</i>	<i>5</i>	<i>125</i>			
	<i>1</i>	<i>PE</i>	<i>250 mL</i>	<i>Nitric</i>	<i>250</i>	<i>21</i>	<i>Straw</i>	<i>APP</i>	<i>11</i>	<i>11</i>			
	<i>1</i>	<i>AG</i>	<i>125 mL</i>	<i>HCl</i>	<i>125</i>	<i>1</i>	<i>DOC</i>	<i>APP</i>	<i>11</i>	<i>11</i>			
	<i>1</i>	<i>PE</i>	<i>250 mL</i>	<i>Nitric</i>	<i>250</i>	<i>2</i>	<i>metals</i>	<i>APP</i>	<i>11</i>	<i>11</i>			
REMARKS: <i>Please see analyze sample 1387 for crw w/out nutrients for remaining samples</i>													
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)													
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)													

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 062510-TPGW-9B		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06/25/10	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/16"	WELL SCREEN INTERVAL DEPTH: 48 feet to 50 feet	STATIC DEPTH TO WATER (feet): 2.9 ft	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

= (feet —

feet) X

gallons/foot = _____ gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

= gallons + 1.05 in

54

gallons = 7070 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 49	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 49	PURGING INITIATED AT: 0852	PURGING ENDED AT: 0918	TOTAL VOLUME PURGED (gallons): 300
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump ESP = Electric Submersible Pump PP = Peristaltic Pump O = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump: ESP = Electric Submersible Pump: PP = Peristaltic Pump: O = Other (Specify)

PURGING EQUIPMENT CODES: B = Bailer BP = Bladder Pump: ESP = Electric Submersible Pump: PP = Peristaltic Pump: O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Decker / E+G	SAMPLER(S) SIGNATURE(S) [Signature]	SAMPLING INITIATED AT: 0930	SAMPLING ENDED AT: 0945
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BLIND OR TYPING

TUE

FILTERED: ☒ YES ☐ NO

FILTER SIZE: 45

PUMP OR TUBING
DEPTH IN WELL (feet):

TUBING MATERIAL

FIELD-FILTERED: ☒ Y ☐ N
Filtration Equipment Type:

FILTER SIZE: 10 μm

DEPTH IN WELL (feet).

DE.

Equipment Type	Equipment Description	Equipment Location	Equipment Status	Equipment Date	Equipment Time	Equipment User	Equipment Remarks
Equipment Type	Equipment Description	Equipment Location	Equipment Status	Equipment Date	Equipment Time	Equipment User	Equipment Remarks

FIELD DECONTAMINATION: PUMP Y ☒ N TUBING Y ☒ N (replaced) DUPLICATE: Y ☒ N

[illegible]

REMARKS: please see Analyte Sample List for GW w/out nutrients for remaining samples.

MATERIAL CODES: AG = Amber Glass: CG = Clear Glass: PE = Polyethylene: PP = Polypropylene: S = Silicone: T = Teflon: O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: $\pm 0.2^\circ\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: TPGW-12 S		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06-17-10	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3 1/4"	WELL SCREEN INTERVAL DEPTH: 22 feet to 24 feet	STATIC DEPTH TO WATER (feet): 44 ft	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

(only fill out if applicable)

$$= \{$$

feet —

feet

gal

gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

(only fill out if applicable)

11

gall

ot X

ga

gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 24 ft	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 24	PURGING INITIATED AT: 1508	PURGING ENDED AT: 1518	TOTAL VOLUME PURGED (gallons): 3.2
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Jorgensen	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>	SAMPLING INITIATED AT: 15:55	SAMPLING ENDED AT: 16:04
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PUMP OR TUBING DEPTH IN WELL (feet):	24 ft	TUBING MATERIAL CODE:	T	FIELD-FILTERED: (Y) N	FILTER SIZE: 45 μm
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FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PE	1L	—	1L	—	Al, Br, S, Cl, Cr	APP	1.10
	3	PE	500ml	for heavy metals	500ml	10/2	Al, Fe, Ni, Zn, TOC	APP	1.10
	5	PE	250mL	for nitric sulfuric acid	250mL	12/2	SO ₂ , heavy metals	APP	1.10
	3	PE	125ml	1/-/-	125 mL	—	OP, Carb, H ₂ O ₂	APP	1.10
	1	EG	40ml	—	40 ml	—	DIC	APP	1.10
	1	AG	125ml	hydrochl	125 ml	2	DOC	APP	1.10
REMARKS:	2	PE	250ml	with HCl/-	250ml	2/-	span/TOC	APP	1.10

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: TPGW-12m		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 06-17-10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Jessica Jacobs</i>				SAMPLER(S) SIGNATURE(S): <i>J. Jacobs</i>			DRAINING INITIATED AT: <i>1630</i>		DRAINING ENDED AT: <i>1650</i>		
PUMP OR TUBING DEPTH IN WELL (feet): <i>60 ft</i>				TUBING MATERIAL CODE: <i>T</i>		FIELD-FILTERED: <i>(Y)</i> N		FILTER SIZE: <i>45</i> μ m			
FIELD DECONTAMINATION: PUMP <i>Y</i> <i>(N)</i> TUBING <i>Y</i> <i>(N)</i> (replaced)						DUPLICATE: <i>Y</i> <i>(N)</i>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (ml per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	<i>1</i>	<i>PE</i>	<i>1L</i>	<i>—</i>	<i>1L</i>	<i>—</i>	<i>Al, B, C, S, etc.</i>		<i>APP</i>	<i>500</i>	<i>.16</i>
	<i>3</i>	<i>PE</i>	<i>500 mL</i>	<i>200 mL / 500 mL</i>	<i>500 mL</i>	<i>10/10</i>	<i>500 mL / 500 mL</i>		<i>APP</i>	<i>500</i>	<i>.16</i>
	<i>3</i>	<i>PE</i>	<i>250 mL</i>	<i>125 mL / 250 mL</i>	<i>250 mL</i>	<i>12/12</i>	<i>250 mL / 250 mL</i>		<i>APP</i>	<i>250</i>	<i>.16</i>
	<i>3</i>	<i>PE</i>	<i>125 mL</i>	<i>—</i>	<i>125 mL</i>	<i>—</i>	<i>125 mL / 125 mL</i>		<i>APP</i>	<i>125</i>	<i>.16</i>
	<i>1</i>	<i>AG</i>	<i>125 mL</i>	<i>—</i>	<i>125 mL</i>	<i>2</i>	<i>DOC</i>		<i>APP</i>	<i>125</i>	<i>.16</i>
	<i>1</i>	<i>CG</i>	<i>40 mL</i>	<i>40 mL</i>	<i>40 mL</i>	<i>—</i>	<i>DOC</i>		<i>APP</i>	<i>40</i>	<i>.16</i>
REMARKS: <i>2 PE 250 mL N/A / 250 mL 250 mL 250 mL 250 mL 250 mL 250 mL 250 mL 250 mL 250 mL 250 mL 250 mL</i>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	061810-TPGW-12D	SITE LOCATION:	
WELL NO:		SAMPLE ID:	DATE: 06/18/10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs S. Hodges				SAMPLER(S) SIGNATURE(S): [Signature]			DRAINING INITIATED AT: 10:30		DRAINING ENDED AT: 10:50	
PUMP OR TUBING DEPTH IN WELL (feet): 99				TUBING MATERIAL CODE: PE			FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N TUBING Y <input checked="" type="radio"/> N (replaced)							DUPLICATE: <input checked="" type="radio"/> Y <input type="radio"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PE	1L	—	1L	—	MK B/C PAPP		APP	.10
	2	PE	125mL	—	125mL	—	OP/1/2/2 APP		APP	.10
	3	PE	500mL	—	500mL	—	1/2/2 DS/1/1/1 NH3		APP	.10
	1	CG	40mL	—	40mL	—	DTC		APP	.10
	1	AG	250mL	H2SO4	250mL	4	DTC		APP	.10
	2	PE	250	—	250mL	—	1/2 TAT/Strat		APP	.10
REMARKS: 0 PE 250 1/2 Nitric acid 250mL 1/2 5.0% CaSO4/trace metals Sulfuric acid 2/1/2 metals/noop/TEN										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 063010-TPGW-135	SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 06/30/10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>J. Jacobson</i>				SAMPLER(S) SIGNATURE(S): <i>J. Jacobson</i>			SAMPLING INITIATED AT: <i>12:47</i>		SAMPLING ENDED AT: <i>1305</i>	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE: <i>T</i>		FIELD-FILTERED: <i>(7)</i> N Filtration Equipment Type:		FILTER SIZE: <i>95</i> µm		
FIELD DECONTAMINATION: PUMP <i>Y</i> <i>(1)</i> TUBING <i>Y</i> <i>(N) (replaced)</i>						DUPLICATE: <i>Y</i> <i>(N)</i>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH				
	<i>2</i>	<i>PE</i>	<i>250 ml</i>	<i>NITRIC</i>	<i>250</i>	<i>2 1/2</i>	<i>Trace met/met.</i>	<i>APP</i>	<i>0.05</i>	
	<i>2</i>	<i>PE</i>	<i>250 ml</i>	<i>Sulfuric</i>	<i>250</i>	<i>2 1/2</i>	<i>TPNOx/TKN</i>	<i>APP</i>	<i>.05</i>	
	<i>1</i>	<i>PE</i>	<i>500 ml</i>	<i>Sulfuric</i>	<i>250</i>	<i>2</i>	<i>NH3</i>	<i>APP</i>	<i>.05</i>	
	<i>1</i>	<i>PE</i>	<i>500 ml</i>	<i>Zn Acet</i>	<i>500</i>	<i>10</i>	<i>Sulfate</i>	<i>APP</i>	<i>.05</i>	
	<i>1</i>	<i>PE</i>	<i>250 ml</i>	<i>NITRIC</i>	<i>250</i>	<i>2</i>	<i>Stratum</i>	<i>APP</i>	<i>.05</i>	
	<i>1</i>	<i>AG</i>	<i>125 ml</i>	<i>HCl</i>	<i>125</i>	<i>2</i>	<i>DO2</i>	<i>APP</i>	<i>.05</i>	
REMARKS: <i>For remaining samples, please see CW w/ nutrient analysis list.</i>										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME:	063010-TPGW-13m	SITE LOCATION:	
WELL NO:		SAMPLE ID:	DATE: 06-30-10

[illegible]

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): J. Jacobs			SPRINKLING INITIATED AT: 1220		SPRINKLING ENDED AT: 45		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="radio"/> N		FILTER SIZE: 45 μ m			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)						DUPLICATE: Y <input checked="" type="radio"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (ml per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	2	PE	250ml	Nitric	250	2/2	Trace metal/met		APP		0.1
	2	PE	250ml	Sulfuric	250	2/2	TPOX/TKN		APP		"
	1	PE	500ml	Sulfuric	500	2	NH ₃		APP		"
	1	PE	500ml	BACALON	500	10	Sulfuric		APP		"
	1	PE	250ml	Nitric	250	2	Strontium		APP		"
	1	PE	125ml	HCl	125	2	BOD		APP		"
REMARKS: AG For remaining samples please see GLW w/ nutrients Analysis											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SEPTEMBER 2010

FIELD SAMPLE LOGS

GROUNDWATER SAMPLING LOG

SITE NAME: 863810-TPGW-13D		SITE LOCATION:	
WELL NO:		DATE:	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 1300		SAMPLING ENDED AT: 1415	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="radio"/> N		FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)						DUPLICATE: Y <input checked="" type="radio"/> N <input checked="" type="radio"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	2	PE	250 mL	Nitric	250	2	Trace metals APP		0.05	
	2	PE	250 mL	Sn Fume	250	2	Ti, V, W, / TKM APP		"	
	1	PE	500 mL	Sn Fume	500	2	NH3 APP		"	
	1	PE	250 mL	Nitric	250	2	Strontium APP		"	
	1	PE	500 mL	Tr Acetate / HCl	500	10	Substrate APP		"	
	1	AG	125 mL	HCl	125	2	DOC APP		"	
REMARKS: Please see CWD w/ nutrients for remaining samples analyzed 1-57										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SEPTEMBER 2010

FIELD SAMPLE LOGS

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 090110-TPGW-105		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 09-01-10

PURGING DATA

WELL DIAMETER (inches): 2" ¹	TUBING DIAMETER (inches): 3/8" ¹	WELL SCREEN INTERVAL DEPTH: 21 feet to 23 feet	STATIC DEPTH TO WATER (feet): 8.3	PURGE PUMP TYPE OR BAILER: PP/ESP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = 52.46 - 8.86 feet - 8.453 feet X 0.16 gallons/foot = 7.06 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 12	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 12	PURGING INITIATED AT: 1616	PURGING ENDED AT: 1740	TOTAL VOLUME PURGED (gallons): 26.5

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs		SAMPLER(S) SIGNATURE(S): JJ Jacobs		SAMPLING INITIATED AT: 1745	SAMPLING ENDED AT: 1800
PUMP OR TUBING DEPTH IN WELL (feet): 12		TUBING MATERIAL CODE: PE		FIELD-FILTERED: <input checked="" type="radio"/> N	FILTER SIZE: 45 µm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (Replaced)		DUPLICATE: Y <input checked="" type="checkbox"/>			

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD-9000-24

PURGING DATA

ORP
-213.5
-223.3
-224.7

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: <u>090110 - TPCW - 100</u>	SITE LOCATION:
WELL NO:	DATE: <u>09-01-10</u>

PURGING DATA

WELL DIAMETER (inches): <u>2"</u>	TUBING DIAMETER (inches): <u>3/8"</u>	WELL SCREEN INTERVAL DEPTH: <u>111</u> feet to <u>115</u> feet	STATIC DEPTH TO WATER (feet): <u>8.45</u>	PURGE PUMP TYPE OR BAILER: <u>PP/ESP</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (115 - 8.45) \text{ feet} \times 0.16 \text{ gallons/foot} = 168.86 \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>15</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>15</u>	PURGING INITIATED AT: <u>1520</u>	PURGING ENDED AT: <u>1554</u>	TOTAL VOLUME PURGED (gallons): <u>79.45</u>
--	--	-----------------------------------	-------------------------------	---

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1610	5.91	78.25		8.27	7.19	28.24	256,504	24/3.8%	0.42	Clear	None
1615	1.91	78.75	.20	8.25	7.20	28.12	56,566	22/3.4%	0.23	"	"
1620	1.70	79.45	.34	8.25	7.21	28.09	56,590	17/2.6%	0.34	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>J. Jacobs / S. Hodges E+E inc</u>	SAMPLER(S) SIGNATURE(S): <u>AAccm</u>	SAMPLING INITIATED AT: <u>1622</u>	SAMPLING ENDED AT: <u>1637</u>
PUMP OR TUBING DEPTH IN WELL (feet): <u>15</u>	TUBING MATERIAL CODE: <u>PE</u>	FIELD-FILTERED: <input checked="" type="radio"/> N	FILTER SIZE: <u>.45</u> μm
FIELD DECONTAMINATION: PUMP <u>Y</u> TUBING <u>Y</u> (Displaced)		DUPLICATE: <u>Y</u>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500mL	NaOH / 3m	500	10	Substrate	APP	3.34
	1	PP	250mL	Nitric	250	1	metals	APP	3.34
	1	PP	250mL	Nitric	250	1	Fe/Ba	APP	3.34
	1	PP	125mL	Nitric	125		Selenium	APP	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 090210 - TPCW-115		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
		DATE: 09/02/10	

PURGING DATA

PURGING DATA					
WELL DIAMETER (Inches): 2"	TUBING DIAMETER (Inches): 3/8"	WELL SCREEN INTERVAL DEPTH: 23 feet to 27 feet	STATIC DEPTH TO WATER (feet): 9.05	PURGE PUMP TYPE OR BAILER: PP/ESP	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)					
= (435 feet - 9.05 feet) X 0.14 gallons/foot = 5.51 gallons					
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)					
= gallons + (gallons/foot X feet) + gallons = gallons					
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 16	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 16	PURGING INITIATED AT: 1520	PURGING ENDED AT: 1632	TOTAL VOLUME PURGED (gallons): 21.55	

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump

PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLING DATA									
SAMPLED BY (PRINT) / AFFILIATION: J. Dawes				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 1635		SAMPLING ENDED AT: 1648
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE: PE		FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (Replaced)				FILTRATION Equipment Type:					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			DUPLICATE: Y <input checked="" type="checkbox"/>		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
	1	PP	500 mL	N ₂ O ₄ /2-Alt	500	10	Sal/Arce	APP	1.31
	1	PP	250 mL	NITRIC	250	3	met/ly	APP	1.31
	1	PP	250 mL	"	250	1	Fe/BA	APP	1.31
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									
NOTES: 1. The above do not constitute all of the information required by Chapter 60-100, 5-1-0									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 090210 - TPCW - 11 m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09/02/10	

[illegible]

SAMPLED BY (PRINT) / AFFILIATION: J Jacobs				SAMPLER(S) SIGNATURE(S): J Jacobs			SAMPLING INITIATED AT: 1520		SAMPLING ENDED AT: 1533	
PUMP OR TUBING DEPTH IN WELL (feet): 16				TUBING MATERIAL CODE: PE		FIELD-FILTERED: <input checked="" type="radio"/> N Filtration Equipment Type:			FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)						DUPLICATE: Y <input checked="" type="radio"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	moist/pe2142	500	11	SIL/22		APP	0.30
	1	PP	250 mL	NITRO2	250	2	METER		APP	0.30
	1	PP	250 mL	NITRIL	250	2	Fe/BA		APP	0.30
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 090210 - TPGW-110		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09/02/10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			PROBING INITIATED AT: 1555		SAMPLING ENDED AT: 1611	
PUMP OR TUBING DEPTH IN WELL (feet): 16				TUBING MATERIAL CODE: PE			FIELD-FILTERED: <input checked="" type="checkbox"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)							DUPLICATE: Y <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500mL	NO PRESERVATIVE	500	10	Sulfide		APP	33
	1	PP	250mL	N.H.Z	250	2	N.H.Z		APP	33
	1	PP	250mL	N.H.Z	250	2	PE/B		APP	33
REMARKS: NIS calculation of pH at depth to H ₂ O.										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

[illegible]

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED:		FILTER SIZE:		
FIELD DECONTAMINATION: PUMP				TUBING			DUPLICATE:				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLE PUMP FLOW RATE		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1		500 mL	Zn ACETATE / NaOH	500	10	Sulfide		APP		
	1		250 mL	NITRIC	250	2	metals		APP		
	1		250 mL	NITRIC	250	1	Fe/Ba		APP		
REMARKS: Very high DO % readings could mean malfunctioning sensor. S.E.H. recommended to note high readings & continue sampling.											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											
NOTES: 1. The above do not constitute a guarantee of accuracy or reliability of the data.											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

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GROUNDWATER SAMPLING LOG

SITE NAME: 090110-TPG7W-14D		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 09-01-10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs				SAMPLER(S) SIGNATURE(S): <i>J. Jacobs</i>			SAMPLING INITIATED AT: 1340		SAMPLING ENDED AT: 1353	
PUMP OR TUBING DEPTH IN WELL (feet): 15.				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)							DUPLICATE: Y <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	NO ₃ / Nitric	500	10	Sulfide	APP		
	1	PP	250 mL	Nitric	250	3	Free Metals	APP		
	1	PP	250 mL	"	250	3	Fe/Ba	APP		
	1	PP	250 mL	"	125		Strontium	APP		
REMARKS: Slight sulfur smell towards end of pumping										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+ 0.2$ mg/L or $+ 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $+ 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME:	092310-TPC7W-115	SITE LOCATION:	
WELL NO:		SAMPLE ID:	DATE: 09-23-10

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/4	WELL SCREEN INTERVAL DEPTH: 36.25 feet to 40.25 feet	STATIC DEPTH TO WATER (feet): 8.15	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (feet - feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (.0014 gallons/foot X 47 feet) + gallons = .06 gallons				

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>J. Jacobs / Storage etc., inc</i>				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>				SAMPLING INITIATED AT: <i>1105</i>		SAMPLING ENDED AT: <i>11:17</i>	
PUMP OR TUBING DEPTH IN WELL (feet): <i>sedicates</i>				TUBING MATERIAL CODE: <i>T</i>			FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N Filtration Equipment Type:		FILTER SIZE: <i>.45</i> µm		
FIELD DECONTAMINATION: PUMP <i>Y</i> <input checked="" type="radio"/> TUBING <i>Y</i> <input checked="" type="radio"/> (replaced)						DUPLICATE: <i>Y</i> <input checked="" type="radio"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	<i>1</i>	<i>PP</i>	<i>500ml</i>	<i>NH₄/Acetic</i>	<i>500</i>	<i>10</i>	<i>Sulfide</i>	<i>APP</i>	<i>.12</i>		
	<i>2</i>	<i>PP</i>	<i>250ml</i>	<i>N.H.C</i>	<i>500</i>	<i>2/2</i>	<i>Metals/Fe</i>	<i>B9 APP</i>	<i>.12</i>		
	<i>2</i>	<i>CG</i>	<i>90ml</i>	<i>HCl</i>	<i>80</i>	<i>1/1</i>	<i>DIC</i>	<i>APP</i>	<i>.12</i>		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092310-TPGW-11m		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 09-23-10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hedges INC.				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1052		SAMPLING ENDED AT: 1059	
PUMP OR TUBING DEPTH IN WELL (feet): 1200				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (Replaced)							DUPLICATE: Y <input checked="" type="radio"/> N <input checked="" type="radio"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500mL	NaOH / 2% HCL	500	10	Sulfate	APP	11	
	2	PP	250mL	NH ₄ Cl	600	1/1	Metals / Fe, Mn	APP	11	
	2	CG	40mL	HCl	80	1/0	DIL	APP	11	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

7

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PURGING DATA

SCREEN INTERVAL

	PURGING
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OAP
277.7
-280.8
-285.7

$$.25'' = 0.06; \quad 2'' = 0.16;$$

ESP = Electric Sub

SAMPLING DATA

SIGNATURE(S):

AMPLIFIED PRESERVATION

PE = Polyethylene; PP =

B = Bailer; BP = Black

n required by Chapter 6

LAST THREE CONSECUTIVE

uctance: $\pm 5\%$ Dissolve

[illegible]

SAMPLING DATA											
SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodge EHEC				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SAMPLING INITIATED AT: 1400		SAMPLING ENDED AT: 1411		
PUMP OR TUBING DEPTH IN WELL (feet): decreases				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N				TUBING Y <input checked="" type="radio"/> N (replaced)			DUPLICATE: Y <input checked="" type="radio"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500 mL	methanol/Acetate	500	10	Sulfide		APP	3.08	
	2	PP	250 mL	N.2 HCl	500	2/2	methanol/PE, A		APP	.08	
	2	CG	40 mL	HCl	80	0/0	DIC		APP	.08	
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											
NOTES: 1. The above do not constitute all of the information that should be recorded on this form.											

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 091610-TPGW-12m		SITE LOCATION:	
WELL NO:		DATE: 09-16-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N Filtration Equipment Type:		FILTER SIZE: <u>45</u> μ m		
FIELD DECONTAMINATION: PUMP <input checked="" type="radio"/> Y <input type="radio"/> N				TUBING <input checked="" type="radio"/> Y <input type="radio"/> N (replaced)			DUPLICATE: <input type="radio"/> Y <input checked="" type="radio"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500 mL	NaOH / Zn Acetate	500	10.5	Suicide		APP		1.10
	2	DP	250 mL	N.H ₄ Cl	500	2/2	R, Ba / mercury, etc.		APP		1.10
	2	CG	40 mL	HCl	80	0/0	DIC		APP		1.10
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

Revision Date: February 12, 2009

SITE NAME: 091610 - Tplw - 120		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-16-10	

[illegible]

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:	
J. J. O'Leary / S. Hedges				[Signature]			1255		1308	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		FILTER SIZE: <u>.45</u> μ m	
dedicates				T			Filtration Equipment Type:			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)							DUPLICATE: Y <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	NaOH / Zn	500	10	Snifer	APP	0.05	
	2	PP	250 mL	N. HCL	500	0/2	Fe, Ba / Methyl etc	APP	.05	
	2	CG	40 mL	HCl	80	1/1	DIC	APP	.05	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 090910-TPG ^w -135		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 09-09-10

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges ETEC				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 15:50		SAMPLING ENDED AT: 16:03		
PUMP OR TUBING DEPTH IN WELL (feet): decreased				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N				TUBING Y <input checked="" type="radio"/> N (replaced)			DUPLICATE: Y <input checked="" type="radio"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500mL	NaOH / Zn Acetate	500	10	Sn / Fe		APP		.05
	1	PP	250mL	Nitric	250	2	Fe / Ba		APP		.05
	2	CG	40mL	HCl	80 + 60mL	1/1	DIL		APP		.05
	1	PP	250mL	Nitric	250	1.5	Mercury, Cu, Pb, Ni		APP		.05
REMARKS: Depth to water near malfunctioning part way through recording parameters - no further readings recorded.											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 090910-TPGW-13m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-09-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:	SAMPLING ENDED AT:	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:	FIELD-FILTERED: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N Filtration Equipment Type:		FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y <input checked="" type="checkbox"/> TUBING <input type="checkbox"/> Y <input checked="" type="checkbox"/> (Replaced)						DUPLICATE: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500 mL	NADH / Ascorbic Acid	500	7	Sulfide	APP	.09
	2	PP	250 mL	Nitric	500	2 / 2	Fe, Ba / manganous chloride	APP	.09
	* 2	RG	4 mL	Hydrochloric	100 80	1 / 1	DIC	APP	.09
REMARKS: * Depth to water meter malfunctioning during sampling so did not continue recording. * Lots of black flecks in pumped water.									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									
NOTES: 1. The above do not constitute a warranty or endorsement by EPA.									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 090910-TPGW-13D	SITE LOCATION:
WELL NO:	DATE: 09-09-10

PURGING DATA

WELL DIAMETER (Inches): 2"	TUBING DIAMETER (Inches): 3/16"	WELL SCREEN INTERVAL DEPTH: 86 feet to 90 feet	STATIC DEPTH TO WATER (feet): 2.35	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 117.3 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 117.3 PURGING INITIATED AT: 10:12 PURGING ENDED AT: 10:37 TOTAL VOLUME PURGED (gallons): 2.50				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:20	1.0	1.0	.125		7.15	30.18	85,992	34/6.3	2.22	Clear	Strong
10:28	.75	1.75	.09		6.92	30.15	86,023	62/11.7	0.23	"	"
10:33	.75	2.50	.25		6.87	30.10	86,058	108/19.9	0.34	turbid	"
								85		grey, blackish	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
 PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges E&E Inc.				SAMPLER(S) SIGNATURE(S): [Signature]				SAMPLING INITIATED AT: 10:40		SAMPLING ENDED AT: 10:51	
PUMP OR TUBING DEPTH IN WELL (feet): 117.3				TUBING MATERIAL CODE: T				FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 45 μm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)				DUPLICATE: Y <input checked="" type="checkbox"/>							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500 mL	Nitric / Acetic	500	10	Sulfide	APP	.25
	2	PP	250 mL	Nitric	500	2/2	mercury/PB	APP	.25
	2	CG	40 mL	HCl	80 mL	1/1	DIC	APP	.25

REMARKS: Lots of black sediment/debris in bottom of purge bucket.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: 092710-TOG-145		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
WELL:		DATE: 09/27/10	

[illegible]

SAMPLED BY (PRINT) / AFFILIATION:		SAMPLER(S) SIGNATURE(S):		PUMP OR TUBING		SAMPLING INITIATED AT:		SAMPLING ENDED AT:	
DEPTH IN WELL (feet):		TUBING MATERIAL CODE:		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N		Filtration Equipment Type:		FILTER SIZE: <u>40</u> μ m	
FIELD DECONTAMINATION: PUMP <input type="radio"/> Y <input checked="" type="radio"/> N		TUBING <input type="radio"/> Y <input checked="" type="radio"/> N (replaced)		DUPLICATE: <input type="radio"/> Y <input checked="" type="radio"/> N					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL. ADDED IN FIELD (mL)	FINAL pH	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)	
	1	PP	500ml	NaOH 12.5	500	10	APP	1.12	
	2	PP	250ml	D.H.C	300	2/2	APP	1.2	
	2	CG	40ml	HCl	80	1/0	RFP	1.2	
REMARKS:									

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by the EPA.

NOTES: 1. The above do not constitute all of the information required by Chapter 62-180, F.A.C.
2. STABILIZATION CRITERIA: FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: +0.2 units Temperature: +0.3°C Conductivity: +10% Dissolved Oxygen: +0.2 mg/L

pH: ± 0.2 units **Temperature:** $\pm 0.2^\circ\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\pm 20\%$ saturation (see Table FS 2200-2) optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 092710-TRCV-14m		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
		DATE: 09/27/10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):				SAMPLING DATA			
J. Jacobs				[Signature]				PUMP OR TUBING DEPTH IN WELL (feet): 1650 FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) MATERIAL CODE: T SAMPLING INITIATED AT: 1650 FILTERED: (Y) N Filtration Equipment Type: N FILTER SIZE: 1659			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				DUPLICATE: Y (N)			
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)		
	1	PP	500mL	NITRIC ACID	500	10	Sub E	APP	0.0		
	2	PP	250mL	NITRIC	500	2/2	Memo, R/B	APP	0.0		
	2	CG	40mL	HCL	80	1/1	DIC	APP	0.0		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; EEP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											
NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C. 2. STABILIZATION CRITERIA FOR RANGE OF ...											

pH: ± 0.2 units Temperature: $\pm 0.2^\circ\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) Turbidity: all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: Turkey Point Water MonitoringMETER MODEL# YSI 556 MPSSAMPLERS/ORGANIZATION: J. JacobsMETER SERIAL# 10A101789S. HodgesM. Mohlman (EAI) - only BBSWPump # 1325

Station#	Date	Time	Total Depth	Sample Depth	Water Temp	DO	DO	Cond	Salinity	pH	Turbidity	Comments
	Yy/mm/dd	Hr:min	Ft	Ft	Deg C	Mg/L	% Sat	uS/cm	ppt	S.U.	NTU	
090210-BBSW-5B	10/09/02	0948	6.5	5.5	29.39	5.18	81.3	50,200	32.77	8.18	1.50	ORP = 100.9
090210-BBSW-4B	10/09/02	1057	8.7	7.7	29.72	5.74	91.7	53,788	35.40	8.28	1.17	ORP = 33.4
090210-BBSW-3B	10/09/02	1245	14.1	13.1	30.37	5.27	84.2	51,270	33.52	8.22	2.70	ORP = -23.6
090210-BBSW-3B	10/09/02	1702	5.5	4.5	30.88	11.05	179.8%	53,401	34.47	8.79	1.58	ORP = -4.0
090210-BBSW-2B	10/09/02	1808	5.0	4.0	31.50	11.77	190.2%	49,244	32.01	8.66	1.07	ORP = 16.1
090710-TPSWC-3B	10/09/07	1135	11.0	10.0	30.46	3.70	50.1%	584 _{uS}	0.28	7.84	2.10	ORP = 195.3
090710-TPSWC-3T	10/09/07	1200	11.0	1.0	31.45	6.07	82.3%	588 _{uS}	0.28	7.83	1.00	ORP = 154.9
090710-TPSWC-2B	10/09/07	13:10	10.0	9.0	30.37	6.00	80.4%	509 _{uS}	0.24	7.93	1.30	ORP = 83.2
090710-TPSWC-2T	10/09/07	13:32	10.0	1.0	33.00	6.72	93.6%	521 _{uS}	0.25	8.05	1.17	ORP = 86.2
090710-TPSWC-1B	10/09/07	14:40	13.0	11.5	29.94	3.65	48.4%	422 _{uS}	0.20	7.59	1.10	ORP = 70.8 *higher depth due to muddy bottom
090710-TPSWC-1T	10/09/07	15:05	13.0	1.0	31.37	5.06	68.5%	429	0.20	7.69	1.14	ORP = 107.7

NOTES:

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: Turkey Point Water MonitoringMETER MODEL# YSS 556 MPS

SAMPLERS/ORGANIZATION:

J. JacobsS. HodgesMETER SERIAL# 10A10 1789pump # 1322

Station#	Date	Time	Total Depth	Sample Depth	Water Temp	DO	DO	Cond	Salinity	pH	Turbidity	Comments
	Yy/mm/dd	Hr:min	Ft	Ft	Deg C	Mg/L	% Sat	uS/cm	ppt	S.U.	NTU	
090810 TPSWID-3B	10/09/08	11:20	14.0	13.0	28.91	0.22	2.9	2576	1.32	7.22	3.54	ORP = -212.8
090810 TPSWID-3T	10/09/08	11:35	14.0	1.0	30.98	5.09	68.8	2076	1.05	7.73	0.89	ORP = 8.3
090810 TPSWCCS-3B	10/09/08	12:05	3.0	2.0	33.75	3.42	65.0	80,056	55.58	8.34	7.05	ORP = -105.1
090810 TPSWID-2B	10/09/08	12:50	14.0	13.0	29.16	0.20	2.7	4473	2.37	7.09	14.76	ORP = 16.7 Turbidity sample taken twice for high reading verify
090810 TPSWID-2T	10/09/08	13:07	14.0	1.0	30.82	5.68	76.8	2432	1.24	7.88	1.92	ORP = 55.8
090810 TPSWCCS-7B	10/09/08	13:42	23.0	~2.0	37.14	5.61	112.0	89,784	55.98	8.53	9.31	ORP = 67.9
090810 TPSWID-1B	10/09/08	14:38	8.0	7.0	30.77	5.88	79.5	3,815	1.99	8.23	2.49	ORP = 50.1
090810 TPSWID-1T	10/09/08	14:55	8.0	1.0	31.84	6.00	82.5	3,749	1.95	8.19	1.31	ORP = 42.2
090810 TPSWCCS-1B	10/09/08	15:25	3.5	1.0	38.25	3.88	79.4	82,182	56.93	8.40	4.74	ORP = 53.7
091110 TPSWC-6B	10/09/14	12:10	7.0	6.0	28.30	1.21	15.5	734	0.36	7.19	0.63	ORP = 84.8
091110 TPSWC-6T	10/09/14	11:32	7.0	1.0	28.37	0.98	12.6	735	0.36	7.23	0.59	ORP = 119.5

NOTES:

P#
1325

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: FPL Turkey Point Water MonitoringSAMPLERS/ORGANIZATION: J. Jacobs
S. HodgesMETER MODEL# YSI 556METER SERIAL# 10A101789pump # 1325

Station#	Date	Time	Total Depth	Sample Depth	Water Temp	DO	DO	Cond	Salinity	pH	Turbidity	Comments
	Yy/mm/dd	Hr:min	Ft	Ft	Deg C	Mg/L	% Sat	uS/cm	ppt	S.U.	NTU	
090910-TPSWC-4B	10/09/09	10:10	5.5	4.5	30.61	4.2	56.4	2970	1.45	7.34	4.55	ORP = 116.1
090910-TPSWC-4T	10/09/09	10:40	5.5	1.0	30.79	4.54	61.3	2084	1.05	7.30	2.42	68.0 = ORP
090910-TPSWC-5B	10/09/09	11:35	13.25	12.25	33.11	0.32	5.6	66,032	40.71	6.53	12.60	ORP = -196.2
090910-TPSWC-5T	10/09/09	12:05	13.25	1.0	31.21	6.36	101.0	46,455	29.97	7.66	0.67	ORP = 27.0
090910-TPSWCS-2B	10/09/09	16:41	3.0	2.0	36.31	7.35	146.1	82,550	57.45	8.23	7.34	ORP = -14.4
091110-TPSWCS-5B	10/09/11	11:32	~20.0	~19.0	32.90	4.12	77.5	80,899	56.31	8.28	5.90	ORP = 154.7
091110-TPSWCS-5T	10/09/11	12:00	~20.0	1.0	32.81	3.91	73.8	80,967	56.36	8.28	3.98	ORP = 12.4
091110-TPSWCS-4B	10/09/11	12:55	~23.0	~22.0	33.54	6.12	116.2	81,369	56.65	8.34	4.20	ORP = 53.1
091110-TPSWCS-4T	10/09/11	13:18	~23.0	1.0	33.70	6.70	127.8	81,626	56.87	8.34	5.80	ORP = 53.7
091110-TPSWCS-6B	10/09/11	14:20	~18.0	~17.0	33.47	5.01	95.2	81,547	56.75	8.29	3.32	ORP = 14.0
091110-TPSWCS-6T	10/09/11	14:40	~18.0	1.0	33.30	4.99	94.5	81,650	56.41	8.30	4.10	ORP = 10.6

NOTES:

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

SURVEY/PROJECT: Turkey Point Water MonitoringMETER MODEL# HI 556 MPSAMPLERS/ORGANIZATION: J. JacobsMETER SERIAL# 10A101789S. Hodges

Station#	Date	Time	Total Depth	Sample Depth	Water Temp	DO	DO	Cond	Salinity	pH	Turbidity	Comments
	Yy/mm/dd	Hr:min	Ft	Ft	Deg C	Mg/L	% Sat	uS/cm	ppt	S.U.	NTU	
092210- BBSW-1B	10/09/22	15:42	14.5	13.0	29.61	4.73	72.4	43,311	27.76	8.01	3.72	Sitting water - so hard to get
092310- BBSW-3B	10/09/23											ORP = 21.1
092310- BBSW-2B	10/09/23	09:20	5.3	4.3	27.90	6.81	96.8	30,586	18.78	8.16	0.89	ORP = 74.6
092410- BBSW-5B	10/09/24	10:35	5.9	4.9	27.71	4.48	66.1%	42,063	26.92	7.70	2.79	ORP = 70.8
092410- BBSW-4B	10/09/24	11:45	8.6	7.6	28.07	5.23	79.7%	48,063	31.25	8.02	2.70	ORP = 60.0
092710- BBSW-3B	10/09/27	1800	5.9	4.9	29.64	7.55	118.8%	49,871	32.51	8.29	1.12	ORP = 18.1
092810- BBSW-1B	10/09/28	0835	11.9	10.5	28.83	4.00	61.6%	48,235	31.34	7.92	3.25	ORP = 28.3

NOTES:

GROUNDWATER SAMPLING LOG

SITE NAME: 091410 TPC7W-15		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
		DATE: 09-14-10	

PURGING DATA

PURGING DATA				
WELL DIAMETER (Inches): 2"	TUBING DIAMETER (Inches): 3/16"	WELL SCREEN INTERVAL DEPTH: 31 feet to 33 feet	STATIC DEPTH TO WATER (feet): 40	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (feet - feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (.0614 gallons/foot X 34 feet) + gallons = 047 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): Sediment	FINAL PUMP OR TUBING DEPTH IN WELL (feet): Sediment	PURGING INITIATED AT: A	PURGING ENDED AT: 14:41	TOTAL VOLUME PURGED (gallons): 513.13

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:		FIELD-FILTERED: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N		FILTER SIZE: <u>45</u> μ m		
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				TUBING <input checked="" type="checkbox"/> Y <input type="checkbox"/> N (Replaced)			DUPLICATE: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	NaOH / <u>Water</u>	500	10	SubRe		APP	5.08
	2	PP	250 mL	N, + HCl	500	2/2	Manganese / Fe		APP	.08
	2	CG	40-2	HCl	80	1/1	DIL		APP	.08
REMARKS: A										

REMARKS: ★ Invalid readings due to machine malfunction. Do not count for recorded parameters. (tube fed incorrectly)

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 091410-TPC1W-1m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-14-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges et al. inc.				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 1550		SAMPLING ENDED AT: 1605	
PUMP OR TUBING DEPTH IN WELL (feet): 220 ft				TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 10 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)						DUPLICATE: Y <input checked="" type="checkbox"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500mL	NaOH / 2% NaOH	500	10.5	Sulfide		APP	0.15
	2	PP	250mL	Nitric	500	2/2	mercury / sp.		APP	0.15
	2	CG	40mL	HCL	80	1/1	DIC		APP	0.15
REMARKS: p# 1322, ~ #1784										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 091410-TPC72-1D		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-14-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>J. Jacobs / S. Hodges EOE inc</u>				SAMPLER(S) SIGNATURE(S): <u>[Signature]</u>			SAMPLING INITIATED AT: <u>1445</u>		SAMPLING ENDED AT: <u>1455</u>		
PUMP OR TUBING DEPTH IN WELL (feet): <u>220 ft</u>				TUBING MATERIAL CODE: <u>T</u>		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N			FILTER SIZE: <u>45</u> μ m		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N <input type="radio"/> TUBING Y <input checked="" type="radio"/> N (replaced)						DUPLICATE: Y <input checked="" type="radio"/> N <input type="radio"/>					
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500	NiCl ₂ /2 Acetic	500	10	Sulfide		APP		117
	2	PP	200 mL	NiCl ₂	500	2/2	mercury etc / R/S		APP		17
	2	CG	400 mL	HCL	80 mL	1/1	DIL		APP		17
REMARKS: <u>pH 13.22 m # 1789</u>											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092010-TPGW-25		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09/20/10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT): J. Jacobs / S. Hodges AFFILIATION: Env. Inc.				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 1500		SAMPLING ENDED AT: 1510		
PUMP OR TUBING DEPTH IN WELL (feet): dedicated				TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="checkbox"/> N Filtration Equipment Type:			FILTER SIZE: 45 µm		
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/>				TUBING Y <input checked="" type="checkbox"/> (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500 mL	100% ACETONE	500	10	Sulfate		APP		1.10
	2	PP	250 mL	N. Tril	500	2/2	metals / Fe, Pb		APP		1.10
	2	CG	40 mL	HCl	80	1/1	DIC		APP		1.10
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

PURGING DATA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (0014 gallons/foot X 93 feet) + gallons = 13 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	ded.	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	ded.	PURGING INITIATED AT:	1534	PURGING ENDED AT:	1557	TOTAL VOLUME PURGED (gallons):	22.4
--	------	--	------	-----------------------	------	-------------------	------	--------------------------------	------

020
281
-256
241.9
-240
2

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges E&E inc.		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: 1600	SAMPLING ENDED AT: 1610
PUMP OR TUBING DEPTH IN WELL (feet): dedicated		TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N	FILTER SIZE: 45 µm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N <input type="radio"/>		TUBING Y <input type="radio"/> N <input checked="" type="radio"/> (replaced)		DUPLICATE: Y <input type="radio"/> N <input checked="" type="radio"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500mL	20% HCl	500	10	Soil for	APP	9.08
	2	PP	250mL	NH ₄ Cl	500	2/1	Metals/Rep	APP	.08
	2	CG	40mL	HCl	80	1/0	OTC	APP	.08
REMARKS: 62									

REMARKS: Purged water very turbid. Lots of black particulate.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092010-TPGW-35		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-20-10	

PURGING DATA

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 092010-TPCw-3m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-20-10	

PURGING DATA

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092010 - TPLW-30		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 09-20-10

PURGING DATA

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 091710-TPCW-45		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-17-10	

WELL DIAMETER (Inches):	TUBING DIAMETER (Inches):	WELL SCREEN INTERVAL DEPTH: 22.5 feet to 24.5 feet	STATIC DEPTH TO WATER (feet): 1.41	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (\quad \text{feet} - \quad \text{feet}) \times \quad \text{gallons/foot} = \quad \text{gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \quad \text{gallons} + (.0014 \text{ gallons/foot} \times 27.5 \text{ feet}) + \quad \text{gallons} = \quad \text{gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.25	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 14.25	PURGING INITIATED AT: 1458	PURGING ENDED AT: 1520	TOTAL VOLUME PURGED (gallons): ~250

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016 PURGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)									
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SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Valley & Co, Inc				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i> <i>[Signature]</i>			SAMPLING INITIATED AT: 1525		SAMPLING ENDED AT: 1534	
PUMP OR TUBING DEPTH IN WELL (feet): 1200				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="checkbox"/> N		FILTER SIZE: 1/5 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (N (replaced))							DUPLICATE: Y <input checked="" type="checkbox"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	NH ₄ OH / <i>[initials]</i>	500	11	Sulfide		APP	0.09
	2	PP	250 mL	NH ₄ OH	500	2/1	Methyl Cr, B ₃		APP	0.09
	2	CG	400 mL	HCl	80	0/0	DIC		APP	0.09

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 091710-TPGW-4m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-17-10	

Revision Date: February 12, 2009

SITE NAME: 091710- TELNW-40		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE:

[illegible]

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges inc						SAMPLER(S) SIGNATURE(S) <i>[Signature]</i>			SAMPLING INITIATED AT: 1425		SAMPLING ENDED AT: 1934	
PUMP OR TUBING DEPTH IN WELL (feet): describes						TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="checkbox"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> N								TUBING Y <input checked="" type="radio"/> N(replaced)		DUPLICATE: Y <input checked="" type="radio"/>		
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)			
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH						
	1	PP	500ml	NaOH/zinc	500	10	SnKze	APP	.17			
	2	PP	200ml	N.HCl	500	2/2	mety/cygs	APP	.17			
	2	CG	400ml	HCl	80	1/6	DZ	APP	.17			
REMARKS:												
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)												
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)												

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

09/4/0-

SITE NAME: TPCW-58		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-14-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:		
J. Jacobs EHEC				H. H. H.			1830		1841		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input type="radio"/> N		FILTER SIZE: <u>45</u> μ m		
DEPTH IN WELL (feet): <u>deceased</u>				TUBING MATERIAL CODE: <u>T</u>			Field Filtration Equipment Type:				
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				TUBING <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (replaced)			DUPLICATE: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		
	1	PP	500 mL	NaOH / Acetic	400	12	Sulfate		APP		
	2	PP	250 mL	Nitric	500	1/2	R, B, / measuring etc.		APP		
	2	CG	40 mL	HCl	80	0/0	DIL		APP		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											
NOTES: 1. The above do not constitute all sampling methods.											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD-9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 091410 - TPLW-5m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09/14/10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs ETE inc.				SAMPLER(S) SIGNATURE(S): 			PLUMPING INITIATED AT: 1747		SAMPLING ENDED AT: 1800	
PUMP OR TUBING DEPTH IN WELL (feet): decreases				TUBING MATERIAL CODE: T			FIELD-FILTERED: N Filtration Equipment Type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y CN TUBING Y X(replaced)						DUPLICATE: Y CN				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	NH ₄ OH / Zn Acetate	500	10	Sulfide	APP	0.05	
	2	PP	250 mL	NH ₄ OH	2500	2/2	Mercury / R ₁₃	APP	.05	
	2	ALG	40 mL	HCl	80	0/0	DIC	APP	.05	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										
NOTES: 1. This form is to be used for all sampling events. It is not to be used for monitoring events. If you are unsure if your event is a sampling event or a monitoring event, please contact the project manager.										

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 091410-TPGW-50		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-14-10	

PURGING DATA

WELL	TUBING	WELL SCREEN INTERVAL						STATIC DEPTH		PURGE PUMP TYPE	
DIAMETER (Inches): 2"	DIAMETER (Inches): 3/8"	DEPTH: 67.5 feet TO 72.5 feet						TO WATER (feet): 490		OR BAILER: PP	
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only full out if applicable) = (feet - feet) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only full out if applicable) = gallons + (.6614 gallons/foot X 72.5 feet) + gallons = .10 gallons											
INITIAL PUMP OR TUBING			FINAL PUMP OR TUBING			PURGING		PURGING		TOTAL VOLUME	
DEPTH IN WELL (feet): 67.5			DEPTH IN WELL (feet): 72.5			INITIATED AT: 11:09		ENDED AT: 11:36		PURGED (gallons): 2.2	
TIME	VOLUME PURRED (gallons)	CUMUL. VOLUME PURRED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) $\mu\text{mhos/cm}$ or $\mu\text{S/cm}$	DISSOLVED OXYGEN (circle units) mg/L or $\%$ saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1725	.125	1.25	.08	4.88	6.79	24.85	34,147	1.08 / 14.3%	0.32	Clear	none
1730	.45	1.70	.09	4.88	6.73	24.76	34,155	.08 / 9.3%	0.31	"	"
1736	.50	2.20	.08	4.90	6.70	24.75	34,157	.43 / 5.7%	0.29	"	"
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: S. Hodges E+E Inc.				SAMPLER(S) SIGNATURE(S): 			SAMPLING INITIATED AT: 1742		SAMPLING ENDED AT: 1755	
PUMP OR TUBING DEPTH IN WELL (feet): detached				TUBING MATERIAL CODE: T			FIELD-FILTERED: <input checked="" type="checkbox"/> N Filtration Equipment Type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)						DUPLICATE: Y <input checked="" type="checkbox"/>				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (µL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	NH ₄ OH / Acetic Acid	500	10	Surfactant	APP	1.08	
	2	PP	250 mL	NH ₄ OH	500	2/2	methylene blue	APP	1.08	
	2	CG	40 mL	HCl	80	0/0	DIC	APP	1.08	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

SITE NAME: 091510-TPGW-85		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-15-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N		FILTER SIZE: <u>45</u> μ m		
FIELD DECONTAMINATION: PUMP <input checked="" type="radio"/> Y <input type="radio"/> N				TUBING <input checked="" type="radio"/> Y <input type="radio"/> N (replaced)			DUPLICATE: <input checked="" type="radio"/> Y <input type="radio"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500mL	NaOH / 2% acetate	500	10	JLFZ		APP		0.07
	2	PP	250mL	NaOH	500	7.2	NEMU/R/O		APP		.07
	2	CG	40mL	HCl	80	1.1	DIL		APP		.07
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

Revision Date: February 12, 2009

SITE NAME: 091510 - TPLW-08m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-15-10	

[illegible][illegible]

Revision Date: February 12, 2009

SITE NAME: 091510 - TP17W-480		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-15-10	

[illegible]

SAMPLED BY (PRINT): J. J. Lewis / S. H. Hedges				AFFILIATION: EJE inc.				SAMPLED BY (PRINT): J. J. Lewis / S. H. Hedges				AFFILIATION: EJE inc.			
PUMP OR TUBING DEPTH IN WELL (feet): 100				TUBING MATERIAL CODE: T				FIELD-FILTERED: 1 N				FILTER SIZE: 45 µm			
FIELD DECONTAMINATION: PUMP Y N				TUBING Y N (replaced)				DUPLICATE: Y N							
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD				SAMPLING EQUIPMENT CODE			
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH									
	1	PP	500 mL	none / 200 mL	500 mL	10		Sulfide		APP					
	2	PP	200 mL	NaHCl	500 mL	2 / 2		metals / Fe, Ba		APP					
	2	CG	40 mL	HCl	80 mL	1 / 1		DIC		APP					
REMARKS:															
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)															
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)															

Revision Date: February 12, 2009

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Filtration Equipment Type:		FILTER SIZE: <u>45</u> μ m		
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N TUBING <input checked="" type="checkbox"/> Y <input type="checkbox"/> N (replaced)							DUPLICATE: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500mL	N ₂ O ₄ /Acetic	500	11	Sn/Fe		APP		1.10
	2	PP	250mL	Nitric	500	2/2	mercuric/R ₂ S		APP		1.10
	2	CG	40mL	HCl	80	1/1	DIL		APP		1.10
									1		
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

Revision Date: February 12, 2009

SITE NAME: 091710- T9C2W - 7m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-17-10	

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

Revision Date: February 12, 2009

SITE NAME: 091710-TPGW-7D		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-17-10	

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N		FILTER SIZE: <u>45</u> µm		
FIELD DECONTAMINATION: PUMP <input type="checkbox"/> Y <input checked="" type="checkbox"/> N				TUBING <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (Replaced)			DUPLICATE: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	PP	500mL	NH ₄ OH / Acetate	500	12	Sulfide		APP		0.05
	2	PP	250mL	NH ₄ OH	500	2/2	Metals / Fe, B ₆		APP		.05
	2	CG	40mL	HCl	80	1/1	DIC		APP		.05
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092010-TPCnd-8m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09/20/10	

PURGING DATA

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+ 5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092010-TPCW-80		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09/20/10	

PURGING DATA

WELL DIAMETER (Inches): 2		TUBING DIAMETER (Inches): 3/10		WELL SCREEN INTERVAL DEPTH: 49.5 feet to 53.5 feet		STATIC DEPTH TO WATER (feet): 2/3 ft.		PURGE PUMP TYPE OR BAILER:			
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (feet - feet) X gallons/foot = gallons											
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (.0014 gallons/foot X 58.5 feet) + gallons = .28 gallons											
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):		FINAL PUMP OR TUBING DEPTH IN WELL (feet):		PURGING INITIATED AT:		PURGING ENDED AT:		TOTAL VOLUME PURGED (gallons):			
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) <small>µmhos/cm or µS/cm</small>	DISSOLVED OXYGEN (circle units) <small>mg/L or % saturation</small>	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1207	.75	1.75	.12	2/3	7.05	24.79	692	.31 / 3.8%	0.81	clear	slight soap
1214	.75	2.5	.107	2/3	7.03	25.50	698	.24 / 2.9%	0.81	"	"
1219	.25	2.75	.05	2/3	7.02	25.54	699	.22 / 2.7%	0.61	"	"
1225	.50	3.25	.08	2/3	7.01	25.51	699	.20 / 2.4%	1.13	"	"
WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016											
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)											

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hoyer				SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>			SPRINKLING INITIATED AT: 1230		SPRINKLING ENDED AT: 1238	
PUMP OR TUBING DEPTH IN WELL (feet): dedicated				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y N Filtration Equipment Type:			FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y D				TUBING Y N(replaced)			DUPLICATE: Y N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	NH ₄ /acetate	500	13	Sulfide	APP	.08	
	2	PP	250 mL	N.H. ₄ C	300	1/1	Metals/AE, 8s	APP	.08	
	2	CG	40 mL	HCl	80	1/1	DIC	APP	.08	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $+10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $+10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 091510-TP67W-98		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-15-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:		
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y		FILTER SIZE: <u>45</u> μ m		
FIELD DECONTAMINATION: PUMP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				TUBING <input checked="" type="checkbox"/> Y <input type="checkbox"/> N (replaced)			DUPLICATE: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N				
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					
	1	BP	500mL	NaOH / <u>As</u>	500	11	Si, Cd		APP		0.10
	2	PP	250mL	NH ₄ Cl	500	1/2	metals / Fe, As		APP		.10
	2	CG	40mL	HCl	80	1/1	Dil		APP		.10
REMARKS:											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)											

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 091510-TPCW-9m		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 09-15-10

PURGING DATA

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 091510-TP672-90		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-15-10	

PURGING DATA

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURE(S):			SAMPLING INITIATED AT:		SAMPLING ENDED AT:	
J. Jacobs / S. Hodge ETE				[Signature]			12 30		12 48	
PUMP OR TUBING DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N		FILTER SIZE: <u>45</u> μ m	
DEPTH IN WELL (feet):				TUBING MATERIAL CODE:			Filtration Equipment Type:			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)							DUPLICATE: Y <input checked="" type="radio"/>			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500 mL	None / 2 Acetate	500	10	Sulfide	APP	5.06	
	2	PP	250 mL	Nitric	500	2/2	metals / Fe, B, S	APP	.06	
	2	CG	40 mL	HCl	80	1/1	DIC	APP	.06	
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 092210-TPGW-105		SITE LOCATION:	
WELL NO:		DATE: 09-22-10	

PURGING DATA

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:		SAMPLING ENDED AT:			
J. Jacob / S. B. W. Est. Inc.		[Signature]		1755		1808			
PUMP OR TUBING DEPTH IN WELL (feet):		TUBING MATERIAL CODE:		FIELD-FILTERED: <input checked="" type="radio"/> Y <input type="radio"/> N		FILTER SIZE: <u>15</u> μ m			
PUMP		TUBING		Filtration Equipment Type:					
FIELD DECONTAMINATION:		PUMP Y <input checked="" type="radio"/> N		TUBING Y <input checked="" type="radio"/> N (replaced)		DUPLICATE: Y <input checked="" type="radio"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE D CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500 mL	NADH / Ascorbic	500	10	ShiK2e	APP	12
	2	PP	250 mL	NADH	500	2/2	Methu/Le/B	APP	12
	2	CG	40 mL	HCl	80	1/1	DIC	APP	12
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									
NOTES: 1. The above do not constitute all of the information required for a complete record of the sampling process.									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092210-TPC7W-10m		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
		DATE: 09-22-10	

PURGING DATA

SAMPLING DATA

SAMPLED BY (PRINT): J. Jacobs / S. Ewe				AFFILIATION: EWE inc.				SAMPLER(S) SIGNATURE(S): [Signature]				SPRINKLING INITIATED AT: 17:15				SPRINKLING ENDED AT: 17:29											
PUMP OR TUBING DEPTH IN WELL (feet): 200				TUBING MATERIAL CODE: T				FIELD-FILTERED: 0 N				FILTER SIZE: 45 µm															
FIELD DECONTAMINATION: PUMP Y (N)								TUBING Y (X) (replaced)								DUPLICATE: Y (N)											
SAMPLE CONTAINER SPECIFICATION								SAMPLE PRESERVATION								INTENDED ANALYSIS AND/OR METHOD				SAMPLING EQUIPMENT CODE				SAMPLE PUMP FLOW RATE (mL per minute)			
SAMPLE ID CODE		# CONTAINERS		MATERIAL CODE		VOLUME		PRESERVATIVE USED		TOTAL VOL ADDED IN FIELD (mL)		FINAL pH															
		1		PP		500 mL		NITRIC		500		Sulfide		APP				.06									
		2		PP		250 mL		NITRIC		500		METHIS/2		APP				.06									
		2		CG		400 mL		HCl		80		DCL		APP				.06									
REMARKS:																											
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)																											
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)																											

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $+0.2$ mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally $+5$ NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: 092210- TPCW-100

WELL NO:	SAMPLE ID:	DATE: 09-22-20
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PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 111 feet to 115 feet	STATIC DEPTH TO WATER (feet): 9.40	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
$= (\text{feet} - \text{feet}) \times \text{gallons/foot} = \text{gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
$= \text{gallons} + (8014 \text{ gallons/foot} \times 135 \text{ feet}) + \text{gallons} = 19 \text{ gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 22.2	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 22.2	PURGING INITIATED AT: 1628	PURGING ENDED AT: 1705	TOTAL VOLUME PURGED (gallons): 2.76

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** $\pm 0.2^\circ\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 092310 - TPL7W-115		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-23-10	

PURGING DATA

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 092310-TPGW-11m	SITE LOCATION:
WELL NO: 1	SAMPLE ID: DATE: 09-23-10

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 87 feet to 91 feet	STATIC DEPTH TO WATER (feet): 8.2	PURGE PUMP TYPE OR BAILER: PA
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = (79 feet - 78 feet) X 98 gallons/foot = 98 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = 10014 gallons/foot X 98 feet + 14 gallons = 9814 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ded	FINAL PUMP OR TUBING DEPTH IN WELL (feet): ded	PURGING INITIATED AT: 1024	PURGING ENDED AT: 1049	TOTAL VOLUME PURGED (gallons): 35

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:28	.75	.75	.18	8.2	7.17	26.71	58,016	.64/1.9	1.57	Yellow	Sulfur
10:33	.75	1.50	.15	8.2	6.97	26.72	58,044	.59/1.1	0.36	"	Sulfur
10:43	1.25	2.75	.12	8.2	6.85	26.61	58,003	.31/4.8	0.17	"	Sulfur
10:48	.55	3.30	.11	8.2	6.83	26.56	58,174	.50/7.8	0.10	"	Sulfur

ORP
-264.9
-278.6
-291.7
-287.6

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT)/AFFILIATION: J. Jacobs / S. Hedges Inc.	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>	SAMPLING INITIATED AT: 1052	SAMPLING ENDED AT: 1059
PUMP OR TUBING DEPTH IN WELL (feet): ded water	TUBING MATERIAL CODE: T	FIELD-FILTERED: <input checked="" type="radio"/> N	FILTER SIZE: 45 μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (Replaced)		DUPLICATE: <input checked="" type="radio"/> <input checked="" type="radio"/>	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500mL	NAC/AN	500	10	Sulfur	APP	.11
	2	PP	250mL	NAC	250	1/1	Metals/Re, S	APP	.11
	2	CG	40mL	HCl	80	1/0	DIL	APP	.11

REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

PURGING DATA

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD-9000-24

SITE NAME: 090610 - TPLW - 125		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
		DATE: 09-10-10	

PURGING DATA

[illegible]

SAMPLING DATA

[illegible]

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CEMENT FOR PAVEMENT

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 091610-TPGW-12m		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-16-10	

PURGING DATA

[illegible]

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:						SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):						TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: μm	
FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced)								DUPLICATE: Y N	
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500 mL	NaOH or Acetic	500	10.5	Surf size	APP	.10
	2	DP	250 mL	NH ₄ FIC	500	2/2	R, Ba/methy, etc.	NAP	.10
	2	CG	40 mL	HCl	80	0/0	DIC	APP	.10
REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									
NOTES: 1. If sample is analyzed by EPA method, it must be preserved according to EPA method requirements.									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 0916E - Tplw - 120		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-16-10	

PURGING DATA

WELL DIAMETER (Inches): 2"	TUBING DIAMETER (Inches): 3/16	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 3.27	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

$$= (\quad \text{feet} - \quad \text{feet}) \times \quad \text{gallons/foot} = \quad \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (10014 gallons/foot X 97 feet) + gallons = 1135 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
destroyed	destroyed	1214	1248	30

[illegible]

WELL CAPACITY (Gallons Per Foot):									
0.75" = 0.02;	1" = 0.04;	1.25" = 0.06;	2" = 0.16;	3" = 0.37;	4" = 0.65;	5" = 1.02;	6" = 1.47;	12" = 5.88	
TUBING INSIDE DIA. CAPACITY (Gal./Ft.):									
1/8" = 0.0006;	3/16" = 0.0014;	1/4" = 0.0026;	5/16" = 0.004;	3/8" = 0.006;	1/2" = 0.010;	5/8" = 0.016			

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. J. Wells / S. Hayes		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: 1255	SAMPLING ENDED AT: 1308
PUMP OR TUBING DEPTH IN WELL (feet): <i>decont.</i>		TUBING MATERIAL CODE: T	FIELD-FILTERED: <input checked="" type="checkbox"/> N	FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)			DUPLICATE: Y <input checked="" type="checkbox"/>		

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 090910-TPG ^W -13S		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
		DATE: 09-09-10	

PURGING DATA

WELL DIAMETER (inches):	2"	TUBING DIAMETER (inches):	3 1/2"	WELL SCREEN INTERVAL DEPTH: 30 feet to 34 feet	STATIC DEPTH TO WATER (feet):	2-3	PURGE PUMP TYPE OR BAILER:	PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

$$= (\quad \text{feet} - \quad \text{feet}) \times \quad \text{gallons/foot} = \quad \text{gallons}$$

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (.0014 gallons/foot X 38.2 feet) + gallons = .053 gallons



INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1520	PURGING ENDED AT: 15.46	TOTAL VOLUME PURGED (gallons): 1.75
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hedges E+E		SAMPLER(S) SIGNATURE(S):  / 		SAMPLING INITIATED AT: 15:50	SAMPLING ENDED AT: 16:03
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PUMP OR TUBING DEPTH IN WELL (feet): <u>2500</u>	TUBING MATERIAL CODE: <u>1</u>	FIELD-FILTERED: <input checked="" type="checkbox"/> N	FILTER SIZE: <u>45</u> μ m
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FIELD DECONTAMINATION:			PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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[illegible]

REMARKS: ♀ Depth to water near malfunctioning part way through recording parameters. no further readings recorded.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD-9000-24

SITE NAME: 090910 - TPCW - 13m		SITE LOCATION:	
WELL NO:	SAMPLE ID:		DATE: 09-09-10

PURGING DATA

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hedges inc				SAMPLER(S) SIGNATURE(S): [Signature]			SAMPLING INITIATED AT: 16:14		SAMPLING ENDED AT: 16:24	
PUMP OR TUBING DEPTH IN WELL (feet): dedicated				TUBING MATERIAL CODE: T			FIELD-FILTERED: 0 N		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y				TUBING Y (Replaced)			DUPLICATE: Y			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PP	500ml	NaOH / H ₂ O ₂	500	7	Sulfate		APP	0.09
	2	PP	250ml	Nitric	500	2 / 2	Fe, Ba / mangan		APP	0.09
	* 2	KG	4ml	HydroCl	100 80	1 / 1	DIC		APP	0.09
REMARKS: * Depth to water meter malfunctioning during sampling so did not continue recording. * Lots of black flecks in pumped water.										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)										
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)										
NOTES: 1. The chemical analysis of the samples was performed by [unclear] and the results are as follows: [unclear]										

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 090910-TRGW-13D		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 09-09-10	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/16"	WELL SCREEN INTERVAL DEPTH: 86 feet to 90 feet	STATIC DEPTH TO WATER (feet): 2.35	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 10.12				
FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10.37				
PURGING INITIATED AT: 10.12				
PURGING ENDED AT: 10.37				
TOTAL VOLUME PURGED (gallons): 2.50				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1020	1.0	1.0	.125		7.15	30.18	85,942	.34/6.3	2.22	Clear	Strong
1028	.75	1.75	.09		6.92	30.15	86,023	.62/11.7	0.23	"	"
1033	.75	2.50	.25		6.87	30.10	86,058	1.09/19.9	0.34	turbid	"
								08		grey, blackish	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hayes E&P		SAMPLER(S) SIGNATURE(S): [Signature]		SAMPLING INITIATED AT: 1040	SAMPLING ENDED AT: 1051
PUMP OR TUBING DEPTH IN WELL (feet): 10.12		TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="checkbox"/> N	FILTER SIZE: 45 μm
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> TUBING Y <input checked="" type="checkbox"/> (replaced)		DUPLICATE: Y <input checked="" type="checkbox"/>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500 mL	NiCl ₂ /HCl	500	10	Sulfide	APP	.25
	2	PP	250 mL	NiCl ₂	500	2/2	mercury/RB	APP	.25
	2	CG	40 mL	HCl	80 mL	1/1	DIC	APP	.25

REMARKS: Lots of black sediment/debris in bottom of purge bucket.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: 092710-TPGW-145		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
WELL		DATE: 09/27/10	

[illegible]

SAMPLED BY (PRINT) / AFFILIATION:		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT: 1707		SAMPLING ENDED AT: 1715	
PUMP OR TUBING DEPTH IN WELL (feet): 242 feet		TUBING MATERIAL CODE: T		FIELD FILTERED: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N		TUBING Y <input checked="" type="checkbox"/> N (Replaced)		DUPLICATE: Y <input checked="" type="checkbox"/> N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD
	1	PP	500mL	NaOH / Ascorbic	500	10	Sub E2e
	2	PP	250mL	D.H.C	300	2/2	Mutability
	2	CG	40mL	HCl	80	1/0	OTC
REMARKS:							
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESR = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)							
NOTES: 1. The above do not constitute all of the information required by Chapter 62.120, F.A.C.							

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA: FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: $\pm 0.2^{\circ}\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2);
optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) Turbidity: all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)
Revision Date: February 12, 2009

Revision Date: February 12, 2009

PURGING DATA				
WELL DIAMETER (Inches): 2	TUBING DIAMETER (Inches): 3/4	WELL SCREEN INTERVAL DEPTH: 58 feet to 62 feet	STATIC DEPTH TO WATER (feet): 9.25	PURGE PUMP TYPE OR BAILER: P.P.
WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				

~~EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME * (TUBING CAPACITY (feet/min) * TUBING LENGTH (feet)) + FLOW CELL VOLUME (gallons)~~
~~(only fill out if applicable)~~

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	224	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	221	PURGING INITIATED AT: 11:17	PURGING	11:17	TOTAL VOLUME	gallons = 09
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[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal/Ft.): 1/8" = 0.0008; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Saller, BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs		SAMPLER(S) SIGNATURE(S): [Signature]		SAMPLING INITIATED AT: 1650		SAMPLING ENDED AT: 1659	
PUMP OR TUBING DEPTH IN WELL (feet): dedicated		TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N		FILTER SIZE: 0.5 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		Filtration Equipment Type: <input checked="" type="checkbox"/> Peristaltic Pump <input type="checkbox"/> Other (Specify)					

SAMPLE CONTAINER SPECIFICATION				TUBING Y N (replaced)			DUPLICATE: Y N		
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
				PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500mL	NITRIC ACID	500				
	2	PP	250mL	NITRIC	500	10	Sub 2	APP	0.0
	2	CG	40mL	HCL	80	2 1/2	Mixing E/B	APP	0.0
						1/1	DIC	APP	0.0
REMARKS:									

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
 SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
 RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)
 NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF INFORMATION

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA: FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: $\pm 0.2^{\circ}\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2);
optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ≤ 5 NTU or $\pm 10\%$ (whichever is greater)

PURGING DATA				
WELL DIAMETER (Inches):	TUBING DIAMETER (Inches):	WELL SCREEN INTERVAL DEPTH: 0 feet to 17 feet	STATIC DEPTH TO WATER (feet): 9.76	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY				
(only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME X (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME				
(only fill out if applicable)				

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62.120, E.A.C.
2. Specimens must be analyzed within 14 days of collection.

Revision Date: February 12, 2009

OCTOBER 2010

**HISTORIC L AND G SERIES
FIELD SAMPLE LOGS**

Form FD 9000-24

SITE NAME: 102110 - TPGW-G21-18

SITE
LOCATION:

WELL NO: .

SAMPLE ID:

DATE: 10-21-19

PURGING DATA

WELL: DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/16"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (0.004 gallons/foot X 23 feet) + gallons = 03 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 10	PURGING INITIATED AT: 15:19	PURGING ENDED AT: 15:36	TOTAL VOLUME PURGED (gallons): 2.25
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[illegible]

ORF

20.25

186.3

187.2

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: 1. Jacobs P. H. / <i>6+5</i>	SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>	SAMPLING INITIATED AT: <i>15:40</i>	SAMPLING ENDED AT: <i>15:48</i>
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PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: <input checked="" type="checkbox"/> N Filtration Equipment Type:	FILTER SIZE: <u>10</u> μ m
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FIELD DECONTAMINATION: PUMP Y ☒ N ☐ TUBING Y ☒ N (replaced) ☐ DUPLICATE: Y ☒ N ☐

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: $\pm 0.2^\circ\text{C}$ Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) Turbidity: all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME:	102110-TPGW-G21-38	SITE LOCATION:	
WELL NO:		SAMPLE ID:	DATE: 10-21-10

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE, PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (feet - feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + 60014 gallons/foot X 63 feet + gallons = 008 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58	PURGING INITIATED AT: 14:45	PURGING ENDED AT: 16:03	TOTAL VOLUME PURGED (gallons): 2.25

[illegible]

ORP
-40.4
-53.4
-67.0

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <i>Jacobs S. Hodges E. Inc.</i>		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: <i>15:05</i>	SAMPLING ENDED AT: <i>15:19</i>
PUMP OR TUBING DEPTH IN WELL (feet): <i>58</i>		TUBING MATERIAL CODE: <i>T</i>		FIELD-FILTERED: <input checked="" type="radio"/> N	FILTER SIZE: <i>40</i> μ m
FIELD DECONTAMINATION: PUMP <i>Y</i> <input checked="" type="radio"/> N <input type="radio"/> TUBING <i>Y</i> <input checked="" type="radio"/> N (replaced) <input type="radio"/>				DUPLICATE: <i>Y</i> <input checked="" type="radio"/> N <input type="radio"/>	

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** $\pm 0.2^{\circ}\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

PURGING DATA

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88									
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016									
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)									

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodge E+G		SAMPLER(S) SIGNATURE(S): [Signature]		SAMPLING INITIATED AT: 18:15	SAMPLING ENDED AT: 18:24
PUMP OR TUBING DEPTH IN WELL (feet): 18		TUBING MATERIAL CODE: PE		FIELD-FILTERED: <input checked="" type="checkbox"/> N	FILTER SIZE: 40 µm
FIELD DECONTAMINATION:		PUMP	Y <input checked="" type="checkbox"/>	TUBING	Y <input checked="" type="checkbox"/> (N replaced)
				DUPLICATE:	Y <input checked="" type="checkbox"/> (N)

[illegible]

REMARKS: pH verified w/ pH paper. Reading of ~10.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** $\pm 0.2^\circ\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: 101910-TPGW-C2858		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 10/19/10	

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58 FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58 PURGING INITIATED AT: 16:18 PURGING ENDED AT: 16:58 TOTAL VOLUME PURGED (gallons): 24.0				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
16:25	.75	.75	.11	6.92	6.95	25.12	39548	0.40/5.5%	30.97	murky	N/A
16:30	.75	1.5	.15		6.94	26.00	39,700	24/3.3%	30.42	" murky "	
16:35	.40	1.90	.08		6.92	24.94	39,698	22/3.0%	28.34	" "	
16:40	.45	2.35	.09		6.95	24.94	39,722	18/2.5%	23.38	" "	
16:45	.45	2.80	.09		6.94	24.87	39,748	17/2.4%	15.00	" "	
16:50	.50	3.30	.10		6.94	24.83	39,774	25/3.4%	12.69	" "	
16:56	.45	3.75	.08		6.95	24.77	39,797	19/2.6%	9.00	clearer	" "

ORP
-62.9
-55.8
-53.4
-53.7
-52.3
-51.0
-49.0

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. Jacobs / S. Hodges		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: 17:00	SAMPLING ENDED AT: 17:14
PUMP OR TUBING DEPTH IN WELL (feet): 58		TUBING MATERIAL CODE: T		FIELD-FILTERED: <input checked="" type="radio"/> N	FILTER SIZE: 45 μm
FIELD DECONTAMINATION: PUMP <input checked="" type="radio"/> Y		TUBING <input checked="" type="radio"/> Y (replaced)		DUPLICATE: <input checked="" type="radio"/> Y	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
	1	PP	500 mL	Jack / 2200	500	10	Jack	APP	.08
	2	PP	250 mL	NATRI	500	2.10	Mettler	APP	.08
	2	CG	40 mL	HCL	80	1.1	DIC	APP	.08

REMARKS:									
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)									
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)									

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: 101910-TPGW-G35-18

**SITE
LOCATION:**

WELL NO:

SAMPLE ID:

DATE: 10/19/10

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL : DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 518		FINAL PUMP OR TUBING DEPTH IN WELL (feet): 318	PURGING INITIATED AT: 14:38	PURGING ENDED AT: 14:55	TOTAL VOLUME PURGED (gallons): 150
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[illegible]

-156.9
-149.3
-176.1

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

PURGING EQUIPMENT CODES: B = Boiler BP = Bladder Pump ESP = Electric Submersible Pump PP = Peristaltic Pump O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. A. Cobos / J. A. Cobos		SAMPLER(S) SIGNATURE(S): [Signature]		SAMPLING INITIATED AT: 1500	SAMPLING ENDED AT: 1503
PUMP OR TUBING DEPTH IN WELL (feet): 18		TUBING MATERIAL CODE: pe	FIELD-FILTERED: <input checked="" type="radio"/> N	FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (Replaced)		DUPLICATE: Y <input checked="" type="radio"/>			

[illegible]

REMARKS: 10 ft added in to tubing length to pump 24" of brush

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 101910-TPGW-G35-58		SITE LOCATION:	
WELL NO:		SAMPLE ID:	
		DATE: 10/19/10	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE, PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (feet - feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (.0014 gallons/foot X 68 feet) + gallons = .095 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58	PURGING INITIATED AT: 14:05	PURGING ENDED AT: 14:24	TOTAL VOLUME PURGED (gallons): 2.0

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.008; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: . B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

[illegible]

REMARKS: 10 ft added on to tubing length to pump out of brush.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: 101910-TPGW-L3-18		SITE LOCATION:	
WELL NO:	SAMPLE ID:	DATE: 10/19/10	

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/4	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 6.2	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (feet - feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (-.0014 gallons/foot X 23 feet) + gallons = .032 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18	PURGING INITIATED AT: 0946	PURGING ENDED AT: 10:09	TOTAL VOLUME PURGED (gallons): 2.2

[illegible]

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88 TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016										
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PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. J. GOWR, S. Ho Zager / E+E, Inc		SAMPLER(S) SIGNATURE(S): <i>[Signature]</i>		SAMPLING INITIATED AT: 10:10		SAMPLING ENDED AT: 10:28	
PUMP OR TUBING DEPTH IN WELL (feet): 18		TUBING MATERIAL CODE: PE		FIELD-FILTERED: <input checked="" type="checkbox"/> N Filtration Equipment type:		FILTER SIZE: 45 µm	
FIELD DECONTAMINATION: PUMP Y <input checked="" type="checkbox"/>		TUBING Y <input checked="" type="checkbox"/> (replaced)		DUPLICATE: Y <input checked="" type="checkbox"/>			

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** $\pm 0.2^\circ\text{C}$ **Specific Conductance:** $\pm 5\%$ **Dissolved Oxygen:** all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, $\pm 0.2\text{ mg/L}$ or $\pm 10\%$ (whichever is greater) **Turbidity:** all readings $\leq 20\text{ NTU}$; optionally $\pm 5\text{ NTU}$ or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: 101910-TPGW-L3-58

SITE
LOCATION:

WELL NO:

SAMPLE ID:

DATE: 10/19/10

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 6.2	PURGE PUMP TYPE OR BAILER: 1P
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WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= 0.0014 gallons/foot X 63 feet + 0.088 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58	PURGING INITIATED AT: 09:00	PURGING ENDED AT: 09:18	TOTAL VOLUME PURGED (gallons): 2.0
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TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
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-192.5


-198.3



WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: J. J. J. / ERE	SAMPLER(S) SIGNATURE(S): 	SAMPLING INITIATED AT: 09:20	SAMPLING ENDED AT: 09:40
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PUMP OR TUBING DEPTH IN WELL (feet): <u>68</u>	TUBING MATERIAL CODE: <u>PE</u>	FIELD-FILTERED: <u>Y</u> N Filtration Equipment Type: _____	FILTER SIZE: <u>20</u> μ m
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FIELD DECONTAMINATION:	PUMP	Y	N	TUBING	Y	N (replaced)	DUPLICATE:	Y	N
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SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			

[illegible]

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Baller; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

SITE NAME: ~~FR~~ 10/19/0 - TPC7W - L5 - 88

SITE
LOCATION:

WELL NO:

SAMPLE ID:

DATE: 08/19/10

PURGING DATA

WELL DIAMETER (inches): 2 1/4	TUBING DIAMETER (inches): 3/4	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: PP
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
= (feet - feet) X gallons/foot = 0.88 gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
= gallons + (0.0014 gallons/foot X 63 feet) + gallons = 0.88 gallons				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 68	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 68	PURGING INITIATED AT: 11:50	PURGING ENDED AT: 11:54	TOTAL VOLUME PURGED (gallons): 1.75

ORP
-68.4
-76.9
-69.7

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings < 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Revision Date: February 12, 2009

APPENDIX G:

DATA USABILITY REPORTS FOR GROUNDWATER AND SURFACE WATER LABORATORY RESULTS

JUNE/JULY 2010

DATA USABILITY SUMMARY

On behalf of Florida Power & Light Company (FPL), Ecology and Environment, Inc. (E & E) reviewed sixteen data packages from Test America Laboratories, Inc. (Test America) (and subcontract labs) for the analysis of groundwater and surface water samples collected during the June/July 2010 Quarterly Sampling Event at the Turkey Point facility in Homestead, Florida. Data were reviewed for conformance to the requirements of the guidance document, *Florida Power & Light Company, Inc. Turkey Point Monitoring Plan Quality Assurance Project Plan (QAPP), April and August, 2010*.

Intended Use of Data: To provide current data on the environmental conditions of the groundwater and surface waters in the monitoring area and to assess chemicals of concern levels in groundwater and surface waters and to guide future monitoring actions, if necessary.

Analyses requested included:

- EPA Method 200.7 – Metals, Total, by Inductively Coupled Plasma / Atomic Emission Spectroscopy (ICP/AES) - As, Ba, Be, Cd, Cu, Fe, Pb, Mn, Mo, Ni, Se, Tl, V, and Zn
- EPA Method 200.7 – Metals, Dissolved, by ICP/AES - Silica
- SW-846-6010 - Metals, Total, by ICP/AES - Ca, Mg, K, Na, B, and Sr
- SM 3500 Cr-B – Chromium (VI)
- EPA Method 245.1 – Mercury
- EPA Method 300 – Anions by Ion Chromatography (bromide, chloride, fluoride, sulfate)
- EPA Method 351.2 – Total Kjeldahl Nitrogen
- EPA Method 353.2 – Nitrate/Nitrite as N
- EPA Method 365.1 – Total Phosphorous
- SM 4500-P E - Ortho-phosphate (SRP)
- SM 4500-S2 F – Sulfides
- SM 2320B - Alkalinity
- SM 2540C – Total Dissolved Solids (TDS)
- SW-846-9060 – Dissolved Inorganic Carbon

- EPA Method 900 – Gross Alpha
- Non-standard method - $^{18}\text{O}/^{16}\text{O}$
- Non-standard method - $^2\text{H}/^1\text{H}$
- Non-standard method - $^{13}\text{C}/^{12}\text{C}$
- Non-standard method - $^{87}\text{Sr}/^{86}\text{Sr}$
- Non-standard method - ^3H

Gross alpha analysis was performed by KNL Laboratories, Inc. in Tampa, Florida. Carbon isotope analysis was performed by to the University of Miami, Stable Isotope Laboratory, Rosenstiel School of Marine Atmospheric Science. Hydrogen and Oxygen isotope analyses were performed by the University of Miami, Laboratory of Stable Isotope Ecology. The samples for these analyses were shipped to Test America who forwarded them to the respective labs for analysis. The tritium and strontium isotope samples were shipped directly to United States Geologic Survey (USGS), Menlo Park, California for analysis.

Data were reviewed and validated as described in the FPL Turkey Point Monitoring Plan QAPP and the results of the review/validation are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data and the results of supporting quality control (QC) analyses;
- the case narratives;
- the chain of custody (COC) and sample receipt checklist; and
- sampling logs and field log books.

Table 1 lists sample and laboratory identifications, methods requested, QC performed, and identification corrections. Table 2 lists method and laboratory quality control acceptance criteria. Tables 3a, 3b, 3c summarize field duplicate results. Table 4 summarizes the data qualified as a result of this validation. Table 5 lists the qualifier codes and definitions used to qualify data in this validation.

Corrective actions are noted throughout this DUS in bold print and bulleted. Data qualified as unusable are in bold print.

Introduction

A total of 76 samples were received. Thirty-three groundwater samples, 2 groundwater duplicate samples, 8 Biscayne Bay surface water samples, 6 Interceptor Ditch surface water samples, 12 canal surface water samples, one canal surface water duplicate sample, 9 Cooling Canal System (CCS) surface water samples, one (1) field blank, and one (1) equipment blank were analyzed for one or more of the analyses listed above. Table 1 below lists the sample identifications (IDs) cross-referenced to laboratory identifications and the analyses selected. Also any corrections for the sample ID are noted.

Preliminary reports from Test America were submitted between August 2 and August 31, 2010. The preliminary reports for sample delivery groups (SDGs) 35805, 35826, 35848, 35863, 35950, and 35970 initially had reported the wrong minimum detection levels (MDLs) for some of the 200.7 analytes and required revisions (Rev 1). "Level 4 Mini Final Reports" were submitted to FPL on October 6, 2010. The "Level 4 Mini Final Reports" were resubmitted December 7, 2010 with the addition of the gross alpha quality control information. Rev(2) reports were submitted January 21, 2011 with bicarbonate results reported instead of carbonate.

Table 1: Sample Listing

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
35805	GW	061610-TPGW-5D	660-35805-1	6/16/10	200.7, 6010, 300, 9060, 2320, 2540, 4500, H&O, Sr, 3H, C	LD-2320	None
35805	GW	061610-TPGW-5M	660-35805-2	6/16/10	200.7, 6010, 300, 9060, 2320, 2540, 4500 H&O, Sr, 3H, C		None
35805	GW	061610-TPGW-5S	660-35805-3	6/16/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S H&O, Sr, 3H, C		None
35826	GW	061710-TPGW-3S	660-35826-1	6/17/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-200.7, 6010, 4500NH3 LD-2540	None
35826	GW	061710-TPGW-3M	660-35826-2	6/17/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-3500 LD-200.7	None
35826	GW	061710-TPGW-3D	660-35826-3	6/17/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
35826	GW	061710-TPGW-12S	660-35826-4	6/17/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-353.2	None
35826	GW	061710-TPGW-12M	660-35826-5	6/17/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-300, 365.1, 4500PE LD-2320	None
35826	GW	061710-FB1	660-35826-6	6/17/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, H&O, Sr, 3H	FB	None
35848	GW	061810-TPGW-12D	660-35848-1	6/18/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-200.7, 3500, 4500NH3 LD-2320, 2540, 4500PE	None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
35848	GW	061810-TPGW-2S	660-35848-2	6/18/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-245.1,	None
35848	GW	061810-TPGW-2M	660-35848-3	6/18/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3		None
35848	GW	061810-TPGW-EB1	660-35848-4	6/18/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, H&O, Sr, 3H, C	EB	None
35848	GW	061810-TPGW-DUP 1	660-35848-5	6/18/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, H&O, Sr, 3H, C	FD1, MS/MSD-300,	None
35863	GW	062110-TPGW-6S	660-35863-1	6/21/10	200.7, 245.1, 6010, 300, 3500, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C	MS/MSD-245.1, 3500	None
35863	GW	062110-TPGW-6M	660-35863-2	6/21/10	200.7, 245.1, 6010, 300, 3500, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		None
35863	GW	062110-TPGW-6D	660-35863-3	6/21/10	200.7, 245.1, 6010, 300, 3500, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C	MS/MSD-300 LD-2320	None
35863	GW	062110-TPGW-Dup1	660-35863-4	6/21/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, H&O, Sr, 3H, C	FD2, MS/MSD-200.7, 300,	None
35863	GW	062110-TPGW-2D	660-35863-5	6/21/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	LD-200.7	None
35863	SW	062110-TPSWC-6S	660-35863-6	6/21/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		062110-TPSWC-6T
35863	SW	062110-TPSWC-6D	660-35863-7	6/21/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-300	062110-TPSWC-6B
35894	SW	062210-BBSW-1S	660-35894-1	6/22/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-200.7, 300 LD-2320	062210-BBSW-1T

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
35894	SW	062210-BBSW-1D	660-35894-2	6/22/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	LD-4500NH3	062210-BBSW-1B
35894	SW	062210-BBSW-2D	660-35894-3	6/22/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-300	062210-BBSW-2B
35918	SW	062310-BBSW-4D	660-35918-1	6/23/10	200.7, 245.1, 6010, 300, 3500, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-3500	062310-BBSW-4B
35918	SW	062310-BBSW-3D	660-35918-2	6/23/10	200.7, 245.1, 6010, 300, 3500, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-300,	062310-BBSW-3B
35918	SW	062310-BBSW-5S	660-35918-3	6/23/10	200.7, 245.1, 6010, 300, 3500, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		062310-BBSW-5T
35918	SW	062310-BBSW-4S	660-35918-4	6/23/10	200.7, 245.1, 6010, 300, 3500, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		062310-BBSW-4T
35918	SW	062310-BBSW-5D	660-35918-5	6/23/10	200.7, 245.1, 6010, 300, 3500, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		062310-BBSW-5B
35950	SW	062410-TPGW-4S	660-35950-1	6/24/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C	LD-2320	None
35950	SW	062410-TPGW-4M	660-35950-2	6/24/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C	MS/MSD-300	None
35950	SW	062410-TPGW-4D	660-35950-3	6/24/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		None
35950	SW	062410-TPGW-7S	660-35950-4	6/24/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		None
35950	SW	062410-TPGW-7M	660-35950-5	6/24/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H		None
35950	SW	062410-TPGW-7D	660-35950-6	6/24/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C	LD-2540	None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
35970	GW	062510-TPGW-8M	660-35970-1	6/25/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		None
35970	GW	062510-TPGW-8D	660-35970-2	6/25/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		None
35970	GW	062510-TPGW-9S	660-35970-3	6/25/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		None
35970	GW	062510-TPGW-9M	660-35970-4	6/25/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		None
35970	GW	062510-TPGW-9D	660-35970-5	6/25/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C	LD-2320	None
35986	SW	062810-SWCCS-1B	660-35986-1	6/28/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	MS/MSD-200.7, 300, 4500 LD-4500PE	None
35986	SW	062810-SWCCS-3B	660-35986-2	6/28/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	MS/MSD-353.2	None
35986	SW	062810-SWCCS-7B	660-35986-3	6/28/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	MS/MSD-300	None
36007	SW	062910-TPSWID-1B	660-36007-1	6/29/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-4500NH3 LD-2320	None
36007	SW	062910-TPSWID-1T	660-36007-2	6/29/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36007	SW	062910-TPSWID-2B	660-36007-3	6/29/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36007	SW	062910-TPSWID-2T	660-36007-4	6/29/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
36031	GW	063010-TPGW-13S	660-36031-1	6/30/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-200.7, 245.1, 3500, 4500PE LD-2320, 4500PE	None
36031	GW	063010-TPGW-13M	660-36031-2	6/30/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	LD-200.7, 2320	None
36031	GW	063010-TPGW-13D	660-36031-3	6/30/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36031	SW	063010-TPSWCCS-2b	660-36031-5	6/30/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	LD-2540	063010-TPSWCCS-2B
36031	SW	063010-TPSWCCS-8b	660-36031-6	6/30/10	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C		063010-TPSWCCS-8B
36059	SW	070110-TPSWID-3B	660-36059-1	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-200.7, 353.2, 4500NH3, 4500PE LD-4500PE	None
36059	SW	070110-TPSWID-3T	660-36059-2	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	LD-200.7,	None
36059	SW	070110-TPSWC-4B	660-36059-3	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36059	SW	070110-TPSWC-4T	660-36059-4	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-300, 365.1	None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
36059	SW	070110-TPSWCCS-4B	660-36059-5	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C		None
36059	SW	070110-TPSWCCS-4T	660-36059-6	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C		None
36059	SW	070110-TPSWC-5T	660-36059-7	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36059	SW	070110-TPSWC-5B	660-36059-8	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36059	SW	070110-TPSWC-DUP1	660-36059-9	7/1/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, H&O, Sr, 3H, C	MS/MSD-300	None
36118	SW	070710-TPSWC-1B	660-36118-1	7/07/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-365.1, 4500PE LD-4500PE	None
36118	SW	070710-TPSWC-1T	660-36118-2	7/07/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-351.2	None
36118	SW	070710-TPSWC-2B	660-36118-3	7/07/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	LD-2320	None
36118	SW	070710-TPSWC-2T	660-36118-4	7/07/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	LD-4500NH3	None
36118	SW	070710-TPSWC-3B	660-36118-5	7/07/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36118	SW	070710-TPSWC-3T	660-36118-6	7/07/10	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
36118	GW	070610-TPGW-8s	660-36118-7	7/06/10	200.7, 6010, 300, 9060, 2320, 2540, 4500S, H&O, Sr, 3H, C		070610-TPGW-8S
36167	SW	070910 SWCCS-1B	660-3167-1	7/9/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	MS/MSD-200.7, 365.1 LD-200.7, 2320, 2540	None
36167	SW	070910 SWCCS-5B	660-3167-2	7/9/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C		None
36167	SW	070910 SWCCS-5T	660-3167-3	7/9/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	MS/MSD-300	None
36195	GW	071210-TPGW-1D	660-36195-1	7/12/2010	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36195	GW	071210-TPGW-1M	660-36195-2	7/12/2010	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C		None
36195	GW	071210-TPGW-1S	660-36195-3	7/12/2010	200.7, 245.1, 6010, 300, 351.2, 353.2, 365.1, 3500, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, H&O, Sr, 3H, C	MS/MSD-365.1 LD-2540	None
36274	SW	071510-TPSWCCS-6B	660-36274-1	7/15/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	LD-2320	None
36274	SW	071510-TPSWCCS-6T	660-36274-2	7/15/2010	200.7, 6010, 300, 351.2, 353.2, 365.1, 9060, 2320, 2540, 4500NH3, 4500PE, 4500S, TN, Unionized NH3, 900, H&O, Sr, 3H, C	MS/MSD-300	None

Data Review / Validation Results

Analytical Results

All results were evaluated against the method detection limit (MDL), defined as the minimum concentration of an analyte reported with 99% confidence that the analyte concentration is greater than zero. The reporting limit (RL) or practical quantitation limit (PQL), is defined as the lowest non-zero standard concentration in the calibration curve. Results are reported with an "I" flag if less than the RL but greater than the MDL. Non-detected results are reported as less than the value of the MDL.

Quality Control (QC) Acceptance Criteria

Table 2 summarizes the analytical method and laboratory QC requirements and criteria for each method performed during this event. Criteria reviewed include initial and continuing calibration verifications (ICV/CCV), interference check standards (ICS), contract required quantitation limit (CRQL) standards, laboratory control samples (LCS), matrix spikes (MS), lab duplicates for samples, control, and matrix spikes (Dup), post digestion spikes (PDS), and serial dilutions (SD). Not all criteria are required for each method.

Table 2: Method and Laboratory QC Acceptance Criteria

Method	Source	IC/CCV	ICS	CRQL	LCS	MS	Dup	PDS	SD
200.7	Method	±5/±10	±20%	NA	±15%	±30%	NA	±15%	±10%
	Lab	±5/±10	±20%	±50%	±15%	±30%	20%	±15%	±10%
245.1	Method	±5/±10	NA	NA	±15%	±30%	NA	NA	NA
	Lab	±5/±10	NA	±50%	±15%	±15%	20%	NA	±10%
300	Method	±10/±10	NA	NA	±10%	±20%	NA	NA	NA
	Lab	±10/±10	NA	NA	±10%	±10%	30%	NA	NA
351.2	Method	±10/±10	NA	NA	±10%	±10%	NA	NA	NA
	Lab	±10/±10	NA	NA	±10%	±10%	30%	NA	NA
353.2	Method	±10/±10	NA	NA	±10%	±10%	NA	NA	NA
	Lab	±10/±10	NA	NA	±10%	±10%	30%	NA	NA
365.1	Method	±10/±10	NA	NA	±10%	±10%	NA	NA	NA
	Lab	±10/±10	NA	NA	±10%	±10%	30%	NA	NA
6010	Method	±10%mid ±30%low	NA	NA	±20%	±25%	20%	±20%	±10%

Method	Source	IC/CCV	ICS	CRQL	LCS	MS	Dup	PDS	SD
	Lab	±10/±10	±20%	±50%	±25%	±25%	20%	±25%	±10%
900	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	NA	NA	NA	NA	NA
9060	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	±10/±10	NA	NA	Not listed	NA	NA	NA	NA
4500 S2F	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±25%	NA	25%	NA	NA
2320B	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±20%	NA	30%	NA	NA
2540C	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±20%	NA	20%	NA	NA
4500 NH3	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±10%	±10%	30%	NA	NA
4500 P E	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±10%	±10%	30%	NA	NA
3500 CrB	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	±10/±10	NA	NA	±15%	±15%	20%	NA	NA
TN	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	NA	NA	NA	NA	NA
² H/ ¹ H	Lab	NA	NA	NA	±2‰	NA	NA	NA	NA
¹⁸ O/ ¹⁶ O	Lab	NA	NA	NA	±0.07‰	NA	NA	NA	NA
¹³ C/ ¹² C	Lab	NA	NA	NA	±0.1‰	NA	NA	NA	NA
⁸⁷ Sr/ ⁸⁶ Sr	Lab	NA	NA	NA	±0.001%	NA	NA	NA	NA
³ H	Lab	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not Applicable.

The laboratory limits either met or exceeded method requirements in all cases with one exception. The Method 6010 LCS criteria are listed as 80-120% while the laboratories criteria is 75-125% although the laboratory is allowed by the method to establish criteria based on historical results.

Laboratory acceptance limits are used for this validation with the exception of the duplicate precision criteria (20% for aqueous samples, 40% for other matrices).

Documentation

Samples were evaluated for agreement with the COC. All samples were received in the appropriate containers and in good condition with the paperwork filled out properly with a few exceptions. In SDG 35863, a time was not noted on the COC for sample TPGW-2D. In SDG 35863, samples TPSWC-6S and TPSWC-6D should have been labeled TPSWC-6T and TPSWC-6B, respectively. In SDG 35918, the dissolved inorganic carbon (DIC) and dissolved organic carbon (DOC) samples were received but not marked for analysis on the COC. In SDG 35970, the metals (Method 200.7) samples were received but not marked on the COC for analysis. The laboratory performed analyses and reported results.

- **Samplers should review sample identification requirements and review all paperwork for completeness and accuracy.**

No results for the oxygen and hydrogen isotope analysis are reported for the field blank in SDG 35826 although requested on the COC. The sample results table, however, lists sample 3S twice. It appears one ID was duplicated and so all IDs for that SDG are off. This was corrected in the final EDD.

The tritium surface water results summary has a couple of apparent reporting errors. The second instance of EB1 and EB1DUP are mislabeled. EB1 (6/17) corresponds to FB1 (35826-6), EB1 (6/18) corresponds to 061810-TPGW-EB1, and EB1DUP (6/18) corresponds to 061810-TPGW-DUP 1. The tritium groundwater results for TPGW-6S DUP is mislabeled. Duplicates are not identified on sample bottles. ID should be 062110-TPGW-DUP1. The sample results have been corrected and approved by USGS.

The strontium results summary does not report a result for sample TPGW-3M when a sample was submitted. Also, the TPGW-1D result block is empty.

- **Each laboratory should be notified of these errors to reduce the potential for future errors.**

Preservation and Holding Times

Samples were shipped and received in good condition with one exception. In SDG 36167, the DIC bottle for sample SWCCS-1B was received broken. Another

unpreserved sample bottle was used to perform the analysis. Sample receipt temperatures were within the acceptance criteria of 4 ± 2 °C.

Samples were preserved in the field as specified in the FPL Turkey Point Monitoring Plan QAPP with a few exceptions. The laboratory reports state an unspecified number of DOC sample bottles were received above the required pH. The laboratory adjusted the samples to the required pH for analysis. This occurred in samples related to SDG's 35805, 35826, 35848, 35863, 35894, 35986, and 36118. No data was qualified.

A sample bottle for Method 200.7 in SDG 35805 was received unpreserved. The laboratory adjusted the pH and waited the required 24 hours before processing. No data was qualified.

- **Samplers should be sure to verify and document proper sample bottle preservation in the field.**

Samples were prepared and analyzed within holding times specified in the FPL Turkey Point Monitoring Plan QAPP with the following exceptions. In SDG 35826, the ortho-phosphorous samples were analyzed outside the holding time due to matrix issues. Ortho-phosphorous results in sample 061710-TPGW-12M has been qualified as out of holding time and estimated (QJ-). In SDG 35863, the chromium (Method SM3500 Cr B) samples 062110-TPGW-2D, 062110-TPGW-6D, and 062110-TPGW-6M were received outside of holding time. Chromium results in these samples have been qualified as out of holding time and estimated (QJ-). In SDG 36274, fluoride results are qualified as past holding time in samples 071510-TPSWCCS-6B and 071510-TPSWCCS-6T. However, this is not noted in the case narrative.

- **The laboratory should be notified to ensure all qualified data is reported in the narratives.**
-
- **Samplers should be reminded of the 10:00 AM sampling requirement for chromium.**

Calibrations

Calibration applies to methods 200.7, 6010, 300, 245.1, 351.2, 353.2, 2320, 2540C, and 365.1. According to the data sheets, initial calibration and continuing calibration data met method requirements for each analysis with a few exceptions.

The Initial Calibration Verification sample (ICV) (96199) for mercury in SDG 35826 was below laboratory limits. However, the Continuing Calibration Verification samples (CCVs) bracketing the samples were within limits. No data was qualified.

The ICV (96855) for potassium in SDG 36007 was lower than laboratory limits. Potassium has been qualified as estimated, J, in samples 062910-TPSWID-1B, 062910-TPSWID-1T, 062910-TPSWID-2B, and 062910-TPSWID-2T.

A CCV (70850/112) for iron in SDGs 36007 and 36118 (run on the same sequence) was higher than laboratory limits. Iron has been qualified as estimated (J) in samples 070110-TPSWID-3B, 070110-TPSWID-3T, 070110-TPSWC-4B, and 070110-TPSWC-4T from SDG 36059 and samples 070710-TPSWC-1B, 070710-TPSWC-1T, 070710-TPSWC-2B, 070710-TPSWC-2T, 070710-TPSWC-3B, 070710-TPSWC-3T, and 070710-TPGW-8s in SDG 36118.

A CCV (71119/16) for beryllium in SDG 36195 was higher than laboratory limits. However, the CCVs bracketing the samples was within limits. No data was qualified.

MDL/RL/CRQL

The MDLs for arsenic, lead, and thallium are above the FDEP Class 2 Groundwater criteria. Arsenic, lead, and thallium had an MDLs of 0.012, 0.024, and 0.016 mg/L in many samples due to dilutions based on matrix issues. Sulfide had an MDL of 1.0 mg/L in all analyses, above the Department of Environmental Resources Management (DERM) criterion of 0.2 mg/L.

- **The laboratory should be notified to discuss analytical possibilities for sulfide analyses to meet the criteria.**

The CRQL, or Contract Required Quantitation Limit, is the low level calibration standard analyzed as a sample. This standard is required for methods 200.7 and 6010. The standard must be analyzed during each run and must have a percent recovery within 50-150% of the true value.

According to the analytical run logs, the CRQL standards were run at the required frequency and had acceptable results with the following exceptions. In SDG 35805, sodium had a low CRQL percent recovery. Sodium results in samples 061610-TPGW-5D and 061610-TPGW-5M have been qualified as estimated with a low bias (J-). In SDG 35826, arsenic and selenium had low CRQL percent recoveries. Arsenic and selenium results in samples 061710-TPGW-3S, 061710-TPGW-3M, 061710-TPGW-3D, 061710-TPGW-12S, and 061710-TPGW-12M have been qualified as estimated with a low bias (J-). In SDG 35848, sodium, arsenic, and selenium had low CRQL percent recoveries. Sodium, arsenic and selenium results in samples 061810-TPGW-12D, 061810-TPGW-2S, 061810-TPGW-2M, and 061810-TPGW-DUP1 have been qualified as estimated with a low bias (J-). In SDG 36031, mercury had a low CRQL percent recovery. Mercury results in samples 063010-TPGW-13S, 063010-TPGW-13M, and 063010-TPGW-13D have been qualified as estimated with a low bias (J-). In SDG 36195, mercury had a low CRQL percent recovery. Mercury results in samples 071210-TPGW-1D, 071210-TPGW-1M, and 071210-TPGW-1S have been qualified as estimated with a low bias (J-).

Interference Check Standards

Interference Check Standards (ICS) are required in Methods 6010 and 6020. The ICS consists of two solutions: A and AB. Solution A contains the possible interferents and solution AB contains the analytes and interferents. ICS results must fall within the acceptance recovery criteria of 80-120%.

According to the data sheets, all ICS results were within the acceptance range with one exception. In SDG 35848, selenium had a low percent recovery in the ISCAB standard. Selenium results in samples 061810-TPGW-12D, 061810-TPGW-2S, 061810-TPGW-2M, 061810-TPGW-EB1, and 061810-TPGW-DUP1 have been qualified as estimated (J).

Blanks

For the June 2010 Quarterly Event, one field blank (061710-FB1) and one equipment blank (061810-TPGW-EB1) were collected and submitted for analysis. The laboratory performs calibration and preparation (method) blanks if required by the analytical method. Sample results for analytes detected in an associated method or preparation blank at concentrations less than ten times the equivalent blank concentration will be qualified as "V" at the reported concentration. Sample results for analytes detected in all other blanks at concentrations less than ten times the equivalent blank concentration shall be qualified as "J" at the reported concentration.

All laboratory blanks were performed at the required frequency. Two field QC blanks were collected for the event. With 74 samples collected, a minimum of four field QC blanks (equipment blank or field blank) should have been collected based on FDEP SOP FQ 1000.

- **Samplers should perform either an equipment blank or field blank at a minimum of every twenty samples collected during an event.**

It should be noted that blank contamination can only be applied to samples collected the same day and with the same equipment. Data from different days can not be qualified based on the blank contamination.

Zinc was detected in the field blank 061710-FB1 in SDG 35826. Zinc has been qualified as estimated (J) in sample 061710-TPGW-12S.

Iron, zinc, calcium, magnesium, sodium, strontium, chloride, nitrite/nitrate, ammonia, ortho-phosphate, and alkalinity were detected in the equipment blank 061810-TPGW-EB1. Nitrite/nitrate results have been qualified as estimated (J) in samples 061810-TPGW-12D and 061810-TPGW-DUP1.

Arsenic was detected in a Method 200.7 method blank associated with SDG 36031. Arsenic results have been qualified as detected in the method blank (V) in samples 063010-TPGW-13S and 063010-TPGW-13M.

Iron was detected in a Method 200.7 method blank associated with SDG 36059. Iron results have been qualified as detected in the method blank (V) in samples 070110-TPSWID-3B and 070110-TPSWID-3T. Gross alpha was detected in a method associated with SDG 36059. However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank and therefore no data was qualified.

Iron was detected in a Method 200.7 method blank associated with SDG 36118. Iron results have been qualified as detected in the method blank (V) in samples 070710-TPSWC-1B, 070710-TPSWC-1T, 070710-TPSWC-2B, 070710-TPSWC-2T, 070710-TPSWC-3B, and 070110-TPGW-8s.

Laboratory Control Samples

Laboratory Control Samples (LCS) recoveries for all applicable analyses were within laboratory acceptance criteria and were performed at the required frequency.

Matrix Spike/Matrix Spike Duplicates

MS/MSD samples were performed at the required frequency for applicable methods. Recovery calculations are not required if the concentration added is less than 30% of the sample background concentration. MS/MSD recoveries of less than 10% are qualified as unusable due to apparent significant matrix effects. MS/MSD precision and accuracy results for all applicable analyses were within project objectives with the following exceptions.

In SDG 35826, the Method 6010 MS/MSD recoveries of magnesium, potassium, sodium, boron, and strontium exceeded laboratory established limits in sample 061710-TPGW-3S. These analytes have been qualified as estimated with a high bias (J+) in 061710-TPGW-3S. Calcium was detected in the same MS/MSD but below laboratory limits. Calcium has been qualified as estimated with a low bias (J-) in sample 061710-TPGW-3S. The Method SM3500 Cr B MS/MSD recovery of chromium was below laboratory limits in sample 061710-TPGW-3M. Chromium has been qualified as estimated with a low bias (J-) in sample 061710-TPGW-3M. The Method 353.2 MS/MSD recovery of nitrate/nitrite exceeded laboratory limits in sample 061710-TPGW-12S. Nitrate/nitrite has been qualified as estimated with a high bias (J+) in sample 061710-

TPGW-12S. The Method 4500 P E MS/MSD recovery of ortho-phosphate was less than 10% in sample 061710-TPGW-12M. **Ortho-phosphate has been qualified as unusable, ?, in sample 061710-TPGW-12M.** The Method 365.1 MS/MSD recovery of phosphorous exceeded laboratory limits in sample 061710-TPGW-12M. Phosphorous has been qualified as estimated with a high bias (J+) in sample 061710-TPGW-12S.

In SDG 35848, the Method 245.1 MS/MSD recoveries of mercury were below laboratory limits in sample 061810-TPGW-2S. Mercury has been qualified as estimated with a low bias (J-) in 061810-TPGW-2S. The Method SM4500 NH3 MS/MSD recoveries of ammonia exceeded laboratory limits in sample 061810-TPGW-12D. Ammonia has been qualified as estimated with a high bias (J+) in 061810-TPGW-12D. The Method 4500 P E MS/MSD recoveries of ortho-phosphate were less than 10% in sample 061810-TPGW-12D. **Ortho-phosphate has been qualified as unusable, ?, in sample 061810-TPGW-12D.**

In SDG 35863, the Method 300.0 MS/MSD recoveries of fluoride were below laboratory limits in sample 062110-TPGW-Dup1. Fluoride has been qualified as estimated with a low bias (J-) in 062110-TPGW-Dup1.

In SDG 35918, the Method 300.0 MS/MSD recoveries of fluoride were below laboratory limits in sample 062310-BBSW-3D. Fluoride has been qualified as estimated with a low bias (J-) in 062310-BBSW-3D.

In SDG 35986, the Method 300.0 MS recovery of chloride were below laboratory limits in sample 062810-SWCCS-7B. Chloride has been qualified as estimated with a low bias (J-) in 062810-SWCCS-7B.

In SDG 36031, the Method 245.1 MS/MSD recoveries of mercury were below laboratory limits in sample 063010-TPGW-13S. Mercury has been qualified as estimated with a low bias (J-) in 063010-TPGW-13S. The Method SM3500 Cr B MS/MSD recoveries of chromium were below laboratory limits in sample 063010-TPGW-13S. Chromium has been qualified as estimated with a low bias (J-) in 063010-TPGW-13S.

In SDG 36059, the Method 353.2 MS/MSD recoveries of nitrate/nitrite exceeded laboratory limits in sample 070110-TPSWID-3B. Nitrate/nitrite has been qualified as estimated with a high bias (J+) in 070110-TPSWID-3B.

In SDG 36167, the Method 300 MS/MSD recoveries of chloride were below laboratory limits in sample 070910-SWCCS-5T. Chloride has been qualified as estimated with a low bias (J-) in 070910-SWCCS-5T. The Method 365.1 MS/MSD recoveries of phosphorous were below laboratory limits in sample 070910-SWCCS-1B. Phosphorous has been qualified as estimated with a low bias (J-) in 070910-SWCCS-1B.

In SDG 36274, the Method 300 MS/MSD recoveries of fluoride were less than 10% in sample 071510-TPSWCCS-6T. **Fluoride has been qualified as unusable, ?, in 071510-TPSWCCS-6T.**

Post Digestion Spike

A PDS is applicable to Methods 6010 and 200.7 If MS recoveries are outside project objectives and the sample result is < 4x the spike added, a PDS shall be performed. PDS percent recovery acceptance criteria are the same as the MS criteria, 75-125%R.

In SDG 35826, the PDS recovery of boron was below laboratory limits. The MS/MSD recoveries exceeded laboratory limits. Boron has been qualified as estimated (J) in sample 061710-TPGW-3S.

Serial Dilution

Inductively coupled plasma (ICP) serial dilutions are run to help evaluate whether or not significant physical or chemical interferences exist due to sample matrix. When analyte concentrations are sufficiently high (the concentration in the original sample is minimally a factor of 50 above the instrument detection limit [IDL]) the results obtained for a five-fold dilution of the original sample are compared to the original results by means of a percent difference (%D). The %D is compared to a precision acceptance limit of $\pm 10\%$. If the SD does not meet the criteria, all results for that analyte in the associated sample delivery group are qualified as estimated (flagged "J/UJ").

In SDG 35826, the serial dilution %D of potassium exceeded laboratory limits in sample 061710-TPGW-3S. Potassium results have been qualified as estimated (J) for all samples in SDG 35826.

In SDG 35848, the serial dilution %D of silica exceeded laboratory limits in sample 061810-TPGW-12D. Silica results have been qualified as estimated (J) for all samples in SDG 35848.

Laboratory Duplicates

Laboratories randomly select samples to perform internal duplicate analyses. Laboratory duplicate precision, as RPD, requirement is less than or equal to 20% for aqueous samples. All duplicate precision was within project objectives with the following exceptions.

In SDG 35826, the 200.7 laboratory duplicate had a high RPD for barium in sample 061710-TPGW-3M. Barium has been qualified as estimated (J) in sample 061710-TPGW-3M.

In SDG 35863, the 200.7 laboratory duplicate had a high RPD for barium in sample 062110-TPGW-2D. Barium has been qualified as estimated (J) in sample 062110-TPGW-2D.

In SDG 36031, the 200.7 laboratory duplicate had a high RPD for arsenic in sample 063010-TPGW-13S. Arsenic has been qualified as estimated (J) in sample 063010-TPGW-13S.

Field Precision

Field duplicate precision, as RPD, requirement is less than or equal to 20% for aqueous samples. The results for analytes where both values are greater than the reporting limit are given as relative percent difference. Results of analytes where one or both values are less than the reporting limit are not considered appropriate for assessing precision. Three field duplicate pairs were collected during the sampling event: 061810-TPGW-12D & 061810-TPGW-DUP1; 062110-TPGW-2D & 062110-TPGW-Dup1; and 070110-TPSWC-5B & 070110-TPSWC-DUP1. Groundwater duplicates were collected at the

required frequency. With 35 surface water samples collected, a minimum of two field duplicates should have been collected based on FDEP SOP FQ 1000. Tables 3a, 3b, and 3c summarize field duplicate precision results.

In the field duplicate pair 061810-TPGW-12D & 061810-TPGW-DUP1, the nitrate/nitrite and phosphorous results had high RPDs. These results have been qualified as estimated (J) in both samples.

In the field duplicate pair 062110-TPGW-2D & 062110-TPGW-Dup1, the barium results had high RPDs. Barium has been qualified as estimated (J) in both samples.

- **Sample 070110-TPSWC-5B was submitted to the laboratory but was only analyzed for isotopes.**

Table 3a - Field Precision

Method	Analyte	Unit	MQL	061810-TPGW-DUP 1	061810-TPGW-12D	RPD / Abs. Diff.	Rating	Samp Qual
200.7	Barium	mg/L	0.1	0.12	0.1	18.2%	Acceptable	None
200.7	Iron	mg/L	0.5	0.52	0.5	3.9%	Acceptable	None
200.7	Manganese	mg/L	0.1	0.036 I	0.039 I	NC	Acceptable	None
200.7	Vanadium	mg/L	0.1	0.011 I	0.011 I	NC	Acceptable	None
200.7	Zinc	mg/L	0.2	0.094 I	ND	NC	Acceptable	None
6010	Boron	mg/L	0.2	5.4	5.6	3.6%	Acceptable	None
6010	Calcium	mg/L	2.0	580	610	5.0%	Acceptable	None
6010	Potassium	mg/L	50	600	640	6.5%	Acceptable	None
6010	Strontium	mg/L	0.02	11	11	0.0%	Acceptable	None
6010	Magnesium	mg/L	0.32	1700	1700	0.0%	Acceptable	None
6010	Sodium	mg/L	100	14000	15000	6.9%	Acceptable	None
300	Bromide	mg/L	5.0	89	87	2.3%	Acceptable	None
300	Chloride	mg/L	500	25000	24000	4.1%	Acceptable	None
300	Sulfate	mg/L	50	3500	3400	2.9%	Acceptable	None
351.2	TKN	mg/L	0.2	1.4	1.7	19.4%	Acceptable	None
353.2	Nitrate/Nitrite	mg/L	0.01	0.022	0.046	70.6%	Poor	J
365.1	Phosphorous	mg/L	0.01	0.042	0.034	21.1%	Poor	J
2320	Alkalinity	mg/L	1.0	180	180	0.0%	Acceptable	None
2540	TDS	mg/L	250	53000	53000	0.0%	Acceptable	None
4500 NH3	Ammonia	mg/L	0.10	1.2	1.2	0.0%	Acceptable	None
TN	Total Nitrogen	mg/L	0.21	1.4	1.7	19.4%	Acceptable	None
FDEP	Unionized NH3	mg/L	0.000017	NA	0.018	NC	Acceptable	None
200.7	Silica	mg/L	0.5	5.5	4.6	17.8%	Acceptable	None
9060	DIC	mg/L	1.0	46	46	0.0%	Acceptable	None
4500 PE	OP-dissolved	mg/L	0.5	0.11	0.11	0.0%	Acceptable	None
Non-standard	d18O	‰	NA	4.3	4.2	2.4%	Acceptable	None
Non-standard	d2H	‰	NA	22.3	27.1	19.4%	Acceptable	None
Non-standard	d13C	‰	NA	-7.05	-7.05	0.0%	Acceptable	None

Method	Analyte	Unit	MQL	061810-TPGW-DUP 1	061810-TPGW-12D	RPD / Abs. Diff.	Rating	Samp Qual
Non-standard	dSr87/86	‰	NA	0.70916	0.70914	0.0%	Acceptable	None
Non-standard	Tritium	pCi/L	<5	1764.1	1561.6	12.2%	Acceptable	None

Key:

DIC – Dissolved inorganic carbon.

FDEP – Florida Department of Environmental Protection.

J – Estimated bias.

mg/L – Milligrams per liter.

NA – Not analyzed.

ND – Not detected.

NC – Not calculated.

NH3 – Ammonia.

OP -

pCi/L – PicoCuries per liter.

TDS – Total dissolved solids.

TKN – Total Kjeldahl nitrogen.

Table 3b - Field Precision

Method	Analyte	Unit	MQL	062110-TPGW-Dup1	062110-TPGW-2D	RPD / Abs. Diff.	Rating	Samp Qual
200.7	Barium	mg/L	0.1	0.14	0.11	24.0%	Poor	J
200.7	Iron	mg/L	0.5	0.91	0.9	1.1%	Acceptable	None
200.7	Manganese	mg/L	0.1	0.052 I	0.055 I	NC	Acceptable	None
200.7	Vanadium	mg/L	0.1	0.016 I	0.014 I	NC	Acceptable	None
6010	Boron	mg/L	0.5	6.6	6.6	0.0%	Acceptable	None
6010	Calcium	mg/L	5.0	680	680	0.0%	Acceptable	None
6010	Potassium	mg/L	200	550	540	1.8%	Acceptable	None
6010	Strontium	mg/L	0.05	14	13	7.4%	Acceptable	None
6010	Magnesium	mg/L	0.8	2000	2000	0.0%	Acceptable	None
6010	Sodium	mg/L	100	16000	16000	0.0%	Acceptable	None
300	Bromide	mg/L	5.0	100	100	0.0%	Acceptable	None
300	Chloride	mg/L	500	30000	29000	3.4%	Acceptable	None

Method	Analyte	Unit	MQL	062110-TPGW-Dup1	062110-TPGW-2D	RPD / Abs. Diff.	Rating	Samp Qual
300	Sulfate	mg/L	500	4000	4000	0.0%	Acceptable	None
351.2	TKN	mg/L	0.2	1.8	2.0	10.5%	Acceptable	None
353.2	Nitrate/Nitrite	mg/L	0.01	0.014	0.014	0.0%	Acceptable	None
365.1	Phosphorous	mg/L	0.01	0.057	0.059	3.4%	Acceptable	None
2320	Alkalinity	mg/L	1.0	180	190	5.4%	Acceptable	None
2540	TDS	mg/L	250	63000	62000	1.6%	Acceptable	None
4500 NH3	Ammonia	mg/L	0.05	1.7	1.8	5.7%	Acceptable	None
TN	Total Nitrogen	mg/L	0.21	1.8	2.0	10.5%	Acceptable	None
FDEP	Unionized NH3	mg/L	0.000017	NA	0.010	NC	Acceptable	None
200.7	Silica	mg/L	2.5	4.2	3.5	18.2%	Acceptable	None
9060	DIC	mg/L	1.0	46	46	0.0%	Acceptable	None
4500 PE	OP-dissolved	mg/L	0.5	0.10 l	0.10 l	NC	Acceptable	None
Non-standard	d18O	‰	NA	5	4.9	2.0%	Acceptable	None
Non-standard	d2H	‰	NA	32.5	30	8.0%	Acceptable	None
Non-standard	d13C	‰	NA	-6.44	-6.63	2.9%	Acceptable	None
Non-standard	dSr87/86	‰	NA	0.70917	0.70917	0.0%	Acceptable	None
Non-standard	Tritium	pCi/L	<5	3732.3	3232	14.4%	Acceptable	None

Table 3c - Field Precision

Method	Analyte	Unit	MQL	070110-TPSWC-Dup1	070110-TPSWC-5B	RPD / Abs. Diff.	Rating	Samp Qual
200.7	Barium	mg/L	0.1	0.026	NA	NC	Acceptable	None
200.7	Iron	mg/L	0.5	0.088	NA	NC	Acceptable	None
6010	Boron	mg/L	0.5	5.3	NA	NC	Acceptable	None
6010	Calcium	mg/L	5.0	500	NA	NC	Acceptable	None
6010	Potassium	mg/L	200	470	NA	NC	Acceptable	None
6010	Strontium	mg/L	0.05	9.1	NA	NC	Acceptable	None
6010	Magnesium	mg/L	0.8	1500	NA	NC	Acceptable	None
6010	Sodium	mg/L	100	12000	NA	NC	Acceptable	None
300	Bromide	mg/L	5.0	75	NA	NC	Acceptable	None
300	Chloride	mg/L	500	22000	NA	NC	Acceptable	None
300	Sulfate	mg/L	500	3000	NA	NC	Acceptable	None
351.2	TKN	mg/L	0.2	0.56	NA	NC	Acceptable	None
353.2	Nitrate/Nitrite	mg/L	0.01	0.0073	NA	NC	Acceptable	None
365.1	Phosphorous	mg/L	0.01	0.021	NA	NC	Acceptable	None
2320	Alkalinity	mg/L	1.0	160	NA	NC	Acceptable	None
2540	TDS	mg/L	250	NA	NA	NC	Acceptable	None
4500 NH3	Ammonia	mg/L	0.05	0.036	NA	NC	Acceptable	None
TN	Total Nitrogen	mg/L	0.21	0.57	NA	NC	Acceptable	None
FDEP	Unionized NH3	mg/L	0.000017	NA	NA	NC	Acceptable	None
200.7	Silica	mg/L	2.5	1.9	NA	NC	Acceptable	None
9060	DIC	mg/L	1.0	30	NA	NC	Acceptable	None
4500 PE	OP-dissolved	mg/L	0.5	0.05	NA	NC	Acceptable	None
Non-standard	d18O	‰	NA	2.4	2.5	4.1%	Acceptable	None
Non-standard	d2H	‰	NA	23.9	20.4	15.8%	Acceptable	None
Non-standard	d13C	‰	NA	-5.94	-5.25	12.3%	Acceptable	None
Non-standard	Strontium	‰	NA	0.70918	0.70915	0.0%	Acceptable	None
Non-standard	Tritium	pCi/L	<10	NA	261.6	NC	Acceptable	None

Automated Data Processing Tool (ADaPT)

The laboratory submitted electronic data deliverables (EDDs) for each SDG in the Automated Data Processing Tool (ADaPT) format. These EDDs were run through the ADaPT EDD Error Check by the laboratory against the FDEP generated library “DWM_Library_20100722” before submission. Any critical errors noted in the EDD Error Check are corrected by the laboratory before submission. Comments are provided by the laboratory for the remaining errors noted.

Several points should be noted concerning the ADaPT files. The Library provided to FPL and Test America has acceptance criteria that do not conform to the analytical methods or the project.

- **A project-specific ADaPT Library, based on DWM_Library_20100722 and populated with project specific criteria, should be created to streamline the review process.**

A section specifically for CRQL, serial dilution, post digestion spike, and interference check sample data is not provided in ADaPT. The “overall result qualifier” is utilized to adjust qualifiers and add reasons to the files.

ADaPT automatically applies data qualifier codes to all samples from a batch based on duplicate (LCSD, MSD, LD) data. While the LCSD data should be applied to all samples of a batch, the matrix spikes and laboratory duplicate results should be applied to the original sample only, unless the samples are sufficiently similar. The qualifiers are removed from all samples except the parent.

Qualifiers presented in Table 4 have been added to the ADaPT files and saved. The EDDs have been signed as “Reviewed” and uploaded to the FPL database.

Technical Consistency

Certain technical comparisons are performed on data to ensure validity. The comparisons to be made and the acceptance criteria for each are defined FDEP-QA-002/02, Requirements for Field and Analytical Work. While ADaPT does perform these comparisons, the acceptance criteria in ADaPT is not consistent with QA-002/02. For

instance, ADaPT specifies the ortho-phosphate result must be less than the total phosphorous result. QA-002/02 specifies the ortho-phosphate must be less than 120% of the total phosphorous result. For this review, the QA-002/02 criteria will be followed. The values for the charge balance determination and the cation and anion calculated conductivity are provided in the ADaPT files. The following is a list of the technical comparisons made and the results of those comparisons. Technical comparison calculations are provided in the results summary table provided with this DUS.

- *The total anion charge must be within 80% - 110% of the total cation charge.* TPSWID-2B anion charge was greater than 110% of the cation charge based on values calculated in ADaPT. Calcium, magnesium, sodium, alkalinity, sulfate, chloride, potassium, and nitrate analyses have been qualified as estimated (J) in sample TPSWID-2B.
- *The measured specific conductivity (uS/cm) must be within 80% - 120% of the conductivity estimated from major cation concentrations (calcium, magnesium, sodium, and potassium). This is only required when the initial charge balance calculation does not pass the criterion.* The conductivity versus cation concentration results were within criteria for sample TPSWID-2B. Therefore, no ionic data for TPSWID-2B were qualified based on technical comparisons.
- *The measured specific conductivity (uS/cm) must be within 80% - 120% of the conductivity estimated from major anion concentrations. This is only required when the initial charge balance calculation does not pass the criterion.* The conductivity versus anion concentration results were within criteria for sample TPSWID-2B. Therefore, no ionic data for TPSWID-2B were qualified based on technical comparisons.
- *The TDS concentration must be within 40% -120% of the measured conductivity.* TPGW-8S, TPSWCCS-4B did not pass using field conductivity.
- *The total ammonia concentration must be less than 120% of the total Kjeldahl nitrogen (TKN) concentration.* TPGW-1S, 1D and 3M did not pass. The ammonia concentrations in TPGW-1S, TPGW-1M, and TPGW-3M were higher than 120% of the respective TKN (the sum of organic nitrogen, ammonia, and ammonium) concentrations. Ammonia and TKN have been qualified as estimated (J) in TPGW-3M. **TPGW-1S and 1M ammonia (NH3) results were significantly**

higher; therefore the ammonia and TKN results have been qualified as unusable, ?, in these samples.

- *The orthophosphate concentration must be less than 120% of the total phosphorus concentration.* In several SDG's, the ortho-phosphate results are significantly higher than the total phosphorous results. These include 35826, 35848, 35863, 35918, 35986, 36031, 36059, 36167, 36195, and 36274. Both ortho-phosphate and total phosphorous results have been qualified as estimated (J). This is likely due to matrix effects from the high salinity of the samples. This effect was not observed in samples with lower salinities.
- **The laboratory should be notified to discuss possible alternative methods or procedures for the ortho-phosphate and total phosphorus analyses.**

While not specified in QA-002/02, during the validation, a discrepancy in the nitrogen results was observed. In SDG 36031, the Total Nitrogen result is less than the TKN and nitrate/nitrite sum in sample SWCCS-8B. In sample SWCCS-2B, the Total Nitrogen result is greater than the TKN and nitrate/nitrite sum. The total nitrogen results have been qualified as estimated in samples SWCCS-8B and SWCCS-2B.

Summary

Some results for total phosphorous, ammonia, TKN, and fluoride have been qualified as unusable, ?, due to poor matrix spike and matrix spike duplicate recoveries. With these exceptions, groundwater and surface water analytical data are usable for the purpose of determining current conditions in groundwater and surface waters at the affected property. Qualified data is summarized in Table 4.

Corrective actions to discuss with the field sampling crew include:

- Samplers should review sample identification requirements and review all paperwork for completeness and accuracy.
- Samplers should be sure to verify and document proper sample bottle preservation in the field.
- Samplers should be reminded of the 10AM sampling requirement for chromium.

- Samplers should perform either an equipment blank or field blank at a minimum of one for every twenty samples collected.
- Samplers should be sure to collect the appropriate number of field duplicate samples for each matrix.

Corrective actions to discuss with the laboratory include:

- The MDLs for arsenic, lead, thallium, and sulfides are above the FDEP Class 2 Groundwater criteria. The laboratory should be notified to discuss analytical possibilities to meet the criteria.
- Samples SWC-5T and B were not analyzed by Test America although collected and submitted. Isotopes were analyzed. FPL directed Test America not to analyze these samples as they were scheduled to be re-sampled but never were.
- The laboratory should be notified to ensure all qualified data is reported in the narratives.
- The laboratory should be notified to discuss possible alternative methods or procedures for total phosphorous and ortho-phosphate.

Other notations include:

- TPGW-10, -11, -14 were not sampled due to incomplete construction at time of the sampling event.
- SWCCS-1T, 2T, 3, T, 7T and 8T and BBSW-2S and -3S were not collected due to water depth at time of sampling.
- Sample SWCCS-1B was collected and analyzed twice. The second result from July is reported.
- Method 200.7 was not requested for TPGW-6S, -6M, and -6D.
- Strontium isotope results were not reported for TPGW-1D and -3M.
- Strontium and tritium were not sampled for BBSW-3, -4, -5.
- Tritium result was missing for 070101-TPSWC-DUP1.

Data Quality Indicators

Precision and accuracy results are discussed throughout this DUS with a summary of exceptions noted in Table 5. Based on the number of unusable data points compared to the total submitted for analysis, the project met the completeness goal of 95% for the

water quality quarterly sampling event. Comparability was met based on sampling procedures and analytical method selection, and the use of consistent reporting units.

Table 4 - Summary of Qualified Data

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
35805	6010	061610-TPGW-5D	Sodium	6500	J-	GW	Low CRQL %R
35805	6010	061610-TPGW-5M	Sodium	4900	J-	GW	Low CRQL %R
35826	200.7	061710-TPGW-3S	Arsenic	ND	UJ-	GW	Low CRQL %R
35826	200.7	061710-TPGW-3S	Selenium	ND	UJ-	GW	Low CRQL %R
35826	200.7	061710-TPGW-3M	Arsenic	ND	UJ-	GW	Low CRQL %R
35826	200.7	061710-TPGW-3M	Selenium	ND	UJ-	GW	Low CRQL %R
35826	6010	061710-TPGW-3M	Potassium	490	J	GW	High SD %D
35826	351.2	061710-TPGW-3M	TKN	1.1	J	GW	NH3 > 120% TKN
35826	4500 NH3	061710-TPGW-3M	NH3	1.4	J	GW	NH3 > 120% TKN
35826	200.7	061710-TPGW-3D	Arsenic	ND	UJ-	GW	Low CRQL %R
35826	200.7	061710-TPGW-3D	Selenium	ND	UJ-	GW	Low CRQL %R
35826	6010	061710-TPGW-3D	Potassium	490	J	GW	High SD %D
35826	200.7	061710-TPGW-12S	Arsenic	ND	UJ-	GW	Low CRQL %R
35826	200.7	061710-TPGW-12S	Selenium	ND	UJ-	GW	Low CRQL %R
35826	6010	061710-TPGW-12S	Potassium	440	J	GW	High SD %D
35826	200.7	061710-TPGW-12M	Arsenic	ND	UJ-	GW	Low CRQL %R
35826	200.7	061710-TPGW-12M	Selenium	ND	UJ-	GW	Low CRQL %R
35826	6010	061710-TPGW-12M	Potassium	470	J	GW	High SD %D
35826	200.7	061710-TPGW-3M	Barium	0.11	J	GW	High LD RPD
35826	200.7	061710-TPGW-12S	Zinc	0.0018	IJ	GW	Detected in FB1
35826	6010	061710-TPGW-3S	Calcium	640	J-	GW	Low MS/MSD %R
35826	6010	061710-TPGW-3S	Magnesium	1700	J+	GW	High MS/MSD %R
35826	6010	061710-TPGW-3S	Potassium	450	J+	GW	High MS/MSD %R, High SD %D
35826	6010	061710-TPGW-3S	Sodium	13000	J+	GW	High MS/MSD %R
35826	6010	061710-TPGW-3S	Boron	5.0	J	GW	High MS/MSD %R, Low PDS %R
35826	6010	061710-TPGW-3S	Strontium	11.0	J+	GW	High MS/MSD %R
35826	4500PE	061710-TPGW-3S	OP-Dissolved	0.36	IJ	GW	OP> 120% TP
35826	365.1	061710-TPGW-3S	Phosphorous	0.097	IJ	GW	OP> 120% TP
35826	3500 Cr	061710-TPGW-3M	Chromium	ND	UJ-	GW	Low MS/MSD %R
35826	4500PE	061710-TPGW-3M	OP-Dissolved	0.13	IJ	GW	OP> 120% TP
35826	365.1	061710-TPGW-3M	Phosphorous	0.079	IJ	GW	OP> 120% TP
35826	4500PE	061710-TPGW-3D	OP-Dissolved	0.12	J	GW	OP> 120% TP
35826	365.1	061710-TPGW-3D	Phosphorous	0.08	IJ	GW	OP> 120% TP
35826	353.2	061710-TPGW-12S	Nitrate/Nitrite	0.0052	IJ+	GW	High MS/MSD %R
35826	4500PE	061710-TPGW-12S	OP-Dissolved	0.094	IJ	GW	OP> 120% TP
35826	365.1	061710-TPGW-12S	Phosphorous	0.061	IJ	GW	OP> 120% TP
35826	365.1	061710-TPGW-12M	Phosphorous	0.058	IJ+	GW	High MS/MSD %R
35826	4500PE	061710-TPGW-12M	OP-dissolved	0.11	?	GW	Outside HT, MS/MSD < 10%R, OP>TP
35848	6010	061810-TPGW-12D	Sodium	15000	J	GW	Low CRQL %R
35848	200.7	061810-TPGW-12D	Arsenic	ND	UJ-	GW	Low CRQL %R
35848	200.7	061810-TPGW-12D	Selenium	ND	UJ-	GW	Low CRQL %R, Low ICS %R
35848	353.2	061810-TPGW-12D	Nitrate/nitrite	0.046	J	GW	High FD RPD
35848	6010	061810-TPGW-2S	Sodium	17000	J-	GW	Low CRQL %R

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
35848	200.7	061810-TPGW-2S	Arsenic	ND	UJ-	GW	Low CRQL %R
35848	200.7	061810-TPGW-2S	Selenium	ND	UJ-	GW	Low CRQL %R, Low ICS %R
35848	6010	061810-TPGW-2M	Sodium	18000	J-	GW	Low CRQL %R
35848	200.7	061810-TPGW-2M	Arsenic	ND	UJ-	GW	Low CRQL %R
35848	200.7	061810-TPGW-2M	Selenium	ND	UJ-	GW	Low CRQL %R, Low ICS %R
35848	6010	061810-TPGW-DUP1	Sodium	14000	J-	GW	Low CRQL %R
35848	200.7	061810-TPGW-DUP1	Arsenic	ND	J-	GW	Low CRQL %R
35848	200.7	061810-TPGW-DUP1	Selenium	ND	J-	GW	Low CRQL %R, Low ICS %R
35848	245.1	061810-TPGW-2S	Hg	ND	UJ-	GW	Low MS/MSD %R
35848	4500PE	061810-TPGW-2S	OP-Dissolved	0.12	IJ	GW	OP> 120% TP
35848	365.1	061810-TPGW-2S	Phosphorous	0.036	J	GW	OP> 120% TP
35848	4500PE	061810-TPGW-2M	OP-Dissolved	0.11	IJ	GW	OP> 120% TP
35848	365.1	061810-TPGW-2M	Phosphorous	0.082	IJ	GW	OP> 120% TP
35848	4500 NH3	061810-TPGW-12D	NH3	1.2	J+	GW	High MSD %R
35848	4500PE	061810-TPGW-12D	OP-Dissolved	0.11	?	GW	MS/MSD %R ≤10% OP> 120% TP,
35848	365.1	061810-TPGW-12D	Phosphorous	0.034	IJ	GW	OP> 120% TP
35848	353.2	061810-TPGW-12D	Nitrate/Nitrite	0.046	J	GW	Detected in EB1
35848	4500PE	061810-TPGW-DUP1	OP-Dissolved	0.11	IJ	GW	OP> 120% TP
35848	365.1	061810-TPGW-DUP1	Phosphorous	0.042	J	GW	OP>TP, High FD RPD
35848	353.2	061810-TPGW-DUP 1	Nitrate/Nitrite	0.022	J	GW	Detected in EB1
35863	200.7	062110-TPGW-2D	Barium	0.11	J	GW	High LD, FD RPD
35863	4500PE	062110-TPGW-2D	OP-Dissolved	0.1	IJ	GW	OP> 120% TP
35863	365.1	062110-TPGW-2D	Phosphorous	0.059	J	GW	OP> 120% TP
35863	4500PE	062110-TPGW-6S	OP-Dissolved	0.014	IJ	GW	OP> 120% TP
35863	365.1	062110-TPGW-6S	Phosphorous	0.0044	UJ	GW	OP> 120% TP
35863	300	062110-TPGW-Dup1	Fluoride	ND	UJ-	GW	Low MS/MSD %R
35863	200.7	062110-TPGW-Dup1	Barium	0.14	J	GW	High FD RPD
35863	4500PE	062110-TPGW-Dup1	OP-Dissolved	0.1	IJ	GW	OP> 120% TP
35863	365.1	062110-TPGW-Dup1	Phosphorous	0.057	J	GW	OP> 120% TP
35863	3500 Cr	062110-TPGW-6M	Chromium	ND	UQJ	GW	Outside HT
35863	3500 Cr	062110-TPGW-6D	Chromium	ND	UQJ	GW	Outside HT
35863	3500 Cr	062110-TPGW-2D	Chromium	ND	UQJ	GW	Outside HT
35918	300	062310-BBSW-3D	Fluoride	ND	UJ-	SW	Low MS/MSD %R
35918	4500PE	062310-BBSW-3D	OP-Dissolved	0.048	IJ	SW	OP> 120% TP
35918	365.1	062310-BBSW-3D	Phosphorous	0.019	J	SW	OP> 120% TP
35918	4500PE	062310-BBSW-4D	OP-Dissolved	0.044	IJ	SW	OP> 120% TP
35918	365.1	062310-BBSW-4D	Phosphorous	0.02	J	SW	OP> 120% TP
35918	4500PE	062310-BBSW-5S	OP-Dissolved	0.044	IJ	SW	OP> 120% TP
35918	365.1	062310-BBSW-5S	Phosphorous	0.015	J	SW	OP> 120% TP
35918	4500PE	062310-BBSW-4S	OP-Dissolved	0.053	IJ	SW	OP> 120% TP
35918	365.1	062310-BBSW-4S	Phosphorous	0.025	J	SW	OP> 120% TP
35918	4500PE	062310-BBSW-5D	OP-Dissolved	0.047	IJ	SW	OP> 120% TP
35918	365.1	062310-BBSW-5D	Phosphorous	0.016	J	SW	OP> 120% TP
35986	300	062810-SWCCS-7B	Chloride	39000	J-	SW	Low MS %R

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
35986	4500PE	062810-SWCCS-1B	OP-dissolved	0.069	?	SW	MS/MSD %R <10%
35986	365.1	062810-SWCCS-1B	Phosphorous	0.033	J	SW	OP> 120% TP
35986	4500PE	062810-SWCCS-3B	OP-dissolved	0.071	IJ	SW	OP> 120% TP
35986	365.1	062810-SWCCS-3B	Phosphorous	0.026	J	SW	OP> 120% TP
35986	4500PE	062810-SWCCS-7B	OP-dissolved	0.069	IJ	SW	OP> 120% TP
35986	365.1	062810-SWCCS-7B	Phosphorous	0.025	J	SW	OP> 120% TP
36007	6010	062910-TPSWID-1B	Potassium	38	J	SW	Low ICV %R
36007	6010	062910-TPSWID-1T	Potassium	37	J	SW	Low ICV %R
36007	6010	062910-TPSWID-2B	Potassium	54	J	SW	Low ICV %R
36007	6010	062910-TPSWID-2T	Potassium	17	J	SW	Low ICV %R
36031	200.7	063010-TPGW-13S	Arsenic	0.016	IVJ	GW	Detected in MB, high LD RPD
36031	245.1	063010-TPGW-13S	Mercury	0.000072	UJ-	GW	Low CRQL %R, Low MS/MSD %R
36031	245.1	063010-TPGW-13M	Mercury	0.000072	UJ-	GW	Low CRQL %R
36031	245.1	063010-TPGW-13D	Mercury	0.000072	UJ-	GW	Low CRQL %R
36031	3500	063010-TPGW-13S	Chromium	0.003	IJ-	GW	Low MS/MSD %R
36031	200.7	063010-TPGW-13M	Arsenic	0.018	IV	GW	Detected in MB
36031	TN	TPSWCCS-2B	Total Nitrogen	2.6	J	SW	TN ≠ TKN+NOx
36031	TN	TPSWCCS-8B	Total Nitrogen	1.5	J	SW	TN ≠ TKN+NOx
36031	4500PE	063010-TPGW-13S	OP-dissolved	0.081	J	GW	OP> 120% TP
36031	365.1	063010-TPGW-13S	Phosphorous	0.049	J	GW	OP> 120% TP
36031	4500PE	063010-TPGW-13D	OP-dissolved	0.072	J	GW	OP> 120% TP
36031	365.1	063010-TPGW-13D	Phosphorous	0.035	J	GW	OP> 120% TP
36031	4500PE	063010-SWCCS-2b	OP-dissolved	0.058	J	SW	OP> 120% TP
36031	365.1	063010-SWCCS-2b	Phosphorous	0.028	J	SW	OP> 120% TP
36031	4500PE	063010-SWCCS-8b	OP-dissolved	0.057	J	SW	OP> 120% TP
36031	365.1	063010-SWCCS-8b	Phosphorous	0.03	J	SW	OP> 120% TP
36059	200.7	070110-TPSWID-3B	Iron	0.033	IVJ	SW	Detected in MB, High CCV %R
36059	353.2	070110-TPSWID-3B	Nitrate/Nitrite	0.016	J+	SW	High MS/MSD %R
36059	200.7	070110-TPSWID-3T	Iron	0.037	IVJ	SW	Detected in MB, High CCV %R
36059	4500PE	070110-TPSWID-3T	OP-dissolved	0.0094	J	SW	OP> 120% TP
36059	365.1	070110-TPSWID-3T	Phosphorous	0.0044	UJ	SW	OP> 120% TP
36059	4500PE	070110-TPSWC-4T	OP-dissolved	0.024	IJ	SW	OP> 120% TP
36059	365.1	070110-TPSWC-4T	Phosphorous	0.011	J	SW	OP> 120% TP
36059	200.7	070110-TPSWC-4T	Iron	0.21	J+	SW	High CCV %R
36059	4500PE	070110-TPSWC-4B	OP-dissolved	0.03	IJ	SW	OP> 120% TP
36059	365.1	070110-TPSWC-4B	Phosphorous	0.02	J	SW	OP> 120% TP
36059	200.7	070110-TPSWC-4B	Iron	0.29	J+	SW	High CCV %R
36059	4500PE	070110-TPSWCCS-4B	OP-dissolved	0.078	IJ	SW	OP> 120% TP
36059	365.1	070110-TPSWCCS-4B	Phosphorous	0.024	J	SW	OP> 120% TP
36059	4500PE	070110-TPSWCCS-4T	OP-dissolved	0.076	IJ	SW	OP> 120% TP
36059	365.1	070110-TPSWCCS-4T	Phosphorous	0.024	J	SW	OP> 120% TP
36059	4500PE	070110-TPSWC-DUP1	OP-dissolved	0.05	IJ	SW	OP> 120% TP
36059	365.1	070110-TPSWC-DUP1	Phosphorous	0.021	J	SW	OP> 120% TP
36118	200.7	070710-TPSWC-1B	Iron	0.028	IVJ+	SW	Detected in MB, High

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
							CCV %R
36118	200.7	070710-TPSWC-1T	Iron	0.029	IVJ+	SW	Detected in MB, High CCV %R
36118	200.7	070710-TPSWC-2B	Iron	0.070	IVJ+	SW	Detected in MB, High CCV %R
36118	200.7	070710-TPSWC-2T	Iron	0.034	IVJ+	SW	Detected in MB, High CCV %R
36118	200.7	070710-TPSWC-3B	Iron	0.034	IVJ+	SW	Detected in MB, High CCV %R
36118	200.7	070610-TPGW-8s	Iron	0.042	IVJ+	SW	Detected in MB, High CCV %R
36167	300	070910 SWCCS-5T	Chloride	37000	J-	SW	Low MS/MSD %R
36167	4500PE	070910 SWCCS-1B	OP-dissolved	0.051	IJ	SW	OP> 120% TP
36167	365.1	070910 SWCCS-1B	Phosphorous	0.029	J-	SW	Low MS/MSD %R, OP>TP
36167	4500PE	070910 SWCCS-5B	OP-dissolved	0.062	IJ	SW	OP> 120% TP
36167	365.1	070910 SWCCS-5B	Phosphorous	0.024	J	SW	OP> 120% TP
36167	4500PE	070910 SWCCS-5T	OP-dissolved	0.052	IJ	SW	OP> 120% TP
36167	365.1	070910 SWCCS-5T	Phosphorous	0.024	J	SW	OP> 120% TP
36195	4500PE	071210-TPGW-1S	OP-dissolved	0.05	J	GW	OP> 120% TP
36195	365.1	071210-TPGW-1S	Phosphorous	0.021	J	GW	OP> 120% TP
36195	245.1	071210-TPGW-1S	Mercury	0.000072	UJ-	GW	Low CRQL %R
36195	351.2	071210-TPGW-1S	TKN	1.6	?	GW	NH3 >> 120% TKN
36195	4500 NH3	071210-TPGW-1S	NH3	37	?	GW	NH3 >> 120% TKN
36195	351.2	071210-TPGW-1M	TKN	2.2	?	GW	NH3 >> 120% TKN
36195	4500 NH3	071210-TPGW-1M	NH3	15	?	GW	NH3 >> 120% TKN
36195	4500PE	071210-TPGW-1M	OP-dissolved	0.055	J	GW	OP> 120% TP
36195	365.1	071210-TPGW-1M	Phosphorous	0.023	J	GW	OP> 120% TP
36195	245.1	071210-TPGW-1M	Mercury	0.000072	UJ-	GW	Low CRQL %R
36195	4500PE	071210-TPGW-1D	OP-dissolved	0.061	J	GW	OP> 120% TP
36195	365.1	071210-TPGW-1D	Phosphorous	0.023	J	GW	OP> 120% TP
36195	245.1	071210-TPGW-1D	Mercury	0.000072	UJ-	GW	Low CRQL %R
36274	300	071510-TPSWCCS-6T	Fluoride	0.10	UQ?	SW	Out of HT, MS/MSD %R <10%
36274	300	071510-TPSWCCS-6B	Fluoride	0.10	UQ	SW	Out of HT
36274	4500PE	071510-TPSWCCS-6T	OP-dissolved	0.074	IJ	SW	OP> 120% TP
36274	365.1	071510-TPSWCCS-6T	Phosphorous	0.016	J	SW	OP> 120% TP
36274	4500PE	071510-TPSWCCS-6B	OP-dissolved	0.073	IJ	SW	OP> 120% TP
36274	365.1	071510-TPSWCCS-6B	Phosphorous	0.019	J	SW	OP> 120% TP

Table 5: Data Qualifier Codes

Code	Definition
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	Estimated value. A "J" value shall be accompanied by a detailed explanation to justify the reason(s) for designating the value as estimated. A bias is assigned if discernable.
Q	Holding Time exceeded.
V	Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value. Only for method blank and J qualifier for other blanks.
I	Value detected between the MDL and the reporting limit.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
Code	Bias
+	Bias is high.
-	Bias is low.

Prepared by: Steven Elliott, Chemist, E&E

Date: 10/20/2010

SEPTEMBER 2010

DATA USABILITY SUMMARY

On behalf of Florida Power & Light Company (FPL), Ecology and Environment, Inc. (E & E) reviewed two data packages from Test America Laboratories, Inc. (Test America) and subcontract labs for the analysis of groundwater and surface water samples collected during the September 2010 Quarterly Sampling event at the Turkey Point facility in Homestead, Florida. Data were reviewed for conformance to the requirements of the guidance document, *Florida Power & Light Company, Inc. Turkey Point Monitoring Plan Quality Assurance Project Plan (QAPP), April and August, 2010* (FPL Turkey Point Monitoring Plan QAPP) and modifications provided by FPL to the *South Florida Water Management District during the November 2010 Quarterly meeting*.

Intended Use of Data: To provide current data on the environmental conditions of the groundwater and surface waters in the monitoring area and to assess chemicals of concern levels in groundwater and surface waters and to guide future monitoring actions, if necessary.

Analyses requested included:

- EPA Method 200.7 – Metals, Total, by Inductively Coupled Plasma / Atomic Emission Spectroscopy (ICP/AES) - Ba and Fe
- SW-846-6010 - Metals, Total, by ICP/AES - Ca, Mg, K, Na, B, and Sr
- EPA Method 300 – Anions by Ion Chromatography (bromide, chloride, fluoride, sulfate)
- SM 4500-S2 F – Sulfides
- SM 2320B - Alkalinity
- SM 2540C – Total Dissolved Solids (TDS)
- SW-846-9060 – Dissolved Inorganic Carbon
- Non-standard method - $^{18}\text{O}/^{16}\text{O}$
- Non-standard method - $^2\text{H}/^1\text{H}$
- Non-standard method - $^{13}\text{C}/^{12}\text{C}$
- Non-standard method - $^{87}\text{Sr}/^{86}\text{Sr}$
- Non-standard method - ^3H

Carbon isotope analysis was performed by to the University of Miami, Stable Isotope Laboratory, Rosenstiel School of Marine Atmospheric Science. Hydrogen and Oxygen isotope analyses were performed by the University of Miami, Laboratory of Stable Isotope Ecology. The samples for these analyses were shipped to Test America who forwarded them to the respective labs for analysis. The tritium and strontium isotope samples were shipped directly to United States Geologic Survey (USGS), Menlo Park, California for analysis.

Data were reviewed and validated as described in the *FPL Turkey Point Monitoring Plan QAPP* and the results of the review/validation are discussed in this Data Usability Summary (DUS). The following laboratory submittals and field data were examined:

- the reportable data and the results of supporting quality control (QC) analyses;
- the case narratives;
- the chain of custody (COC) and sample receipt checklist; and
- sampling logs and field logbooks.

Table 1 lists sample and laboratory identifications, methods requested, quality control (QC) performed, and identification corrections. Table 2 lists method and laboratory quality control acceptance criteria. Tables 3a, 3b, 3c summarize field duplicate results. Table 4 summarizes the data qualified as a result of this validation. Table 5 lists the qualifier codes and definitions used to qualify data in this validation.

Corrective actions are noted throughout this DUS in bold print and bulleted. Data qualified as unusable are in bold print.

Introduction

A total of 90 samples were received. Forty-two groundwater samples, 1 groundwater duplicate sample, 5 Biscayne Bay surface water samples, 6 Interceptor Ditch surface water samples, 12 canal surface water samples, 1 canal surface water duplicate sample, 10 Cooling Canal System (CCS) surface water samples, 12 field blanks, and 1 equipment blank were analyzed for one or more of the analyses listed above. Table 1 below lists the sample identifications (IDs) cross-referenced to laboratory identifications and the analyses selected. Also any corrections for the sample ID are noted.

“Level 4 Mini Final Reports” along with the subcontract isotope data were submitted to FPL on December 13, 2010. A revision to the Level 4 reports was submitted to FPL on January 11, 2011. The revision was due to reporting of carbonate versus bicarbonate.

Data Review / Validation Results

Analytical Results

All results were evaluated against the method detection limit (MDL), defined as the minimum concentration of an analyte reported with 99% confidence that the analyte concentration is greater than zero. The reporting limit (RL) or practical quantitation limit (PQL), is defined as the lowest non-zero standard concentration in the calibration curve. Results are reported with an “I” flag if less than the RL but greater than the MDL. Non-detected results are reported as less than the value of the MDL.

Table 1: Sample Listing

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
37075	GW	090910-TPGW-13D	660-37169-1	9/9/2010	300,2320,2540,4500S, 9060,200.7,6010	200.7-LD, MS/MSD, PDS, 2320B-LD, 2540C-LD	None
37075	GW	090910-TPGW-13M	660-37169-2	9/9/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	090910-TPGW-13S	660-37169-3	9/9/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091510-TPGW-6S	660-37257-1	9/15/2010	300,2320,2540,4500S, 9060,200.7,6010	200.7-LD, MS/MSD, PDS, 245.1-MS/MSD,SD, 300- MS/MSD, 2320B-LD	None
37075	GW	091510-TPGW-6M	660-37257-2	9/15/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091510-TPGW-6D	660-37257-3	9/15/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091510-TPGW-9S	660-37257-4	9/15/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091510-TPGW-9M	660-37257-5	9/15/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091510-TPGW-9D	660-37257-6	9/15/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091510-FB1	660-37257-7	9/14/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091410-TPGW-1S	660-37260-1	9/14/2010	300,2320,2540,4500S, 9060,200.7,6010	300-MS/MSD	None
37075	GW	091410-TPGW-1M	660-37260-2	9/14/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091410-TPGW-1D	660-37260-3	9/14/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091410-TPGW-5S	660-37260-4	9/14/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091410-TPGW-5M	660-37260-5	9/14/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091410-TPGW-5D	660-37260-6	9/14/2010	300,2320,2540,4500S, 9060,200.7,6010	2540C-LD	None
37075	GW	091710-FB1	660-37307-1	9/17/2010	300,2320,2540,4500S, 9060,200.7,6010		None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
37075	GW	091710-TPGW-7D	660-37307-2	9/17/2010	300,2320,2540,4500S, 9060,200.7,6010	300-MS/MSD	None
37075	GW	091710-TPGW-7M	660-37307-3	9/17/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091710-TPGW-7S	660-37307-4	9/17/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091710-TPGW-4D	660-37307-5	9/17/2010	300,2320,2540,4500S, 9060,200.7,6010	2320B-LD	None
37075	GW	091710-TPGW-4M	660-37307-6	9/17/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091710-TPGW-4S	660-37307-7	9/17/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091610-TPGW-12S	660-37308-1	9/16/2010	300,2320,2540,4500S, 9060,200.7,6010	2320B-LD	None
37075	GW	091610-TPGW-12M	660-37308-2	9/16/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091610-TPGW-12D	660-37308-3	9/16/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	091610-FB1	660-37308-4	9/16/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-FB1	660-37378-1	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-TPGW-8S	660-37378-2	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010	2320B-LD	None
37075	GW	092010-TPGW-8M	660-37378-3	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-TPGW-8D	660-37378-4	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-TPGW-2S	660-37378-5	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-TPGW-2M	660-37378-6	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-TPGW-2D	660-37378-7	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-TPGW-3S	660-37378-8	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092010-TPGW-3M	660-37378-9	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
37075	GW	092010-TPGW-3D	660-37378-10	9/20/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092310-FB1	660-37429-1	9/23/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092310-TPGW-11M	660-37429-2	9/23/2010	300,2320,2540,4500S, 9060,200.7,6010	200.7-LD, MS/MSD, PDS, SD, 2320B-LD	None
37075	GW	092310-TPGW-11S	660-37429-3	9/23/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092310-DUP1	660-37429-5	9/23/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092210-TPGW-10S	660-37431-3	9/22/2010	300,2320,2540,4500S, 9060,200.7,6010	200.7- LD,MS/MSD,PDS,SD, 2320B-LD	None
37075	GW	092210-TPGW-10M	660-37431-4	9/22/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092210-TPGW-10D	660-37431-5	9/22/2010	300,2320,2540,4500S, 9060,200.7,6010	2540C-LD	None
37075	GW	092710-TPGW-14S	660-37462-1	9/27/2010	300,2320,2540,4500S, 9060,200.7,6010	200.7- LD,MS/MSD,PDS,SD, 2320B-LD	None
37075	GW	092710-TPGW-14M	660-37462-2	9/27/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092710-TPGW-14D	660-37462-3	9/27/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37075	GW	092710-TPGW-11D	660-37462-4	9/27/2010	300,2320,2540,4500S, 9060,200.7,6010		None
37076	SW	090810-TPSWID-1B	660-37123-1	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010	200.7-MS/MSD,PDS,SD, 300-MS/MSD,	None
37076	SW	090810-TPSWCCS- 1B	660-37123-2	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010	200.7-LD, 2320-LD	None
37076	SW	090810-TPSWID-1T	660-37123-3	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090810-FB1	660-37123-4	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090810-TPSWCCS- 7B	660-37123-5	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090810-TPSWID-2B	660-37123-6	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010		None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
37076	SW	090810-TPSWID-3T	660-37123-7	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090810-TPSWID-2B	660-37123-8	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090810-TPSWID-2T	660-37123-9	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010	9060-LD	None
37076	SW	090810-TPSWCCS-3B	66037123-10	9/8/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090710-TPSWC-3B	660-37125-1	9/7/2010	300,2320,2540,4500S,9060,200. 7,6010	200.7-LD, 2320-LD	None
37076	SW	090710-TPSWC-3T	660-37125-2	9/7/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090710-TPSWC-2B	660-37125-3	9/7/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090710-TPSWC-2T	660-37125-4	9/7/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090710-TPSWC-1B	660-37125-5	9/7/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090710-TPSWC-1T	660-37125-6	9/7/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090710-FB1	660-37125-7	9/7/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090910-EB1	660-37170-1	9/9/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090910-TPSWC-5T	660-37170-2	9/9/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090910-TPSWC-4T	660-37170-3	9/9/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090910-TPSWC-4B	660-37170-4	9/9/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090910-TPSWC-5B	660-37170-5	9/9/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	090910-TPSWCCS-2B	660-37170-6	9/9/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	091110-FB1	660-37198-1	9/11/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	091110-TPSWCCS-5B	660-37198-2	9/11/2010	300,2320,2540,4500S,9060,200. 7,6010		None
37076	SW	091110-TPSWCCS-	660-37198-3	9/11/2010	300,2320,2540,4500S,9060,200.		None

SDG	Matrix	Sample ID	Lab ID	Sample Date	Analyses	QC	ID Corr.
		5T			7,6010		
37076	SW	091110-TPSWCCS-4B	660-37198-4	9/11/2010	300,2320,2540,4500S,9060,200.7,6010	300-MS/MSD	None
37076	SW	091110-TPSWCCS-4T	660-37198-5	9/11/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	091110-TPSWCCS-6B	660-37198-6	9/11/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	091110-TPSWCCS-6T	660-37198-7	9/11/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	091410-FB1	660-37259-1	9/14/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	091410-DUP1	660-37259-2	9/14/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	091410-TPSWC-6B	660-37259-3	9/14/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	091410-TPSWC-6T	660-37259-4	9/14/2010	300,2320,2540,4500S,9060,200.7,6010	2320-LD	None
37076	SW	092310-BBSW-2B	660-37429-4	9/14/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	092310-DUP1	660-37429-5	9/23/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	092410-FB1	660-37429-6	9/24/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	092410-BBSW-5B	660-37429-7	9/24/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	092410-BBSW-4B	660-37429-8	9/24/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	092710-BBSW-3B	660-37464-1	9/27/2010	300,2320,2540,4500S,9060,200.7,6010	300-MS/MSD	None
37076	SW	092810-BBSW-1B	660-37464-2	9/28/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	092710-FB1	660-37464-3	9/27/2010	300,2320,2540,4500S,9060,200.7,6010		None
37076	SW	092810-FB1	660-37464-4	9/28/2010	300,2320,2540,4500S,9060,200.7,6010		None

Quality Control (QC) Acceptance Criteria

Table 2 summarizes the analytical method and laboratory QC requirements and criteria for each method performed during this event. Criteria reviewed include initial and continuing calibration verifications (ICV/CCV), interference check standards (ICS), contract required quantitation limit (CRQL) standards, laboratory control samples (LCS), matrix spikes (MS), lab duplicates for samples, control, and matrix spikes (Dup), post digestion spikes (PDS), and serial dilutions (SD). Not all criteria are required for each method.

Table 2: Method and Laboratory QC Acceptance Criteria

Method	Source	IC/CCV	ICS	CRQL	LCS	MS	Dup	PDS	SD
200.7	Method	±5/±10	±20%	NA	±15%	±30%	NA	±15%	±10%
	Lab	±5/±10	±20%	±50%	±15%	±30%	20%	±15%	±10%
300	Method	±10/±10	NA	NA	±10%	±20%	NA	NA	NA
	Lab	±10/±10	NA	NA	±10%	±10%	30%	NA	NA
6010	Method	±10%mid ±30%low	NA	NA	±20%	±25%	20%	±20%	±10%
	Lab	±10/±10	±20%	±50%	±25%	±25%	20%	±25%	±10%
9060	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	±10/±10	NA	NA	Not listed	NA	NA	NA	NA
4500 S2F	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±25%	NA	25%	NA	NA
2320B	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±20%	NA	30%	NA	NA
2540C	Method	NA	NA	NA	NA	NA	NA	NA	NA
	Lab	NA	NA	NA	±20%	NA	20%	NA	NA
² H/ ¹ H	Lab	NA	NA	NA	±2‰	NA	NA	NA	NA
¹⁸ O/ ¹⁶ O	Lab	NA	NA	NA	±0.07‰	NA	NA	NA	NA
¹³ C/ ¹² C	Lab	NA	NA	NA	±0.1‰	NA	NA	NA	NA
⁸⁷ Sr/ ⁸⁶ Sr	Lab	NA	NA	NA	±0.001%	NA	NA	NA	NA
³ H	Lab	NA	NA	NA	NA	NA	NA	NA	NA

NA = Not applicable.

The laboratory limits either met or exceeded method requirements in all cases with one exception. The Method 6010 Laboratory Control Sample (LCS) criteria are listed as 80-120% while the laboratories' criteria is 75-125% although the laboratory is allowed by the method to establish criteria based on historical results.

Laboratory acceptance limits are used for this validation with the exception of the duplicate precision criteria (20% for aqueous samples, 40% for other matrices).

Documentation

Samples were evaluated for agreement with the COC. All samples were received in the appropriate containers and in good condition with the paperwork filled out properly with a few exceptions. In SDG 37075, strontium and tritium bottles for sample 091510-TPGW-9D were received but not on the COC. The laboratory corrected and analyzed appropriately. Hydrogen and oxygen isotope bottles for samples 092210-FB1 and 092810-BBSW-1B were received but not on the COC. The laboratory corrected and analyzed appropriately.

In SDG 37076, sample 090810-TPSWID-2B shows -3B on 200.7 and hydrogen bottle. The laboratory corrected and analyzed appropriately.

Preservation and Holding Times

Samples were shipped and received in good condition with a few exceptions. The 090910-EB1 bottles for carbon and hydrogen isotopes were received 1/3 full. The carbon isotope bottle cap for sample 091610-TPGW-12D was missing; the sample was empty upon receipt. The lab used a sample from other unpreserved bottles for analysis.

Samples were preserved in the field as specified in FPL Turkey Point Monitoring Plan QAPP with a few exceptions. In SDG 37075, one DIC bottle was received without preservation. The laboratory preserved and analyzed appropriately.

Samples were prepared and analyzed within holding times specified in the FPL Turkey Point Monitoring Plan QAPP.

Calibrations

Calibration applies to methods 200.7, 6010, 300, 245.1, 2320, and 2540C. According to the data sheets, initial calibration and continuing calibration data met method requirements. No samples were qualified based on calibration results.

MDL/RL/CRQL

All MDLs are below the Florida Department of Environmental Protection (FDEP) Class 2 Groundwater criteria. Sulfide had an MDL of 1.0 mg/L in all analyses, above the Department of Environmental Resource Management (DERM) criterion of 0.2 mg/L.

The CRQL, or Contract Required Quantitation Limit, is the low level calibration standard analyzed as a sample. This standard is required for methods 200.7 and 6010. The standard must be analyzed during each run and must have a percent recovery within 50-150% of the true value. No samples were qualified based on CRQL results.

Interference Check Standards

Interference Check Standards (ICS) are required in Methods 6010 and 6020. The ICS consists of two solutions: A and AB. Solution A contains the possible interferents and solution AB contains the analytes and interferents. ICS results must fall within the acceptance recovery criteria of 80-120%. No samples were qualified based on ICS results.

Blanks

The laboratory performs calibration and preparation (method) blanks if required by the analytical method. Sample results for analytes detected in an associated method or preparation blank at concentrations less than ten times the equivalent blank concentration will be qualified as "V" at the reported concentration. Sample results for analytes detected in all other blanks (i.e., field, equipment, calibration) at concentrations less than ten times the equivalent blank concentration shall be qualified as "J" at the reported concentration. All laboratory blanks were performed at the required frequency. For the September 2010 Quarterly Event, a total of 13 field blanks and one equipment blank were collected and submitted for analysis. With 90 samples collected, a minimum of five field QC blanks (equipment blank or field blank) should have been collected based on FDEP SOP FQ 1000. It should be noted that blank contamination can only be

applied to samples collected the same day and with the same equipment. Data from different days cannot be qualified based on the blank contamination.

Boron was detected in the field blank 090710-FB1. Boron results have been qualified as estimated (J) in samples 090710-TPSWC-1T, 1B, 2T, 2B, 3T, and 3B.

Iron, alkalinity and bicarbonate were detected in the equipment blank 090910-EB1. However, either the analyte was not detected or the concentrations detected in the associated samples were greater than 10 times the amount detected in the blanks, therefore no data was qualified.

Calcium, strontium, magnesium, sodium, alkalinity and bicarbonate were detected in the field blank 091110-FB1. However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blanks, therefore no data was qualified.

Tritium was detected in the field blank 091410-FB1. Tritium results (less than 10 times the blank concentration) have been qualified as estimated (J) in sample TPGW-5S.

Mercury, alkalinity, and carbonate were detected in the field blank 091510-FB1. However, either the analyte was not detected or the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank, therefore no data was qualified. Tritium was detected in the field blank 091510-FB1. Tritium results have been qualified as estimated, J, in samples TPGW-6D and TPGW-9S.

Chloride and magnesium were detected in the field blank 091610-FB1. However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank and therefore no data was qualified.

Barium was detected in the field blank 091710-FB1. However, either the analyte was not detected or the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank, therefore no data was qualified.

Alkalinity and bicarbonate were detected in the field blanks 092010-FB1, 092310-FB1, and 092410-FB1. However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blanks, therefore no data was qualified.

Tritium was detected in the field blank 092010-FB1. Tritium results have been qualified as estimated (J) in sample TPGW-8S,

Tritium was detected in the field blank 092210-FB1. Tritium results have been qualified as estimated (J) in sample TPGW-10S and TPGW-10M.

Sulfate, alkalinity and bicarbonate were detected in the field blank 090810-FB1 and 092710-FB1. However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blanks, therefore no data was qualified.

Iron, calcium, magnesium, alkalinity and bicarbonate were detected in field blank 092810-FB1. However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blanks, therefore no data was qualified.

Strontium was detected in 090810-FB1, 090910-EB1, 091110-FB1, 091410-FB1, 091510-FB1, and 091610-FB1. The blank results were reported in parts per billion. However, the related strontium results are reported as unitless ratios. USGS states the concentrations detected in the blanks are typical. No data was qualified based on the blank results.

Barium was detected in a Method 200.7 method blank (37075-73188). Barium results have been qualified as detected in the method blank, V, in sample 091710-FB1. Iron was detected in a Method 200.7 method blank (37075-73473). However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank, therefore no data was qualified.

Sulfate and chloride were detected in a Method 300.0 calibration blank (37075-100968). However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank, therefore no data was qualified.

Iron was detected in the Method 200.7 method blank (37076-73473). However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank, therefore no data was qualified.

Chloride was detected in a calibration blank. However, the concentrations detected in the associated samples were greater than 10 times the amount detected in the blank, therefore no data was qualified.

Laboratory Control Samples

Laboratory Control Samples (LCS) recoveries for all applicable analyses were within laboratory acceptance criteria and were performed at the required frequency.

Matrix Spike/Matrix Spike Duplicates

MS/MSD samples were performed at the required frequency for applicable methods. Recovery calculations are not required if the concentration added is less than 30% of the sample background concentration. MS/MSD recoveries of less than 10% are qualified as unusable due to apparent significant matrix effects. MS/MSD precision and accuracy results for all applicable analyses were within project objectives with the following exceptions.

In SDG 37075, the Method 300 MS/MSD recovery of bromide and sulfate were below laboratory established limits in sample 091510-TPGW-6S. These analytes have been qualified as estimated with a low bias, J-, in 091510-TPGW-6S. The Method 300 MS/MSD recovery of sulfate was below laboratory limits in sample 091410-TPGW-1S. Sulfate has been qualified as estimated with a low bias (J-) in 091410-TPGW-1S. The Method 300 MS/MSD recovery of chloride and sulfate was below laboratory limits in sample 091710-TPGW-7D. These analytes have been qualified as estimated with a low bias (J-) in 091710-TPGW-7D.

In SDG 37076, the Method 300 MS/MSD recoveries of bromide and sulfate were below laboratory established limits in sample 091110-TPSWCCS-4B. Sulfate has been qualified with a low bias (J-) in 091110-TPSWCCS-4B. Bromide was not detected in the parent sample and since the bias is high, no qualification was necessary.

The Method 300 MS/MSD recoveries of bromide and fluoride were below laboratory limits in sample 090810-TPSWID-1B. These analytes have been qualified as estimated with a low bias (J-) in 090810-TPSWID-1B.

The Method 300 MSD recovery of chloride was above laboratory limits in sample 092710-BBSW-3B. The MS/MSD recovery of sulfate was below laboratory limits. Chloride has been qualified as estimated with a high bias (J+) and sulfate has been qualified with a low bias (J-) in 092710-BBSW-3B.

Post Digestion Spike

A PDS is applicable to Methods 6010 and 200.7 If MS recoveries are outside project objectives and the sample result is < 4x the spike added, a PDS shall be performed. PDS percent recovery acceptance criteria are the same as the MS criteria, 75-125%R. No samples were qualified based upon PDS results.

Serial Dilution

Inductively coupled plasma (ICP) serial dilutions are run to help evaluate whether significant physical or chemical interferences exist due to sample matrix. When analyte concentrations are sufficiently high (the concentration in the original sample is minimally a factor of 50 above the detection limit, the results obtained for a five-fold dilution of the original sample are compared to the original results by means of a percent difference (%D). The %D is compared to a precision acceptance limit of $\pm 10\%$. If the SD does not meet the criteria, all results for that analyte in the associated sample delivery group (SDG) are qualified as estimated (flagged "J/UJ"). No samples were qualified based on SD results.

Laboratory Duplicates

Laboratories randomly select samples to perform internal duplicate analyses. The criteria for laboratory duplicate precision, as relative percent difference (RPD), is less than or equal to 20% for aqueous samples. All duplicate precision was within project objectives with the following exceptions.

In SDG 37075, the 200.7 laboratory duplicate had a high RPD for barium in sample 090910-TPGW-13D. Barium has been qualified as estimated (J) in sample 090910-TPGW-13D.

The laboratory duplicate had a high RPD for iron in sample 092310-TPGW-11M. Iron has been qualified as estimated (J) in sample 092310-TPGW-11M.

Forty-two groundwater samples, 1 groundwater duplicate sample, 5 Biscayne Bay surface water samples, 6 Interceptor Ditch surface water samples, 12 canal surface water samples, 1 canal surface water duplicate sample, 10 Cooling Canal System (CCS) surface water samples,

Field Precision

The criteria for field duplicate precision, as RPD, is less than or equal to 20% for aqueous samples, the same as for laboratory duplicate precision. The results for analytes where both values are greater than the reporting limit are given as relative percent difference. Results of analytes where one or both values are less than the reporting limit are not considered appropriate for assessing precision. Two field duplicate pairs were collected during the sampling event: 091410-TPSWC-6T & 091410- DUP1 and 092310-TPGW-11M & 092310- DUP1. With 42 groundwater samples collected, a minimum of 3 field duplicates should have been collected. With 33 surface water samples, a minimum of 2 field duplicates should have been collected. Tables 3a and 3b summarize field duplicate precision results.

In the field duplicate pair 091410-TPSWC-6T & 091410- DUP1, the hydrogen and oxygen isotope results had high RPDs. These results have been qualified as estimated (J) in both samples.

In the field duplicate pair 092310-TPGW-11M & 092310- DUP1, the tritium results had high RPDs. Tritium has been qualified as estimated (J) in both samples.

Table 3a - Field Precision

Method	Analyte	Unit	MQL	091410-TPSWC-6T	091410-DUP 1	RPD / Abs. Diff.	Rating	Samp Qual
6010	Calcium	mg/L	2.0	79	82	3.7%	Acceptable	None
6010	Magnesium	mg/L	0.32	8.0	8.6	7.2%	Acceptable	None
6010	Potassium	mg/L	50	8.0	8.1	1.2%	Acceptable	None
6010	Sodium	mg/L	100	49	53	7.8%	Acceptable	None
6010	Strontium	mg/L	0.02	0.85	0.86	1.2%	Acceptable	None
300	Bromide	mg/L	5.0	0.46	0.46	0.0%	Acceptable	None
300	Chloride	mg/L	500	87	88	1.1%	Acceptable	None
300	Fluoride	mg/L	500	0.11	0.10	9.5%	Acceptable	None
300	Sulfate	mg/L	50	33	34	3.0%	Acceptable	None
2320	Alkalinity	mg/L	1.0	160	160	0.0%	Acceptable	None
2320	Bicarbonate	mg/L	1.0	160	160	0.0%	Acceptable	None
9060	DIC	mg/L	1.0	43	42	2.4%	Acceptable	None
Non-standard	d18O	‰	NA	-0.5	-0.8	-46.2%	>20%	J
Non-standard	d2H	‰	NA	1.0	-6.0	-280.0%	>20%	J
Non-standard	d13C	‰	NA	-11.79	-11.86	-0.6%	Acceptable	None
Non-standard	dSr87/86	‰	NA	0.70917	0.70915	0.0%	Acceptable	None
Non-standard	Tritium	pCi/L	<5	17.3	15.3	12.3%	Acceptable	None

Key:

Abs. Diff -

DUP - Duplicate

mg/L – Milligrams per liter.

MQL -

NA – Not analyzed.

NC – Not calculated.

ND – Not detected.

pCi/L – PicoCuries per liter.

RPD –

TPSWC – Turkey Point Surface Water Canal

Table 3b - Field Precision

Method	Analyte	Unit	MQL	092310-TPGW-11M	092310-DUP1	RPD / Abs. Diff.	Rating	Samp Qual
6010	Calcium	mg/L	5.0	540	530	1.9%	Acceptable	None
6010	Magnesium	mg/L	0.8	1500	1400	6.9%	Acceptable	None
6010	Potassium	mg/L	200	500	460	8.3%	Acceptable	None
6010	Sodium	mg/L	100	13000	12000	8.0%	Acceptable	None
6010	Boron	mg/L	0.5	5.2	5.2	0.0%	Acceptable	None
6010	Strontium	mg/L	0.05	9.0	9.0	0.0%	Acceptable	None
300	Bromide	mg/L	5.0	60	65	8.0%	Acceptable	None
300	Chloride	mg/L	500	22000	22000	0.0%	Acceptable	None
300	Sulfate	mg/L	500	2700	2600	3.8%	Acceptable	None
2320	Alkalinity	mg/L	1.0	320	310	3.2%	Acceptable	None
2320	Bicarbonate	mg/L	1.0	320	310	3.2%	Acceptable	None
9060	DIC	mg/L	1.0	85	84	1.2%	Acceptable	None
Non-standard	d18O	‰	NA	1.6	1.5	6.5%	Acceptable	None
Non-standard	d2H	‰	NA	17	18	5.7%	Acceptable	None
Non-standard	d13C	‰	NA	-10.88	-10.88	0.0%	Acceptable	None
Non-standard	dSr87/86	‰	NA	0.70912	0.70919	0.0%	Acceptable	None
Non-standard	Tritium	pCi/L	<5	26.6	20.1	27.8%	>20%	J

Automated Data Processing Tool (ADaPT)

The laboratory submitted electronic data deliverables (EDDs) for each SDG in the ADaPT format. These EDDs were run through the ADaPT EDD Error Check by the laboratory against the FDEP generated library “DWM_Library_20100722” before submission. Any critical errors noted in the EDD Error Check are corrected by the laboratory before submission. Comments are provided by the laboratory for the remaining errors noted.

Several Points should be noted concerning the ADaPT files. The library provided to FPL and TestAmerica has acceptance criteria that do not conform to the analytical methods or the project.

A section specifically for CRQL, serial dilution, post digestion spike, and interference check sample data is not provided in ADaPT. The “overall result qualifier” is utilized to adjust qualifiers and add reasons to the files.

ADaPT automatically applies data qualifier codes (Table 5) to all samples from a batch based on duplicate (laboratory control spike duplicates, matrix spike duplicates, and laboratory duplicates) data. While the LCSD data should be applied to all samples of a batch, the matrix spikes and laboratory duplicate results should be applied to the original sample only, unless the samples are sufficiently similar. The qualifiers are removed from all samples except the parent.

All qualifiers presented in Table 4 have been added to the ADaPT files and saved. The EDDs have been signed as “Reviewed” and uploaded to the FPL database.

Technical Consistency

Certain technical comparisons are performed on data to ensure validity. The comparisons to be made and the acceptance criteria for each are defined FDEP-QA-002/02, Requirements for Field and Analytical Work. The values for the charge balance determination and the cation and anion calculated conductivity are provided in the ADaPT files. The following is a list of the technical comparisons made and the results of

those comparisons. Technical comparison calculations are provided in the results summary table provided with this DUS.

- *The total anion charge must be within 80% - 110% of the total cation charge.* TPGW-12S, TPGW-2S, BBSW-2B, BBSW-4B, TPSWC-4B, TPSWCCS-4T, TPSWCCS-5T, and TPSWCCS-6T anion charge was greater than 110% of the cation charge based on values calculated in ADaPT.
- *The measured specific conductivity (uS/cm) must be within 80% - 120% of the conductivity estimated from major cation concentrations. **This is only required when the initial charge balance calculation does not pass the criterion.*** The conductivity versus cation concentration results were within criteria for each sample except TPSWCCS-4T and TPSWCCS-6T. Calcium, magnesium, sodium, and potassium data were qualified as estimated, J/UJ, in samples TPSWCCS-4T and TPSWCCS-6T based on technical comparisons
- *The measured specific conductivity (uS/cm) must be within 80% - 120% of the conductivity estimated from major anion concentrations. **This is only required when the initial charge balance calculation does not pass the criterion.*** The conductivity was lower than 80% of the anion concentration in TPGW-12S, TPGW-2S, BBSW-4B and TPSWCCS-5T. Alkalinity, bromide, sulfate, chloride, and fluoride analyses have been qualified as estimated, J/UJ, in samples TPGW-12S, TPGW-2S, BBSW-4B and TPSWCCS-5T based on technical comparisons.

Summary

No results have been qualified as unusable. Groundwater and surface water analytical data are usable for the purpose of determining current conditions in groundwater and surface waters at the affected property. Qualified data is summarized in Table 4 below. Qualifier codes and definitions are summarized in Table 5.

Some results for tritium have been qualified as estimated not detected (UJ) because the sample result was less than the stated uncertainty for the associated measurement.

Corrective actions to discuss with the field sampling crew include:

- Samplers should review sample identification requirements and review all paperwork for completeness and accuracy.
- Samplers should be sure to verify and document proper sample bottle preservation and storage in the field.
- Samplers should be sure to collect the appropriate number of field duplicate samples for each matrix.

Other notations include:

- Samples were collected for a few analytes that were not required. This data is not reported in the summary tables.
- A carbon isotope result is not reported in the lab EDD for sample TPSWCCS-3B. Sample was collected and submitted to Test America.
- A tritium result for sample 091110-FB1 is not reported. Sample was collected and submitted to USGS.
- Hydrogen and oxygen isotope results for sample 092710-FB1 is not reported. Sample was collected and submitted to TA.
- A TDS sample was not collected for samples 092310-DUP1 and 092310-FB1.
- TPSWCCS-1T, 2T, 3T, and 7T not sampled due to depth of water.

Data Quality Indicators

Precision and accuracy results are discussed throughout this DUS with a summary of exceptions noted in Table 4. Based on the number of usable or missed data points compared to the total submitted for analysis, the project met the completeness goal of 95% for the water quality quarterly sampling event. Comparability was met based on sampling procedures and analytical method selection, and the use of consistent reporting units.

Table 4 - Summary of Qualified Data

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
37075	200.7	090910-TPGW-13D	Barium	0.110 mg/L	J	GW	High LD RPD
37075	200.7	091710-FB1	Barium	0.001 mg/L	V	AQ	Detected in MB 73188
37075	200.7	092310-TPGW-11M.	Barium	0.820 mg/L	J	GW	High LD RPD
37075	300	091510-TPGW-6S	Bromide	0.00079 mg/L	J-	GW	Low MS/MSD %R
37075	300	091510-TPGW-6S	Sulfate	13 mg/L	J-	GW	Low MS/MSD %R
37075	300	091410-TPGW-1S	Sulfate	1400 mg/L	J-	GW	Low MS/MSD %R
37075	300	091710-TPGW-7D	Chloride	41 mg/L	J-	GW	Low MS/MSD %R
37075	300	091710-TPGW-7D	Sulfate	25 mg/L	J-	GW	Low MS/MSD %R
37075	Non-standard	091410-TPGW-5S	Tritium	20.4 pC/L	J	GW	Detected in FB
37075	Non-standard	091510-TPGW-6D	Tritium	17.9 pC/L	J	GW	Detected in FB
37075	Non-standard	091510-TPGW-9S	Tritium	6.9 pC/L	J	GW	Detected in FB
37075	Non-standard	092010-TPGW-8S	Tritium	12.6 pC/L	J	GW	Detected in FB
37075	Non-standard	092010-TPGW-8M	Tritium	11.6 pC/L	J	GW	Detected in FB
37075	Non-standard	092210-TPGW-10S	Tritium	21.5 pC/L	J	GW	Detected in FB
37075	Non-standard	092210-TPGW-10M	Tritium	7.8 pC/L	J	GW	Detected in FB
37075	Non-standard	091510-TPGW-6S	Tritium	2.6 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	091510-TPGW-6M	Tritium	4.7 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	091710-TPGW-7S	Tritium	3.2 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	091710-TPGW-7D	Tritium	4.0 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	092010-TPGW-8D	Tritium	-2.1 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	091510-TPGW-9M	Tritium	-2.7 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	091510-TPGW-9D	Tritium	-0.6 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	092210-TPGW-10D	Tritium	2.4 pC/L	UJ	GW	Result<uncertainty
37075	Non-standard	092310-TPGW-11M	Tritium	26.6 pC/L	J	GW	High FD RPD
37075	Non-	092310-TPGW-	Tritium	20.1 pC/L	J	GW	High FD RPD

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
	standard	DUP1					
37076	6010	090710-TPSWC-1T	Boron	0.055 mg/L	J	SW	Detected in FB
37076	Non-standard	090710-TPSWC-1T	Tritium	8.4 pC/L	UJ	SW	Result<uncertainty
37076	6010	090710-TPSWC-1B	Boron	0.057 mg/L	J	SW	Detected in FB
37076	6010	090710-TPSWC-2T	Boron	0.046 mg/L	J	SW	Detected in FB
37076	6010	090710-TPSWC-2B	Boron	0.043 mg/L	J	SW	Detected in FB
37076	6010	090710-TPSWC-3T	Boron	0.044 mg/L	J	SW	Detected in FB
37076	6010	090710-TPSWC-3B	Boron	0.045 mg/L	J	SW	Detected in FB
37076	300	091110-TPSWCCS-4B	Sulfate	4300 mg/L	J-	SW	Low MS/MSD %R
37076	300	090810-TPSWID-1B	Bromide	3.2 mg/L	J-	SW	Low MS/MSD %R
37076	300	090810-TPSWID-1B	Sulfate	83 mg/L	J-	SW	Low MS/MSD %R
37076	300	092710-BBSW-3B	Chloride	16000 mg/L	J+	SW	High MS/MSD %R
37076	300	092710-BBSW-3B	Sulfate	2200 mg/L	J-	SW	Low MS/MSD %R
37076	Non-standard	090810-FB1	Tritium	6.8 pC/L	UJ	SW	Result<uncertainty
37075	300	092010-TPGW-2S	Bromide	97 mg/L	J	GW	Charge Balance
37075	300	092010-TPGW-2S	Chloride	30000 mg/L	J	GW	Charge Balance
37075	300	092010-TPGW-2S	Fluoride	0.10 mg/L	UJ	GW	Charge Balance
37075	300	092010-TPGW-2S	Sulfate	3400 mg/L	J	GW	Charge Balance
37075	2320	092010-TPGW-2S	Alkalinity	170 mg/L	J	GW	Charge Balance
37075	2320	092010-TPGW-2S	Bicarbonate	170 mg/L	J	GW	Charge Balance
37075	300	091610-TPGW-12S	Bromide	0.14 mg/L	UJ	GW	Charge Balance
37075	300	091610-TPGW-12S	Chloride	16000 mg/L	J	GW	Charge Balance
37075	300	091610-TPGW-12S	Fluoride	0.020 mg/L	UJ	GW	Charge Balance
37075	300	091610-TPGW-12S	Sulfate	1700 mg/L	J	GW	Charge Balance
37075	2320	091610-TPGW-12S	Alkalinity	480 mg/L	J	GW	Charge Balance
37075	2320	091610-TPGW-12S	Bicarbonate	480 mg/L	J	GW	Charge Balance
37076	6010	091110-TPSWCCS-4T	Calcium	680 mg/L	J	SW	Charge Balance
37076	6010	091110-TPSWCCS-4T	Magnesium	2200 mg/L	J	SW	Charge Balance

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
37076	6010	091110-TPSWCCS-4T	Potassium	670 mg/L	J	SW	Charge Balance
37076	6010	091110-TPSWCCS-4T	Sodium	17000 mg/L	J	SW	Charge Balance
37076	300	091110-TPSWCCS-4T	Bromide	100 mg/L	J	SW	Charge Balance
37076	300	091110-TPSWCCS-4T	Chloride	37000 mg/L	J	SW	Charge Balance
37076	300	091110-TPSWCCS-4T	Fluoride	0.02 mg/L	UJ	SW	Charge Balance
37076	300	091110-TPSWCCS-4T	Sulfate	4800 mg/L	J	SW	Charge Balance
37076	2320	091110-TPSWCCS-4T	Alkalinity	130 mg/L	J	SW	Charge Balance
37076	2320	091110-TPSWCCS-4T	Bicarbonate	130 mg/L	J	SW	Charge Balance
37076	6010	091110-TPSWCCS-6T	Calcium	670	J	SW	Charge Balance
37076	6010	091110-TPSWCCS-6T	Magnesium	2100	J	SW	Charge Balance
37076	6010	091110-TPSWCCS-6T	Potassium	650	J	SW	Charge Balance
37076	6010	091110-TPSWCCS-6T	Sodium	17000	J	SW	Charge Balance
37076	300	091110-TPSWCCS-6T	Bromide	110 mg/L	UJ	GW	Charge Balance
37076	300	091110-TPSWCCS-6T	Chloride	34000 mg/L	J	GW	Charge Balance
37076	300	091110-TPSWCCS-6T	Fluoride	0.02 mg/L	UJ	GW	Charge Balance
37076	300	091110-TPSWCCS-6T	Sulfate	4600 mg/L	J	GW	Charge Balance
37076	2320	091110-TPSWCCS-6T	Alkalinity	130 mg/L	J	GW	Charge Balance
37076	2320	091110-TPSWCCS-6T	Bicarbonate	110 mg/L	J	GW	Charge Balance
37076	300	092410-BBSW-4B	Bromide	79 mg/L	J	GW	Charge Balance
37076	300	092410-BBSW-4B	Chloride	18000 mg/L	J	GW	Charge Balance
37076	300	092410-BBSW-4B	Fluoride	0.20 mg/L	UJ	GW	Charge Balance
37076	300	092410-BBSW-4B	Sulfate	3300 mg/L	J	GW	Charge Balance
37076	2320	092410-BBSW-4B	Alkalinity	120 mg/L	J	GW	Charge Balance
37076	2320	092410-BBSW-4B	Bicarbonate	120 mg/L	J	GW	Charge Balance
37076	300	091110-TPSWCCS-5T	Bromide	110 mg/L	J	GW	Charge Balance
37076	300	091110-TPSWCCS-5T	Chloride	33000 mg/L	J	GW	Charge Balance
37076	300	091110-TPSWCCS-5T	Fluoride	0.02 mg/L	UJ	GW	Charge Balance
37076	300	091110-TPSWCCS-5T	Sulfate	4200 mg/L	J	GW	Charge Balance

SDG	Method	Sample ID	Analyte	Result	Val Qual	Matrix	Reason for Qualification
37076	2320	091110-TPSWCCS-5T	Alkalinity	130 mg/L	J	GW	Charge Balance
37076	2320	091110-TPSWCCS-5T	Bicarbonate	130 mg/L	J	GW	Charge Balance

Table 5: Data Qualifier Codes

Code	Definition
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
J	Estimated value. A "J" value shall be accompanied by a detailed explanation to justify the reason(s) for designating the value as estimated. A bias is assigned if discernable.
Q	Holding Time exceeded.
V	Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value. Only for method blank and J qualifier for other blanks.
I	Value detected between the MDL and the reporting limit.
?	Data are rejected and should not be used. Some or all of the quality control data for the analyte were outside criteria, and the presence or absence of the analyte cannot be determined from the data.
Code	Bias
+	Bias is high.
-	Bias is low.

Prepared by: Steven Elliott, Chemist, E&E

Date: 01/18/2011

APPENDIX H:

MONITORING WELL CONSTRUCTION DETAILS

Table H-1. Florida Power & Light Turkey Point Plant Monitoring Well Construction Details

Monitoring Well	Top of Casing Elevation (ft NAVD88)	Depth to Top of Screen feet from TOC (ft)	Depth to Bottom of Screen feet from TOC (ft)	Screen Length (ft)	Top of Screen Elevation (ft NAVD88)	Bottom of Screen Elevation (ft NAVD88)	Elevation Screen Midpoint (ft NAVD88)
TPGW1-S	3.82	32.0	34.0	2	-28.18	-30.18	-29.18
TPGW1-M	3.93	52.1	54.1	2	-48.17	-50.17	-49.17
TPGW1-D	4.22	85.3	89.3	4	-81.08	-85.08	-83.08
TPGW2-S	1.35	24.7	28.7	4	-23.35	-27.35	-25.35
TPGW2-M	1.16	50.5	52.5	2	-49.34	-51.34	-50.34
TPGW2-D	1.13	85.5	87.5	2	-84.37	-86.37	-85.37
TPGW3-S	1.44	27.1	31.1	4	-25.66	-29.66	-27.66
TPGW3-M	1.22	54.7	58.7	4	-53.48	-57.48	-55.48
TPGW3-D	1.1	86.6	88.6	2	-85.50	-87.50	-86.5
TPGW4-S	2.24	23.2	25.2	2	-20.96	-22.96	-21.96
TPGW4-M	1.82	38.1	43.1	5	-36.28	-41.28	-38.78
TPGW4-D	1.92	61.6	65.6	4	-59.68	-63.68	-61.68
TPGW5-S	5.35	28.6	32.6	4	-23.25	-27.25	-25.25
TPGW5-M	5.07	49.3	54.3	5	-44.23	-49.23	-46.73
TPGW5-D	5.22	67.0	72.0	5	-61.78	-66.78	-64.28
TPGW6-S	1.56	22.3	24.3	2	-20.74	-22.74	-21.74
TPGW6-M	1.52	48.7	52.7	4	-47.18	-51.18	-49.18
TPGW6-D	1.59	81.9	85.9	4	-80.31	-84.31	-82.31
TPGW7-S	1.36	21.8	25.8	4	-20.44	-24.44	-22.44
TPGW7-M	1.25	47.7	51.7	4	-46.45	-50.45	-48.45
TPGW7-D	1.19	79.7	83.7	4	-78.51	-82.51	-80.51
TPGW8-S	0.42	16.8	20.8	4	-16.38	-20.38	-18.38
TPGW8-M	0.55	34.9	36.9	2	-34.35	-36.35	-35.35
TPGW8-D	0.45	49.2	53.2	4	-48.75	-52.75	-50.75
TPGW9-S	3.63	14.9	18.9	4	-11.27	-15.27	-13.27
TPGW9-M	3.53	34.3	36.3	2	-30.77	-32.77	-31.77

Table H-1. Florida Power & Light Turkey Point Plant Monitoring Well Construction Details

Monitoring Well	Top of Casing Elevation (ft NAVD88)	Depth to Top of Screen feet from TOC (ft)	Depth to Bottom of Screen feet from TOC (ft)	Screen Length (ft)	Top of Screen Elevation (ft NAVD88)	Bottom of Screen Elevation (ft NAVD88)	Elevation Screen Midpoint (ft NAVD88)
TPGW9-D	3.52	47.9	49.9	2	-44.38	-46.38	-45.38
TPGW10-S	8.47	36.4	38.4	2	-27.93	-29.93	-28.93
TPGW10-M	8.47	60.4	64.4	4	-51.93	-55.93	-53.93
TPGW10-D	8.57	126.5	130.5	4	-117.93	-121.93	-119.93
TPGW11-S	8.47	39.4	43.4	4	-30.93	-34.93	-32.93
TPGW11-M	8.47	90.4	94.4	4	-81.93	-85.93	-83.93
TPGW11-D	8.47	122.4	126.4	4	-113.93	-117.93	-115.93
TPGW12-S	0.52	21.6	23.6	2	-21.08	-23.08	-22.08
TPGW12-M	0.73	55.8	59.8	4	-55.07	-59.07	-57.07
TPGW12-D	0.76	89.8	93.8	4	-89.04	-93.04	-91.04
TPGW13-S	2.19	29.8	33.8	4	-27.61	-31.61	-29.61
TPGW13-M	2.13	56.7	60.7	4	-54.57	-58.57	-56.57
TPGW13-D	2.18	84.9	88.9	4	-82.72	-86.72	-84.72
TPGW14-S	8.87	32.5	36.5	4	-23.63	-27.63	-25.63
TPGW14-M	8.87	56.3	60.3	4	-47.43	-51.43	-49.43
TPGW14-D	8.67	102.2	106.2	4	-93.53	-97.53	-95.53

Key:

ft NAVD88 = Feet relative to the North American Vertical Datum of 1988.

ft = Feet.

TOC = Top of Casing.

APPENDIX I:

LEVEL IV REPORTS FOR GROUNDWATER AND SURFACE WATER LABORATORY RESULTS

The Level IV Reports for Groundwater and Surface Water Laboratory Results are provided on DVD.

APPENDIX J:

SCIENTIFIC AND COMMON SPECIES NAMES OF PLANT SPECIES

TABLE J-1. Terrestrial Plant Taxa Observed During the Monitoring Effort

Scientific Name	Common Name
<i>Acrostichum daenaeifolium</i>	leather fern
<i>Avicennia germinans</i>	black mangrove
<i>Blechnum serrulatum</i>	swamp fern
<i>Cassytha filiformis</i>	love-vine
<i>Chrysobalanus icaco</i>	coco plum
<i>Cladium jamaicense</i>	sawgrass
<i>Conocarpus erectus</i>	buttonwood
<i>Distichlis spicata</i>	saltgrass
<i>Eleocharis cellulosa</i>	Gulf Coast spikerush
<i>Ilex cassine</i>	dahoon holly
<i>Juncus roemerianus</i>	needlegrass rush
<i>Laguncularia racemosa</i>	white mangrove
<i>Magnolia virginiana</i>	sweet bay
<i>Myrica cerifera</i>	Southern wax myrtle
<i>Osumunda regalis</i>	royal fern
<i>Parthenocissus quinquefolia</i>	Virginia creeper
<i>Peltandra virginica</i>	green arrow arum
<i>Persea palustris</i>	swamp bay
<i>Rapanea punctata</i>	myrsine
<i>Rhizophora mangle</i>	red mangrove
<i>Rhynchospora tracyi</i>	Tracy's beaksedge
<i>Thelypteris sp.</i>	marsh fern
<i>Toxicodendron radicans</i>	eastern poison ivy
<i>Typha domingensis</i>	southern cattail

TABLE J-2. Marine Taxa Observed During Monitoring Effort

Scientific Name	Common Name
<i>Thalassia testudinum</i>	turtle grass
<i>Halodule wrightii</i>	shoal grass
<i>Syringodium filiforme</i>	manatee grass
<i>Penicillus</i>	calcareous green algae
<i>Rhizocephalus</i>	calcareous green algae
<i>Halimeda</i>	calcareous green algae
<i>Udotea</i>	calcareous green algae
<i>Acetabularia</i>	calcareous green algae
<i>Batophora</i>	fleshy green algae
<i>Alpheidae</i>	snapping shrimps
<i>Anarchopterus criniger</i>	fringed pipefish
<i>Callinectes ornatus</i>	shelligs
<i>Caridea</i>	Caridean shrimps
<i>Diplogrammus pauciradiatus</i>	spotted dragonet
<i>Epialtidae</i>	spider crabs
<i>Farfantepenaeus duorarum</i>	pink shrimp
<i>Gobiosoma robustum</i>	code goby
<i>Hippocampus zosterae</i>	dwarf seahorse
<i>Lagodon rhomboids</i>	pinfish
<i>Opsanus beta</i>	Gulf toadfish
<i>Paguroidea</i>	hermit crabs
<i>Paraclinus fasciatus</i>	banded blenny
<i>Paraclinus marmoratus</i>	marbled blenny
<i>Syngnathus louisianae</i>	chain pipefish
<i>Xanthoidea</i>	short-tailed crabs/mud crabs