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**Hillsborough County** 

May 29, 2015

Dept. Of Environmental Protection

JUN 0 1 2015

Southwest District

Mr. John Morris, P.G.
Florida Department of Environmental Protection
Waste Permitting Section
13051 Telecom Parkway
Temple Terrace, FL 33637

RE: Southeast County Landfill
Laboratory Analytical Results
Initial Assessment Monitoring Plan
Report No. 56 – April 2015

Dear Mr. Morris:

The Hillsborough County Public Utilities Department (County) is pleased to provide the analytical results from the April 2015 sampling event conducted as part of the continuation of the Initial Assessment Monitoring Plan (IAMP). The IAMP was developed to address the potential impacts to groundwater from the sinkhole on the edge of Phase 6 at the Southeast County Landfill (SCLF), which was discovered on December 14, 2010.

As part of the agreement between the County and Florida Department of Environmental Protection (Department) Southwest District Office, four (4) upper Floridan/Limestone aquifer monitoring wells, designated as TH-72, TH-76, TH-77, and TH-78 are sampled on a monthly schedule. Representative samples were collected from each of these four (4) monitoring wells on April 1-2, 2015 and analyzed for total dissolved solids (TDS), chloride, total ammonia, arsenic, iron, sodium, and five (5) field parameters. The samples collected were analyzed by our contracted laboratory, Advanced Environmental Laboratories, Inc. The following paragraphs summarize the parameter specific results pertinent to the evaluation of potential water quality impacts from the sinkhole at the SCLF.

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#### pН

pH was observed within the Secondary Drinking Water Standard (SDWS) acceptable range of 6.5-8.5 pH units in each of the four (4) upper Floridan/Limestone aquifer monitoring wells. The pH values in monitoring wells, TH-72, TH-76, TH-77, and TH-78 were recorded at 6.67, 7.28, 7.27, and 7.63 pH units, respectively, and the values are consistent with the historical data set.

#### **Turbidity**

Turbidity values in the upper Floridan/Limestone aquifer monitoring wells TH-72, TH-76, TH-77, and TH-78 were recorded at 1.02, 0.96, 0.47, and 1.27 Nephelometric Turbidity Units (NTUs), respectively, and these values are consistent with the historical data set.

#### Conductivity

The conductivity values in TH-72, TH-76, TH-77, and TH-78 were recorded at 2,459, 508, 495, and 584 umhos/cm, respectively. Monitoring well TH-72 is the closest upper Floridan/Limestone aquifer monitoring well to the sinkhole, and it continues to exhibit groundwater impacts similar to those observed over the past year. Conductivity values in TH-76, TH-77, and TH-78 are relatively low and consistent with the other unaffected deep wells across the site.

#### **Total Dissolved Solids (TDS)**

The TDS in monitoring well TH-72 was observed at 1,300 mg/l, which continues to be above the SDWS of 500 mg/l. The remaining three (3) down gradient upper Floridan/Limestone aquifer monitoring wells, TH-76, TH-77, and TH-78 exhibited TDS values of 270, 260, and 320 mg/l, respectively. These values are consistent with the water quality of the unaffected deep wells across the site.

#### Chloride

Chloride was observed at 810 mg/l in monitoring well TH-72, which is well above the SDWS of 250 mg/l, and the highest concentration observed to date. Chloride values in the down gradient upper Floridan/Limestone aquifer monitoring wells TH-76, TH-77, and TH-78 were observed at 9.7, 8.6, and 33 mg/l. These values are consistent with the unaffected deep wells across the site.

#### Iron

The total iron concentration in the upper Floridan/Limestone aquifer monitoring well TH-72 was 0.61 mg/l, which is above the SDWS of 0.3 mg/l. The remaining three monitoring wells, TH-76, TH-77, and TH-78 exhibited iron below the SDWS at 0.12, 0.13, and 0.24 mg/l, respectively. The concentrations of iron observed are consistent with the historical data sets for these wells.

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#### Sodium

Sodium was observed at a concentration of 170 mg/l in monitoring well TH-72, which is just above the Primary Drinking Water Standard (PDWS) of 160 mg/l. Sodium values in down gradient monitoring wells TH-76, TH-77, and TH-78 were observed at 19, 15, and 31 mg/l, which is consistent with the unaffected deep wells across the site.

#### **Groundwater Elevations and Direction of Flow**

On April 1, 2015, the County collected groundwater elevation data at eleven (11) locations along the western portion of Phases 1-6 at the landfill site, including seven (7) surficial aquifer wells and four (4) upper Floridan (limestone) aquifer wells. Contour diagrams have been generated manually with AutoCAD <sup>TM</sup> utilizing the pertinent data points,

No significant changes to the patterns of flow in the surficial aquifer were noted in the data set and the flow diagram for the surficial aquifer. The elevations observed within the wells closest to the sinkhole indicate that the flow pattern continues to be affected by the feature, which has not been unexpected. However, the overall direction of flow within the surficial aquifer remains toward the west/northwest.

A contour diagram of the upper Floridan / Limestone aquifer has been prepared for the west side of the landfill around the sinkhole, and it is provided with this submittal. During this sampling event, the changes in elevations between TH-72 and TH-76 is - 0.04 ft., and TH-72 and TH-77 is + 0.15 ft. Elevation of newly installed monitor well TH-78 indicated an elevation approximately 9 feet higher than those elevations recorded at TH-72, TH-76, and TH-77. This anomaly in the groundwater elevation indicates that TH-78 may be influenced by some sub-surface geologic formation that may be creating this potentiometric high. Based on the significant difference in elevations, the data from TH-78 was not utilized to prepare the contour diagram. However, the County maintains the position that the configuration of the three down gradient deep monitoring wells adequately addresses the potential for migration of the contamination observed in TH-72, and the three wells have not exhibited any impact to date.

#### **Conclusions**

The water quality observed in the April 2015 IAMP sampling event indicates that the monitoring well TH-72 continues to exhibit impacts to water quality in the upper Floridan / Limestone aquifer. The impacts observed include elevated conductivity, TDS, chloride, iron, and sodium. Overall, the values have remained relatively stable, and do not appear to be migrating to any of the down gradient deep monitoring wells. Down gradient wells, TH-76 and TH-77, and TH-78 continue to exhibit good water quality consistent with the unaffected deep wells at the site.

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#### Recommendations

The County has submitted information to the FDEP Southwest District office that supports the discontinuation of the IAMP. Two select IAMP wells, TH-72 and TH-78, shall be included in the semi-annual sampling events conducted in accordance with the Landfill Operations Permit No. 35435-022-SO/01. The application for modification of that permit has been discussed with the FDEP, and will be formally submitted to the FDEP in Tallahassee in .

Enclosed for your review please find a site location map depicting the location of the monitoring wells sampled, the water quality data summary table for this sampling event, a groundwater elevation data table, groundwater contour and flow diagrams for the surficial and upper Floridan / Limestone aquifers, the historical data summary tables for the wells sampled this month, and the complete analytical data report from our contracted laboratory, Advanced Environmental Laboratories, Inc. Should you have any questions or require any additional information please feel free to call me at (813) 663-3221.

Respectfully submitted,

David S. Adams, P.G Environmental Manager

**Public Utilities Department** 

xc:

John Lyons, Director, Public Works Department

Kim Byer, Director, Solid Waste Division, Public Works

Larry Ruiz, Landfill Manager, Solid Waste Division, Public Works

Jeff Greenwell, GMIII, Environmental Services, Public Utilities

Richard Tedder, FDEP Tallahassee

Clark Moore, FDEP Tallahassee

Steve Morgan, FDEP, Southwest District

Andy Schipfer, EPC

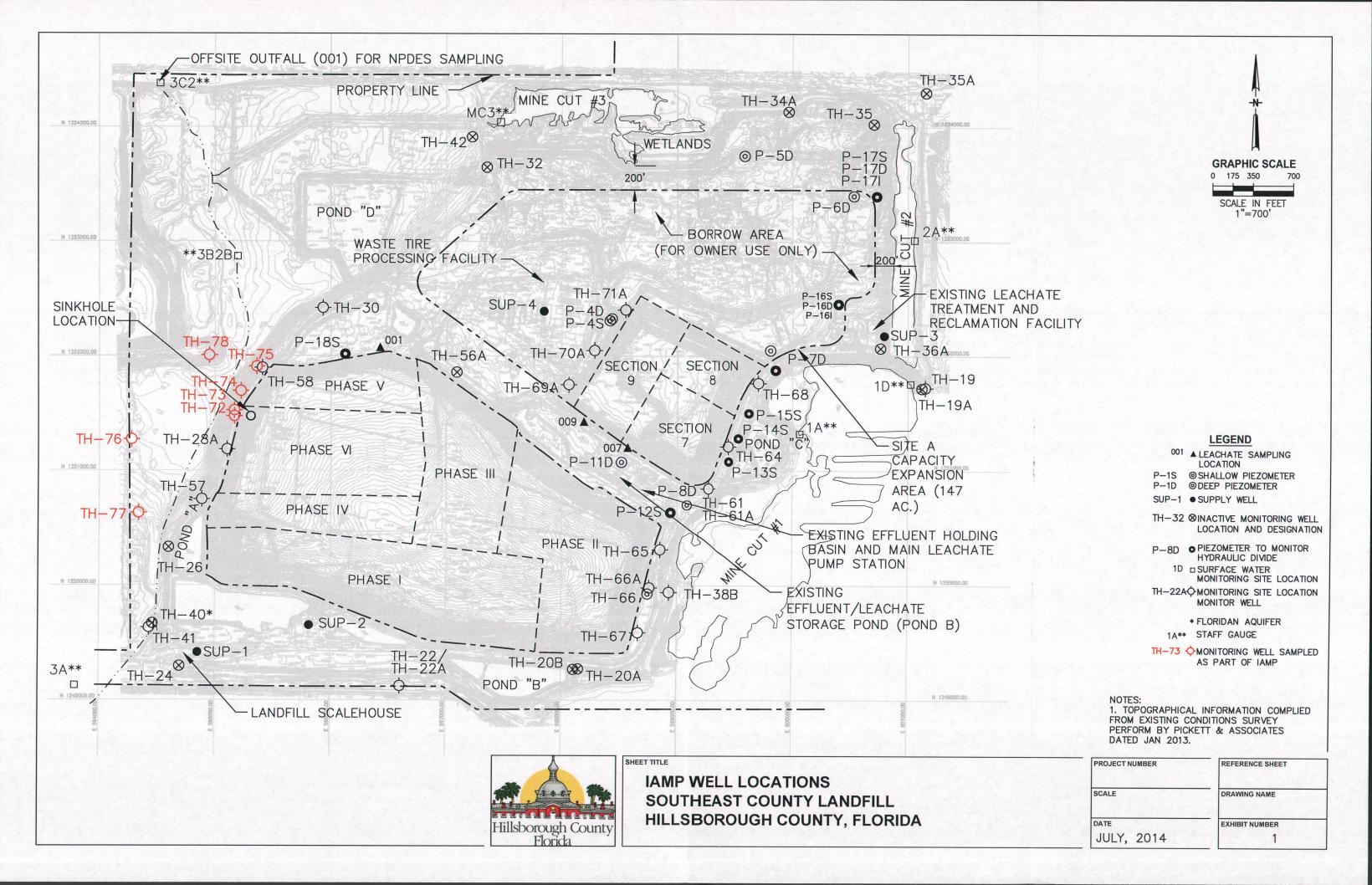
Ernest Ely, WMI

Brian Miller, DOH

Rich Siemering, HDR

Bob Curtis, HDR

Joe O'Neill, CDS



# Southeast County Landfill Laboratory Analytical Data Upper Floridan Aquifer Groundwater Monitoring Wells April 1-2, 2015

GENERAL	L	pper Flor	idan Wells		MCL STANDARD
PARAMETERS	TH-72	TH-76	TH-77	TH-78	
conductivity (umhos/cm) (field)	2,459	508	495	584	NS
dissolved oxygen (mg/l) (field)	0.40	0.12	0.14	0.19	NS
pH (field)	6.67	7.28	7.27	7.63	(6.5 - 8.5)**
temperature (°C) (field)	23.59	22.94	23.62	23.30	NS
turbidity (NTU) (field)	1.02	0.96	0.47	1.27	NS
total dissolved solids (mg/l)	1,300	270	260	320	500**
chloride (mg/l)	810	9.7	8.6	33	250**
ammonia nitrogen (mg/l as N)	19	0.31	0.32	0.32	NS
METALS (mg/l)					MCL STANDARD
arsenic	0.00031 i	0.0059	0.00015 u	0.00022 i	0.01*
iron	0.61	0.12 i	0.13 i	0.24	0.3**
sodium	170	19	15	31	160*
Note: Ref. Groundwater Guidance Co	ncentrations	s, FDEP 20	012		
MCL = Maximum Contaminant Level					
NTU = Nephelometric Turbidity Units					
NS = No Standard					
u = parameter was analyzed but not d	etected.				
i = value was detected between the la	boratory me	ethod detec	ction limit and	practical quar	ntitation limit.
* = Primary Drinking Water Standard					
** = Secondary Drinking Water Standa	ard				
1,300					
ug/l = micrograms per liter					
mg/l = milligrams per liter	The same of the sa				

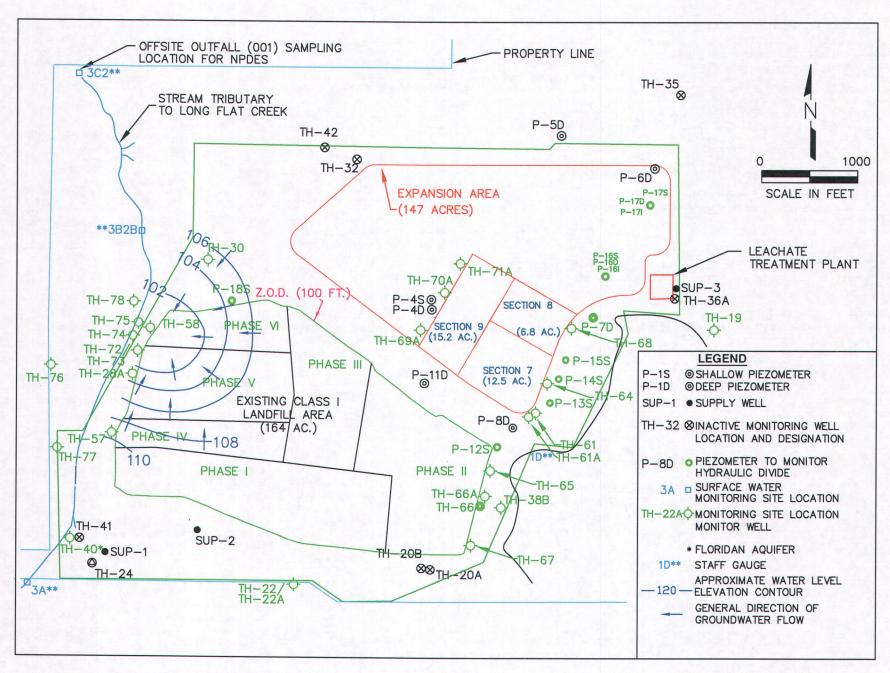
# **Southeast County Landfill Groundwater Elevations April 1, 2015**

Measuring Point I.D.	T.O.C. Elevations (NGVD)	W.L. B.T.O.C.	W.L. (NGVD)	Time
TH-28A	131.10	28.04	103.06	10:17 AM
TH-30	128.88	23.86	105.02	10:07 AM
TH-57	128.36	18.92	109.44	9:54 AM
TH-58	127.88	27.92	99.96	10:10 AM
TH-72*	130.96	96.51	34.45	10:12 AM
TH-73	131.07	30.51	100.56	10:13 AM
TH-74	109.08	9.32	99.76	9:59 AM
TH-75	106.92	7.77	99.15	10:01 AM
TH-76*	111.21	76.80	34.41	10:27 AM
TH-77*	119.88	85.28	34.60	10:23 AM
TH-78*	120.75	77.30	43.45	10:33 AM
T.O.C.	= National Geodet = Top of Casing			

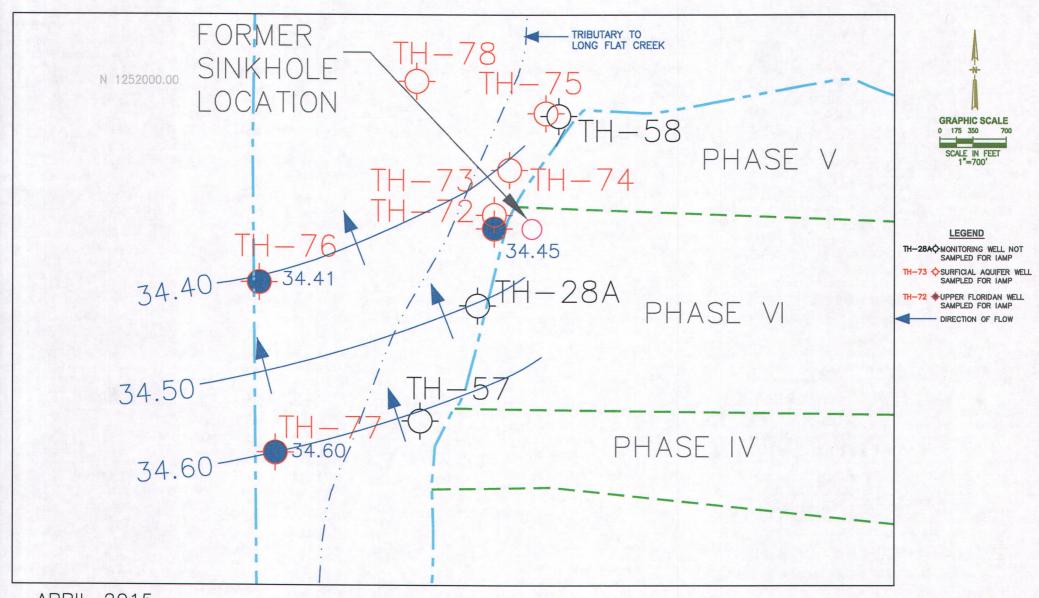
B.T.O.C. = Below Top of Casing

\* = Floridan Well

W.L. = Water Level



Southeast County Landfill Groundwater Elevation Contour Diagram — April 1, 2015



APRIL 2015
UPPER FLORIDAN / LIMESTONE AQUIFER CONTOUR DIAGRAM IN THE VICINITY OF THE FORMER SINKHOLE SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA

Date	Depth to Water (feet)	Water Table Elevation (NGVD)	conductivity (umhos/cm) (field)	dissolved oxygen (mg/l) (field)	pH (field)	temperature (°C) (field)	turbidity (NTU) (field)	total dissolved solids (mg/l)	chloride (mg/l)	ammonia nitrogen (mg/l as N)	arsenic (mg/l)	iron (mg/l)	sodium (mg/l)
01/27/2011	115.69	15.27	551	0.39	7.43	22.88	3.2			0.22	0.004 u	Straightful (All Control Contr	32
02/03/2011	112.18	18.78	565		7.38	22.95	9.9			0.21	0.004 u	STATISTICS OF STREET	27
02/10/2011	109.80	21.16	514			22.65	3.2		31	0.28	0.004 u	RESIDENCE OF THE PROPERTY OF T	31
02/14/2011	108.18	22.78	483	1.15		22.7 22.85	3.5	320 350		0.24 0.22	0.0013 u 0.004 u	0.58 0.53	32 31
02/24/2011 03/03/2011	111.71 111.88	19.25 19.08	513 579	0.19 0.77	7.34 7.35	22.85	0.8		32 31	0.22	0.004 u		32
03/10/2011	113.65	17.31	551	1.26	7.35	22.73	0.9		30	0.18	0.004 u	0.35	31
03/17/2011	112.85	18.11	388	1.05	7.34	22.9	0.9		30	0.31	0.004 u	0.25	31
03/24/2011	114.33	16.63	1192	1.5		23.1	1.5		350	9	0.004 u	0.64	130
04/01/2011	115.70	15.26	928			22.8	3.6		110	2	0.004 u	0.24	59
04/08/2011	112.10	18.86	810	0.92	7.35	23.13	6.1	420	87	1.9	0.004 u	0.22	51
05/05/2011	116.21	14.75	609	0.71	7.67	23.01	6.6		33	0.3	0.004 u	0.27	37
06/08/2011	119.19	11.77	607	0.71	7.65	23.35	4.51	340			0.004 u	0.2	34
07/07/2011	113.30	17.66	606		7.4	23.25	3.94	150	64	2.1	0.004 u	7.9	27
08/04/2011	103.31	27.65	564	0.33	7.29	23.18	0.4	360		0.21	0.004 u	0.18 i	34
09/08/2011	97.99	32.97	536	1.11	7.29	23.2 23.13	0.6	340 290		0.41	0.004 u 0.004 u	0.18 i 0.14 i	36 34
10/04/2011	99.45	31.51	471 550	1.69 1.8		23.13	1.1 1.51	290		0.29	0.004 u	0.141 0.15 i	34
11/03/2011 12/08/2011	103.37 106.80	27.59 24.16	528	1.92	7.20	23.04	0.73		29	0.32	0.004 u	0.13 i	33
01/05/2012	113.08	17.88	535		7.23	22.74	0.44		32		0.004 u		31
02/10/2012	113.86	17.10	511	0.94	7.23	22.89	1.39			0.28	0.004 u	0.13 i	30
03/07/2012	121.00	9.96	575	0.27	7.15	23.23	0.5				0.004 u	0.11 i	31
04/05/2012	124.96	6.00	522			23.18	0.65		28		0.004 u	0.11 i	29
05/03/2012	126.55	4.41	746			23.46	0.81	380	72		0.004 u		49
06/07/2012	120.46	10.50	641	0.72	7.07	23.4	0.26	370	46	1	0.004 u	0.23	37
07/05/2012	104.95	26.01	900		6.54	23.52	0.4	650	190	2.9 j3	0.004 u	0.39	70
08/03/2012	98.26	32.70	843			23.6	2.23		210	3	0,004 u	SEMINAL CONTRACTOR OF THE PROPERTY COMPANY	78
09/06/2012	91.18	39.66	2,357	0.2		23.62	1.05	THE RESERVE OF THE PROPERTY OF	570	12	0:004 u	1.1	170
10/04/2012	90.19	40.77	1,654		CONTRACTOR SERVICE CONTRACTOR SERVICES	23.22	0.46	5		25	0.004 u		210
11/07/2012	99.29	31.67	2,488	0.76	6.58	23.03	0.74	ments and the second se		15	0.004 u	- 1.4	
12/05/2012	101.82	29.14	2,416		and the second s	23.18	0.45	STREET OF STREET STREET STREET		13	0.004 u	cicerocca miligramalicos cogamicas esse	180 j3
01/03/2013	100.65	30.31	2,430	1.1	COLUMN TO SERVICE SERV	23.09 23.1	0.42 0.22		500 470	15 13	0.004 u 0.004 u	1.3 1.1	<b>170 j3</b> 160
02/07/2013	105.58 110.00	25.38 20.96	2,206 1,234			22.85	0.22	770	290	11	0.004 u	1.1	110
03/07/2013 04/04/2013	111.35	19.61	1,252		6.74	23.15	9.9		260	10	0.004 u		100
05/02/2013	109.56	21.40	1,615	0.33	6.83	23.16	0.45			8.6	0.004 u	COMMISSION AND ADDRESS OF THE PARTY OF THE P	110
06/04/2013	109.62	21.34	1,440	0.31	7.13	23.3	0.27	850	290	8.4	0.004 u	POLYMER PLANTS CONTROL OF THE PROPERTY OF	120
07/03/2013	98.72	32,24	1,450	0.18	7.03	23.5	0.41	820	280	8.8	0.004 u	0.79	120
08/02/2013	ND	ND	1,256	0.46	6.88	23.43	0.2	800	290	6.8	0.004 u	0.72	120
09/05/2013	87.92	43.04	1,001	0.61	6.98	23.45	1.17	760	290	7.6	0.004 u	0.71	110
10/02/2013	87.39	43.57	1,566								0.004 u		120
11/06/2013	97.90	33.06	2,145				0.8			12	0.004 u	0.64	170
12/05/2013	98.50	32.46	2,615			23.45	0.58			16	0.004 u	0.65	200
01/03/2014	99.02	31.94	2,220			22.88	1.64	CHIEF CONTROL		25	0.004 u	\$1600 - C#460446.7013 - CACADO James DALE 1 C. 1 CACADO CONT. 1 C. 1	230 j3
02/06/2014	99.50	31.46	2,452			23.13	2.07			23 j3	0.004 u	0.71	210
03/04/2014	97.91	33.05	2,173			23.4	1.33			22	0.004 u	A CONTRACT OF STREET	220
04/03/2014	96.22	34.74	1,992			23.35	1.33			27	0.0013 u 0.004 u	AND DESIGNATION OF THE PROPERTY OF THE PROPERT	220 230
05/06/2014	100.22	30.74 28.38	2,247 2,771			23.5 23.46	1.22 0.96	The state of the s		24 27	0.004 u 0.004 u		220
06/03/2014 07/03/2014	102.58 97.64	33.32	2,771			23.46	1.34			24	0.004 u		220
08/12/2014	90.40	40.56	2,366			23.55	0.81		Self-recommendation of the self-recommendation o	23	0.004 u	STREET, STREET	200 j3
09/05/2014	90.75	40.21	3,156			23.61	1.96		MURROR MANAGEMENT CONTRACTOR N	20	0.004 u		210
10/07/2014	88.72	42.24	2,300			23.59				23	0.004 u		200
11/04/2014	95.50	35.46	2,511			23.46	1.83			20	0.0016 u		200
12/03/2014	94.56	36.40	2,675		6.67	23.47	1.3			18	0.0016 u		160
01/08/2015	93.10	37.86	2,637	0.98		23.03	1.69	1,300	450	18	0.0016 u	0.64	190
02/04/2015	94.16	36.80	2,540	0.57	6.71	23.27	2.29			17	0.0016 u	Commence of the Commence of th	190
03/04/2015	93.21	37.75	2,486	0.57	6.87	23.5	0.66	1,300	450	21	0.0021 u	0.65	190

New survey data beginning with 10/4/2012.

u = parameter was analyzed but not detected

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

j3 = estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.

ND = No Data - water levels collected during quarterly ADR.

1,100 EXCEEDS STANDARD

Date	Depth to Water (feet)	Water Table Elevation (NGVD)	conductivity (umhos/cm) (field)	dissolved oxygen (mg/l) (field)	pH (field)	temperature (°C) (field)	turbidity (NTU) (field)	total dissolved solids (mg/l)	chloride (mg/l)	ammonia nitrogen (mg/l as N)	arsenic (mg/l)	iron (mg/l)	sodium (mg/l)
05/02/2013	89.83	21.38	450	0.22	7.63	22.81	36.9		13	0.4	0.004 u	1.1 0.66	20
06/04/2013	89.91	21.30	401	0.27	7.86	22.9	16.2		13	0.4	0.004 u 0.004 u	0.99	22
07/03/2013	79.04	32.17	398	0.19	8	23	28.6	210	12	0.34	0.004 u	1.6	21
08/02/2013	ND	ND	343	0.22	7.57	23.02	42.2		13	0.26 0.32	0.004 u	1.6	20
09/05/2013	68.22	42.99	278	0.21	7.74	22.97			12	0.32	0.004 u		20
10/02/2013	67.69	43.46	399	0.22		22.99			13	0.36	0.004 u	1.1	20
11/06/2013	78.19	33.02	446	0.64		22.84			13	0.35	0.004 u	250	20
12/05/2013	78.80	32.41	478	0.48	7.45	22.9	19.2		12 12	0.23 j3	0.004 u	The second secon	20
01/03/2014	79.38	31.83	398	0.58	7.67	22.35			12		0.004 u	0.96	20
02/06/2014	79.87	31.34	446	0.14	7.54	22.57			12		0.004 u	0.69	20
03/04/2014	78.20	33.01	434	0.18	7.36	22.7			12	0.6	0.0013 u	0.34	19
04/03/2014	76.54	34.67	441	0.18	7.46	22.82			12	0.38	0.004 u	300000	21
05/06/2014	80.52	30.69	427	0.24	7.56	22.85			12	0.47	0.004 u		20
06/03/2014	82.85	28.36	423	0.3		22.82				0.49	0.004 u	0.2	20
07/03/2014	77.98	33.23	421	0.3		22.83 22.81				0.5	0.004 u	104	20
08/13/2014	70.72	40.49					<u> </u>			0.72	0.004 u	0.61	20
09/05/2014	71.05	40.16				22.92 22.89			12	0.78	0.004 u	0.77	19
10/07/2014	69.03	42.18				22.69			11	0.37	0.0016 u	0.27	21
11/04/2014	75.84	35.37			<del></del>	22.82			8	0.34	0.0016 u		19
12/03/2014	74.87	36.34		0.27					8.4	0.18	0.0016 u	0.14	22
01/08/2015	73.38								9.8	0.34	0.0016 u	0.13	22
02/04/2015	74.46							<u> </u>	13	0.33	0.0021 เ	0.095 i	21
03/04/2015	73.50	37.71	500	0.38	7.50	22.55	0.00	<u> </u>	<u> </u>		<u> </u>		

u = parameter was analyzed but not detected

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

j3 = estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.

ND = No Data - water levels collected during quarterly ADR.

1.1 EXCEEDS STANDARD

Date	Depth to Water (feet)	Water Table Elevation (NGVD)	conductivity (umhos/cm) (field)	dissolved oxygen (mg/l) (field)	pH (field)	temperature (°C) (field)	turbidity (NTU) (field)	total dissolved solids (mg/l)	chloride (mg/l)	ammonia nitrogen (mg/l as N)	arsenic (mg/l)	iron (mg/l)	sodium (mg/l)
05/02/2013	98.31	21.57	440	0.57	7.39	23.39	59.4		9.4	0.39		1.2	17
06/04/2013	98.38	21.50	384	0.56	7.86	23.59	35.4		8.9	0.42	0.004 u	0.89	10
07/03/2013	87.48	32,40	388	0.41	7.8	23.7	38.4		8.9	0.4	0.004 u	4.1	17
08/02/2013	ND	ND	334	0.47	7.44	23.66	42.9		9.2	0.36	0.004 u	1.1	10
09/05/2013	76.66	43.22	269	0.83	7.61	23.68	47.1		8.9	0.35	0.004 u	0.96	17
10/02/2013	76.14	43.72	383	0.69	7.5	23.59	52.7		9.1	0.39	0.004 u	1.3	17
11/06/2013	86.68	33.20	423	0.74	7.43	23.51	25.1		9.7	0.36 j3	0.004 u	0.68	17
12/05/2013	87.29	32.59	451	0.9	7.44	23.6	16.4	<del></del>	9	0.36	0.004 u	0.58	
01/03/2014	87.87	32.01	371	0.85	7.65	23.18	16.5		9.1	0.39	0.004 u		17
02/06/2014	88.30	31.58	424	0.09	7.53	23.39			9.2	0.27	0.004 u		10
03/04/2014	86.70	33.18	418	0.36	7.34	23.38				0.32	0.004 u		15
04/03/2014	85.02	34.86	430	0.28	7.45	23.47	1.97			0.61	0.0013 u		10
05/06/2014	89.02	30.86	414	0.34	7.52	23.47	1.01			0.59	0.004 u		17
06/03/2014	91.34	28.54		0.27	7.47	23.49			9.7	0.75	0.004 u		17
07/03/2014	86.40	33.48	409	0.34	7.44	23.65			9.6	0.48	0.004 u		
08/13/2014	79.19	40.69	436	0.36	7.39	23.76			9.5	0.49	0.004 u		16 20
09/05/2014	79.52	40.36	578	0.37	7.31	23.62			12		0.004 u		16
10/07/2014	77.55	42.33	416	0.22	7.36	23.64					0.004 u		17
11/04/2014	84.27	35.61	469	0.27	7.26	23.66			10		0.0016 u		16
12/03/2014	83.33	36.55	490	0.46	7.24	23.43			12		0.0016 u		18
01/08/2015	81.86			0.5	7.41	23.12			11	0.42	0.0016 u	0.14	18
02/04/2015	82.94	36.94		0.2	7.39						0.0016 u		18
03/04/2015	81.99			0.49	7.56	23.52	0.63	330	7.6	0.37	0.0021 u	0.11 i	10

u = parameter was analyzed but not detected

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

j3 = estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
 ND = No Data - water levels collected during quarterly ADR.

<sup>1.2</sup> EXCEEDS STANDARD

Date	Depth to Water (feet)	Water Table Elevation (NGVD)	conductivity (umhos/cm) (field)	dissolved oxygen (mg/l) (field)	pH (field)	temperature (°C) (field)	turbidity (NTU) (field)	total dissolved solids (mg/l)	(mg/l)	ammonia nitrogen (mg/l as N)	arsenic (mg/l)	iron (mg/l)	sodium (mg/l)
07/02/2014	ND	ND	363	0.41	9.08	23.89				0.44	0.0019 i		36
	75.51	45.24	467	0.4	9.55	23.56	7.37	240	38	0.42 j3	0.004 u	THE RESERVE OF THE PARTY OF THE	- J4
08/12/2014		45.63	680	0.15	8.18	23.46	3.86	270	36	0.40	0.004 u		35
09/05/2014	75.12		508			23.35	1.12	270	34	0.44	0.004 u	0.23	34
10/07/2014	73.49	47.26				23.33		320	37	0.3	0.0016 u	0.27	34
11/04/2014	77.73	43.02	555					290	29	0.31	0.0016 u	0.25	31
12/03/2014	79.04	41.71	584	0.49		23.3			21	0.34	0.0016 u		36
01/08/2015	76.39	44.36	595	0.76	7.98				31	0.32	0.0016 u		35
02/04/2015	76.21	44.54	601	0.32	8.25	22.95	0.96	310	29				36
03/04/2015	75.16	45.59	605	0.46	8.23	23.5	0.62	410	28	0.33	0.0021 u	0.24	30

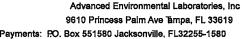
u = parameter was analyzed but not detected

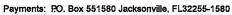
ND = No Data - survey data was not complete.

1 EXCEEDS STANDARD

i = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

j3 = estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.







April 16, 2015

David Adams Hillsborough Co Public Utilites 332 North Falkenburg Rd Tampa, FL 33619

RE:

Workorder:

T1504417 Southeast County Landfill

Dear David Adams:

Enclosed are the analytical results for sample(s) received by the laboratory between Wednesday, April 01, 2015 and Thursday, April 02, 2015. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. The analytical results for the samples contained in this report were submitted for analysis as outlined by the Chain of Custody and results pertain only to these samples.

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

OBuch

Sincerely,

Heidi Brooks

HBrooks@AELLab.com

**Enclosures** 

Report ID: 361807 - 5316061

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#### **SAMPLE SUMMARY**

Workorder: T1504417 Southeast County Landfill

Lab ID	Sample ID	Matrix	Date Collected	Date Received
T1504417001	Field Blank	Water	4/1/2015 10:40	4/1/2015 14:10
T1504417002	TH-78	Water	4/1/2015 11:41	4/1/2015 14:10
T1504417003	TH-72	Water	4/2/2015 10:48	4/2/2015 15:20
T1504417004	TH-76	Water	4/2/2015 12:29	4/2/2015 15:20
T1504417005	TH-77	Water	4/2/2015 13:27	4/2/2015 15:20
T1504417006	Duplicate	Water	4/2/2015 00:00	4/2/2015 15:20

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#### **ANALYTICAL RESULTS**

Workorder: T1504417 Southeast County Landfill

Lab ID: T1504417001

Date Received: 04/01/15 14:10 Matrix:

Water

Sample ID: Field Blank

Date Collected: 04/01/15 10:40

Sample Description: Location:

ourripio dioorripaorri				Loodioi.				
Danamatan	Decute	Overl	Linta	DE	Adjusted	Adjusted	A1	1 -6
Parameters	Results	Qual	Units	DF	PQL	MDL	Analyzed	Lab
METALS								
Analysis Desc: SW846 6010B Analysis,Water			Method: S\ ethod: SW-	V-846 3010A 846 6010				
Iron	38	U	ug/L	1	200	38	4/7/2015 16:04	J
Sodium	0.026	U	mg/L	1	0.20	0.026	4/7/2015 16:04	
Analysis Desci SVV846 6020B	Pret	paration I	Vethod: SV	V-846 3010A		Carry Inches		
Analysis,Total	Anai	vtical Me	ethod: SW-	846 6020				
Arsenic	0.15	u U			2.0	0.15	4/8/2015 20:09	
Alselic	0.10	U	ug/L	•	2.0	0.15	4/6/2015 20:08	J
WET CHEMISTRY								
Analysis Desci Ammonia,E350.1,Water	Anal	ytical Me	ethod: EPA	350.1				
Ammonia (N)	0.02	U	mg/L	1	0.10	0.02	4/3/2015 12:51	<b>T</b>
Analysis Desc: Tot Dissolved Solids,SM2540C	Anal	ytical Me	thod: SM	2540 C		4 14		
Total Dissolved Solids	12		mg/L	1.25	12	12	4/3/2015 09:04	
			mg/L	1.20	12	12	4/3/2015 09.04	' '
Analysis Desc: Chlorides;SM4500-Cl- E,Water	Anal	ytical Me	thod: SM	4500-CI-E				
CERTAL AST AND AND AND ADDRESS OF THE PROPERTY								
Chloride	1.1	U	mg/L	7	5.0	1.1	4/2/2015 14:31	T

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Water



Payments: PO. Box 551580 Jacksonville, FL32255-1580

Phone: (813)630-9616 Fax: (813)630-4327

#### **ANALYTICAL RESULTS**

Workorder: T1504417 Southeast County Landfill

Lab ID:

T1504417002

Sample ID: TH-78 Date Received: 04/01/15 14:10 Matrix:

Date Collected: 04/01/15 11:41

Cample Description:

Advanced Environmental Laboratories, Inc.

Sample Description:			L	ocation:				
_					Adjusted	Adjusted	A	
Parameters	Results	Qual	Units	DF	PQL	MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Anal	lytical Me	thod: Field M	easureme	nts .			
Conductivity	584		umhos/cm	1			4/1/2015 11:41	
Dissolved Oxygen	0.19		mg/L	1			4/1/2015 11:41	
Temperature	23.3 1.27		°C NTU	1			4/1/2015 11:41 4/1/2015 11:41	
Turbidity pH	7.63		SU	1			4/1/2015 11:41	
pri	1.00		00	•			-17 17 20 10 1111	
METALS								
Analysis Desc: Chlorides SM4500-CI- E,Water Chloride	Ana 33	lytical Me	thod: SM 450 mg/L	0-CI-E	5.0	1.1	4/2/2015 14:31	in the state of th
		Hillian Sang Visit No. 700 N					as operate a string beach in this wall	velleansestaseidestein
Analysis Desc: SW846 6010B Analysis,Water			Method: SW-8 thod: SW-846					
iron	240		ug/L	1	200	38	4/7/2015 16:09	
Sodium	31		mg/L	1	0.20	0.026	4/7/2015 16:09	J
Analysis Desc: SW846 6020B Analysis,Total		English No.	fethod: SW-8 thod: SW-846					
Arsenic	0.22	I	ug/L	1	2.0	0.15	4/8/2015 20:12	. J
METALS								
Analysis Desc Ammonia E350.1, Water	Anal	lvtical Me	thod: EPA 35	0.1		palar materia (se		A LANG.
			lik vielden skapen.			0.00	4/2/204E 42.E4	
Ammonia (N)	0.32		mg/L	7	0.10	0.02	4/3/2015 12:51	1
Analysis Desc: Tot Dissolved Solids,SM2540C Total Dissolved Solids	320	lytical Me	thod: SM 254 mg/L	0 C 1.25	12	12	4/3/2015 09:04	<b>T</b>
IUIAI DISSUIVEU SUIIUS	320		y.r	1.20	12	12	7/3/2010 08:04	

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#### **ANALYTICAL RESULTS**

Workorder: T1504417 Southeast County Landfill

Lab ID: Sample ID: T1504417003

TH-72

Date Received: 04/02/15 15:20

Matrix:

Water

Date Collected: 04/02/15 10:48

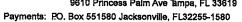
Sample Description:				Location:			l		
Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab	
		Quai	Office		FQL	MIDE	Allalyzeu	Lau	
FIELD PARAMETERS Analysis Desc: Data entry of field measurements	Anal	ytical Met	hod: Field	Measurements					
Conductivity	2459	程はないこの対象値間的な	umhos/c	:m 1	BERTHING AND STATE OF A PARTIES AND SECTION OF THE SEC	STREET SCORES - Te prophism	4/2/2015 10:48	7962 (116966)  -	
Dissolved Oxygen	0.4		mg/L	1			4/2/2015 10:48	}	
Temperature ·	23.59		°C	1			4/2/2015 10:48	;	
Turbidity	1.02		NTU	1			4/2/2015 10:48	1	
pH	6.67		SU	1			4/2/2015 10:48	ŀ	
METALS									
Analysis Desc: SW846 6010B Analysis,Water			ethod: SV hod: SW-	V-846 3010A 846 6010					
Iron	810	ser - Animiningiase	ug/L		200	38	4/14/2015 13:39		
Sodium	170		mg/L	1	0.20	0.026	4/14/2015 13:39	-	
Analysis Desc: SW846 6020B Analysis,Total		Van 15 San	ethod: SV hod: SW-(	V-846 3010A 846 6020					
Arsenic	0.31	i	ug/L	1	2.0	0.15	4/8/2015 20:16	J	
WET CHEMISTRY									
Analysis Desc Ammonia,E350:1.Wa	ter Anal	vtical Met	hod: EPA	350.1					
Ammonia (N)	19		mg/L	10	1.00	0.25	4/3/2015 12:51	Т	
Analysis Desc: Tot Dissolved	Anal	∕tical Met	hod: SM 2	540 C				. 1	
Solids,SM25400		. 19							
Total Dissolved Solids	1300		mg/L	1.25	12	12	4/3/2015 09:04	T	
Analysis Desci Chlorides SM4500-Cl	Anal	rtical Met	hod: SM 4	500-CI-E		in a state of			
E,Water									
Chloride	810		mg/L	10	50	11	4/6/2015 15:36	T	

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#### **ANALYTICAL RESULTS**

Workorder: T1504417 Southeast County Landfill

Lab ID: Sample ID: T1504417004

TH-76

Date Received: 04/02/15 15:20

Matrix:

Water

Date Collected: 04/02/15 12:29

Sample Description:				Location:				
					Adjusted	Adjusted		
Parameters	Results	Qual	Units	DF	PQL	MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Anal	ytical Me	thod: Field	Measurements				
Conductivity	508	The state of the s	umhos/c	m 1	e e e e e e e e e e e e e e e e e e e	Illulianii immeris sorbe de Meneriani est	4/2/2015 12:29	Inger Provinsi Basilence en
Dissolved Oxygen	0.12		mg/L	1			4/2/2015 12:29	•
Temperature	22.94		°C	1			4/2/2015 12:29	
Turbidity	0.96		NTU	1			4/2/2015 12:29	
pH	7.28		SU	1			4/2/2015 12:29	
METALS								
Analysis Desc: SW846 6010B Analysis,Water			/lethod: SV thod: SW-	V-846 3010A				
Iron	120		ug/L	t	200	38	4/14/2015 13:43	ayanaggaarii 3 J
Sodium	19		mg/L	1	0.20		4/14/2015 13:43	
Analysis Desc: SW846 6020B Analysis,Total			Method: SV thod: SW-	V-846 3010A 846 6020				
Arsenic	5.9	nan-erabanan minerim par-er	ug/L	1	2.0	0.15	4/10/2015 18:09	) J
WET CHEMISTRY								
Analysis Desci Ammonia,E350,1,V	Viotalia de la companya della companya della companya de la companya de la companya della compan		thod: EPA	SERVINIES CONTRACT	PANOSII III III III TOMBAA AAN	Massicory Coursinalism	MARCONINTO DE TRANSPORTANTO	alanta filtra e tre
A. 2017年19日,1980年1月1日 - 1980年1月1日 - 1980年1日		/tical ivie	C S FIS	330.1			<b>集模</b> 索 2000	
Ammonia (N)	0.31		mg/L	1	0.10	0.02	4/3/2015 12:51	T
Analysis Desc: Tot Dissolved	Anal	∕tical Me	thod: SM 2	2540 <b>©</b>				
Solids,SM2540C		erikasia.						
Total Dissolved Solids	270		mg/L	1.25	12	12	4/3/2015 09:04	Т
Analysis Desc. Chlorides SM4500	O⊦	rtical Me	thod: SM 4	500-CI-E				
E,Water								
Chloride	9.7	······································	mg/L	1	5.0	1.1	4/6/2015 15:36	T

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#### **CERTIFICATE OF ANALYSIS**





#### **ANALYTICAL RESULTS**

Workorder: T1504417 Southeast County Landfill

Lab ID:

T1504417005

Sample ID:

Date Received: 04/02/15 15:20

Matrix:

Water

Date Collected: 04/02/15 13:27

Sample Description:

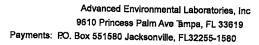
Sample Description:				Location:				
Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
FIELD PARAMETERS								
Analysis Desc: Data entry of field measurements	Ana	lytical Me	ethod: Field	Measurements			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Conductivity	495	a . To a ray angungging ya	umhos/c	m 1	Militarians we are steen assets of all reversibilities state		<b>4/2/2</b> 015 13:27	· APPENDENT
Dissolved Oxygen	0.14		mg/L	1			4/2/2015 13:27	1
Temperature	23.62		°C	1			4/2/2015 13:27	
Turbidity pH	0.47		NTU	1			4/2/2015 13:27	
рп	7.27		SU	1			4/2/2015 13:27	
METALS								
Analysis Desc: SW846 6010B Analysis,Water		7294	Method: SW ethod: SW-8	/-846 3010A  46 6010				
Iron	130	incertain de la company de la	ug/L	1	200	38	4/14/2015 13:48	1996) - 1997 1
Sodium	15		mg/L	1	0.20	0.026	4/14/2015 13:48	•
Analysis Desc: SW846 6020B Analysis, Total			Method: SW thod: SW-8	/-846 3010A 46 6020				
Arsenic	0.15	U	ug/L	1	2.0	0.15	4/10/2015 18:12	эцары 2 51 арх 2
WET CHEMISTRY								
Analysis Desc Ammonia E350 1 W	vater Anal	vtical Me	thod: EPA (	3501				Maria de Maria
Ammonia (N)	0.32							
· ·	0.32		mg/L	1	0.10	0.02	4/3/2015 12:51	Т
Analysis Desc: Tot Dissolved Solids,SM25400	Anal	ytical Me	thod: SM 2	540'G'				
THE COUNTY OF THE PROPERTY OF THE PARTY OF T								
Total Dissolved Solids	260		mg/L	1.25	12	12	4/3/2015 09:04	T
Analysis Desc: Chlorides,SM4500-0	Ci- Anal	ytical Me	thod: SM 4	500-CI-E			100 Sec. (550) 150 p. (5)	1166 A
E,Water				LANGE STREET				
Chloride	8.6		mg/L	1	5.0	1.1	4/6/2015 15:36	T

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#### **CERTIFICATE OF ANALYSIS**







#### **ANALYTICAL RESULTS**

Workorder: T1504417 Southeast County Landfill

Lab ID: Sample ID:

T1504417006

**Duplicate** 

Date Received: 04/02/15 15:20

Matrix:

Water

Date Collected: 04/02/15 00:00

Sample Description:				Location:				
Parameters	Results	Qual	Units	DF	Adjusted PQL	Adjusted MDL	Analyzed	Lab
METALS								Lab
Analysis Desc: SW846 6010B Analysis,Water Iron				W-846 3010A -846 6010 1	200	38	4/14/2015 13:53	
Sodium	16		mg/L	1	0.20		4/14/2015 13:53	
Analysis Desc: SW846 6020B Analysis, Total Arsenic	ALCOHOL SERVICE		<b>6. 100 C. C. C. William</b>	N-846 3010A -846 6020 1	2.0		4/10/2015 18:16	
WET CHEMISTRY								•
Analysis Desc: Ammonia E350, 1 Water Ammonia (N)	Anal 0.38	/tical Me	thod: EPA mg/L	350.1	0.10	0.02	4/3/2015 12:51	
Analysis Desc: Tot Dissolved Sollds,SM2549C Total Dissolved Solids	Anal	/tical Me	riod: SMI mg/L	2540 C	12		4/3/2015 09:04	
Analysis Desc: Chlorides SM4500-CI- E Water Chloride	Analy 7.7	rti <b>cal M</b> et	hod: SM mg/L	1500+CLE	5.0		4/6/2015 15:36	SP SE

Report ID: 361807 - 5316061

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#### **ANALYTICAL RESULTS QUALIFIERS**

Workorder: T1504417 Southeast County Landfill

#### **PARAMETER QUALIFIERS**

- U The compound was analyzed for but not detected.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

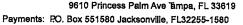
#### LAB QUALIFIERS

- J DOH Certification #E82574(AEL-JAX)(FL NELAC Certification)
- T DOH Certification #E84589(AEL-T)(FL NELAC Certification)
- T^ Not Certified

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#### **QUALITY CONTROL DATA**

Workorder: T1504417 Southeast County Landfill

QC Batch:

WCAt/2505

Analysis Method:

SM 4500-CI-E

QC Batch Method:

SM 4500-CI-E

Prepared:

Associated Lab Samples:

T1504417001, T1504417002

METHOD BLANK: 1715691

Reporting

Parameter

Units

Blank Result

Limit Qualifiers

WET CHEMISTRY

Chloride

mg/L

1.1

1.1 U

LABORATORY CONTROL SAMPLE: 1715692

Parameter Units

Spike Conc.

LCS Result

LCS % Rec

% Rec

Limits Qualifiers

WET CHEMISTRY

Chloride

mg/L

mg/L

40

40

MS

74

100

90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1715693

1715694

Original: T1504417002

104

Parameter

Chloride

Units WET CHEMISTRY

Conc. Result

40

Spike

MSD Result

75

MSD % Rec % Rec

90-110

Max Limit RPD RPD Qualifiers

> 1 10

QC Batch:

WCAt/2517

Analysis Method:

SM 2540 C

MS

102

% Rec

QC Batch Method:

SM 2540 C

Prepared:

Associated Lab Samples:

Original

Result

33

T1504417001, T1504417002, T1504417003, T1504417004, T1504417005, T1504417006

METHOD BLANK: 1716173

Units

Reporting

Parameter

WET CHEMISTRY **Total Dissolved Solids** 

mg/L

10

Blank

Result

10 U

Limit Qualifiers

Report ID: 361807 - 5316061

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#### **CERTIFICATE OF ANALYSIS**





#### **QUALITY CONTROL DATA**

LABORATORY CONTROL	SAMPLE: 1	716174									
Parameter	Units		pike onc.	LCS Result	LC % Re	_	% Rec Limits	Qualifiers			
WET CHEMISTRY Total Dissolved Solids	/l		660	650		9	75.405				
Total Dissolved Solids	mg/L		000	000	*	9	75-125				
SAMPLE DUPLICATE: 17	16175			Original: T1	504391001		<u> </u>				
Parameter	Units	Orig Re	inal sult	DUP Result	RP	D	Max RPD	Qualiflers			
WET CHEMISTRY Total Dissolved Solids	mg/L		160	160		2	10	-			
QC Batch: WCA	\t/2525			Analysis M	ethod:	EF	PA 350.1				
QC Batch Method: EPA	350.1			Prepared:							
Associated Lab Samples:	T15044170	01, T1504417	7002, T15	04417003							
METHOD BLANK: 171679	8				<del></del>						
Parameter	Units		Blank Result	Reporting Limit	Qualifiers						
WET CHEMISTRY			0.00	0.00					············		
Ammonia (N)	mg/L		0.02	0.02	U						
LABORATORY CONTROL	SAMPLE: 1	716799									
Parameter	Units		oike onc.	LCS Result	LC % Re		% Rec	Qualifiers			
WET CHEMISTRY											<del></del>
Ammonia (N)	mg/L		1	1.1	11	0	90-110				
MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 1716	800	17168	01	0	Priginal: T150	04258002	<del></del>	<del></del>	
Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	M % Re		% Rec Limit	RPD	Max RPD	Qualifiers
WET CHEMISTRY		<del></del>									
Ammonia (N)	mg/L	0.03	1	1.0	1.0	10	0 97	90-110	2	10	

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#### **CERTIFICATE OF ANALYSIS**





#### **QUALITY CONTROL DATA**

Workorder: T1504417 Southeast County Landfill

QC Batch:

WCAt/2526

Analysis Method:

EPA 350.1

QC Batch Method:

EPA 350.1

Prepared:

Associated Lab Samples:

T1504417004, T1504417005, T1504417006

METHOD BLANK: 1716802

Reporting

Parameter

Units

Result Limit Qualifiers

WET CHEMISTRY

Ammonia (N)

mg/L

0.02

Blank

0.02 U

LABORATORY CONTROL SAMPLE: 1716803

Parameter

Spike Conc.

1

LCS Result

1.1

LCS % Rec % Rec Limits Qualifiers

WET CHEMISTRY

Ammonia (N)

mg/L

Units

mg/L.

Units

110

90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1716804

1716805

Original: T1504417004

Parameter

Spike MS Conc. Result

MSD Result % Rec

MSD % Rec % Rec Max

Limit RPD RPD Qualifiers

WET CHEMISTRY Ammonia (N)

0.31

Original

Result

1.4

1

1.4

107

MS

106 90-110

1 10

QC Batch:

DGMJ/1362

Analysis Method:

SW-846 6010

QC Batch Method:

SW-846 3010A

Prepared:

04/06/2015 09:12

Associated Lab Samples:

T1504417001, T1504417002

METHOD BLANK: 1717376

Parameter

Units

Reporting Limit Qualifiers

**METALS** 

Iron

Sodium

ug/L mg/L

38 0.026

Blank

Result

38 U 0.026 U

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**CERTIFICATE OF ANALYSIS** 





#### **QUALITY CONTROL DATA**

Workorder:	T1504417	Southeast	County	l andfill

LABORATORY CONTRO	OL SAMPLE & LC	SD: 1717	377	17173	78						
Parameter	Units	Spike Conc			LCS 1		% Rec Limit	RPD	Ma RP		alifiers
METALS			2			,					
lron Sodium	ug/L mg/L	25000 50			98 99	98 99	80-120 80-120	1 0		20 20	
MATRIX SPIKE & MATR	IX SPIKE DUPLIC	CATE: 1717	379	17173	80	Ori	ginal: T150	3355033			<del>-</del>
Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec		% Rec Limit		Max RPD	Qualifiers
METALS	······································	······································	<del></del>					······································			
Iron Sodium	ug/L mg/L	<b>43</b> 0	25000 50	26000 170	26000 170	104 332		75-125 75-125	1 0	20 20	
	9.2	Ů	00	170	170	002	331	70-120	U	20	
	CAt/2550			Analysis Me	ethod:	SM	4500-CI-E				
	/ 4500-CI-E			Prepared:							
Associated Lab Samples	: T150441700	3, T1504417	004, T1504	417005, T1	50441700	6					
METHOD BLANK: 1717	352										
Parameter	Units		Blank Result	Reporting Limit (	Qualifiers						
WET CHEMISTRY Chloride	mg/L		1.1	1.1 \	J						
_ABORATORY CONTRO	DL SAMPLE: 17	17853								<del></del>	
Parameter	Units		ike nc.	LCS Result	LC % R		% Rec Limits C	ualifiers)			
NET CHEMISTRY							<del></del>	•		-	· · · · · · · · · · · · · · · · · · ·

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#### **QUALITY CONTROL DATA**

MATRIX SPIKE & MA	ATRIX SPIKE DUPL	ICATE: 1717	'854	17178	355	Ori	ginal: T150	4417005		
Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec		% Rec Limit	RPD	Max RPD Qualifiers
WET CHEMISTRY Chloride	mg/L	8.6	40	46	40	03	00	00.440	-	40
					48	93	<del></del>	90-110	5	10
MATRIX SPIKE & MA	AIRIX SPIKE DUPL	ICATE: 1717	<b>7856</b>	17178	357	Ori	ginal: T150	4417006		
		Original	Spike	MS	MSD	MS	MSD	% Rec		Max
Parameter	Units	Result	Conc.	Result	Result	% Rec	% Rec	Limit	RPD	RPD Qualifiers
WET CHEMISTRY Chloride	mg/L	7.7	40	45	48	94	101	90-110	6	10
QC Batch:	DGMj/1366			Analysis M	ethod:	SW-	846 6020			
QC Batch Method:	SW-846 3010A			Prepared:		04/0	8/2015 08:30	0		
Associated Lab Samp	oles: T15044170	01, T1504417	002, T150	4417003						
METHOD BLANK: 17	719673									
Parameter	Units		Blank Result	Reporting Limit	Qualifier	3				
METALS Arsenic	ug/L	1	0.077	0.077	U					
LABORATORY CONT	TROL SAMPLE & LO	CSD: 17196	74	17196	75					
Parameter	Units	Spike Conc.			LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Ma: RPI	x D Qualifiers
METALS Arsenic	ug/L	100	100	) 110	103	106	80-120	3	20	0
MATRIX SPIKE & MA	TRIX SPIKE DUPLI	CATE: 1719	676	17196	77	Orig	inal: G1502	2382001		
Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers
METALS Arsenic	ug/L	0.061	200	200	210	101	104	75-125	3	20

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#### **CERTIFICATE OF ANALYSIS**





#### **QUALITY CONTROL DATA**

Workorder: T1504417 Southeast County Landfill

QC Batch:

DGMJ/1382

Analysis Method:

SW-846 6020

QC Batch Method:

SW-846 3010A

Prepared:

04/10/2015 09:00

Associated Lab Samples:

T1504417004, T1504417005, T1504417006

METHOD BLANK: 1722498

Reporting

Parameter

Units

Blank Result

Limit Qualifiers

**METALS** 

Arsenic

ug/L

ug/L

0.077

0.077 U

LABORATORY CONTROL SAMPLE & LCSD:

1722500

Spike Parameter Units Conc.

LCS Result LCSD LCS LCSD

98

% Rec

80-120

Max

**RPD** RPD Qualifiers Result % Rec % Rec Limit

**METALS** 

Arsenic

100

98

99

99

0

20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1722518

1722519

Original: T1504729002

Original Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Result Limit RPD RPD Qualifiers Result % Rec % Rec **METALS** Arsenic 3.5 200 200 190 ug/L 98 95 75-125 3 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1724953

1724954

Original: T1503355039

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD Qualifiers	
METALS Arsenic	ug/L	3.5	200	200	190	98	95	75-125	3	20	

QC Batch:

DGMj/1391

Analysis Method:

SW-846 6010

QC Batch Method:

SW-846 3010A

Prepared:

04/13/2015 09:59

Associated Lab Samples:

T1504417003, T1504417004, T1504417005, T1504417006

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#### **QUALITY CONTROL DATA**

METHOD BLANK: 1	723804									
Parameter	Units	_	lank esult	Reporting Limit (	Qualifier	<b>s</b>				
METALS					· . ·		····			
Iron	ug/L		38	38 (	J					
Sodium	mg/L	0	.026	0.026 (	J					
LABORATORY CON	ITROL SAMPLE & LCSD:	172380	)5	17238	D6					
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	•
Parameter	Unit <b>s</b>	Conc.	Result		% Rec		Limit	RPD		Qualifiers
METALS				<del></del>					····-	
Iron	ug/L	25000	25000	25000	98	99	80-120	0	20	)
Sodium	mg/L	50	49	49	97	97	80-120	0	20	)
MATRIX SPIKE & MA	ATRIX SPIKE DUPLICAT	E: 17238	307	17238	08	Or	iginal: T150	3355043	<del> </del>	
	0	riginal	Spike	MS	MSD	MS	S MSD	% Rec		Max
Parameter		Result	Conc.	Result	Result	% Red				RPD Qualifiers
METALS								·		
iron	ug/L	27	25000	26000	26000	102	2 101	75-125	0	20
Sodium	mg/L	0	50	150	150	294	1 293	75-125	0	20

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#### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: T1504417 Southeast County Landfill

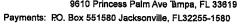
Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1504417001	Field Blank			SM 4500-CI-E	WCAt/2505
T1504417002	TH-78			SM 4500-CI-E	WCAt/2505
T1504417001	Field Blank			SM 2540 C	WCAt/2517
T1504417002	TH-78			SM 2540 C	WCAt/2517
T1504417003	TH-72			SM 2540 C	WCAt/2517
T <b>1504417004</b>	TH-76			SM 2540 C	WCAt/2517
T1504417005	TH-77			SM 2540 C	WCAt/2517
T1504417006	Duplicate			SM 2540 C	WCAt/2517
T1504417001	Field Blank			EPA 350.1	WCAt/2525
T1504417002	TH-78			EPA 350.1	WCAt/2525
T1504417003	TH-72			EPA 350.1	WCAt/2525
T1504417004	TH-76			EPA 350.1	WCAt/2526
T1504417005	TH-77			EPA 350.1	WCAt/2526
T1504417006	Duplicate			EPA 350.1	WCAt/2526
T1504417001	Field Blank	SW-846 3010A	DGMj/1362	SW-846 6010	ICPj/1221
T1504417002	TH-78	SW-846 3010A	DGMj/1362	SW-846 6010	ICPj/1221
Γ1504417003	TH-72			SM 4500-CI-E	WCAt/2550
1504417004	TH- <b>7</b> 6			SM 4500-CI-E	WCAt/2550
T1504417005	TH-77			SM 4500-CI-E	WCAt/2550
T1504417006	Duplicate			SM 4500-CI-E	WCAt/2550
T1504417001	Field Blank	SW-846 3010A	DGMj/1366	SW-846 6020	ICMj/1078
1504417002	TH-78	SW-846 3010A	DGMj/1366	SW-846 6020	ICMj/1078
1504417003	TH-72	SW-846 3010A	DGMj/1366	SW-846 6020	ICMj/1078
1504417004	TH-76	SW-846 3010A	DGMj/1382	SW-846 6020	ICMj/1081
1504417005	TH-77	SW-846 3010A	DGMj/1382	SW-846 6020	ICMj/1081
1504417006	Duplicate	SW-846 3010A	DGMj/1382	SW-846 6020	ICMj/1081

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#### **CERTIFICATE OF ANALYSIS**







#### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

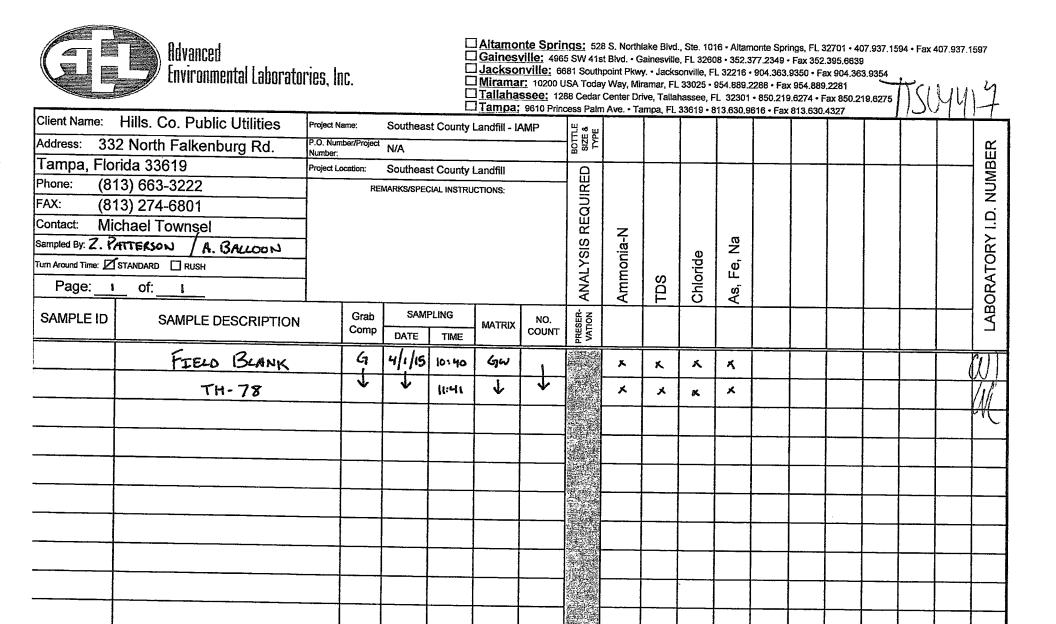
Workorder: T1504417 Southeast County Landfill

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
T1504417003	TH-72	SW-846 3010A	DGMj/1391	SW-846 6010	ICPj/1236
T1504417004	TH-76	SW-846 3010A	DGMj/1391	SW-846 6010	ICPj/1236
T1504417005	TH-77	SW-846 3010A	DGMj/1391	SW-846 6010	ICPj/1236
T1504417006	Duplicate	SW-846 3010A	DGMj/1391	SW-846 6010	ICPj/1236
T1504417002	TH-78	Field Measurements	FLDt/	Field Measurements	FLDt/
T1504417003	TH-72	Field Measurements	FLDt/	Field Measurements	FLDt
T1504417004	TH-76	Field Measurements	FLDt/	Field Measurements	FLDt/
T1504417005	TH-77	Field Measurements	FLDt/	Field Measurements	FLDt/

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Device used for measuring Temp by unique identifier (circle IR temp our used) J: 9A G: LT-1 LT-2 T-10A A:3A M:1A S:1V Time Received by: Time

Temp from blank

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Yes No Temp taken from sample

Received on Ice

Form revised 09/19/2012

FOR DRINKING WAT	TER USE (When PWS Information not otherwise supplied)
PWS ID:	
Contact Person:	Phone:
Supplier of Water:	
Site-Address:	

Where required, pH checked

Preservation Code: 1 = ice H=(HCI) S = (H2SO4) N = (HNO3) T = (Sodium Thiosulfate)

Temperature when received 7.



	Advanced	. ,		L	☐ <u>Altamo</u> ☐ <u>Gaines</u>	<b>VIIIe:</b> 496	5 SW 419	st Blvd. • G	ainesville	. FL 3260	8 - 352.3	77.2349 •	Fax 352	395 6639		14 • Fax 4	07.937.1	<b>5</b> 97
	Environmental Laborato	ries, Inc.		Ł	□ <u>Jackso</u> □ <u>Mirama</u> □ Tallaha	<u>I<b>r:</b></u> 10200 (	JSA Toda	y Way, Min	ramar, FL	33025 - 9	954.889.2	288 • Fax	954.889	.2281		11	146	17
		<del></del>			⊒ <u>Tallaha</u> ⊒ Tampa	9610 Prin	cess Pair	n Ave. • Ta	ive, Tallal ampa, FL	nassee, F 33619 • 8	L 32301 13.630.96	• 850.219 616 • Fax	813.630.	ax 850.21 4327	9.6275	110	$\cup$ $\mid$ $\mid$	++
lient Name:	Hills. Co. Public Utilities	Project Name:		ast County	Landfill - I	AMP	BOTTLE SIZE & TYPE											
	32 North Falkenburg Rd.	P.O. Number/Pro Number:	ect N/A				Sig E											ER
	orida 33619	Project Location:	Souther	ast County	Landfill		ı,											NUMBER
	13) 663-3222		REMARKS/SPI	ECIAL INSTRI	UCTIONS:		REQUIRED											<u> </u>
<del></del>	13) 274-6801						ä											
	chael Townsel	_						z			_							7 I.D
ampled By: Z. F							SIS	ä		Ф	Na				İ			K.
	STANDARD RUSH	]					\_	l g		orid Di	Fe,				1			ATC
Page: 1	of: <u> </u>						ANALYSIS	Ammonia-N	TDS	Chloride	As,					l		JR.
SAMPLE ID	SAMPLE DESCRIPTION	Gra Con	<u></u>	MPLING	MATRIX	NO.	PRESER- VATION											LABORATORY
		-   Con	DATE	TIME	<u> </u>	COUNT	R ≯								]			
· ·	TH-7a	G	4/2/15	10:48	GW	3		×	×	×	X					1		W
· · · · · · · · · · · · · · · · · · ·	TH-70			12:29				×	х	х	×							WY
	TH- 77	\	1	13:27	1	1		×	ж	×	ж							w
	TH-77 Duplicate	1	1	NA	V	1		*	<b>У</b>	ж	Х							ac
				1	<del>                                     </del>							-				-+		W_
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				1														
atrix Code: WW	= wastewater SW = surface water GW = gro	und water DIM -	dinking															
ceived on Ice	Yes No Temp taken from sample	Temp 1		er U = 011	A=air S	J = soil S		-						SO4) N =	7 (			
orm revised 09/19/		LT rembi		)evice used:	for measurin	ra Tomo bu		Where						en receive			degrees	
Relin	nquished by: Date Time	R	eceived by:	Device used	Date	Time	unique id											
pe	After 4/2/15 150	Men		<b>-</b>	4/4/5			PWS		INTIINC	3 VVAI	EK US	(When	PWS Info	mation no	t otherwis	e supplie	d)
					1/4/5	Sell		Contact	•					Phone:	***			
<del></del>								Supplier o	-					_				
		-						Site-Ad	-									$-\parallel$

## Form FD 9000-24 GROUNDWATER SAMPLING LOG

ELL CAPACITY (Gallons) Per Foot): 0.78" = 0.02; 1" = 0.04; 1.125" = 0.08; 2" = 0.18; 3" = 0.37; 4" = 0.85; 5" = 1.02; 6" = 1.47; 12" = 5.81  PIRIGING EQUIPMENT CODES: B = Baller; BP = Bladder Pump; ESP = Electric Devices By (PRINT) / AFFILIATION:  SAMPLER CONTAININATION: PUMP Y N Dedicated BAMPLER (S) SIGNATURE (S)  SAMPLE CONTAININATION: PUMP Y N Dedicated BAMPLER (S) SAMPLER (S) SAMPLE PRESERVATION SAMPLE PRESERVATION INTERDED: Y N DEDIcables BAMPLER (S) SAMPLE PRESERVATION INTERDED: Y N DEDIcables BAMPLER (S) SAMPLE PRESERVATION INTERDED: Y N DEDIcables BAMPLER (S) SAMPLE PRESERVATION INTERDED: Y N DEDIcables BAMPLER (S) SAMPLE PRESERVATION INTERDED: SAMPLER (S) SAMPLER (S) SAMPLE PRESERVATION INTERDED: SAMPLER (S) SAMPLER (S) SAMPLE PRESERVATION INTERDED: Y N DEDIcables BAMPLER (S) SAMPLER (S) SAMPLER (S) SAMPLE PRESERVATION INTERDED: SAMPLER (S) SAMPLER (S) SAMPLER (S) SAMPLER (S) SAMPLE PRESERVATION INTERDED: SAMPLER (S) SAMPLER (S) SAMPLER (S) SAMPLE PRESERVATION INTERDED: SAMPLER (S) SAMPLER	SITE NAME:	SELI	FIAMP			ITE CATION:					
WELL FIGURE (Inches): WA DIAMETER (Inches): WA DIAMETER (Inches): WA DEDTH: "feet to	WELL NO:	Dup	licate	SAMPI	~		- 4-0		T	1_1	
DIAMETER (Inches): A DIAMETER (Inches): DIAMETER (Inches): A WELL SCREEN INTERVAL. STATIC DEPTH IN A PURGE PUMP TYPE UNEL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY  EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VOLUME + (TUBING CAPACITY X TUBINOLENGTH) + FLOW PELL VOLUME (Inches): Depth in Well (feet): 1 Equipment volume purge: 1 EQUIPMENT VOLUME (FINAL PUMP OR TUBING NAME IN WELL (feet): 2 Equipment volume purge: 1 EQUIPMENT VOLUME (feet): 1 Equipment volume purge: 1 EQUIPMENT VOLUME (feet): 2 Equipment volume purge: 1 EQUIPMENT VOLUME (feet): 2 Equipment volume purge: 1 Equipment volume purge: 1 Equipment volume purge: 1 Equipment volume purge: 1 Equipment volume purge: 1 Equipment volume purge: 1 Equipment volume purge: 2 Equipment volume purge: 2 Equipment volume purge: 2 Equipment volume purge: 3 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 4 Equipment volume purge: 5 Equipment volum				·	PURC	JUDII	ATA		DATE: 4	12/16	
Conty fill out if applicable)   Conty fill out if applicable	DIAMETER (inc	ches): N/A	DIAMETER C.		ELL SCREEN	INTERVAL	STAT	C DEPTH W	PUI	RGE PUMP TYPI	= 11/
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL = PUMP VONUME (TUBING CAPACITY X TUBING LENGTH) + FLOW CALL VOLUME pulling allions + (TUBING CAPACITY X TUBING LENGTH) + FLOW CALL VOLUME pulling with applicable)  ### PURGING NAME (Final PUMP OR TUBING NAMPLER (Standard (feet))	(only fill out if a	pplicable)	VELL VOLUME	= (TOTAL WELL DE	PTH - STA	TIC DEPTH	TO WATER)	X WELL CAPAC	OR	BAILER:	-/A
INITIAL PUMP OR TUBING DEPTH IN WELL (freet):    Samp Learn   Samp Lea	EQUIPMENT V	OLUME PURCE						X	gallons/foo		
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):  DEPTH IN WELL (feet):	(only fill out if ap	pplicable)				ING CAPAC	X YTI	TUBINGLENGTH	) + FLOW CE	IL VOLUME	gal
TIME	INITIAL PUMP O	OR TUBING L (feet):	N/A FINA	L PUMP OR TUBIN	G NI		VG NJ/	PURGING			ga
TIME VOLUME PURGED (gallons) PURGED (gal		C	<del></del>		///	INITIAT		ENDED AT:	"/A	PURGED (gallo	IE N ns): /
ELL CAPACITY (Gallons Per Fool): 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  PISING INSIDE DIA. CAPACITY (Gal./FL): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/6" = 0.006; 1/2" = 0.010; 5/6" = 0.00  REGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Special Pump); PP = Perista	PI PI	URGED PL	OLUME PU URGED R	RGE TO WATER	(standard		(circle units) µmhos/cm	OXYGEN (circle units) mg/L or		Y COLOR	OE (des
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION				?					<del></del>		+-
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION											
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION	7				/						17
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION			1		/			/			
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JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION	/		XI		1/1	-/					
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION	-/-	<u> </u>					1			<del>  /</del>	ļ
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION	1					7	/			₩	<del> </del>
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION										4	
JRGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specing Equipment Codes): SAMPLING DATA  SAMPLED BY (PRINT) / AFFILIATION: SAMPLER(S) SIGNATURE(S)  MP OR TUBING SAMPLING SAMPLE PRINT SIZE: SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION	ELL CAPACITY	(Gallons Per Fr	oot): 0.75" = 0.0	D2: 1" = 0.04	1 25" = 0.00	<u> </u>					1
SAMPLING DATA  SAMPLING DATA  SAMPLING DATA  SAMPLING DATA  SAMPLING DATA  SAMPLING DATA  SAMPLING SAMPLE SAMPLE CONTAINER SPECIFICATION  SAMPLE SAMPLE CONTAINER SPECIFICATION  SAMPLE PRESERVATION  PRESERVATIVE TOTAL VOLUME SAMPLE PRESERVATION SAMPLE P	DRING INSIDE D	DIA. CAPACITY	(Gal./Ft.): 1/8"	= 0.0006; 3/16" =	0.0014; 1/4	4" = 0.0026;	5/16" = 0.	004; 3/8" = n n	' = 1.02; 6" 06: 1/2" =	= 1.47; 12" =	5.88
MPLED BY (PRINT) / AFFILIATION: IDREW BALLOON / ZACK PATTERSON  SAMPLER(S) SIGNATURE(S)  TUBING PTH IN WELL (feet):  LD DECONTAMINATION:  SAMPLING INITIATED AT:  FILED-FILTERED: Y MATERIAL CODE:  TOBING Y N Decitated  SAMPLING ENDED AT:  FILTER SIZE:  N  SAMPLE CONTAINER SPECIFICATION  SAMPLE PRESERVATION  INTENDED ANALYSIS AND/OR EQUIPMENT FLOW R						= Electric S	ubmersible Pur				
MP OR TUBING PTH IN WELL (feet):  LD DECONTAMINATION:  PUMP Y N Dedicated TOBING Y N DEDICATE:  SAMPLE CONTAINER SPECIFICATION  SAMPLE PRESERVATION  SAMPLE PRESERVATION  INTENDED  SAMPLING ENDED AT:  FILTER SIZE:  N  N  SAMPLE PRESERVATION  INTENDED  SAMPLING ENDED AT:  FILTER SIZE:  Y N  SAMPLE PRESERVATION  INTENDED  SAMPLING ENDED AT:  FILTER SIZE:  Y N  PRESERVATIVE  TOTAL VOL  USED  ANALYSIS AND/OR EQUIPMENT FLOW R	MPLED BY (PR IDREW BALLOC	INT) / AFFILIAT	ION:	SAMPLER(S) S	GNATURE(S)	1/1/	A	T			
PTH IN WELL (feet):  A TOBING MATERIAL CODE: T  FILED-FILTERED: Y N FILTER SIZE:  LD DECONTAMINATION: PUMP Y N Dedicated TOBING Y N Dedicated FILTER SIZE:  FILTER SIZE:  SAMPLE CONTAINER SPECIFICATION  SAMPLE PRESERVATION  INTENDED ANALYSIS AND/OR EQUIPMENT FLOW R						Other File	Melson	SAMPLING INITIATED AT:		SAMPLING	
LD DECONTAMINATION: PUMP Y N Dedicated TOBING Y N Dedicated CUPLICATE: Y N  SAMPLE CONTAINER SPECIFICATION SAMPLE PRESERVATION INTENDED SAMPLING SAMPLE PRESERVATION INTENDED SAMPLING SAMPLE PROBE CONTAINERS CODE VOLUME PRESERVATIVE TOTAL VOL FINAL ANALYSIS AND/OR EQUIPMENT FLOW R	PTH IN WELL (fo	feet):	A	1	F T		FIELD-I	FILTERED: Y			
SAMPLE CONTAINER SPECIFICATION  SAMPLE PRESERVATION  INTENDED  SAMPLING SAMPLE PRESERVATION  INTENDED  SAMPLING SAMPLE PRESERVATION  INTENDED  ANALYSIS AND/OR EQUIPMENT FLOW R						YN			·		— ни
ODE CONTAINERS CODE VOLUME PRESERVATIVE TOTAL VOL FINAL ANALYSIS AND/OR EQUIPMENT FLOW R				SA	MPLE PRESE				····		
	T 1	1100 11 11 11		PRESERVATIVE	TOTA	LVOL		ANALYSIS AND/	OR   EQUIP	MENT   FLO	W RATE
				<del> </del>	ļ						
				<del> </del>							
					<del>                                     </del>	<del></del>	<del>  </del>				
							<del>  -</del>				
E COC FOR ANALYSIS	E COC F	OR ANAI	YSIS		***************************************		II				
ERIAL CODES: AG = Amber Glass; CG = Clear Glass; DE = Delivativity	ERIAL CODES:	AG = Amb		= Clear Glass Di	= Dobiest.						
PLING EQUIPMENT CODES:  APP = After Peristaltic Pump;  B = Baller;  BP = Bladder Pump;  BP = Bladder Pump;  BP = Electric Submersible Pump;  RFPP = Reverse Flow Peristaltic Pump;  SM = Straw Method Tubics County	PLING EQUIPMI	ENT CODES:	APP = After Pe	eristaltic Pumo:	D = D="-					O = Other (Spe	cify)

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 2009

### Form FD 9000-24 **GROUNDWATER SAMPLING LOG**

SITE NAME:	<b>*</b>	ELF I	AMP			SIT	E CATION:								
WELL NO			BLANK	SAN	IPLE ID:		FIE	ELL	34	ANK	DATE	: 4/	1/15		
L					Р	URG	ING DA	TA							
WELL DIAMETE	R (inches):	// DIAM	ETER (inches):	N/A	WELL SC DEPTH:	- fee	t to 🕶 f	eet	STATIC D	EPTH PROPERTY IN THE PROPERTY	SIA	PURG OR BA	E PUMP T ILER:	YPE	4/4
	LUME PURGE	: 1 WELL V		TAL WELL		STAT	IC DEPTH T	O W	feet) X	WELL CAP		ons/foot/			gallons
	NE VOLUME P	URGE: 1 EC	UIPMENT VO	L. = POMP	feet - VOLUME	+ (ТИВ)	NG CAPACI	ΤΥ	X TU	BNG LENG	TH) + FLC	W CELL	VOLUME		ganona
(only fill or	it if applicable)			=	gations	+(	gallo	ns/foo		<del></del>	eer) +	· · · · ·	gallons		gallons
	JMP OR TUBIN WELL (feet):	IG NA	1	MP OR TU WELL (fee	*	Y/R	PURGIN INITIATE		T: N/A	PURGIN ENDED	AT:	A F	OTAL VO		): N/A
TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	PURGE RATE	DEPT TO WATE (feet	R (star	oH ndard lits)	TEMP. (°C)	(cir µn	COND. rcle units) nhos/cm _ µS/cm	OXYGEN (circle unit mg/L or % saturation	tui s) (t	RBIDITY NTUs)	COL(descr		ODOR (describe)
			$\bigcirc$				<del>)</del> —				<del>)   _</del>		<del>                                     </del>		7
	1		+-	+-	4	<del> </del>	/		/		<del>-  </del>				<del>/</del>
						/			7		1				/
		1	h		. /					/ ,,		/			
	/		17	1	$\mathcal{U}$	$\rightarrow$	/	<del>  -</del>	$-\mathcal{M}$	$-\mathcal{A}$	M		<u> </u>		
			4		4	$-\!\!\!/\!\!\!/$		-	14	-/-	YY I	<u> </u>	<del>  /                                   </del>		
	1/	-		1/-	+				/	_/-			/		/
				<u> </u>				1							
					1 1 25	1 - 0 00	2" = 0.1		3" = 0.37;	<b>4"</b> = 0.65:	5" = 1.	00. 69	= 1.47;	12" =	5.00
WELL CA TUBING I	PACITY (Gallon NSIDE DIA. CA	ns Per Foot): .PACITY (Ga	0.75" = 0.02; ./Ft.): 1/8" = 0	1" = 0.0 .0006; 3	4; 1.25° 3/16" = 0.0		1/4" = 0.002	6;	5/16" = 0.0	004; 3/8"	= 0.006;	1/2" =	0.010;	5/8" =	0.016
PURGING	EQUIPMENT	CODES:	B = Bailer;	BP = Blad			ING DA			np; PP =	= Peristalti	c Pump;	0=0	ther (S	pecify)
	BY (PRINT) / BALLOON / 2			SAMPLE	R(S) SIGN			Po	Herse	SAMPLIN		:40	SAMPLIN ENDED A	IG	p:45
PUMP OR		N		TUBING		- 4	<del></del>		1	J	YO	)	FILTER S		
	WELL (feet): CONTAMINATI			MATERIA Dedicate		TUBING	<u>9</u>	N D	Dedicated	DUPLICA		Y	<b>®</b>	<del></del>	
	PLE CONTAIN		ATION	<del></del>	SAMF	LE PRE	SERVATIO	N		INTE			IPLING		PLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESER USI			OTAL VOL IN FIELD (n	nL)	FINAL pH	ANALYSIS MET			IPMENT ODE		OW RATE per minute)
		<u> </u>						$\dashv$							
	 			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		_		<del> </del>		-			
-	· · · · · · · · · · · · · · · · · · ·							$\dashv$		<del>                                     </del>					
SEE C	OC FOR	ANAL	rsis 2							·				<del></del>	
MATERIAL		AG = Ambe	<del></del>	Clear Gla		= Polyel			Polypropyle ier Pump;	ene; S = Si ESP = Ele		T = Teflor	·	ther (S	pecify)
SAMPLING	3 EQUIPMENT		APP = After Pe RFPP = Rever			= Baile np;	SM = Straw I	Metho	od (Tubing (	Gravity Drain)		Other (Sp			

pH:  $\pm$  0.2 units Temperature:  $\pm$  0.2 °C Specific Conductance:  $\pm$  5% Dissolved Oxygen: all readings  $\leq$  20% saturation (see Table FS 2200-2); optionally,  $\pm$  0.2 mg/L or  $\pm$  10% (whichever is greater) Turbidity: all readings  $\leq$  20 NTU; optionally  $\pm$  5 NTU or  $\pm$  10% (whichever is greater)

Revision Date: February 2009

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)

## DEP-SOP-001/01 FS 2200 Groundwater Sampling

#### Form FD 9000-24 **GROUNDWATER SAMPLING LOG**

SITE NAME:		SELF IAN	ЛР		1	TE DCATION:.		thia, Florida			
WELL NO		TH-78	····	SAMPLE	ID: TH-7			ina, rionaa	DATE: 4	1/15	
L						SING DA	TA			773	
WELL		TUBII		WE			<del></del>	DEPTH 77	30 PUR	GE PUMP TYPE	
	R (inches): 2		ETER (inches)	: 0.5   DEF	PTH:163.14	feet to 178.14	feet   TO WAT	DEPTH 77. ER (feet): 77. WELL CAPAC	ORE	BAILER: DBP	
(only fill o	ut if applicable)					7.30				11. 14	
	NT VOLUME F	URGE: 1 EC	= ( 178 UIPMENT VO	. 14 feet L. = PUMP VOL		ING CAPACI	feet) X	.16 g UBING LENGTH	allons/foot = ) + FLOW CEI	LL VOLUME	gallons
(only fill o	ut if applicable)			= gr	alions + (	gaile	ons/foot X	feet)	+	gallons =	gallons
	UMP OR TUBIN WELL (feet):	NG 177.14		IMP OR TUBING WELL (feet):	∃ 177.14	PURGIN	IG ED AT: 10:40	PURGING ENDED AT:	11:31	TOTAL VOLUME PURGED (gallon	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE	DEPTH	pH (standard units)	TEMP.	COND. µS/cm	DISSOLVED OXYGEN mg/L	TURBIDITY (NTUs)		ODOR (describe)
11:13	16.50	16.5		77.30	7.72	23.27	581	. 21	1.94	NONE	NONE
11:22	4.50	21.0			7.69	23.29	582	. 20	1.18		
11:31	4.50	25.5	-50	77.30	7.63	23.30	584	.19	1.27	<u> </u>	V
	+		+	-		7		/			7
$-\!\!/\!\!-$	+ /	1-/			/			/		/ /	1
/		/								<del>                                     </del>	
										+/-	
	1/			1(-)							7
WELL CA	PACITY (Gallon	s Per Footh:	0.75" = 0.02:	1" = 0.04;	1.25" = 0.06	; 2" = 0.16	3: 3" = 0.37;	4" = 0.65; §	6" = 1.02; 6	3" = 1.47; 12" =	E 00
TUBING I	NSIDE DIA. CA	PACITY (Gal.	/Ft.): 1/8" = 0	.0006; 3/16"	= 0.0014;	1/4" = 0.0020	6; 5/16" = 0.0	3/8" = 0.	006; 1/2"	= 0.010; 5/8" =	0.016
PURGING	EQUIPMENT C	ODES: I	3 = Bailer;	BP = Bladder P		ING DA	Submersible Pun	np; PP = Pe	ristaltic Pump;	O = Other (S	specify)
	BY (PRINT) / A BALLOON / ZA		ON	SAMPLER(S)			Vetterje	SAMPLING INITIATED AT	11:31	SAMPLING PENDED AT:	l: 35
PUMP OR	TUBING WELL (feet);	177.14		TUBING MATERIAL CO	DE.	T		FILTERED: Y	<b>®</b>	FILTER SIZE: _	μm
	CONTAMINATIO	<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>	Y N	©edicated	TUBING	Y N eD	edicates	n Equipment Typ	e: Y	(N)	
SAM	PLE CONTAINE	R SPECIFICA	ATION		SAMPLE PRE	SERVATION		INTENDE			PLE PUMP
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIV		OTAL VOL	FINAL pH	ANALYSIS AN METHOD			OW RATE per minute)
	3311111112113	- 0052		JOLD	ADDLE	M LILLD (III	ic) pri				
								~			
				· · · · · · · · · · · · · · · · · · ·							
						<del></del>					
	.O.C. FO					licated Blade	<del></del>				
SAMPLING	CODES:	AG = Amber	Blass; CG =	Clear Glass;	PE = Polyet B = Bailer	<u> </u>	P = Polypropyler ladder Pump;	ne; S = Silicon ESP = Electric			pecify)
		R	FPP = Reverse	e Flow Peristaltic	c Pump; S	SM = Straw M	lethod (Tubing G	iravity Drain);	O = Other (S		

not constitute all of the information required by Chapter 62-160, F.A.C.

pH:  $\pm$  0.2 units Temperature:  $\pm$  0.2 °C Specific Conductance:  $\pm$  5% Dissolved Oxygen: all readings  $\leq$  20% saturation (see Table FS 2200-2); optionally,  $\pm$  0.2 mg/L or  $\pm$  10% (whichever is greater) Turbidity: all readings  $\leq$  20 NTU; optionally  $\pm$  5 NTU or  $\pm$  10% (whichever is greater)

Revision Date: February 2009

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<sup>2.</sup> STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

## DEP-SOP-001/01 FS 2200 Groundwater Sampling

## Form FD 9000-24 GROUNDWATER SAMPLING LOG

SITE NAME:		SELF	IAMP			j.	SITE					
WELL NO	):	TH-			SANA		LOCATION:.		Lithia, Florida	a		
<del>-</del>	<u></u>		· <u>-</u>	<del></del>	SAIVI		TH-72			DATE: 4	2/15	
WELL			TUBING			PUR	GING D					
DIAMETE	R (inches):	2 .	~1414	inches):		WELL SCREE! DEPTH: 180		STATI	C DEPTH 96	. 89 PUF	RGE PUMP TYPE	
(only fill ou	t if applicab	GE: 1WE  le)	LL VOLUME	= (TOT/	AL WELL D	DEPTH - ST	ATIC DEPTH	TO WATER)	ATER (feet): 96	OR	BAILER: DBP	
					400		<b>~</b>	_				
(only fill ou	NT VOLUMI t if applicabl	E PURGE: ` e)	1 EQUIPME	NT VOL.	= PUMP V	feet - OLUME + (TU	BING CAPAC	feet)	X .16 TUBING LENGTH	gallons/fo	ot = 14.90	3 galle
		·			=	gallons + (		ons/foot X			LL VOLUME	
	IMP OR TUI WELL (feet)				OR TUBI	ING	PURCIN	JG.	feet PURGING	<u>′                                    </u>	gallons =	gal
		CHA		A MI HL	/ELL (feet): DEPTH		INITIAT	EDAT: 10:0	ENDED AT:	10:48	TOTAL VOLUME PURGED (gallon	E 23
TIME	VOLUME PURGED			URGE VATE	TO	pH	TEMP.	COND.	DISSOLVED	7		]
	(gallons)	(galic		gpm)	WATER (feet)	units)	(°C)	μS/cm	OXYGEN mg/L	TURBIDITY (NTUs)	COLOR (describe)	ODO
D:32	15.0	15	.0	50	96.89	6.67	23.61	2458			<u> </u>	(desc
5:40	4.0	19		50	96.80	16.67		2458		1.11	NONE	NON
3:48	4.0	23	.0 .	50	96.80	16.67	23.59	2459	.44	1.28		ļ
			7			7		31101	.40	1.02	- V	V
-/		1_									<del> </del>	
/		1/						_/_				
		$\swarrow$										_
		1							1	_/_	1	
		//							<del>                                     </del>			
	<i></i>	<u> </u>										· · · · · · · · · · · · · · · · · · ·
II CARA	CITY (Calla							1				1
	DE DIA. UA	FACILY (G	): 0.75" = 0. al./Ft.): 1/8'	02; 15	0.04; 3: 3/16"	1.25" = 0.06; = 0.0014;	2" = 0.16;	3"=087;	4" = 0.65; 5"	= 1.02; 6"	= 1.47; 12" = 8	
RGING EC	UIPMENT	CODES:	B = Bailer;		Bladder P			5/16" = 0. ubmersible Pur	004;  3/8" = 0.00	06; 1/2" = (	0.010; 5/8" = 0	5.88 5.016
IPI ED BV	(PRINT) / A	ren ia mia				SAMPI	ING DAT	TA	np; PP = Peris	staltic Pump;	O ≈ Other (Sp	ecify)
REW BAL	LOON / ZA	CK PATTE	N: RSON	SAN	APLER(S)	SIGNATURE(	Sig 1 A/I	11	CANADINIO	<del></del>		
P OR TU				TUB	1010	/	100h 12	alex	SAMPLING INITIATED AT:	10:48	SAMPLING ENDED AT:	:52
TH IN WE		189			ERIAL CO	DE.	т	FIELD-I	FILTERED: Y	(R)	ILTER SIZE:	
DECON	ITAMINATIO	ON: PUN	/IP Y	N 4Ded			N Ded		n Equipment Type:			µп
SAMPLE	CONTAINE	R SPECIFIC	CATION	T -		SAMPLE PRES		Come	DUPLICATE:	Υ (	0	
DE CO	# NTAINERS	MATERIAL CODE	VOLUME	PRE	SERVATIV	E TOT	AL VOL	FINAL	INTENDED ANALYSIS AND/	OR EQUIP		E PUM
		OODL		<del></del>	USED	ADDED II	N FIELD (mL)	pH	METHOD	COL		/ RATE minute
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				+								
7				<del> </del>								<del></del> -
				<del> </del>		-						
	1			+								<del></del>
		L		J								
- ^ -		3 C A R R R	PS 17 towns as as		310 de						······································	<del></del>
C.O.	C. FOF	SAIVI	PLE AN	ALY	515	DBP =Dedica	ated Riaddor	Dumn				
RIAL COD	ES: A	G = Amber	Glass; CG	= Clear (	Glass;	DBP =Dedica PE = Polyethyl			S = C///	T		
ING EQU	IPMENT C	G = Amber DDES: A	Glass; CG	= Clear (	Glass; I	PE = Polyethyl B = Bailer;	ene; PP = BP = Blado	Polypropylene	ren e	T = Teflon;	O = Other (Spec	ify)

<sup>2.</sup> 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)

## Form FD 9000-24 **GROUNDWATER SAMPLING LOG**

NAME:							SITE					
	<del> </del>	SELF	FIAMP	1			OCATION:	Lithia, I	Florida			
WELL NO:		TH-7	76	S	AMPLE		TH-70			DATE: 4	lalie	
							GING DA			1	/2/15	
WELL		TUBIN		W	/ELL SC	REEN INT	ERVAL DEPT		TIC DEPTH			
DIAMETER	(inches): 2	DIAMI	ETER (inches	1. N E   4:	<i></i>	_	4			7.18   PUF	RGE PUMP TYPE	
(only fill out	t if applicable	E: TWELL )	. VOLUME =	(TOTAL WEI	LL DEP	TH - STA	TIC DEPTH	TO WATER)	VATER (feet): / X WELL CAPA	CITY	BAILER: DBP	
			=	( 178.	35 f	ieet -	77.18	feet )	X .16	m=11#-	. 1/ 10	<b>ට</b> ා
(only fill out	if applicable	PURGE: 1.	EQUIPMENT	VOL. = PUM	IP VOLU	JME + (TUI	BING CAPACI	TY X	TUBING LENGTH	gallons/for	ot =  ( <b>0.1</b> °	7 9
				=	gai	ions + (	gallo	ns/foot X	fee			
INITIAL PUI DEPTH IN 1	MP OR TUBI WELL (feet):	NG 177.35	FINAL	PUMP OR T	UBING		PHRGIN	G	DUDONO	<del></del>	gallons = TOTAL VOLUME	ga
JE1 111 114 1	1	CUMU	I DEPT	H IN WELL (fo		177.35	INITIATE	DAT: II: 3	ENDED AT	12:25	PURGED (galion	= 15): Z£
TIME	VOLUME PURGED	VOLUN	ME PUR	GE TO	0	pH (otanalaa)	TEMP.	COND.	DISSOLVED	71100110		Ť
	(gallons)	PURGE (gallon			IER	(standard units)	(°C)	μS/cm	mg/L	TURBIDITY (NTUs)	COLOR (describe)	(des
2:11	16.5	16.				7.27	000.	<i></i>		ļ	(45551.50)	lues
2:20	4.5	21	.5			7.28	22.91	507	1.12	.59	NONE	No
2:29	4.5	25.				7.28	22.94	507	.12	1.07		
		40 60 3,		10	. 30	20	48.44	50%	.12	.96	V	
		<del>                                     </del>	_/						1			7
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									<del> </del>			(
ELL CAPA JBING INSI	CITY (Gallon	s Per Foot):	0.75" = 0.00	2; 1" = 0.0	4; 1.	25" = 0.06;	2" = 0.16;		4" = 0.65: 5	"=102· ėii	2-147: 409	(
DRING INSI	DE DIA. CAI	PACITY (Ga	1./Ft.): 1/8" =	0.0006; 3	3/16" = 0	).0014;	1/4" = 0.0026;	5/16" = 0	.004; 3/8" = 0.	006; 1/2" =	'= 1.47; 12" = 0.010; 5/8" =	5.88 0.016
DRING INSI	CITY (Gallon IDE DIA. CAI QUIPMENT C	PACITY (Ga	0.75" = 0.00 L/Ft.): 1/8" = B = Baller;	2; 1" = 0.0 0.0006; 3 BP = Blade	3/16" = 0 der Pum	).0014; <u>(</u>	1/4" = 0.0026; P = Electric Si	5/16" = 0 ubmersible Pu	.004; 3/8" = 0.	" = 1.02; 6" 006; 1/2" = ristaltic Pump;	'= 1.47; 12" = 0.010; 5/8" = 0 = Other (S	0.016
JRGING INSI	QUIPMENT C	PACITY (Ga	i./Ft.): 1/8" = B = Baller;	0.0006; 3 BP = Blade	3/16" = 0 der Pum	D.0014; 1 p; ESI	1/4" = 0.0026; P = Electric St	5/16" = 0 ubmersible Pu	.004; 3/8" = 0.	006; 1/2" =	0.010; 5/8" =	0.016
JRGING EC JRGING EC MPLED BY JDREW BAI	QUIPMENT C	PACITY (Ga	i./Ft.): 1/8" = B = Baller;	0.0006; 3 BP = Blade	3/16" = 0 der Pum	D.0014; 1 p; ESI	1/4" = 0.0026; P = Electric Si	5/16" = 0 ubmersible Pu	.004; 3/8" = 0.	006; 1/2" = ristaltic Pump;	0.010; 5/8" = O = Other (S	0.016 pecify)
JEING INSI JRGING EC MPLED BY IDREW BAI MP OR TU	QUIPMENT OF COMMENT OF	PACITY (Gal CODES: FFILIATION CK PATTER:	i./Ft.): 1/8" = B = Baller;	0.0006; 3 BP = Blade	3/16" = 0 der Pum	D.0014; 1 p; ESI	1/4" = 0.0026; P = Electric St	5/16" = 0  John ersible Pu  A  Million	.004; 3/8" = 0. imp; PP = Pei SAMPLING INITIATED AT:	006; 1/2" = ristaltic Pump;	0.010; 5/8" =  O = Other (Specific Sampling ENDED AT: 1	0.016 pecify)
MPLED BY IDREW BAI	QUIPMENT OF A LLOON / ZACE BING ELL (feet):	PACITY (Gale of the control of the c	I./Ft.): 1/8" = B = Bailer; : : SON	SAMPLEF TUBING MATERIAL	8/16" = 0 der Pum (S) R(S) SIG	D.0014; p; ESI SAMPL ENATURE(S	1/4" = 0.0026; P = Electric St	5/16" = 0  Johnersible Pu  A  Mother  FIELD-F	.004; 3/8" = 0.  Imp; PP = Pei  SAMPLING INITIATED AT:  ILTERED: Y	006; 1/2" = ristaltic Pump;	0.010; 5/8" = O = Other (S	0.016 pecify)
JBING INSI JRGING EC MPLED BY IDREW BAI IMP OR TU PTH IN WE	(PRINT) / A LLOON / ZAG BING ELL (feet):	PACITY (Gales)  FFILIATION CK PATTER:  177.35 N: PUMI	I./Ft.): 1/8" =  B = Bailer; : : SON	BP = Blade SAMPLEF TUBING	der Pum SR(S) SIG	D.0014; p; ESI SAMPL ENATURE(S	IMG DAJ	5/16" = 0  Johnersible Pu  A  Mother  FIELD-F	SAMPLING INITIATED AT:  ILTERED: Y Equipment Type:	006; 1/2" = ristaltic Pump;	0.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 =  ILTER SIZE:	0.016 pecify)
JBING INSI JRGING EC MPLED BY JDREW BAI JMP OR TU FPTH IN WE SLD DECON	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO	FACITY (Ga. ODES:  FFILIATION CK PATTER:  177.35  N: PUMI	I./Ft.): 1/8" =  B = Bailer; : : SON	SAMPLER TUBING MATERIAL  QUICATED	MA6" = 0 der Pum SR(S) SIG L CODE	D.0014; P. ESI SAMPL SNATURE(S TUBING	IMG DAJ	5/16" = 0  Jobmersible Pu  A  FIELD-F  Filtration	SAMPLING INITIATED AT: ILTERED: Y Equipment Type: DUPLICATE:	006; 1/2" = ristaltic Pump;  12:23  F	0.010; 5/8" =  O = Other (Si  SAMPLING ENDED AT: 1 =  ILTER SIZE:	0.016 pecify) ?: 32 _ μm
MPLED BY DREW BAI MP OR TU PTH IN WELD DECON SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO  #	FACITY (Ga ODES: FFILIATION CK PATTER: 177.35 N: PUMI R SPECIFIC	I./Ft.): 1/8" =  B = Bailer; : : SON	SAMPLER TUBING MATERIAL DEGICATE PRESERV	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric SI ING DA  T Y N C SERVATION TAL VOL	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 2 7  Y  SAMI	0.010; 5/8" =  O = Other (Si  SAMPLING ENDED AT: 1 =  ILTER SIZE:  N  PLING SAMP	0.016 pecify) 2: 32  µm  LE PUI
MPLED BY DREW BAI MP OR TU PTH IN WE LD DECON SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO	FACITY (Ga. ODES:  FFILIATION CK PATTER:  177.35  N: PUMI	I./Ft.): 1/8" =  B = Baller; : SON  P Y N  ATION	SAMPLER TUBING MATERIAL  QUICATED	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric Si ING DA Sibola M T Y N G SERVATION	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LEQUIPMENT Type:  DUPLICATE:  INTENDED	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  2: 3:
MPLED BY DREW BAI MP OR TU PTH IN WELD DECON SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO  #	FACITY (Ga ODES: FFILIATION CK PATTER: 177.35 N: PUMI R SPECIFIC	I./Ft.): 1/8" =  B = Baller; : SON  P Y N  ATION	SAMPLER TUBING MATERIAL DEGICATE PRESERV	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric SI ING DA  T Y N C SERVATION TAL VOL	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  2: 3:  µm  LE PUI W RAT
JEING INSI JRGING EC  JRGING EC  JRP OR TU  PTH IN WE  LD DECON  SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO  #	FACITY (Ga ODES: FFILIATION CK PATTER: 177.35 N: PUMI R SPECIFIC	I./Ft.): 1/8" =  B = Baller; : SON  P Y N  ATION	SAMPLER TUBING MATERIAL DEGICATE PRESERV	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric SI ING DA  T Y N C SERVATION TAL VOL	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  2: 32  µm  LE PUI W RAT
JEING INSI JRGING EC  JRGING EC  JRP OR TU  PTH IN WE  LD DECON  SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO  #	FACITY (Ga ODES: FFILIATION CK PATTER: 177.35 N: PUMI R SPECIFIC	I./Ft.): 1/8" =  B = Baller; : SON  P Y N  ATION	SAMPLER TUBING MATERIAL DEGICATE PRESERV	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric SI ING DA  T Y N C SERVATION TAL VOL	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  3:32  µm  LE PUI
MPLED BY MPLED BY NDREW BAI MP OR TU PTH IN WE ELD DECON SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO  #	FACITY (Ga ODES: FFILIATION CK PATTER: 177.35 N: PUMI R SPECIFIC	I./Ft.): 1/8" =  B = Baller; : SON  P Y N  ATION	SAMPLER TUBING MATERIAL DEGICATE PRESERV	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric SI ING DA  T Y N C SERVATION TAL VOL	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  3:32  µm  LE PUI
MPLED BY IDREW BAI IMP OR TU EPTH IN WE ELD DECON SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO  #	FACITY (Ga ODES: FFILIATION CK PATTER: 177.35 N: PUMI R SPECIFIC	I./Ft.): 1/8" =  B = Baller; : SON  P Y N  ATION	SAMPLER TUBING MATERIAL DEGICATE PRESERV	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric SI ING DA  T Y N C SERVATION TAL VOL	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  2: 32  µm  LE PUI W RAT
MPLED BY IDREW BAI IMP OR TU EPTH IN WE ELD DECON SAMPLE	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO  #	FACITY (Ga ODES: FFILIATION CK PATTER: 177.35 N: PUMI R SPECIFIC	I./Ft.): 1/8" =  B = Baller; : SON  P Y N  ATION	SAMPLER TUBING MATERIAL DEGICATE PRESERV	B/16" = 0  der Pum  R(S) SIG  L CODE  SAM  ATIVE	D.0014; PP; ESI SAMPL BNATURE() TUBING PLE PRES	IM" = 0.0026; P = Electric SI ING DA  T Y N C SERVATION TAL VOL	5/16" = 0 ubmersible Pu  TA  FIELD-F Filtration  Dedicates	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  2: 3:  µm  LE PUI W RAT
JAMPLED BY AMPLED BY AMPLED BY AMPLED BY AMP OR TU EPTH IN WE ELD DECON SAMPLE MPLE CODE CO	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): NTAMINATIO E CONTAINE # NTAMINERS	FRILIATION CK PATTER:  177.35 N: PUMI R SPECIFIC MATERIAL CODE	I./Ft.): 1/8" = Bailer; : SON  P Y N  ATION  VOLUME	SAMPLER TUBING MATERIAL  PRESERV USEI	SAN ATIVE	D.0014; p; ESI SAMPL ENATURE(S TUBING MPLE PRES TO ADDED	IM" = 0.0026; P = Electric SI ING DA  T Y N (I SERVATION TAL VOL IN FIELD (mL	5/16" = 0 ubmersible Pu  FA  Library  FIELD-F  Filtration  Dedicates  FINAL  pH	SAMPLING INITIATED AT:  LTERED: Y (Equipment Type:  DUPLICATE:  INTENDED  ANALYSIS AND	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify) 33  µm  LE PUN W RATI
JEE C.O	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): VTAMINATIO  # ONTAINERS	PACITY (Ga. ODES:  FFILIATION: CK PATTER:  177.35 N: PUMI R SPECIFIC.  MATERIAL CODE	I./Ft.): 1/8" = Bailer; : SON P Y N ATION VOLUME	SAMPLEF TUBING MATERIAL PRESERV USEI	B/16" = C der Purm R(S) SIG L CODE SAM ATIVE D DBP :	D.0014; pp; ESI SAMPL ENATURE(S) TUBING MPLE PRES ADDED  Dedicate	IM" = 0.0026; P = Electric SI ING DA T Y N C SERVATION TAL VOL IN FIELD (mL	5/16" = 0  ubmersible Pu  A  FIELD-F  Filtration  Dedicates  FINAL  pH	SAMPLING INITIATED AT:  ILTERED: Y (Equipment Type:  DUPLICATE:  INTENDED ANALYSIS AND METHOD	1/2" = ristaltic Pump;  1/2: 23  Y SAMI D/OR EQUIF	O.010; 5/8" =  O = Other (S)  SAMPLING ENDED AT: 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1	0.016 pecify)  3:32  µm  LE PUI
MPLED BY NDREW BAI JMP OR TU PTH IN WE ELD DECON SAMPLE MPLE CODE CO ERIAL COI	DE DIA. CAI QUIPMENT C  (PRINT) / A LLOON / ZAC BING ELL (feet): VTAMINATIO  # ONTAINERS	FRILIATION CK PATTERS  177.35 N: PUMI R SPECIFIC CODE  ATTERIAL CODE  R SAMF G = Amber C	I./Ft.): 1/8" = Bailer; : SON  P Y N  ATION  VOLUME	SAMPLER TUBING MATERIAL PRESERV USEI	B/16" = C der Pum  R(S) SIG  L CODE  SAN  ATIVE  D  DBP =	D.0014; p; ESI SAMPL ENATURE(S TUBING MPLE PRES TO ADDED	IM" = 0.0026; P = Electric SI ING DA T Y N C SERVATION TAL VOL IN FIELD (mL	5/16" = 0  Johnersible Pu  TA  FIELD-F Filtration  Pedicaters  FINAL pH  Pedicaters	SAMPLING INITIATED AT:  ILTERED: Y (Equipment Type:  DUPLICATE:  INTENDED ANALYSIS AND METHOD	T = Teflon;	O.010; 5/8" =  O = Other (Si  SAMPLING ENDED AT: 1 Si  ILTER SIZE:  N  PLING SAMP PLING FLOV (mL pe	0.016 pecify)  LE PUM W RATI

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 2009

## DEP-SOP-001/01 FS 2200 Groundwater Sampling

## Form FD 9000-24 GROUNDWATER SAMPLING LOG

WELLNO		SELF IAM	P				SITE LOCATION:					
AALLE IN	D:	TH-77			SAME	PLE ID:			Lithia, Flo			
				<del></del>			TH-	77		DATE:	12/15	
WELL		TUBIN	G		ME	PUI	RGING D	ATA		<u> </u>	12113	
WELLVO	R (inches): 2	DIAME	TER (inch	es): 0.5	154	L SCREEN	NTERVAL DE	PTH: STATE	C DEPTH	Pilip	OCE DUMAN TO ST	
(only fill or	it if applicable	E: 1WELL	VOLUME	= (TOTAL	WELL D	EPTH - S	TATIC DEPT	et TO WA	C DEPTH ATER (feet): 85 X WELL CAPAC	.67 OR	RGE PUMP TYPI BAILER: DBP	<u> </u>
		•		= / 10	30.2	_		110 WATER)	X WELL CAPAC	YTI		
(only fill ou	NT VOLUME It if applicable	PURGE: 1 E	QUIPMEN	T VOL. =	PUMP VO	feet - DLUME + (TI	BING CAPA	ol feet)	<u>×</u> .16	gallons/foot	13.34	
				=					TUBING LENGTH	+ FLOW CEL	L VOLUME	
DEDTH IN	IMP OR TUBI		FINA	AL PUMP	OR TUBIN	galions + (		ons/foot X	feet		gallons =	
DEF ITTIN	WELL (feet):	168.2 CUMUL	DEP	TH IN WE	LL (feet):	168.2	PURGI	NG EDAT: 12:4	PURGING	1	TOTAL VOLUM	gallo
TIME	VOLUME	VOLUMI	. Pu	RGE	DEPTH	pH	7	EDAI: 14.4	LINDED AT:	13:27	PURGED (gallor	E 15): 20.5
	PURGED (gallons)	PURGEI (gallons)	) R	ATE	TO WATER	(standard	TEMP.	COND.	DISSOLVED	TURBIDITY		Ţ
3:13	13.5	13.5		pm)	(feet)	units)	(°C)	μS/cm	OXYGEN mg/L	(NTUs)	COLOR (describe)	ODOF
3:20	3.5	17		-	8594	7.27	23.52	494	.14		(=====	(describ
3:27	3.5			50 8	5.94	7.27	23.59	494		10.	NONE	NONE
64. No B	<del></del>	20.5	9	50 8	5.94	7.27	23.62	495	.13	.57		1
			12					713	.14	.47	4	1
-/-							/					
/		/					/					-
		_/				-/-			_/			/_
				$\overline{}$		/						
					- $A$							
			<del></del>		/-	-4		_ /				
	7		<del> </del>					(	/		/	
LL CAPAC	CITY (Gallons DE DIA. CAPA	Per Foot): 0	75" = 0.0°	2: 47 =							/	_( -
SCINC FO	DE DIA. CAPA			0.0006;	0.04; <u>1</u> 3/16" =	.25" = 0.06; 0.0014; 1	2" = 0.16; /4" = 0.0026;	3" = 0.37;	4" = 0.65; 5"	= 1.02; 6" =		
tones EQ	DIPINENT CO	DES: B	Bailer;		adder Pur		= Flectric S.	5/16" = 0.00 ibmersible Pump	4; 3/8" = 0.000	$\frac{1}{2}$ ; $\frac{1}{2}$ = 0.0	1.47; <b>12"</b> = 5 010; 5/8" = 0	.88
PLED BY	(PRINT) / AFF	II IATION				SAMPL	NC DAT	A	PP = Perist	altic Pump;	O = Other (Spe	ecify)
REW BAL	OON / ZACK	PATTERSOI	N	SAMPL	ER(S) SI	GNATURE	11/1					Jony
P OR TUB	ING					1		telen	SAMPLING INITIATED AT:	2.07 SA	MPLING 19	
TH IN WEL	L (feet):	168.2		TUBING	-					EV	IDED AT: 13	
	AMINATION:	PUMP	YN		IAL CODE		T	Filtration E	quipment Type:	FIL	TER SIZE:	μm
D DECONT					ଦର୍ଶ୍ର	TUBING	v					- 1
SAMPLE C	ONTAINER S	PECIFICATION	ON.	OGGILA				Dedicates (		<b>?</b>		
SAMPLE C	ONTAINER S	Trees.	ON		SAM	MPLE PRESE	ERVATION	Dedicates [	DUPLICATE: (	Y		,
SAMPLE C	# M/	Trees.	ON OLUME		RVATIVE	MPLE PRESE	ERVATION	FINAL	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLI		PUMP
SAMPLE C	# M/	TERIAL	ON	PRESER	RVATIVE	MPLE PRESE	ERVATION		OUPLICATE: (		NT FLOW	RATE
SAMPLE C	# M/	TERIAL	ON	PRESER	RVATIVE	MPLE PRESE	ERVATION	FINAL	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLIN EQUIPME	NT   FLOW	RATE
SAMPLE C	# M/	TERIAL	ON	PRESER	RVATIVE	MPLE PRESE	ERVATION	FINAL	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLIN EQUIPME	NT FLOW	RATE
SAMPLE C	# M/	TERIAL	ON	PRESER	RVATIVE	MPLE PRESE	ERVATION	FINAL	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLIN EQUIPME	NT FLOW	RATE
SAMPLE C	# M/	TERIAL	ON	PRESER	RVATIVE	MPLE PRESE	ERVATION	FINAL	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLIN EQUIPME	NT FLOW	RATE
SAMPLE C	# M/	TERIAL	ON	PRESER	RVATIVE	MPLE PRESE	ERVATION	FINAL	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLIN EQUIPME	NT FLOW	RATE
SAMPLE CONTENTS	# My	TERIAL VO	DLUME	PRESEF	RVATIVE	MPLE PRESE	ERVATION	FINAL	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLIN EQUIPME	NT FLOW	RATE
SAMPLE CON	TAINERS MY	CODE VO	DLUME	PRESERUS	RVATIVE	MPLE PRESE TOTA ADDED IN	ERVATION AL VOL FIELD (mL)	FINAL A	OUPLICATE: ( INTENDED INALYSIS AND/O	SAMPLIN EQUIPME	NT FLOW	RATE
C.O.C	# My IAINERS MY IAINER	CODE VO	DLUME  E ANA  CG = C	PRESEF US	DISS: PE:	MPLE PRESE TOTA ADDED IN	ERVATION AL VOL FIELD (mL) ed bladder p	FINAL A	DUPLICATE:  INTENDED  NALYSIS AND/O	SAMPLIN EQUIPME	NT FLOW	RATE
C.O.C  IAL CODE:	FOR S S: AG = MENT CODE	SAMPLE  Amber Glass S: APP =	DLUME  E ANA  CG = C  After Peris	PRESEF US LYSIS Clear Glass	DDD DDD DDD DDD DDD DDD DDD DDD DDD DD	ADDED IN  ADDED IN  BP= Dedicat  Polyethyler	ed bladder p	FINAL PH PH PH PH PH PH PH PH PH PH PH PH PH	DUPLICATE:  INTENDED  NALYSIS AND/O  METHOD  S = Silicone; T	SAMPLII EQUIPME CODE	The state of the s	RATE minute)
C.O.O IAL CODE: ING EQUIP	FOR S S: AG = MENT CODE	SAMPLE  Amber Glass S: APP = RFPP	DLUME  E ANA  CG = C  After Perise  Reverse	PRESEF US US LYSIS Clear Glass staltic Pum Flow Peris	DDD B stallic Pum	MPLE PRESE TOTA ADDED IN  BP= Dedicat Polyethyler Baller; SM =	ed bladder proper  FINAL pH  ump olypropylene; r Pump; ESi	DUPLICATE:  INTENDED  NALYSIS AND/O  METHOD  S = Silicone; T  P = Electric Subm	SAMPLII EQUIPME CODE CODE  = Teflon; O	NT FLOW	RATE minute)	

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)