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2/2/18

January 31, 2018

Mr. Wilbur Mayorga, P.E., Chief
Miami-Dade County Department of Regulatory & Economic Resources
701 NW 1st Court, 4th Floor
Miami, Florida 33136

RE: Year 2 Event 1 Interim Groundwater Monitoring Only Report
Florida Power & Light Company
Former Cutler Power Plant Property, Miami, Florida
HWR-442/File-16360/IW-79

Dear Mr. Mayorga,

Florida Power & Light Company (FPL) is pleased to present the Year 2 Event 1 Semi-Annual Groundwater Monitoring Report for the Former Cutler Power Plant Property. The objective of the work is to monitor groundwater quality during the interim period prior to implementation of proposed engineering and institutional controls. A copy of the Miami-Dade County Department of Regulatory and Economic Resources (RER) review correspondence dated September 29, 2017 for the semi-annual *Year 1 Event 2 Interim Groundwater Monitoring Only Report* is included as **Appendix A**.

Prior to conducting the groundwater sampling, depth to water was measured in the monitoring wells. Monitoring well construction details are provided in **Table 1** and the well locations are depicted on **Figure 1**.

Depth to water measurements were compared with top-of-casing (TOC) elevations to determine the groundwater elevation at each well. A summary of groundwater elevation data is provided in **Table 2** and depicted on **Figure 2**.

On January 24, 2017, groundwater samples were collected from monitoring wells MW-A2R, MW-B5R, MW-B8, MW-B11, MW-C6, MW-D1R, MW-D5R, MW-D6R, MW-E2, MW-E7, MW-E7DD, MW-11, MW-G2, and MW-G8. The sampling was conducted in accordance with DEP-SOP-001/01 FS 2200 as provided by Chapter 62-160 FAC and analyzed at a National Environmental Laboratory Accreditation Conference (NELAC)-certified environmental laboratory, Jupiter Environmental Labs, Inc. [Florida DOH certification number E86546]. The collected samples were analyzed for antimony, arsenic, nickel, vanadium, and polycyclic aromatic hydrocarbons (PAHs). The laboratory analytical reports, chain of custody, groundwater sampling logs, and calibration logs are provided as **Appendix B**.

A cumulative summary of the groundwater analytical results is provided in **Tables 3** and **4** and the detected concentrations of target analytes are presented on **Figures 3** and **4,** respectively. The analytical results were generally consistent with previous sampling events. The results show that

concentrations of target analytes generally met their respective Groundwater Cleanup Target Levels (GCTLs) listed in Chapter 62-777, Florida Administrative Code (F.A.C.) at the property boundaries. It is noted that vanadium was detected at a concentration of 58 micrograms per liter (µg/L) in monitoring well MW-B5R, and dibenzo(a,h)anthracene was detected in four monitoring wells at concentrations reported between the laboratory detection limit and the practical quantitation limit. The next sampling event will be conducted in June 2018 and the results will be provided by July 30, 2018.

Please contact me at 954-202-9226 with any questions or if you require additional information.

Geological Certification

The geological services addressed herein, as defined in Chapter 492, Florida Statutes and in accordance with applicable provisions of Chapter 62-701 of the Florida Administrative Code, have been performed by and under the responsible charge of the professional geologist named below. These geological services are based upon the named professional's knowledge, information and belief, and in accordance with commonly accepted procedures consistent with applicable standards of practice. This certification is not a guaranty or warranty, either expressed or implied.

Sincerely,

Scott Zednek

Scott C. Zednek, P.G.
Florida License No. 0002086

SCOTT C. ZEDNEK
LICENSE
PG000 2086
1-31-18
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST

TABLES

Table 1
Well Construction Details
Florida Power & Light Company
Former Cutler Power Plant Property
HWR-442/File-16360/IW-79
Miami, Florida

Well ID	Permit Number	Installation Date	Installation Method	TOC Elevation (Feet)	Diameter (inches)	Total Depth (Feet)	Screened Interval (Feet bls)
MW-A2R	13-59-13304	12/13/2016	HSA	15.91	2	18	8 - 18
MW-B5R	13-59-13237	12/9/2016	HSA	6.87	2	13	3 - 13
MW-B8	13-59-8847	4/19/2013	HSA	3.56	2	11	1 - 11
MW-B11	13-59-8841	4/19/2013	HSA	3.15	2	11	1 - 11
MW-C6	13-59-8925	5/25/2013	HSA	4.97	2	12.1	2.1 - 12.1
MW-D1R	13-59-13237	12/9/2016	HSA	17.03	2	20	10 - 20
MW-D5R	13-59-13237	12/9/2016	HSA	8.20	2	12	2 - 12
MW-D6R	13-59-13237	12/9/2016	HSA	6.72	2	12	2 - 12
MW-E2	13-59-12467	1/15/2016	HSA	15.05	2	18	8 - 18
MW-E7	13-59-8927	5/25/2013	HSA	7.31	2	11.7	1.7 - 11.7
MW-E7DD	13-59-9023	5/28/2013	HSA	6.57	2	69.6	64.6 - 69.6
MW-E11	13-59-8843	4/19/2013	HSA	2.59	2	10.8	0.8 - 10.8
MW-G2	13-59-8840	4/19/2013	HSA	11.41	2	17.9	7.9 - 17.9
MW-G8	13-59-8842	4/19/2013	HSA	5.97	2	10.8	0.8 - 10.8

Notes:
bls- below land surface
TOC- Top of Casing Elevation (feet-relative NGVD29)
NGVD29- National Geodetic Vertical Datum of 1929
HAS- Hollow Stem Auger

Table 2
Groundwater Elevations
Florida Power & Light Company
Former Cutler Power Plant Property
HWR-442/File-16360/IW-79
Miami, Florida

Well ID	Screened Interval	TOC Elevation	12/20/2016		8/9/2017		1/24/2018	
			Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation	Depth to Water	Water Table Elevation
	(Feet bls)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(feet)
MW-A2R	8 - 18	15.91	14.53	1.38	13.99	1.92	14.46	1.45
MW-B5R	3 - 13	6.87	5.80	1.07	5.42	1.45	5.90	0.97
MW-B8	1 - 11	3.56	2.47	1.09	2.13	1.43	2.57	0.99
MW-B11	1 - 11	3.15	2.03	1.12	1.67	1.48	2.04	1.11
MW-C6	2.1 - 12.1	4.97	4.14	0.83	3.12	1.85	3.50	1.47
MW-D1R	10 - 20	17.03	15.71	1.32	15.99	1.04	15.54	1.49
MW-D5R	2 - 12	8.20	7.04	1.16	6.26	1.94	6.71	1.49
MW-D6R	2 - 12	6.72	5.70	1.02	4.84	1.88	5.40	1.32
MW-E2	8 - 18	15.05	13.65	1.40	13.01	2.04	13.53	1.52
MW-E7	1.7 - 11.7	7.31	4.87	2.44	5.20	2.11	6.04	1.27
MW-E7DD	64.6 - 69.6	6.57	4.90	1.67	3.74	2.83	4.24	2.33
MW-E11	0.8 - 10.8	2.59	1.37	1.22	1.03	1.56	1.61	0.98
MW-G2	7.9 - 17.9	11.41	9.84	1.57	9.42	1.99	10.02	1.39
MW-G8	0.8 - 10.8	5.97	5.61	0.36	3.88	2.09	5.82	0.15

Notes:
bls- below land surface
TOC- Top of Casing Elevation (feet-relative to NGVD29)
NGVD29- National Geodetic Vertical Datum of 1929

Table 3
Summary of Metals Analytical Results
Florida Power & Light Company
Former Cutler Power Plant Property, Miami, Florida
HWR-442/File-16360/IW-79

Monitoring Well	Analyte	Antimony	Arsenic	Nickel	Vanadium
	GCTL	**6**	**10**	**100**	**49**
	NADC	**60**	**100**	**1000**	**490**
	Units/Sample Date	**ug/L**	**ug/L**	**ug/L**	**ug/L**
MW-A2R	4/23/2013	0.95 U	1.6i	0.59i	5.1i
	1/21/2014	0.95 U	1.1i	0.77i	4.6
	12/20/2016	0.95 U	0.65 U	0.25i	1.2i
	8/9/2017	NA	0.65 U	NA	1.1i
	1/24/2018	0.95 U	0.65 U	0.94i	1.1i
MW-B11	4/24/2013	0.95 U	0.70i	1.2i	1.6i
	1/22/2014	0.95 U	0.65 U	1.2i	1.7i
	12/20/2016	0.95 U	4.1	1.8i	4.3
	8/9/2017	NA	1.8i	NA	5.6
	1/24/2018	0.95 U	1.5i	0.86i	4.0
MW-B5/MW-B5R	4/23/2013	0.95 U	2.5i	1.5i	4.9i
	1/21/2014	0.95 U	1.8i	2.1	6.4
	12/20/2016	0.95 U	1.6i	2.1	48
	8/9/2017	NA	0.65 U	NA	30
	1/24/2018	0.95 U	0.67i	1.5i	**58**
MW-B8	4/23/2013	0.95 U	0.90i	1.9i	1.3i
	1/22/2014	0.95 U	1.2i	2	2.2
	12/20/2016	0.95 U	0.65 U	0.77i	2.9
	8/9/2017	NA	0.84i	NA	3.6
	1/24/2018	0.95 U	1.4i	0.87i	5.2
MW-C6	5/14/2013	NA	NA	NA	**760**
	6/5/2013	NA	NA	NA	**620**
	12/20/2016	0.95U	2.1	24	**450**
	8/9/2017	NA	2.5	NA	**580**
	1/24/2018	0.95 U	2.6	30	**64**
MW-1D/MW-D1R	4/24/2013	0.95 U	2.3i	1.6i	9.6
	1/21/2014	0.95 U	**12**	1.5i	28
	1/30/2014	NA	8.6	NA	NA
	12/20/2016	0.95 U	0.65 U	1.0i	9.9
	8/9/2017	NA	0.65 U	NA	9.5
	1/24/2018	0.95 U	0.65 U	0.47i	9.8
MW-D5/MW-D5R	6/5/2013	NA	NA	NA	2.2
	1/22/2014	0.95 U	**110**	1.4i	3.4
	12/20/2016	0.95 U	**240**	2.2	0.28i
	8/9/2017	NA	**130**	NA	7.0
	1/24/2018	1.1i	**340**	3.8	3.2

Table 3 (continued)
Summary of Metals Analytical Results
Florida Power & Light Company
Former Cutler Power Plant Property, Miami, Florida
HWR-442/File-16360/IW-79

MW-D6R	5/14/2013	NA	NA	NA	**310**
	6/5/2013	NA	NA	NA	**<u>1200</u>**
	1/22/2014	0.95 U	2.8	9.4	**300**
	12/20/2016	3.1	5	7.9	**<u>850 L</u>**
	8/9/2017	NA	2.7	NA	**280**
	1/24/2018	0.95 U	3.6	7.6	**230**
MW-E11	4/24/2013	1.2i	0.87i	2.2i	0.78i
	1/22/2014	2.4	1.5i	0.86i	7.2
	12/20/2016	0.95 U	2.8	4.1	21
	8/9/2017	NA	2.1	NA	14
	1/24/2018	0.95 U	2.3	1.5i	13
MW-E2	1/19/2016	NA	NA	NA	**103**
	12/20/2016	3.3	4.8	2	**120**
	8/9/2017	NA	6.8	NA	**160**
	1/24/2018	1.0i	**11**	0.70i	**170**
MW-E7	5/14/2013	NA	NA	NA	40
	1/23/2014	0.95	3.3	34	34
	12/20/2016	0.95 U	2.7	38	**50**
	8/9/2017	NA	4.9	NA	9
	1/24/2018	0.95 U	**12**	28	2.9
MW-E7DD	6/5/2013	NA	NA	NA	3.6
	1/22/2014	2.6	1.5i	0.95i	1.6i
	12/20/2016	0.95 U	1.0i	0.80i	2.8
	8/9/2017	NA	0.65 U	NA	1.7i
	1/24/2018	0.95 U	0.78i	0.24 U	0.89i
MW-G2	4/24/2013	0.95 U	1.9i	1.9i	1.6i
	1/21/2014	0.95 U	0.96i	2	1.2i
	12/20/2016	0.95 U	0.65 U	2.9	2.4
	8/9/2017	NA	0.65 U	NA	2.8
	1/24/2018	0.95 U	0.65 U	0.65i	3.2
MW-G8	4/24/2013	0.95 U	0.65 U	1.3i	0.81i
	1/21/2014	0.95 U	0.65 U	0.88i	0.91i
	12/20/2016	0.95 U	0.65 U	2.2	1.3i
	8/9/2017	NA	0.65 U	NA	2
	1/24/2018	0.95 U	0.65 U	0.24 U	1.7i

Notes:
GCTL-Groundwater Cleanup Target Levels as provided by Chapter 62-777 FAC
NADC-Natural Attenuation Default Source as provided by Chapter 62-777 FAC
ug/L-micrograms per liter
U-indicates that the compound was analyzed for but not detected above the MDL
i-indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit
L-Reported value is above the calibration range
Bold text indicates concentration exceeds GCTL
Bold and underlined text indicates concentration exceeds NADC
NA- Not Analyzed

Table 4
Summary of Polycyclic Aromatic Hydrocarbon and Total Recoverable Hydrocarbon Analytical Results
Florida Power & Light Company
Former Cutler Power Plant Property, Miami, Florida
HWR-442/File-16360/IW-79

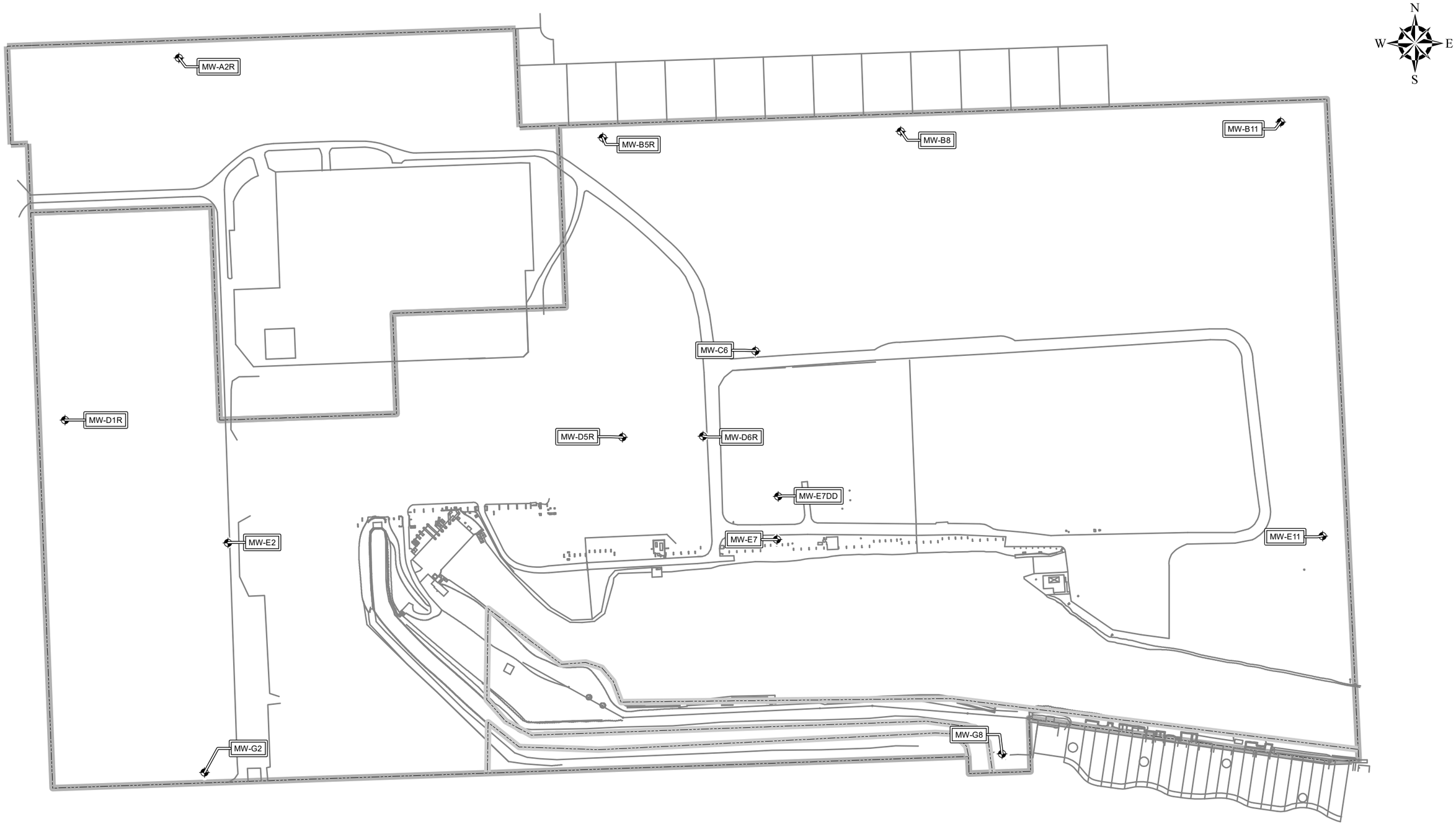
Monitoring Well	Analyte	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	TRPH
	GCTL	**28**	**28**	**20**	**210**	**2100**	**0.05**	**0.2**	**0.05**	**210**	**0.5**	**4.8**	**0.005**	**280**	**280**	**0.05**	**14**	**210**	**210**	**5000**
	NADC	**280**	**280**	**200**	**2100**	**21000**	**5**	**20**	**5**	**2100**	**50**	**480**	**0.5**	**2800**	**2800**	**5**	**140**	**2100**	**2100**	**50000**
	Units/Sample Date	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
MW-A2R	4/23/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	225
	1/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-B11	4/24/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	256
	1/22/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.015i	0.016i	0.023 U	**0.025i**	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-B5/MW-B5R	4/23/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	254
	1/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-B8	4/23/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	97
	1/22/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-C6	1/22/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.065i	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	**0.0091i**	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-1D/MW-D1R	4/24/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	46 U
	1/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-D5/MW-D5R	1/22/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	73i
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	**0.013i**	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-D6/MW-D6R	1/22/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	121
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-E11	4/24/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	66i
	1/22/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA

Table 4 (continued)
Summary of Polycyclic Aromatic Hydrocarbon and Total Recoverable Hydrocarbon Analytical Results
Florida Power & Light Company
Former Cutler Power Plant Property, Miami, Florida
HWR-442/File-16360/IW-79

Monitoring Well	Analyte	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	TRPH
	GCTL	**28**	**28**	**20**	**210**	**2100**	**0.05**	**0.2**	**0.05**	**210**	**0.5**	**4.8**	**0.005**	**280**	**280**	**0.05**	**14**	**210**	**210**	**5000**
	NADC	**280**	**280**	**200**	**2100**	**21000**	**5**	**20**	**5**	**2100**	**50**	**480**	**0.5**	**2800**	**2800**	**5**	**140**	**2100**	**2100**	**50000**
	Units/Sample Date	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
MW-E2	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-E7	1/23/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	46 U
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-E7DD	1/22/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	109
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-G2	4/24/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	66i
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	**0.0054i**	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
MW-G8	4/24/2013	0.050 U	0.050 U	0.025 U	0.025 U	0.025 U	0.025 U	0.015 U	0.015 U	0.015 U	0.015 U	0.025 U	0.00510 U	0.025 U	0.025 U	0.015 U	0.050 U	0.025 U	0.025 U	46 U
	1/21/2014	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	237
	12/20/2016	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.047 U	0.023 U	0.023 U	NA
	8/10/2017	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/24/2018	0.047 U	0.047 U	0.023 U	0.023 U	0.023 U	0.023 U	0.014 U	0.014 U	0.014 U	0.014 U	0.023 U	0.0048 U	0.023 U	0.023 U	0.014 U	0.061i	0.023 U	0.023 U	NA

Notes:
GCTL- Groundwater Cleanup Target Levels as provided by Chapter 62-777 FAC
NADC-Natural Attenuation Default Source as provided by Chapter 62-777 FAC
ug/L- micrograms per liter
U- indicates that the compound was analyzed for but not detected above the MDL
i- indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit.
NA- Not Analyzed
TRPH- total recoverable petroleum hydrocarbons

FIGURES



LEGEND:

MONITORING WELL

TCG TIERRA CONSULTING GROUP
INTEGRITY, EXCELLENCE, COMMITMENT

PROJECT: FORMER CUTLER POWER PLANT PROPERTY
HWR-442/FILE-16360/IW-79
MIAMI, FLORIDA

CLIENT: FLORIDA POWER & LIGHT COMPANY

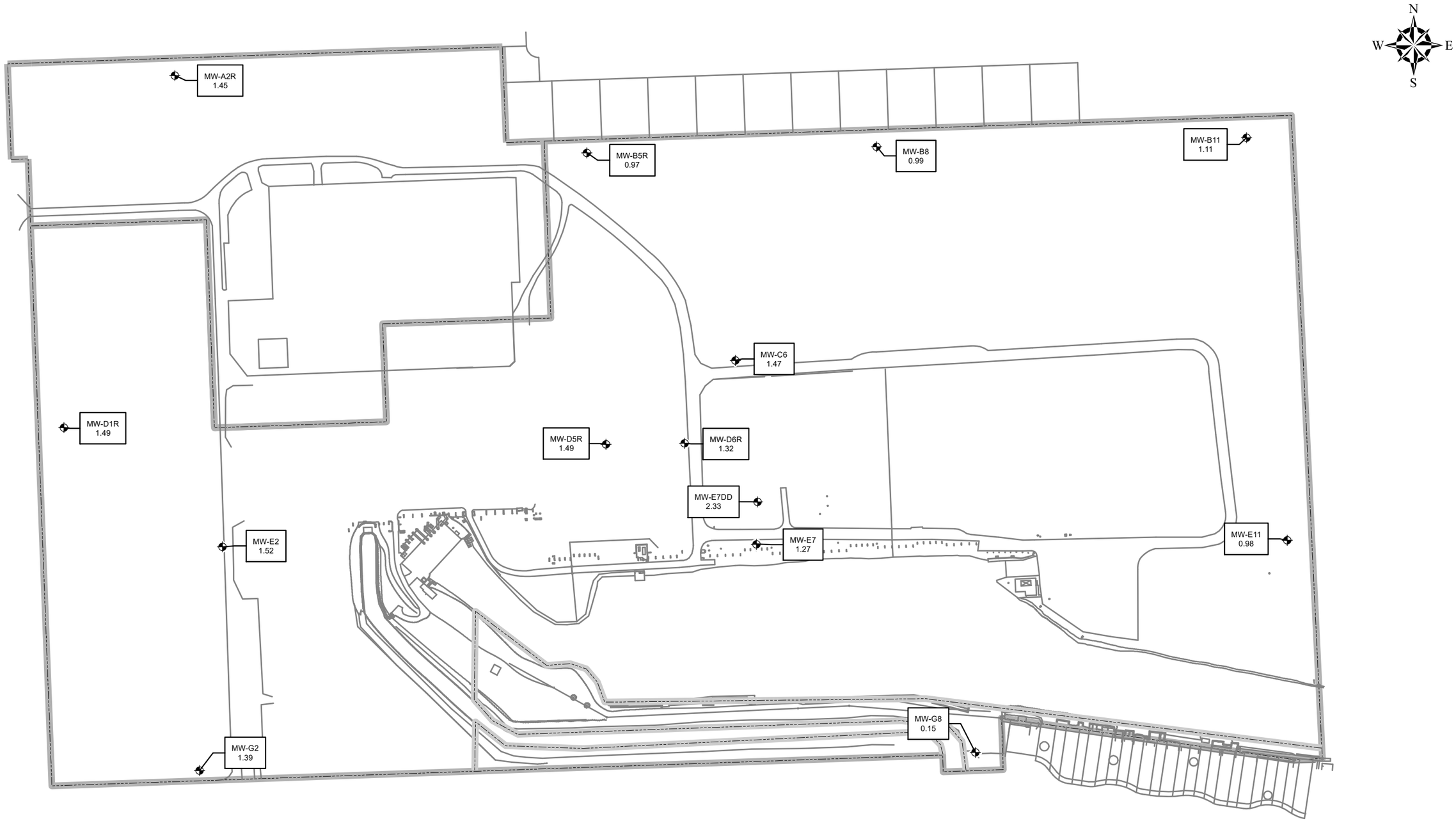
FIGURE 1 : SITE PLAN

200 100 0 200
Feet

DATE: 1/29/2018

DRAWN BY: DT

O: (954) 202 9226 ‖ E: ADMIN@TIERRACONSULTING.COM ‖ WWW.TIERRACONSULTING.COM



LEGEND:

MONITORING WELL

MW-G2 1.57 — Monitoring Well; Top of Casing Elevation (feet-relative NGVD29)

TCG TIERRA CONSULTING GROUP
INTEGRITY, EXCELLENCE, COMMITMENT

PROJECT: FORMER CUTLER POWER PLANT PROPERTY
HWR-442/FILE-16360/IW-79
MIAMI, FLORIDA

CLIENT: FLORIDA POWER & LIGHT COMPANY

FIGURE 2 : GROUNDWATER ELEVATION (JANUARY 2018)

200 100 0 200
Feet

DATE: 1/29/2018

DRAWN BY: DT

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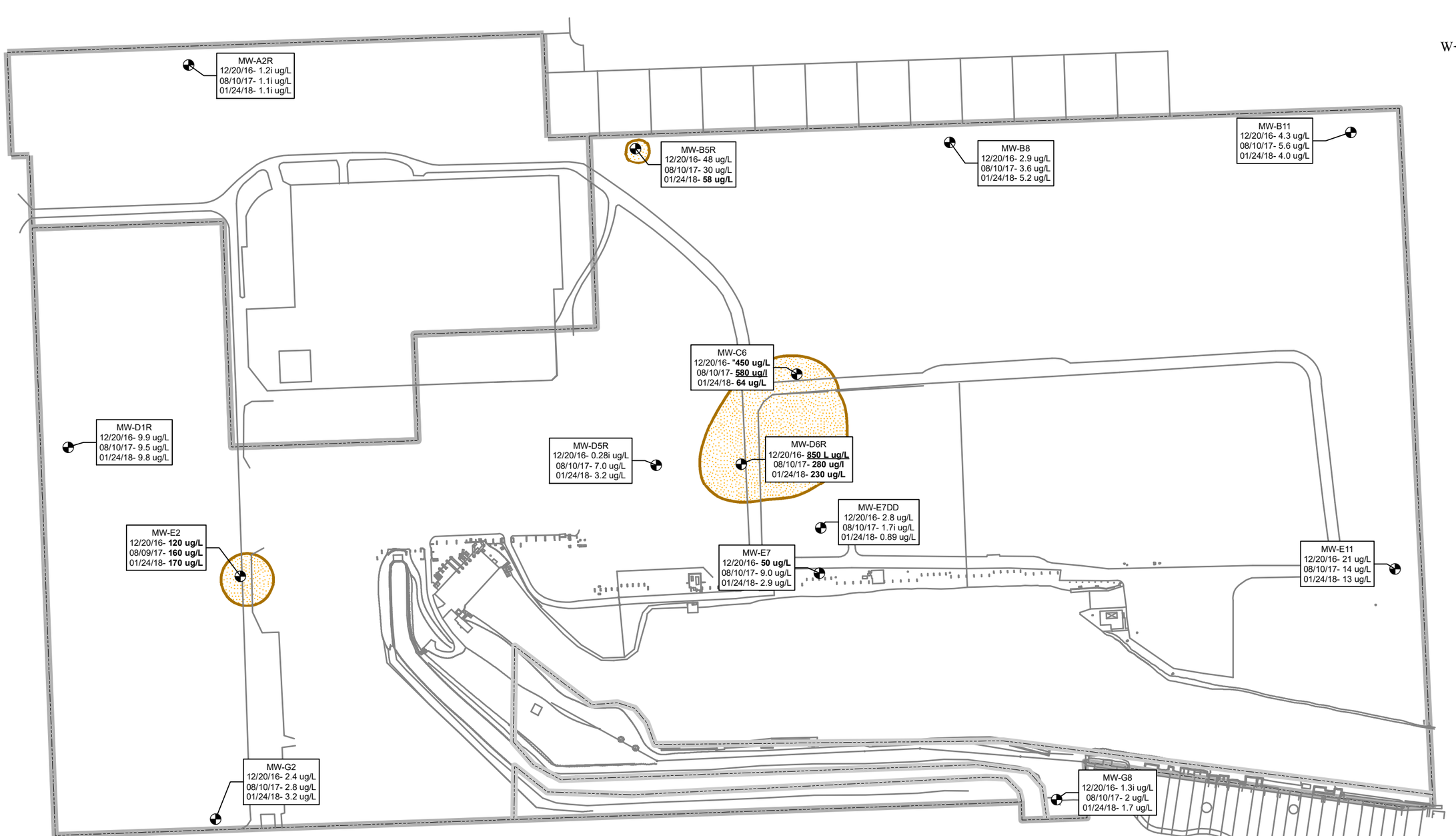


NOTES:
ug/L- micrograms per liter
U- indicates that the compound was analyzed for but not dectected above the MDL
i- indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit
L- Reported value is above the calibration range
Bold and underlined text indicates the vanadium level exceeds Natural Attenuation Default Source Concentrations
Bold text indicates vanadium concentration exceeds Groundwater Cleanup Target Levels

LEGEND:

MONITORING WELL- VANADIUM CONCENTRATION BELOW GCTL

EXTENT OF VANADIUM EXCEEDING 49 ug/L

TCG TIERRA CONSULTING GROUP
INTEGRITY, EXCELLENCE, COMMITMENT

PROJECT: FORMER CUTLER POWER PLANT PROPERTY
HWR-442/FILE-16360/IW-79
MIAMI, FLORIDA

CLIENT: FLORIDA POWER & LIGHT COMPANY

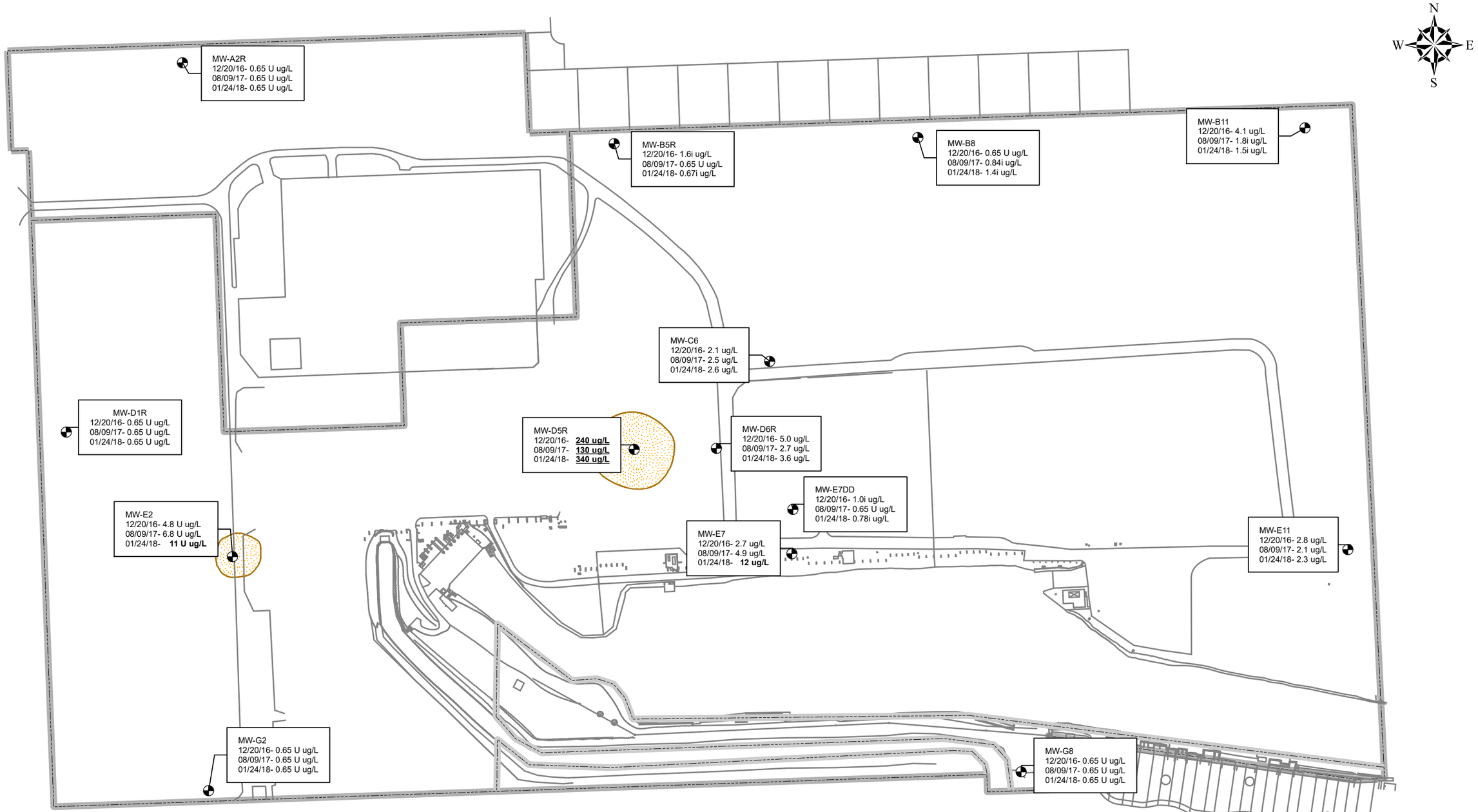
FIGURE 3 : VANADIUM IN GROUNDWATER (JANUARY 2018)

200 100 0 200
Feet

DATE: 1/29/2018

DRAWN BY: DT

O: (954) 202 9226 ‖ E: ADMIN@TIERRACONSULTING.COM ‖ WWW.TIERRACONSULTING.COM



NOTES:
ug/L- micrograms per liter
U- indicates that the compound was analyzed for but not dectected above the MDL
i- indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit
L- Reported value is above the calibration range
Bold and underlined text indicates the vanadium level exceeds Natural Attenuation Default Source Concentrations
Bold text indicates vanadium concentration exceeds Groundwater Cleanup Target Levels

LEGEND:

MONITORING WELL- ARSENIC CONCENTRATION BELOW GCTL

EXTENT OF ARSENIC EXCEEDING 10 ug/L

TCG TIERRA CONSULTING GROUP
INTEGRITY, EXCELLENCE, COMMITMENT

PROJECT: FORMER CUTLER POWER PLANT PROPERTY
HWR-442/FILE-16360/IW-79
MIAMI, FLORIDA

CLIENT: FLORIDA POWER & LIGHT COMPANY

FIGURE 4 : ARSENIC IN GROUNDWATER (JANUARY 2018)

200 100 0 200
Feet

DATE: 1/29/2018

DRAWN BY: DT

O: (954) 202 9226 ‖ E: ADMIN@TIERRACONSULTING.COM ‖ WWW.TIERRACONSULTING.COM

APPENDIX A

MIAMI-DADE COUNTY
RER CORRESPONDENCE

SEPTEMBER 29, 2017

MIAMI-DADE COUNTY

Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources
Environmental Resources Management
701 NW 1st Court, 4th Floor
Miami, Florida 33136-3912
T 305-372-6700 F 305-372-6982

miamidade.gov

September 29, 2017

CERTIFIED MAIL NO. 7014 1200 0002 0828 8979
RETURN RECEIPT REQUESTED

Randall R. LaBauve, Vice President
Florida Power & Light Company
Mailstop JES/JB
700 Universe Blvd.
Juno Beach, Florida 33408

RE: Interim Quarterly Sampling Report (QSRM) August 17, 2017 and submitted by Tierra Consulting Group, Inc. for the FPL Cutler Power Plant (not including the substation) (HWR-442/File-16360/IW-79), located at, near, or in the vicinity of 14925 SW 67 Avenue, Miami-Dade County, Florida.

Dear Mr. LaBauve:

The Department of Regulatory and Economic Resources-Division of Environmental Resources Management (DERM) has reviewed the above report, received on August 25, 2017.

Pursuant to the above and to Chapter 24, Code of Miami-Dade County, continue with the designated monitoring, items and timeframes as stipulated in the Interim Groundwater Monitoring Plan as approved in the DERM letter dated October 17, 2016. Two copies of reports shall be submitted, one paper and one electronic PDF on CD. Reports shall include the original analytical results (laboratory report), chain of custody record form, analytical summary tables updated as applicable, scaled site maps that illustrate the analytical results, and the water-level elevation information (summary table and flow map). A review fee of $400 for the current report and $400 for the next QSRM ($800 total) shall be included with the next submittal.

DERM shall be notified in writing a minimum of three (3) working days prior to the implementation of any sampling or field activities. Email notifications shall be directed to DERMPCD@miamidade.gov. Please include the DERM file number on all correspondence.

Be advised that failure to comply with the above may result in enforcement action for this site.

Any person aggrieved by any action or decision of the DERM Director may appeal said action or decision to the Environmental Quality Control Board (EQCB) by filing a written notice of appeal along with submittal of the applicable fee, to the Code Coordination and Public Hearings Section of DERM within fifteen (15) days of the date of the action or decision by DERM.

Delivery Expected Every Day

If you have any questions concerning the above please contact Thomas Kux, P.G. (kuxt@miamidade.gov) of DERM at (305) 372-6700.

Sincerely,

For

Wilbur Mayorga, P.E., Chief
Environmental Monitoring and Restoration Division

TK

pc: Scott Zednek, P.G., Tierra, Zednek@tierraconsulting.com

APPENDIX B

LABORATORY ANALYTICAL REPORTS, CHAIN OF CUSTODYDOCUMENTATION, GROUNDWATER SAMPLING LOGS, AND CALIBRATION LOGS

Jupiter Environmental Laboratories, Inc.
150 S. Old Dixie Highway
Jupiter, FL 33458
Phone: (561)575-0030
Fax: (561)575-4118
www.jupiterlabs.com
clientservices@jupiterlabs.com

January 31, 2018

Jeremy Ally
Tierra Consulting Group
5815 N. Andrews Way
Suite B
Fort Lauderdale, FL 33309

RE:	LOG#	1855184
	Project ID:	FPL Former Cutler Power Plant
	COC#	1855184

Dear Jeremy Ally:

Enclosed are the analytical results for sample(s) received by the laboratory on Thursday, January 25, 2018. Results reported herein conform to the most current NELAC standards, where applicable, unless indicated by * in the body of the report. The enclosed Chain of Custody is a component of this package and should be retained with the package and incorporated therein.

Results for all solid matrices are reported in dry weight unless otherwise noted. Results for all liquid matrices are reported as received in the laboratory unless otherwise noted. Results relate only to the samples received. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

Samples are disposed of after 30 days of their receipt by the laboratory unless extended storage is requested in writing. The laboratory maintains the right to charge storage fees for archived samples. This report will be archived for 5 years after which time it will be destroyed without further notice, unless prior arrangements have been made.

Certain analyses are subcontracted to outside NELAC certified laboratories, please see the Project Summary section of this report for NELAC certification numbers of laboratories used. A Statement of Qualifiers is available upon request.

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

Sincerely,

Rebecca Lourido

Rebecca Lourido for
Kacia Baldwin
V.P. of Operations

FDOH# E86546

CERTIFICATE OF ANALYSIS

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Jupiter Environmental Laboratories, Inc.
150 S. Old Dixie Highway
Jupiter, FL 33458
Phone: (561)575-0030
Fax: (561)575-4118

SAMPLE ANALYTE COUNT

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID	Sample ID	Method	Analytes Reported
1855184001	MW-A2R	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184002	MW-B5R	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184003	MW-B8	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184004	MW-B11	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184005	MW-C6	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184006	MW-D1R	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184007	MW-D5R	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184008	MW-D6R	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184009	MW-E2	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184010	MW-E7	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184011	MW-E7DD	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184012	MW-E11	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184013	MW-G2	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21
1855184014	MW-G8	EPA 200.8 (Total)	4
		EPA 8270/PAH SIM	21

FDOH# E86546

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150 S. Old Dixie Highway
Jupiter, FL 33458
Phone: (561)575-0030
Fax: (561)575-4118

SAMPLE SUMMARY

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1855184001	MW-A2R	Aqueous Liquid	1/24/2018 16:00	1/25/2018 16:50
1855184002	MW-B5R	Aqueous Liquid	1/24/2018 10:25	1/25/2018 16:50
1855184003	MW-B8	Aqueous Liquid	1/24/2018 11:22	1/25/2018 16:50
1855184004	MW-B11	Aqueous Liquid	1/24/2018 12:03	1/25/2018 16:50
1855184005	MW-C6	Aqueous Liquid	1/24/2018 14:51	1/25/2018 16:50
1855184006	MW-D1R	Aqueous Liquid	1/24/2018 17:04	1/25/2018 16:50
1855184007	MW-D5R	Aqueous Liquid	1/24/2018 14:50	1/25/2018 16:50
1855184008	MW-D6R	Aqueous Liquid	1/24/2018 14:00	1/25/2018 16:50
1855184009	MW-E2	Aqueous Liquid	1/24/2018 15:58	1/25/2018 16:50
1855184010	MW-E7	Aqueous Liquid	1/24/2018 13:04	1/25/2018 16:50
1855184011	MW-E7DD	Aqueous Liquid	1/24/2018 14:15	1/25/2018 16:50
1855184012	MW-E11	Aqueous Liquid	1/24/2018 13:00	1/25/2018 16:50
1855184013	MW-G2	Aqueous Liquid	1/24/2018 18:00	1/25/2018 16:50
1855184014	MW-G8	Aqueous Liquid	1/24/2018 17:00	1/25/2018 16:50

FDOH# E86546

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Jupiter Environmental Laboratories, Inc.
150 S. Old Dixie Highway
Jupiter, FL 33458
Phone: (561)575-0030
Fax: (561)575-4118

ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID: **1855184001** Date Received: 1/25/2018 16:50 Matrix: Aqueous Liquid

Sample ID: **MW-A2R** Date Collected: 1/24/2018 16:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Nitrobenzene-d5 (S)	91	%	30-110		1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
2-Fluorobiphenyl (S)	100	%	30-110		1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
p-Terphenyl-d14 (S)	136	%	30-140		1	1/26/2018 10:22	BFM	1/26/2018 14:55	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	1.1i	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 12:36	ZS	
Nickel	0.94i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 12:36	ZS	
Arsenic	U	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 12:36	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 12:36	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184002**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-B5R**	Date Collected:	1/24/2018 10:25		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
Nitrobenzene-d5 (S)	98	%	30-110		1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
2-Fluorobiphenyl (S)	102	%	30-110		1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	
p-Terphenyl-d14 (S)	147	%	30-140		1	1/26/2018 10:22	BFM	1/26/2018 15:17	VS	J1
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	58	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 12:40	ZS	
Nickel	1.5i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 12:40	ZS	
Arsenic	0.67i	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 12:40	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 12:40	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184003**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-B8**	Date Collected:	1/24/2018 11:22		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Nitrobenzene-d5 (S)	89	%	30-110		1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
2-Fluorobiphenyl (S)	89	%	30-110		1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
p-Terphenyl-d14 (S)	115	%	30-140		1	1/26/2018 10:22	BFM	1/26/2018 15:40	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	5.2	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 12:45	ZS	
Nickel	0.87i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 12:45	ZS	
Arsenic	1.4i	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 12:45	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 12:45	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184004**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-B11**	Date Collected:	1/24/2018 12:03		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Benzo(g,h,i)perylene	0.015i	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Benzo(k)fluoranthene	0.016i	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Dibenzo(a,h)anthracene	0.025i	ug/L	0.047	0.0048	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Nitrobenzene-d5 (S)	56	%	30-110		1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
2-Fluorobiphenyl (S)	68	%	30-110		1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
p-Terphenyl-d14 (S)	89	%	30-140		1	1/26/2018 11:23	BFM	1/26/2018 23:41	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	4.0	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 12:50	ZS	
Nickel	0.86i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 12:50	ZS	
Arsenic	1.5i	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 12:50	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 12:50	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184005**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-C6**	Date Collected:	1/24/2018 14:51		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Dibenzo(a,h)anthracene	0.0091i	ug/L	0.047	0.0048	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
Nitrobenzene-d5 (S)	108	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
2-Fluorobiphenyl (S)	92	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	
p-Terphenyl-d14 (S)	143	%	30-140		1	1/26/2018 11:23	BFM	1/27/2018 00:04	VS	J1
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	64	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 12:55	ZS	
Nickel	30	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 12:55	ZS	
Arsenic	2.6	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 12:55	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 12:55	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID: **1855184006** Date Received: 1/25/2018 16:50 Matrix: Aqueous Liquid

Sample ID: **MW-D1R** Date Collected: 1/24/2018 17:04

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Nitrobenzene-d5 (S)	82	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
2-Fluorobiphenyl (S)	85	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
p-Terphenyl-d14 (S)	126	%	30-140		1	1/26/2018 11:23	BFM	1/27/2018 00:26	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	9.8	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:19	ZS	
Nickel	0.47i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:19	ZS	
Arsenic	U	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:19	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:19	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184007**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-D5R**	Date Collected:	1/24/2018 14:50		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Dibenzo(a,h)anthracene	0.013i	ug/L	0.047	0.0048	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Nitrobenzene-d5 (S)	91	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
2-Fluorobiphenyl (S)	94	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
p-Terphenyl-d14 (S)	138	%	30-140		1	1/26/2018 11:23	BFM	1/27/2018 00:49	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	3.2	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:23	ZS	
Nickel	3.8	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:23	ZS	
Arsenic	340	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:23	ZS	
Antimony	1.1i	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:23	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184008**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-D6R**	Date Collected:	1/24/2018 14:00		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
Nitrobenzene-d5 (S)	89	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
2-Fluorobiphenyl (S)	88	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	
p-Terphenyl-d14 (S)	148	%	30-140		1	1/26/2018 11:23	BFM	1/27/2018 01:11	VS	J1
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	230	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:28	ZS	
Nickel	7.6	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:28	ZS	
Arsenic	3.6	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:28	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:28	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184009**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-E2**	Date Collected:	1/24/2018 15:58		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Nitrobenzene-d5 (S)	90	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
2-Fluorobiphenyl (S)	83	%	30-110		1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
p-Terphenyl-d14 (S)	135	%	30-140		1	1/26/2018 11:23	BFM	1/27/2018 01:34	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	170	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:33	ZS	
Nickel	0.70i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:33	ZS	
Arsenic	11	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:33	ZS	
Antimony	1.0i	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:33	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184010**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-E7**	Date Collected:	1/24/2018 13:04		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
Nitrobenzene-d5 (S)	99	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
2-Fluorobiphenyl (S)	95	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	
p-Terphenyl-d14 (S)	203	%	30-140		1	1/26/2018 12:45	BFM	1/27/2018 01:56	VS	J1
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	2.9	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:38	ZS	
Nickel	28	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:38	ZS	
Arsenic	12	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:38	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:38	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184011**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-E7DD**	Date Collected:	1/24/2018 14:15		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Nitrobenzene-d5 (S)	88	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
2-Fluorobiphenyl (S)	86	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
p-Terphenyl-d14 (S)	132	%	30-140		1	1/26/2018 12:45	BFM	1/27/2018 02:19	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	0.89i	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:42	ZS	
Nickel	U	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:42	ZS	
Arsenic	0.78i	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:42	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:42	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184012**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-E11**	Date Collected:	1/24/2018 13:00		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Nitrobenzene-d5 (S)	91	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
2-Fluorobiphenyl (S)	86	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
p-Terphenyl-d14 (S)	123	%	30-140		1	1/26/2018 12:45	BFM	1/27/2018 02:41	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	13	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:47	ZS	
Nickel	1.5i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:47	ZS	
Arsenic	2.3	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:47	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:47	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184013**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-G2**	Date Collected:	1/24/2018 18:00		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Dibenzo(a,h)anthracene	0.0054i	ug/L	0.047	0.0048	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Naphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Nitrobenzene-d5 (S)	95	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
2-Fluorobiphenyl (S)	79	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
p-Terphenyl-d14 (S)	116	%	30-140		1	1/26/2018 12:45	BFM	1/27/2018 03:04	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	3.2	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:52	ZS	
Nickel	0.65i	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:52	ZS	
Arsenic	U	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:52	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:52	ZS	

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ANALYTICAL RESULTS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID:	**1855184014**	Date Received:	1/25/2018 16:50	Matrix:	Aqueous Liquid
Sample ID:	**MW-G8**	Date Collected:	1/24/2018 17:00		

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Semivolatiles by EPA 8270C										
Analysis Desc: PAH List by 8270C SIM (W)					Preparation Method: EPA 3510C SIM Analytical Method: EPA 8270/PAH SIM					
1-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
2-Methylnaphthalene	U	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Acenaphthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Acenaphthylene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Benzo(a)anthracene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Benzo(a)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Benzo(b)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Benzo(g,h,i)perylene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Benzo(k)fluoranthene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Chrysene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Dibenzo(a,h)anthracene	U	ug/L	0.047	0.0048	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Fluoranthene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Fluorene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Indeno(1,2,3-cd)pyrene	U	ug/L	0.047	0.014	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Naphthalene	0.061i	ug/L	0.093	0.047	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Phenanthrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Pyrene	U	ug/L	0.047	0.023	1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Nitrobenzene-d5 (S)	88	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
2-Fluorobiphenyl (S)	77	%	30-110		1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
p-Terphenyl-d14 (S)	118	%	30-140		1	1/26/2018 12:45	BFM	1/27/2018 03:26	VS	
Analysis Desc: EPA 200.8 Metals (W)					Preparation Method: EPA 200.2 mod. Analytical Method: EPA 200.8 (Total)					
Vanadium	1.7i	ug/L	2.0	0.18	4	1/26/2018 08:48	ZS	1/26/2018 13:57	ZS	
Nickel	U	ug/L	2.0	0.24	4	1/26/2018 08:48	ZS	1/26/2018 13:57	ZS	
Arsenic	U	ug/L	2.0	0.65	4	1/26/2018 08:48	ZS	1/26/2018 13:57	ZS	
Antimony	U	ug/L	2.0	0.95	4	1/26/2018 08:48	ZS	1/26/2018 13:57	ZS	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

PARAMETER QUALIFIERS

J1	Surrogate recovery was outside defined limits.

PROJECT COMMENTS

1855184	A reported value of U indicates that the compound was analyzed for but not detected above the MDL. A value flagged with an "i" flag indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit. RR1|Revised Report, Revision #1 (see date below)

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QUALITY CONTROL DATA

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

QC Batch: MXX/9380 Analysis Method: EPA 200.8 (Total)

QC Batch Method: EPA 200.2 mod.

Associated Lab Samples: 1855182001 1855182002 1855182003 1855184001 1855184002 1855184003 1855184004 1855184005 1855184006 1855184007 1855184008 1855184009 1855184010 1855184011 1855184012 1855184013 1855184014

METHOD BLANK: 134437

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Vanadium	ug/L	U	0.046	
Nickel	ug/L	U	0.059	
Arsenic	ug/L	U	0.16	
Antimony	ug/L	U	0.24	

LABORATORY CONTROL SAMPLE & LCSD: 134438 134439

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Vanadium	ug/L	50	52	54	103	108	85-115	3.77	20	
Nickel	ug/L	50	53	56	106	112	85-115	5.5	20	
Arsenic	ug/L	50	51	54	102	107	85-115	5.71	20	
Antimony	ug/L	50	49	52	97.7	105	85-115	5.94	20	

MATRIX SPIKE SAMPLE: 134441 Original: 1855182003

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Vanadium	ug/L	0	50	54	108	70-130	
Nickel	ug/L	3.1	50	56	105	70-130	
Arsenic	ug/L	0.13	50	56	112	70-130	
Antimony	ug/L	0	50	53	106	70-130	

MATRIX SPIKE SAMPLE: 134443 Original: 1855184014

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Vanadium	ug/L	1.7	50	51	98.4	70-130	
Nickel	ug/L	0.008	50	50	100	70-130	
Arsenic	ug/L	0.16	50	50	99.9	70-130	
Antimony	ug/L	0	50	45	90.8	70-130	

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QUALITY CONTROL DATA

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

SAMPLE DUPLICATE: 134440 Original: 1855182003

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Vanadium	ug/L	0	U	0	20	
Nickel	ug/L	3.1	3.2	3.17	20	
Arsenic	ug/L	0.13	U	16.7	20	
Antimony	ug/L	0	U	0	20	

SAMPLE DUPLICATE: 134442 Original: 1855184014

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Vanadium	ug/L	1.7	2.0	16.2	20	
Nickel	ug/L	0.008	1.1i	197	20	P1
Arsenic	ug/L	0.16	U	43.9	20	P1
Antimony	ug/L	0	U	0	20	

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QUALITY CONTROL DATA

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

QC Batch: XXX/10698 Analysis Method: EPA 8270/PAH SIM

QC Batch Method: EPA 3510C SIM

Associated Lab Samples: 1855184001 1855184002 1855184003 1855184004 1855184005 1855184006 1855184007 1855184008 1855184009 1855184010 1855184011 1855184012 1855184013 1855184014

METHOD BLANK: 134446

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Semivolatiles by EPA 8270C				
Nitrobenzene-d5 (S)	%	95	30-110	
2-Fluorobiphenyl (S)	%	101	30-110	
p-Terphenyl-d14 (S)	%	143	30-140	J1
Naphthalene	ug/L	U	0.050	
2-Methylnaphthalene	ug/L	U	0.050	
1-Methylnaphthalene	ug/L	U	0.050	
Acenaphthylene	ug/L	U	0.025	
Acenaphthene	ug/L	U	0.025	
Fluorene	ug/L	U	0.025	
Phenanthrene	ug/L	U	0.025	
Anthracene	ug/L	U	0.025	
Fluoranthene	ug/L	U	0.025	
Pyrene	ug/L	U	0.025	
Benzo(a)anthracene	ug/L	U	0.025	
Chrysene	ug/L	U	0.025	
Benzo(b)fluoranthene	ug/L	U	0.015	
Benzo(k)fluoranthene	ug/L	U	0.015	
Benzo(a)pyrene	ug/L	U	0.015	
Dibenzo(a,h)anthracene	ug/L	U	0.0051	
Indeno(1,2,3-cd)pyrene	ug/L	U	0.015	
Benzo(g,h,i)perylene	ug/L	U	0.015	

LABORATORY CONTROL SAMPLE & LCSD: 134447 134448

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Semivolatiles by EPA 8270C										
Nitrobenzene-d5 (S)	%				102	97	30-110	5	40	
2-Fluorobiphenyl (S)	%				100	102	30-110	2	40	
p-Terphenyl-d14 (S)	%				119	131	30-140	10	40	
Naphthalene	ug/L	0.993	0.907	0.850	91	86	30-140	6	40	
2-Methylnaphthalene	ug/L	0.991	0.891	0.910	90	92	30-140	2	40	
1-Methylnaphthalene	ug/L	1	0.932	0.942	93	94	30-140	1	40	
Acenaphthylene	ug/L	0.984	0.937	0.911	95	93	30-120	3	40	

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QUALITY CONTROL DATA

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

LABORATORY CONTROL SAMPLE & LCSD: 134447 134448

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	0.994	0.966	0.922	97	93	30-120	5	40	
Fluorene	ug/L	0.986	0.991	0.942	101	96	30-140	5	40	
Phenanthrene	ug/L	0.996	0.942	0.904	95	91	30-120	4	40	
Anthracene	ug/L	1	1.06	0.992	106	99	30-140	7	40	
Fluoranthene	ug/L	0.991	1.13	1.02	114	103	30-120	10	40	
Pyrene	ug/L	0.981	1.22	1.36	125	139	40-140	11	40	
Benzo(a)anthracene	ug/L	1	1.05	1.17	105	116	30-120	11	40	
Chrysene	ug/L	1	1.16	1.10	117	110	30-140	5	40	
Benzo(b)fluoranthene	ug/L	1	0.808	0.811	81	81	30-140	0.4	40	
Benzo(k)fluoranthene	ug/L	1	0.769	0.743	77	74	30-140	3	40	
Benzo(a)pyrene	ug/L	1	0.726	0.676	72	68	30-140	7	40	
Dibenzo(a,h)anthracene	ug/L	1	0.782	0.797	78	80	30-140	2	40	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.906	0.953	91	95	30-140	5	40	
Benzo(g,h,i)perylene	ug/L	1	0.840	0.805	84	80	30-120	4	40	

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QUALITY CONTROL DATA QUALIFIERS

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

QUALITY CONTROL PARAMETER QUALIFIERS

J1	Surrogate recovery was outside defined limits.
P1	RPD value not applicable for sample concentrations less than 5 times the PQL.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 1855184

Project ID: FPL Former Cutler Power Plant

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1855184001	**MW-A2R**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184002	**MW-B5R**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184003	**MW-B8**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184004	**MW-B11**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184005	**MW-C6**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184006	**MW-D1R**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184007	**MW-D5R**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184008	**MW-D6R**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184009	**MW-E2**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184010	**MW-E7**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184011	**MW-E7DD**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184012	**MW-E11**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184013	**MW-G2**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184014	**MW-G8**	EPA 200.2 mod.	MXX/9380	EPA 200.8 (Total)	MMS/8408
1855184001	**MW-A2R**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184002	**MW-B5R**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184003	**MW-B8**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184004	**MW-B11**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184005	**MW-C6**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184006	**MW-D1R**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184007	**MW-D5R**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184008	**MW-D6R**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184009	**MW-E2**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184010	**MW-E7**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184011	**MW-E7DD**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184012	**MW-E11**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184013	**MW-G2**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691
1855184014	**MW-G8**	EPA 3510C SIM	XXX/10698	EPA 8270/PAH SIM	XMS/5691

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J.E.L. Log # 855184
P.O. # _____
Quote # _____

Company Name: Tierra Consulting Group
Address: 5815 N Andrews Way, Suite B
City: Fort Lauderdale State: FL Zip: 33309
Sampling Site Address: Miami, FL
Attn: Jeremy Ally Email: admin@tierraconsulting.com
Project Name: FPL Former Cutler Power Plant Project #: 16707
Sampler Name/Signature: Jeremy Ally

LAB ANALYSIS

Requested Turnaround Time
Note: Rush requests subject to acceptance by the laboratory
___ Standard
X Expedited 5 P.m
Due 1/29/18

#	Sample Label (Client ID)	Collected Date	Collected Time	Matrix Code*	# of Cont	Arsenic (BI)	Antimony (BI)	Nickel (BI)	Vanadium (BI)	PAHs (I)							Field Filtered (Y/N)	Comments
1	MW-A2R	1/24/18	1600	GW	2	X	X	X	X	X								
2	MW-B5R	1/24/18	1025	GW	2	X	X	X	X	X								
3	MW-B8	1/24/18	1122	GW	2	X	X	X	X	X								
4	MW-B11	1/24/18	1203	GW	2	X	X	X	X	X								
5	MW-C6	1/24/18	1451	GW	2	X	X	X	X	X								
6	MW-D1R	1/24/18	1704	GW	2	X	X	X	X	X								
7	MW-D5R	1/24/18	1450	GW	2	X	X	X	X	X								
8	MW-D6R	1/24/18	1400	GW	2	X	X	X	X	X								
9	MW-E2	1/24/18	1558	GW	2	X	X	X	X	X								
10	MW-E7	1/24/18	1304	GW	2	X	X	X	X	X								

RUSH

Matrix Codes*
S Soil/Solid Sediment; SW Surface Water; GW Ground Water; SL Sludge; WW Waste Water; O Other (Please Specify); DW Drinking Water

Pres Codes
A- none; I- Ice; B- HNO_3; O- Other; C- H_2SO_4; M- MeOH; D- NaOH; N- $Na_2S_2O_3$; E- HCl; Z- ZnAc

Relinquished by	Date	Time	Received by	Date	Time
	1/25/18	14:00		1/25/18	14:00
	1/25/18	15:00		1/25/18	15:00
	1/25/18	16:50		1/25/18	16:50

QA/QC level with report
None ___1___2___3___ See price guide for applicable fees

FDEP Dry Cleaning ☐ FDEP UST Pre-Approval ☐
SFWMD ☐ ADaPT ☐ DOT ☐

Temp Control: 3.9 °C

855184

Jupiter
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J.E.L. Log # 855184
P.O. # _____
Quote # _____

Company Name
Address See Sheet #1
City State Zip
Sampling Site Address
Attn: Email
Project Name Project #
Sampler Name/Signature

LAB ANALYSIS

Requested Turnaround Time
Note: Rush requests subject to acceptance by the laboratory
___ Standard
X Expedited
Due 1/29/18 5 P.M.

#	Sample Label (Client ID)	Collected Date	Collected Time	Matrix Code*	# of Cont	Arsenic (BI)	Antimony (BI)	Nickel (BI)	Vanadium (BI)	PAHs (I)							Field Filtered (Y/N)	Comments
1	MW-E7DD	1/24/18	1415	GW	2	X	X	X	X	X								
2	MW-E11	1/24/18	1300	GW	2	X	X	X	X	X								
3	MW-G2	1/24/18	1800	GW	2	X	X	X	X	X								
4	MW-G8	1/24/18	1700	GW	2	X	X	X	X	X								
5																		
6																		
7																		
8																		
9																		
0																		

RUSH

Matrix Codes*
S Soil/Solid Sediment; SW Surface Water
GW Ground Water; SL Sludge
WW Waste Water; O Other (Please Specify)
DW Drinking Water

Pres Codes
A- none; I- Ice
B- HNO_3; O- Other
C- H_2SO_4; M- MeOH
D- NaOH; N- $Na_2S_2O_3$
E- HCl; Z- ZnAc

Relinquished by	Date	Time	Received by	Date	Time
	1/25/18	14:00		1/25/18	14:00
	1/25/18	15:00		1/25/18	15:00
	1/25/18	16:50		1/25/18	16:50

QA/QC level with report
None ___1___2___3___ See price guide for applicable fees

FDEP Dry Cleaning ❑ FDEP UST Pre-Approval ❑
SFWMD ❑ ADaPT ❑ DOT ❑

Temp Control: 3.9 °C

855184

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:	1855184	**Req:**	2709
Client:	TIERRA C.G.	**Project:**	J. Ally
Level:	1	**Date Rec'd:**	1/25/2018 4:50:00 PM
Rec'd via:	courier		

Cooler Check

ID	Temp	# of samples	Security Tape Present	Security Tape Intact	Method of Receipt	Comments
	3.9	14	☐	☐		

Checked By: MD

Sample Verification

Loose Caps?	No	**All Samples on COC accounted For?**	Yes
Broken Containers?	No	**All Samples on COC?**	Yes
pH Verified?	Yes	**Written on Internal COC?**	No
pH Strip Lot #	HC730269	**Sample Vol. Suff. For Analysis?**	Yes
Acid Preserved Samples Lot #	15127	**Samples Rec'd W/I Hold Time?**	Yes
Base Preserved Samples Lot #		**Are All Samples to be Analyzed?**	Yes
Samples Received From	courier	**Correct Sample Containers?**	Yes
Soil Origin (Domestic/Foreign		**COC Comments written on COC?**	No
Site Location/Project on COC?	Yes	**Samplers Initials on COC?**	Yes
Client Project # on COC?	Yes	**Sample Date/Time Indicated?**	Yes
Project Mgr. Indicated on COC	Yes	**TAT Requested:**	RUSH
COC relinquished/Dated by Client?	Yes	**Client Requests Verbal Results?**	No
COC Received/Dated by JEL	Yes		
JEL to Conduct ALL Analyses?	Yes		

Subcontract Analysis

Parameter	Via	Lab Name	Comments

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: FORMER FPL CUTLER PLANT	SITE LOCATION:	
WELL NO: MW-A2R	SAMPLE ID:	DATE: 1/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 8 feet to 18 feet	STATIC DEPTH TO WATER (feet): 14.46	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) = (18 feet – 14.46 feet) X 0.16 gallons/foot = 0.566 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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1538	PURGING ENDED AT: 1556	TOTAL VOLUME PURGED (gallons): 3.6

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)
1541	0.6	0.6	0.2	15.61	7.15	26.3	702	5.20	78.0	CLOUDY	NONE
1546	1.0	1.6	0.2	15.61	7.15	26.4	705	5.37	64.3	CLOUDY	NONE
1551	1.0	2.6	0.2	15.61	7.14	26.4	702	4.87	46.7	CLOUDY	NONE
1556	1.0	3.6	0.2	15.61	7.14	26.3	701	5.28	26.6	CLOUDY	NONE

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: DEREK THOMAS II / TCG	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1600	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: HDPE	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			
MW-A2R	1	AG	1L	ICE	—	—	PAH	APP	400
MW-A2R	1	PE	125 mL	HNO_3 + ICE	—	<2	METALS	APP	400

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:** ± 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: FORMER FPL CUTLER PLANT	SITE LOCATION:
WELL NO: MW-BSR	SAMPLE ID: / DATE: 1/24/10

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 3 feet to 13 feet	STATIC DEPTH TO WATER (feet): 5.90	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) = (13 feet – 5.90 feet) X 0.16 gallons/foot = 1.14 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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0951	PURGING ENDED AT: 1022	TOTAL VOLUME PURGED (gallons): 6.2

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)
0957	1.2	1.2	0.2	5.92	7.08	25.5	1802	2.70	614	WHITE	NONE
1002	1.0	2.2	0.2	5.92	7.10	25.5	1787	2.48	289	WHITE	NONE
1007	1.0	3.2	0.2	5.92	7.08	25.5	1789	2.37	251	WHITE	NONE
1012	1.0	4.2	0.2	5.92	7.08	25.5	1805	2.41	154	WHITE	NONE
1017	1.0	5.2	0.2	5.92	7.08	25.5	1787	2.31	120	WHITE	NONE
1022	1.0	6.2	0.2	5.92	7.08	25.5	1776	2.29	114	WHITE	NONE

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: DEREK THOMAS II / TCG	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1025	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: HDPE	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			
MW-BSR	1	AG	1L	ICE	—	—	PAH	APP	400
MW-BSR	1	PE	125 mL	HNO_3 + ICE	—	<2	METALS	APP	400

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:** ± 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: FORMER FPL CUTLER PLANT	SITE LOCATION: MIAMI, FL
WELL NO: MW-B8	SAMPLE ID: / DATE: 1/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 1 feet to 11 feet	STATIC DEPTH TO WATER (feet): 2.57	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) = (11 feet – 2.57 feet) X 0.16 gallons/foot = 1.34 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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1100	PURGING ENDED AT: 1119	TOTAL VOLUME PURGED (gallons): 5.4

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)
1109	1.4	1.4	0.2	4.65	7.00	25.0	3087	0.47	50.8	CLEAR	YES
1110	1.0	2.4	0.2	4.65	7.00	25.1	3083	0.67	51.1	CLEAR	YES
1113	1.0	3.4	0.2	4.65	7.02	25.4	3042	0.61	53.4	CLEAR	YES
1116	1.0	4.4	0.2	4.65	7.01	25.4	3037	0.48	40.4	CLEAR	YES
1119	1.0	5.4	0.2	4.65	7.01	25.3	3050	0.43	28.8	CLEAR	YES

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: DEREK THOMAS II / TLG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: ~~1116~~ 1122	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: HDPE	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			
MW-B6	1	AG	1 L	ICE	—	—	PAH	APP	400
MW-B8	1	PE	125 mL	HNO_3 + ICE	—	<2	METALS	APP	400

REMARKS: GENERATED 2' DRAW DOWN DURING PURGING

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

GROUNDWATER SAMPLING LOG

SITE NAME: Former FPL Cutler Plant		SITE LOCATION: Miami, Florida	
WELL NO: MW-B11	SAMPLE ID: MW-B11		DATE: 01/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 1 feet to 11 feet	STATIC DEPTH TO WATER (feet): 2.04	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)
= (11 feet – 2.04 feet) X 0.16 gallons/foot = 1.43 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): 5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5	PURGING INITIATED AT: 11:28	PURGING ENDED AT: 12:01	TOTAL VOLUME PURGED (gallons): 6.6

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)
11:36	1.6	1.6	0.2	2.07	6.75	24.99	5783	2.83	148	Clear	Sulfur
11:41	1.0	2.6	0.2	2.07	6.68	25.04	5767	3.68	137	Clear	Sulfur
11:46	1.0	3.6	0.2	2.07	6.69	25.05	5797	2.53	33.9	Clear	Sulfur
11:51	1.0	4.6	0.2	2.07	6.68	25.08	5763	2.41	18.5	Clear	Sulfur
11:56	1.0	5.6	0.2	2.07	6.67	25.11	5751	2.36	16.0	Clear	Sulfur
12:01	1.0	6.6	0.2	2.07	6.65	25.16	5680	2.22	13.2	clear	Sulfur

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: Carolina Arenas / TCG	SAMPLER(S) SIGNATURE(S): Carolina Arenas	SAMPLING INITIATED AT: 12:03	SAMPLING ENDED AT: 12:06
PUMP OR TUBING DEPTH IN WELL (feet): 5	TUBING MATERIAL CODE: HDPE	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			
MW-B11	1	AG	1 L	Ice	—	—	PAH	APP	400
MW-B11	1	PE	125mL	HNO_3 + ice	—	<2	Metals	APP	400

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:** ± 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: FORMER FPL CUTLER PLANT	SITE LOCATION:
WELL NO: MW-C6	SAMPLE ID:	DATE: 1/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 2.1 feet to 12.1 feet	STATIC DEPTH TO WATER (feet): 3.50	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) = (12.1 feet – 3.50 feet) X 0.16 gallons/foot = 1.376 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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1430	PURGING ENDED AT: 1449	TOTAL VOLUME PURGED (gallons): 3.8

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)
1437	1.4	1.4	0.2	3.50	6.94	25.5	1165	0.13	1.80	CLEAR	NONE
1440	0.6	2.0	0.2	3.50	6.93	25.4	1173	0.15	2.46	CLEAR	NONE
1443	0.6	2.6	0.2	3.50	6.93	25.4	1178	0.16	0.78	CLEAR	NONE
1446	0.6	3.2	0.2	3.50	6.93	25.5	1180	0.16	0.77	CLEAR	NONE
1449	0.6	3.8	0.2	3.50	6.93	25.5	1184	0.18	0.70	CLEAR	NONE

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: DEREK THOMAS II \ TCG	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1451	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: HDPE	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			
MW-C6	1	AG	1L	ICE	—	—	PAH	APP	400
MW-C6	1	PE	125 mL	HNO_3 + ICE	—	<2	METALS	APP	400

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:** ± 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: FPL Former Cutler Plant		SITE LOCATION: Miami, Florida	
WELL NO: MW-D1R	SAMPLE ID: MW-D1R		DATE: 01/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 10 feet to 20 feet	STATIC DEPTH TO WATER (feet): 15.54	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)
= (20 feet – 15.54 feet) X 0.16 gallons/foot = 0.71 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): 17	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 17	PURGING INITIATED AT: 16:37	PURGING ENDED AT: 17:02	TOTAL VOLUME PURGED (gallons): 5.0

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 mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
16:42	1.0	1.0	0.2	16.00	6.37	25.90	1072	3.37	56.2	Clear	None
16:47	1.0	2.0	0.2	16.00	6.32	25.90	1072	1.90	22.8	Clear	None
16:52	1.0	3.0	0.2	16.00	6.30	25.89	1066	1.58	10.9	Clear	None
16:57	1.0	4.0	0.2	16.00	6.29	25.88	1053	1.38	9.23	Clear	None
17:02	1.0	5.0	0.2	16.00	6.30	25.87	1040	1.38	6.29	Clear	None

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: Carolina Arenas / TCG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 17:04	SAMPLING ENDED AT: 17:07
PUMP OR TUBING DEPTH IN WELL (feet): 17	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y ☒ Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y ☒	TUBING Y ☒ (replaced)	DUPLICATE: 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			
MW-D1R	1	AG	1 L	Ice	—	—	PAH	APP	400
MW-D1R	1	PE	125 mL	HNO_3 + Ice	—	<2	Metals	APP	400

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:** ± 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: FPL Former Cutler Plant	SITE LOCATION: Miami, Florida
WELL NO: MW-DSR	SAMPLE ID: MW-DSR	DATE: 01/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 6.71	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)
= (12 feet – 6.71 feet) X 0.16 gallons/foot = 0.85 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): 8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 14:27	PURGING ENDED AT: 14:48	TOTAL VOLUME PURGED (gallons): 4.2

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)
14:32	1.0	1.0	0.2	6.76	6.25	26.24	831	2.69	10.8	Clear	None
14:37	1.0	2.0	0.2	6.76	6.26	26.24	828	1.84	5.87	Clear	None
14:42	1.0	3.0	0.2	6.76	6.32	26.31	827	1.14	5.31	Clear	None
14:45	0.6	3.6	0.2	6.76	6.36	26.29	828	1.09	5.54	Clear	None
14:48	0.6	4.2	0.2	6.76	6.37	26.30	827	0.98	4.64	Clear	None

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: Carolina Arenas / TCG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 14:50	SAMPLING ENDED AT: 14:53
PUMP OR TUBING DEPTH IN WELL (feet): 8.00	TUBING MATERIAL CODE: HDPE	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			
MW-DSR	1	AG	1L	Ice	—	—	PAH	APP	400
MW-DSR	1	PE	125mL	HNO_3+ice	—	<2	Metals	APP	400

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:** ± 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: FORMER FPL CUTLER PLANT	SITE LOCATION: MIAMI, FL
WELL NO: MW-06R	SAMPLE ID: / DATE: 1/24/18

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	1/4	2 feet to 12 feet	5.40	

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet – 5.40 feet) X 0.16 gallons/foot = 1.056 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):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
		1330	1357	5.1

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)
1337	1.1	1.1	0.2	5.40	7.30	25.4	1489	5.52	2.32	CLEAR	NONE
1342	1.0	2.1	0.2	5.40	7.29	25.5	1489	5.43	1.47	CLEAR	NONE
1347	1.0	3.1	0.2	5.40	7.29	25.5	1487	5.01	0.77	CLEAR	NONE
1352	1.0	4.1	0.2	5.40	7.29	25.5	1487	5.18	0.64	CLEAR	NONE
1357	1.0	5.1	0.2	5.40	7.28	25.5	1486	5.12	0.75	CLEAR	NONE

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:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
DEREK THOMAS #1 / TCG	[signature]	1400	

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
	HDPE		

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			
MW-06R	1	AG	1L	ICE	—	—	PAH	APP	400
MW-06R	1	PE	125 mL	HNO_3 + ICE	—	<2	METALS	APP	400

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:** ± 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: FDL Former Cutler Plant	SITE LOCATION:	
WELL NO: MW-E2	SAMPLE ID: MW-E2	DATE: 01/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 8 feet to 18 feet	STATIC DEPTH TO WATER (feet): 13.53	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)
= (18 feet – 13.53 feet) X 0.16 gallons/foot = 0.72 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): 15	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15	PURGING INITIATED AT: 15:31	PURGING ENDED AT: 15:56	TOTAL VOLUME PURGED (gallons): 5.0

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)
15:36	1.0	1.0	0.2	13.56	6.90	27.00	574	5.70	678	Cloudy	None
15:41	1.0	2.0	0.2	13.56	6.74	27.03	547	5.06	761	Cloudy	None
15:46	1.0	3.0	0.2	13.56	6.70	27.00	545	5.26	515	Cloudy	None
15:51	1.0	4.0	0.2	13.56	6.61	27.00	545	5.32	231	Cloudy	None
15:56	1.0	5.0	0.2	13.56	6.68	27.00	547	5.37	206	Cloudy	None

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: Carolina Arenas / TCG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 15:58	SAMPLING ENDED AT: 16:01
PUMP OR TUBING DEPTH IN WELL (feet): 15	TUBING MATERIAL CODE: HDPE	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			
MW-E2	1	AG	1L	Ice	—	—	PAH	APP	400
MW-E2	1	PE	125mL	HNO_3 + ice	—	<2	Metals	APP	400

REMARKS:
Turbidity < 20 NTU could not be reached after purging in excess of 5 well volumes

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

GROUNDWATER SAMPLING LOG

SITE NAME: FPL Former Cutler Plant		SITE LOCATION: Miami, Florida	
WELL NO: MW-E7	SAMPLE ID: MW-E7		DATE: 01/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 1.7 feet to 11.7 feet	STATIC DEPTH TO WATER (feet): 6.04	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)
= (11.7 feet – 6.04 feet) X 0.16 gallons/foot = 0.91 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): 8.00	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.00	PURGING INITIATED AT: 12:41	PURGING ENDED AT: 13:02	TOTAL VOLUME PURGED (gallons): 4.2

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)
12:46	1.0	1.0	0.2	6.08	6.48	26.31	834	1.45	99.5	Clear	Sulfur
12:51	1.0	2.0	0.2	6.08	6.50	26.39	838	0.83	28.5	Clear	Sulfur
12:56	1.0	3.0	0.2	6.08	6.49	26.45	839	0.56	8.33	Clear	Sulfur
12:59	0.6	3.6	0.2	6.08	6.48	26.45	840	0.48	5.71	Clear	Sulfur
13:02	0.6	4.2	0.2	6.08	6.47	26.46	841	0.48	5.41	Clear	Sulfur

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: Carolina Arenas / TCG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 13:04	SAMPLING ENDED AT: 13:07
PUMP OR TUBING DEPTH IN WELL (feet): 8.00	TUBING MATERIAL CODE: HDPE	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					
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)
MW-E7	1	AG	1 L	Ice	—	—	PAH	APP	400
MW-E7	1	PE	125 mL	HNO_3 + ice	—	<2	Metals	APP	400

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:** ± 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: FPL Former Cutler Plant		SITE LOCATION: Miami, Florida	
WELL NO: MW-E7DD	SAMPLE ID: MW-E7DD		DATE: 01/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 64.8 feet to 69.8 feet	STATIC DEPTH TO WATER (feet): 4.24	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)
= 0.01 gallons + (0.0026 gallons/foot X 67 feet) + 0.25 gallons = 0.43 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 67	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 67	PURGING INITIATED AT: 14:00	PURGING ENDED AT: 14:12	TOTAL VOLUME PURGED (gallons): 2.4

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)
14:03	0.6	0.6	0.2	4.27	6.94	26.39	6228	0.74	16.0	Clear	Sulfur
14:06	0.6	1.2	0.2	4.27	6.91	26.33	6588	0.35	5.61	Clear	Sulfur
14:09	0.6	1.8	0.2	4.27	6.87	26.32	6716	0.31	4.34	Clear	Sulfur
14:12	0.6	2.4	0.2	4.27	6.82	26.32	6695	0.30	2.68	Clear	Sulfur

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: Carolina Arenas / TCG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 14:15	SAMPLING ENDED AT: 14:18
PUMP OR TUBING DEPTH IN WELL (feet): 67	TUBING MATERIAL CODE: HDPE	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			
MW-E7DD	2	AG	1 L	Ice	—	—	PAH	APP	400
MW-E7DD	1	PE	125mL	HNO3+Ice	—	<2	Metals	APP	400

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:** ± 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: FORMER FPL CUTLER PLANT		SITE LOCATION: MIAMI, FL	
WELL NO: MW-B11	SAMPLE ID:		DATE: 1/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 0.6 feet to 10.6 feet	STATIC DEPTH TO WATER (feet): 1.61	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: (only fill out if applicable) **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
= (10.6 feet – 1.61 feet) X 0.16 gallons/foot = 1.43 gallons

EQUIPMENT VOLUME PURGE: (only fill out if applicable) **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
= gallons + (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: 1226	PURGING ENDED AT: 1254	TOTAL VOLUME PURGED (gallons): 5.6

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)
1234	1.6	1.6	0.2	2.09	6.96	24.8	29553	0.06	15.4	CLEAR	YES
1239	1.6	2.6	0.2	2.09	6.96	24.8	29564	0.06	12.0	CLEAR	YES
1244	1.6	3.6	0.2	2.09	6.97	24.9	29536	0.05	8.2	CLEAR	YES
1249	1.6	4.6	0.2	2.09	6.97	24.9	29553	0.07	9.45	CLEAR	YES
1254	1.6	5.6	0.2	2.09	6.96	24.8	29580	0.06	9.14	CLEAR	YES

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: DEREK THOMAS II / TCG	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1300	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: HDPE	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			
MW-B11	1	AG	1L	ICE	—	—	PAH	APP	400
MW-B11	1	PE	125mL	HNO_3 + ICE	—	<2	METALS	APP	400

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:** ± 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: FPL Former Cutler Plant		SITE LOCATION: Miami, Florida	
WELL NO: MW-G2	SAMPLE ID: MW-G2		DATE: 01/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH: 7.9 feet to 17.9 feet	STATIC DEPTH TO WATER (feet): 10.02	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)
= (17.9 feet – 10.02 feet) X 0.16 gallons/foot = 1.26 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: 17:24	PURGING ENDED AT: 17:56	TOTAL VOLUME PURGED (gallons): 6.4

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)
17:31	1.4	1.4	0.2	10.09	7.27	26.0	764	3.09	167	Cloudy	None
17:36	1.0	2.4	0.2	10.09	7.27	26.0	743	3.36	234	Cloudy	None
17:41	1.0	3.4	0.2	10.09	7.26	26.0	739	3.38	227	Cloudy	None
17:46	1.0	4.4	0.2	10.09	7.26	26.0	728	3.39	203	Cloudy	None
17:51	1.0	5.4	0.2	10.09	7.26	26.0	712	3.57	188	Cloudy	None
17:56	1.0	6.4	0.2	10.09	7.26	259	691	3.72	138	Cloudy	None

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: Carolina Arenas / TCA	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 18:00	SAMPLING ENDED AT: 18:03
PUMP OR TUBING DEPTH IN WELL (feet): 12	TUBING MATERIAL CODE: HDPE	FIELD-FILTERED: Y ☒ Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y ☒	TUBING Y ☒ (replaced)	DUPLICATE: 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			
MW-G2	1	AG	1L	Ice	—	—	PAH	APP	400
MW-G2	1	PE	125mL	HNO3+Ice	—	<2	Metals	APP	400

REMARKS: DO < 20% and Turbidity < 20NTU could not be reached after purging in excess of 5 well volumes.

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

GROUNDWATER SAMPLING LOG

SITE NAME: FORMER FPL CUTLER PLANT		SITE LOCATION: MIAMI, FL	
WELL NO: MW-68	SAMPLE ID:		DATE: 1/24/18

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/4	WELL SCREEN INTERVAL DEPTH 0.8 feet to 10.8 feet	STATIC DEPTH TO WATER (feet): 5.82	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: (only fill out if applicable) **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
= (10.8 feet – 5.82 feet) X 0.16 gallons/foot = 0.796 gallons

EQUIPMENT VOLUME PURGE: (only fill out if applicable) **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
= gallons + (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: 1640	PURGING ENDED AT: 1657	TOTAL VOLUME PURGED (gallons): 2.6

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)
1648	0.8	0.8	0.2	5.82	6.95	25.0	1660	0.23	16.95	CLEAR	SULFUR YES
1651	0.6	1.4	0.2	5.82	6.94	25.2	1653	0.16	15.40	CLEAR	YES
1654	0.6	2.0	0.2	5.82	6.93	25.2	1656	0.16	15.60	CLEAR	YES
1657	0.6	2.6	0.2	5.82	6.93	25.2	1666	0.14	12.9	CLEAR	YES

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: DEREK THOMAS II / TCG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1700	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: HDPE	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			
MW-68	1	AG	1L	ICE	—	—	PAH	APP	400
MW-68	1	PE	125mL	HNO_3 + ICE	—	<2	METALS	APP	400

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:** ± 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

Tierra Consulting Group
5815 N Andrews Way, Fort Lauderdale, FL 33309
(954) 202-9226 | admin@tierraconsulting.com

Calibration and Mobilization Checklist

Equipment Model: YSI Pro Plus Serial #: 17L101374

Date: 1/23/2018 Project: 16707 FPL Former Cutler

Calibration Standard #1: 100% DO Lot #: Atm. Exp. Date: –

Equipment Reading: 99.3% DO Acceptance Criteria:

Calibration Standard #2: 80,000 µS/cm Lot #: HI7034 Exp. Date: 06 / 2019

Equipment Reading: 80,665 µS/cm Acceptance Criteria: ±5%

Calibration Standard #3: 7.0 pH Lot #: 66F077 Exp. Date: 06/2018

Equipment Reading: 6.81 SU Acceptance Criteria: ±0.2 SU

Calibration Standard #4: 4.0 pH Lot #: 66J010 Exp. Date: 10 /2018

Equipment Reading: 3.96 SU Acceptance Criteria: ±0.2SU

Calibration Standard #5: 10.0 pH Lot #: 66I964 Exp. Date: 09 /2018

Equipment Reading: 10.05 SU Acceptance Criteria: ±0.2SU

Ambient Temperature: 24.5°C Ambient Pressure: 766.0 mmHg

Equipment Condition

Battery Status: (Full) Mid Empty Other:

New Physical Damage: (No) Yes Notes:

New Missing Components: (No) Yes Notes:

Calibrated By: Jeremy Ally
Print Name

Signature

Circle/Fill In: (Lab Calibrated) Field Calibrated/Verified:

Notes:

Boldly"X" this box if there is qualified data on this page.

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Meter ID: 17L101374 RQ- Project: 16707-FPL CUTLER

Notes: (1) Always wait for meter to stabilize before recording any readings.
(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site_____

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.										P / F	L / F
ICV	DEREK THOMAS II	01/24/18	0941	25.9	8.128	8.34	102.8	—	—	P / F	L / F
CCV	DEREK THOMAS II	01/24/18	1405	25.5	8.188	8.31	100%	—	—	P / F	L / F
CCV	DEREK THOMAS II	01/24/18	1705	24.9	8.279	8.38	100%	—	—	P / F	L / F

DO Acceptance criteria from Table ± 0.3 mg/L. **Rapid-Pulse Sensors:** DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.
Optical: DO gain range 0.85 to 1.15; DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard ~~µmhos/cm~~ µS/cm	Meter Reading ~~µmhos/cm~~ µS/cm	Pass / Fail	Lab / Field
Calibr.								P / F	L / F
ICV	DEREK THOMAS II	01/24/18	0945	—	—	84	88	P / F	L / F
CCV	DEREK THOMAS II	01/24/18	1407	—	—	84	86	P / F	L / F
CCV	DEREK THOMAS II	01/24/18	1707	—	—	84	88	P / F	L / F

Conductivity Acceptance criteria ± 5%

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.						7.0			P / F	L / F
Calibr.						4.0			P / F	L / F
Calibr.						10.0			P / F	L / F
ICV	DEREK THOMAS II	01/24/18	0943	66F077	6/2018	7.0	6.87	—	P / F	L / F
CCV	DEREK THOMAS II	01/24/18	1409	66F077	6/2018	7.0	6.91	—	P / F	L / F
CCV	DEREK THOMAS II	01/24/18	1709	66F077	6/2018	7.0	6.90	—	P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50; mV pH 4 Range +180 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value meters	Pass / Fail	Lab / Field
Pressure mode in air						P / F	L / F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HACH 2100Q **INSTRUMENT #** 11110C014297

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP
☐ TURBIDITY ☐ RESIDUAL Cl ☐ DO ☐ OTHER _____

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A HACH 1.00 NTU 12/2018 A6365
Standard B HACH 100 NTU 8/2018 A7126
Standard C HACH 800 NTU 8/2018 A7124

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
18/01/24	0935	A	1.00	1.02	2%	YES	IC	DT
			NTU	NTU				
18/01/24	0937	B	100	104	4%	YES	IC	DT
			NTU	NTU				
18/01/24	0939	C	800	802	0.3%	YES	IC	DT
			NTU	NTU				
		CCV DURING SAMPLING EVENT						
18/01/24	1411	A	1.00	1.03	3%	YES	CCV	DT
			NTU	NTU				
		CCV FOLLOWING SAMPLING EVENT						
18/01/24	1711	A	1.00	1.02	2%	YES	CCV	DT
			NTU	NTU				
18/01/24	1713	B	100	103	3%	YES	CCV	DT
			NTU	NTU				

Certificate of Calibration
Multi-Parameter Water Quality

Equipment Type:	YSI 556				
Date	January 23, 2018				
Serial #	08C100848				
Calibration Standard # 1	pH 4.01				
Calibration Standard # 2	pH 7.00				
Calibration Standard # 3	pH 10.00				
Calibration Standard # 4	100% D.O Saturation				
Calibration Standard # 5	Zobell ORP Solution				
Calibration Standard # 6	1000uS Conductivity				
Calibration Standard # 7					
Calibration Standard # 8					
Calibration Standard # 9					
Lot # (s)	6K289	6G240	6G237	6C160	16A100497
	pH4.01	pH7.00	1000uS	PH10.00	237.5 ORP
Expiration Date(s)	Jun-18	Jun-18	May-18	Jun-18	Jan-18
Ambient Temperature	23°C (73.4°F)				
Instrument Reading; Calibrated	pH 4.01	pH 7.00	pH 9.99	Cond. 1002uS	
	237.0mV ORP	8.72 mg/L D.O.			
Calibrated By:	Miami Regional Manager	***Signature:***			

NOTES:

Peterson Environmental, Inc.
1704 W. Grace Street
Tampa, FL 33607
Phone: 813-871-2626| Fax 813-871-1366

Boldly "X" this box if there is qualified data on this page.

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Meter ID: 08C100848 RQ- Project: 16707-FPLCutler

Notes: (1) Always wait for meter to stabilize before recording any readings.
(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site_____

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.										P / F	L / F
ICV	Carolina Arenas	01/24/18	0939	24.8	8.294	8.41	100%	—	—	(P) / F	L / (F)
CCV	Carolina Arenas	01/24/18	14:59	25.0	8.263	8.38	100%	—	—	(P) / F	L / (F)
CCV	Carolina Arenas	01/24/18	18:05	24.7	8.309	8.42	100%	—	—	(P) / F	L / (F)

DO Acceptance criteria from Table ± 0.3 mg/L. **Rapid-Pulse Sensors:** DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.
Optical: DO gain range 0.85 to 1.15; DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard ~~µmhos/cm~~ µS/cm	Meter Reading ~~µmhos/cm~~ µS/cm	Pass / Fail	Lab / Field
Calibr.								P / F	L / F
ICV	Carolina Arenas	01/24/18	0937	—	—	1,000	~~1049~~ 1048	(P) / F	L / (F)
CCV	Carolina Arenas	01/24/18	14:57	—	—	1,000	1,038	(P) / F	L / (F)
CCV	Carolina Arenas	01/24/18	18:07	—	—	1,000	1,036	(P) / F	L / (F)

Conductivity Acceptance criteria ± 5%

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.						7.0			P / F	L / F
Calibr.						4.0			P / F	L / F
Calibr.						10.0			P / F	L / F
ICV	Carolina Arenas	01/24/18	0935	6GJ010	10/18	4.0	4.09	—	(P) / F	L / (F)
CCV	Carolina Arenas	01/24/18	14:55	6GJ010	10/18	4.0	4.11	—	(P) / F	L / (F)
CCV	Carolina Arenas	01/24/18	18:09	6GJ010	10/18	4.0	4.10	—	(P) / F	L / (F)

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50; mV pH 4 Range +180 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value meters	Pass / Fail	Lab / Field
Pressure mode in air						P / F	L / F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

INSTRUMENT (MAKE/MODEL#) HACH 2100Q **INSTRUMENT #** 16030C048233

PARAMETER: *[check only one]*

- ☐ TEMPERATURE
- ☑ TURBIDITY
- ☐ CONDUCTIVITY
- ☐ RESIDUAL Cl
- ☐ SALINITY
- ☐ DO
- ☐ pH
- ☐ OTHER _____
- ☐ ORP

STANDARDS: *[Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]*

Standard A HACH 1.00 NTU - 12/2018 A6365

Standard B HACH 100 NTU - 8/2018 A7126

Standard C HACH 800 NTU - 8/2018 A7124

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
18/01/24	09:29	A	1.00	1.01	1%	Yes	IC	CA
			NTU	NTU				
18/01/24	09:31	B	100	102	2%	Yes	IC	CA
			NTU	NTU				
18/01/24	09:33	C	800	795	0.6%	Yes	IC	CA
			NTU	NTU				
		CCV During Sampling Event						
18/01/24	14:53	A	1.00	1.02	2%	Yes	CCV	CA
			NTU	NTU				
		CCV Following Sampling Event						
18/01/24	18:11	A	1.00	1.03	3%	Yes	CCV	CA
			NTU	NTU				
18/01/24	18:13	B	100	101	1%	Yes	CCV	CA
			NTU	NTU				