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Office of the County Administrator Michael S. Merrill

February 28, 2014

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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. 41 – January 2014

Dear Mr. Morris:

The Hillsborough County Public Utilities Department (County) is pleased to provide the analytical results from the January 2014 sampling event conducted as part of our 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 VI 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 Southwest District Office (Department), three (3) upper Floridan/Limestone aquifer monitoring wells, designated as TH-72, TH-76 and TH-77 are sampled on a monthly schedule. Representative samples were collected from each of these monitoring wells on January 3, 2014 and analyzed for total dissolved solids (TDS), chloride, total ammonia, arsenic, iron, sodium, and five (5) field parameters. Each sample collected was analyzed by our contracted laboratory, Test America, Inc. The following paragraphs summarize the parameter specific results pertinent to the evaluation of potential water quality impacts from the sinkhole at the SCLF.

<u>Turbidity</u>

During the January sampling event, turbidity values in the Upper Floridan / Limestone aquifer monitoring wells TH-72, TH-76, and TH-77 were recorded at 1.64, 19.4, and 16.5 Nephelometric Turbidity Units (NTUs), respectively. Turbidity continues to decrease in the two newest monitoring wells TH-76 and TH-77.

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Conductivity

The conductivity values observed in TH-72, TH-76, and TH-77 were 2,220, 398, and 371 micromhos per centimeter (umhos/cm), respectively. Monitoring well TH-72 is the closest UFA monitoring well to the sinkhole, it and continues to exhibit groundwater impacts similar to those observed over the last year. The elevated conductivity observed is likely attributable to the waste in the throat of the sinkhole and the large amounts of grout materials injected into subsurface as part of the sinkhole stabilization and remediation processes. The conductivity values observed in TH-76 and TH-77 are relatively low and consistent with the unaffected deep wells across the site.

Total Dissolved Solids (TDS)

The TDS in TH-72 was observed at 1,200 mg/l and continues to be above the Secondary Drinking Water Standard (SDWS) of 500 mg/l. The two down gradient monitoring wells, TH-76 and TH-77 exhibited TDS values of 190 mg/l and 160 mg/l, respectively, which is consistent with the water quality of the unaffected deep wells across the site.

Chloride

Chloride was observed at 580 mg/l in TH-72, which is well above the SDWS of 250 mg/l. The elevated chloride value observed, is likely attributable to waste in the sinkhole and/or the grouting activities.

<u>Iron</u>

Total iron concentrations in each of the three (3) UFA monitoring wells were observed above the SDWS of 0.3 mg/l. TH-72, TH-76 and TH-77 exhibited iron at 0.67, 1.1, and 0.63 mg/l, respectively. The elevated iron concentrations observed in these wells are consistent with historical data set, and are likely naturally occurring in the formation, and/or the result of past strip mining activities in the area.

Sodium

Sodium was observed at a concentration of 230 mg/l in TH-72, which is above the PDWS of 160 mg/l. The elevated sodium value is likely attributable to the waste in the sinkhole and/or the grouting activities.

<u>Total Ammonia</u>

Total ammonia was observed at a concentration of 25 mg/l, which is above the former groundwater cleanup target level (GCTL) of 2.8 mg/l. The two down gradient monitoring wells, TH-76 and TH-77 were observed at 0.23 and 0.39 mg/l, respectively, which is consistent with the unaffected deep wells across the site.

Groundwater Elevations and Direction of Flow

On January 2, 2014, the County collected groundwater and surface water elevation data at sixtyfive (65) points across the site, including twenty eight (28) surficial aquifer wells, seven (7) upper Floridan (limestone) aquifer wells, twenty three (23) piezometers, and six (6) surface water sites. No significant changes to the patterns of flow in the surficial aquifer were noted in the December data set and the flow diagram provided is consistent with the observations over the Mr. John Morris, P.G. February 28, 2014 Page 3 of 4

period of record. The general direction of flow within the surficial aquifer has historically been to the west-northwest across the Southeast County Landfill site. The elevations observed within the wells closest to the sinkhole indicate that flow patterns may be somewhat affected in the area, which would not be unexpected. However, the overall direction of flow within the surficial aquifer remains toward the west/northwest across the site.

A contour diagram of the upper Floridan / Limestone aquifer has been prepared for the general area around the sinkhole and is included with this submittal. This diagram was generated manually in AutoCad TM utilizing only the three data points closest to the sinkhole. For the month of January, the elevation change between TH-72 and TH-76 is only 0.11 ft., and the change between TH-72 and TH-77 is only 0.07 ft. The diagram indicates that flow within the UFA in the area of the former sinkhole continues to be in a north/northwest direction, but at what appears to be a very slow rate. The County will continue to evaluate the direction of flow within the upper Floridan / Limestone aquifer in the vicinity of the sinkhole, and a more comprehensive understanding of this system will be developed over time. However, based on the consistency of the gradient and a consistent direction of flow, an additional down gradient UFA monitoring appears to be warranted.

Conclusions

The water quality observed in the January 2014 IAMP sampling event indicates that the upper Floridan / Limestone well TH-72, which is closest to the sinkhole, continues to exhibit impacts to water quality. The impacts observed in TH-72 include elevated conductivity, TDS, chloride, ammonia, iron and sodium. These impacts were not unexpected within the upper Floridan / Limestone aquifer in the immediate vicinity of the sinkhole feature. The two recently installed upper Floridan / Limestone aquifer monitoring wells, TH-76 and TH-77 exhibit good water quality with no evidence of impact from the sinkhole. Conductivity values, TDS, chloride and ammonia are all very low and consistent with the historical data set for the unaffected upper Floridan aquifer groundwater monitoring wells at the SCLF.

Based on the groundwater elevations in TH-72, TH-76, and TH-77, the direction of flow within the upper Floridan aquifer in the vicinity of the sinkhole again appears to be towards the northwest. The County will continue to evaluate the direction of flow in this area, and if no significant seasonal changes in the direction of flow are observed, an additional upper Floridan well will be installed in an appropriate down gradient location northwest of the sinkhole. The County will work with the Department on approval of the location and construction details.

Recommendations

The County continues to move forward with implementation of the IAMP, which includes the monthly sampling of the three upper Floridan / Limestone aquifer groundwater monitoring wells, TH-72, TH-76, and TH-77, and the quarterly sampling of the three surficial aquifer monitoring wells, TH-73, TH-74, and TH-75. We will continue to evaluate any water quality changes in both the surficial and upper Floridan wells, and present the findings in the monthly IAMP reports.

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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 the January 2014 sampling event, a groundwater elevation data table, groundwater contour and flow diagrams for the surficial and upper Floridan / Limestone aquifers, the historical data tables for each well sampled this month, and the complete analytical data report from our contracted laboratory, Test America, Inc.

Should you have any questions or require any additional information please feel free to call me at (813) 663-3221.

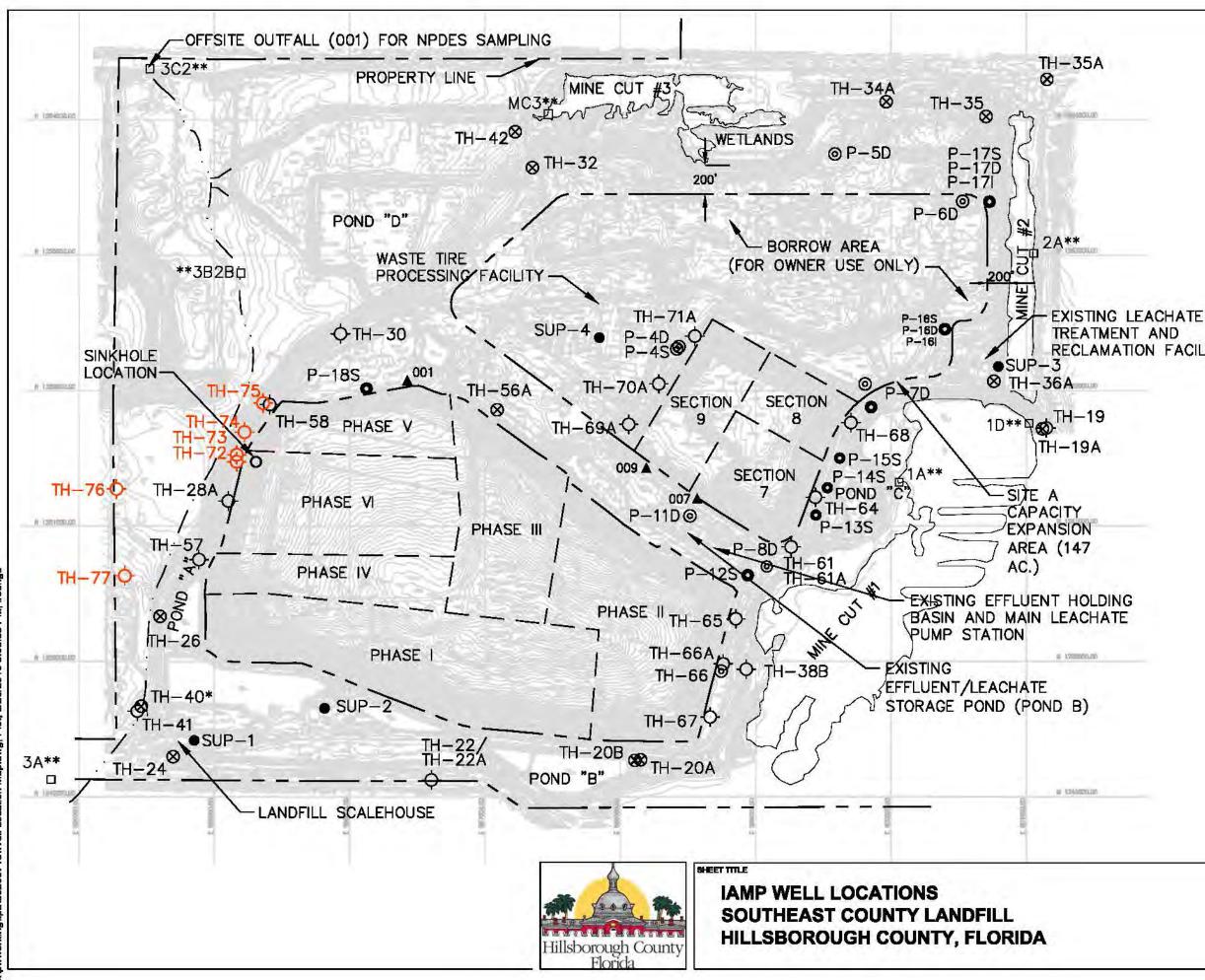
Respectfully submitted,

David S. Adams, P.G Environmental Manager Public Utilities Department Environmental Services



 xc: John Lyons, Director, Public Works Department Kim Byer, Public Works Department, Solid Waste Division Larry Ruiz, Public Works Department, Solid Waste Division Michelle Van Dyke, Public Utilities Department Richard Tedder, FDEP Tallahassee Clark Moore, FDEP Tallahassee Susan Pelz, FDEP Southwest District Steve Morgan, FDEP, Southwest District Andy Schipfer, EPC Ernest Ely, WMI Brian Miller, DOH Rich Siemering, HDR Joe O'Neill, CDS

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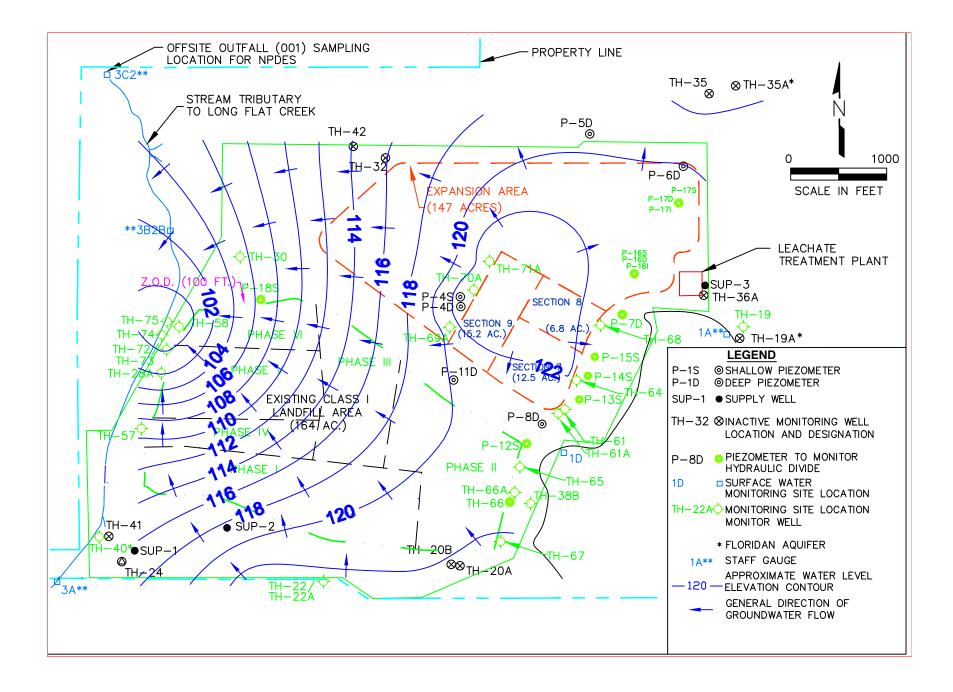
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	SCALE	DRAWING NAME
	date MAY. 2013	EXHIBIT NUMBER

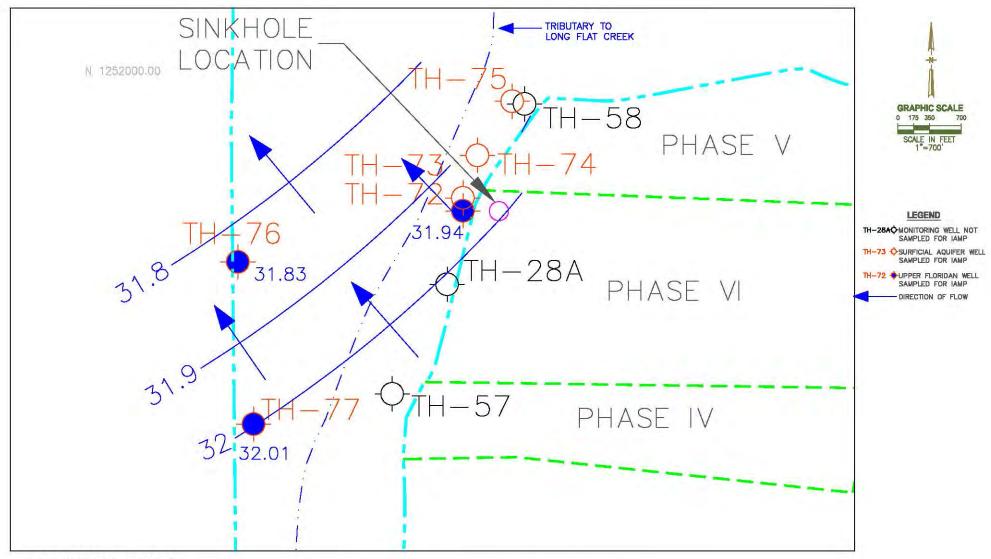
Southeast County Landfill Laboratory Analytical Data Upper Floridan Groundwater Monitoring Wells January 3, 2014

GENERAL	Up	per Floridan Wells		(MCL) STANDARD
PARAMETERS	TH-72	TH-76	TH-77	
conductivity (umhos/cm) (field)	2220	398	371	NS
dissolved oxygen (mg/l) (field)	0.84	0.58	0.85	NS
pH (field)	6.83	7.67	7.65	(6.5 - 8.5)**
temperature (°C) (field)	22.88	22.35	23.18	NS
turbidity (NTU) (field)	1.64	19.4	16.5	NS
total dissolved solids (mg/l)	1200	190	160	500**
chloride (mg/l)	580	12	9.1	250**
ammonia nitrogen (mg/l as N)	25	0.23 j3	0.39	2.8***
				(MCL) STANDARD
Metals: (mg/l)	TH-72	TH-76	TH-77	
arsenic	0.004 u	0.004 u	0.004 u	0.01*
iron	0.67	1.1	0.63	0.3**
sodium	230 j3	20	17	160*
Note: Ref. Groundwater Guidance Cor	centrations, FDE	P 2012		
MCL=MAXIMUM CONTAMINANT LE\	/EL			
BDL=BELOW DETECTION LIMIT				
NTU=NEPHELOMETRIC TURBIDITY	UNITS			
u = parameter was analyzed but not de	etected.			
j3 = estimated value, value may not be			side of criteria.	
*=DENOTES PRIMARY DRINKING W				
**=DENOTES SECONDARY DRINKIN				
***=DENOTES GROUNDWATER CLE	ANUP TARGET L	EVELS		
1200				
ug/I=MICROGRAMS PER LITER				
mg/I=MILLIGRAMS PER LITER				
NS=NO STANDARD				

Southeast County Landfill Groundwater and Surface Water Elevations January 2, 2014

Measuring	T.O.C.			
Point	Elevations	W.L.	W.L.	Time
I.D.	(NGVD)	B.T.O.C.	(NGVD)	T III C
P-4D	140.78	21.89	118.89	10:07
P-4D	140.78	10.00	130.95	10:07
P-43	151.94	ND	ND	11:17
-				
P-6D-A	148.01	27.50	120.51	11:25
P-7D	138.92	17.79	121.13	10:41
P-8D	138.34	19.90	118.44	10:02
P-11D	138.02	17.23	120.79	10:19
P-12S	134.97	14.00	120.97	10:00
P-13S	140.21	19.27	120.94	10:26
P-14S	138.56	17.60	120.96	10:28
P-15S	139.19	18.29	120.90	10:30
P-16S	143.38	15.79	127.59	10:47
P-16I	144.15	23.90	120.25	10:46
P-16D	143.84	23.61	120.23	10:46
P-17S	137.35	15.92	121.43	11:12
P-17I	137.32	17.03	120.29	11:13
P-17D	137.22	17.06	120.16	11:13
P-18S	129.86	18.10	111.76	11:45
P-19	133.36	13.74	119.62	11:45
P-19 P-20	132.38	12.60	119.02	11:22
P-20 P-21				11:28
	122.79	3.70	119.09	
P-22	128.35	9.10	119.25	11:40
P-23	143.13	23.34	119.79	11:33
TH-19*	130.27	100.20	30.07	10:44
TH-20A	131.86	9.64	122.22	9:44
TH-20B	132.57	10.61	121.96	9:45
TH-22	128.82	5.38	123.44	9:27
TH-22A	129.27	6.00	123.27	9:26
TH-24A	128.23	5.52	122.71	9:40
TH-28A	131.10	28.02	103.08	12:22
TH-30	128.88	23.81	105.07	12:12
TH-32	129.90	14.40	115.50	11:49
TH-35	145.98	28.62	117.36	11:03
TH-36A	152.70	32.74	119.96	10:51
TH-38A	130.68	10.15	120.53	9:49
TH-38B	131.81	11.02	120.79	9:50
TH-40*	124.99	95.14	29.85	9:22
TH-41*	125.00	100.51	24.49	9:23
TH-41 TH-42*	116.74	75.41	41.33	9.23 11:52
TH-57	128.36	18.95	109.41	12:25
TH-58	127.88	28.25	99.63	12:15
TH-61	138.73	17.38	121.35	10:22
TH-61A	139.45	18.00	121.45	10:23
TH-64	139.64	17.64	122.00	10:26
TH-65	135.40	14.32	121.08	9:56
TH-66	130.58	9.16	121.42	9:53
TH-66A	130.66	9.63	121.03	9:52
TH-67	129.51	6.85	122.66	9:48
TH-68	140.01	18.14	121.87	10:38
TH-69A	144.97	25.04	119.93	10:15
TH-70A	146.63	22.62	124.01	10:12
TH-71A	146.95	22.70	124.25	10:10
TH-72*	130.96	99.02	31.94	12:18
TH-73	131.07	30.73	100.34	12:19
TH-74	109.08	9.57	99.51	12:29
TH-75	106.92	7.96	98.96	12:33
TH-76*	111.21	79.38	31.83	9:13
TH-77*	119.88	87.87	32.01	9:18
SW-3A	3.0'=125.53'	0.14	122.67	9:08
SW-3B2B	3.0'=97.97'	ND	ND	12:07
SW-3626 SW-362	6.0'=92.33'	1.20	87.53	12:07
Mine Cut #1				
	4.0'=122.14'	2.68	120.82	10:34
Mine Cut #2	6.0'=123.47'	2.68	120.15	10:59
Mine Cut #3	4.0'=112.27'	2.29	110.56	11:54
Mine Cut #4	5.0'=97.54'	1.38	93.92	11:58
	= National Geoder	uc vertical Datum		
	= Top of Casing			
	= Below Top of Ca	asing		
	= Floridan Well			
	= No Data - Samp	ling Location Dry		
W.L.	= Water Level			





JANUARY 2014 UPPER FLORIDAN / LIMESTONE AQUIFER CONTOUR DIAGRAM IN THE VICINITY OF THE FORMER SINKHOLE SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA

Hillsborough County Southeast Landfill Laboratory Analytical Results from IAMP Groundwater Monitoring

TH-72

		Water	1. 1. 1.					total					
	Depth to	Table	conductivity	dissolved		tomporoturo	turbidity	dissolved	oblorido	ammonia	oroonio		o o diu mo
Date	Water (feet)	Elevation (NGVD)	(umhos/cm) (field)	oxygen (mg/l) (field)	pH (field)	temperature (°C) (field)	(NTU) (field)	solids (mg/l)	chloride (mg/l)	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	320	32	0.22	0.004 u	0.52	32
02/03/2011	112.18	18.78	565	1.09	7.38	22.95	9.9	300	32	0.21	0.004 u	0.62	27
02/10/2011	109.80	21.16	514	1.58	7.34	22.65	3.2	340	31	0.28	0.004 u	0.54	31
02/14/2011	108.18	22.78	483	1.15	7.36	22.7	3.5	320	32	0.24	0.0013 u	0.58	32
02/24/2011	111.71	19.25	513	0.19	7.34	22.85	1	350	32	0.22	0.004 u	0.53	31
03/03/2011	111.88	19.08	579	0.77	7.35	22.8	0.8	330	31	0.23	0.004 u	0.43	32
03/10/2011	113.65	17.31	551	1.26	7.41	22.73	0.9	320	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	330	30	0.31	0.004 u	0.25	31
03/24/2011	114.33	16.63	1192	1.5	7.58	23.1	1.5	1,100	350	9	0.004 u	0.64	130
04/01/2011	115.70	15.26	928	0.16	7.41	22.8	3.6	520	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	320	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	32	0.57	0.004 u	0.2	34
07/07/2011 08/04/2011	113.30 103.31	17.66 27.65	606 564	0.72	7.4	23.25 23.18	<u>3.94</u> 0.4	150 360	64 33	2.1 0.21	0.004 u 0.004 u	7.9 0.18 i	27 34
08/04/2011	97.99	32.97	536	1.11	7.29	23.18	0.4	360	33	0.21	0.004 u 0.004 u	0.181 0.181	34
10/04/2011	97.99	32.97	471	1.69	7.29	23.2	<u> </u>	290	34	0.41	0.004 u 0.004 u	0.181 0.14 i	30
11/03/2011	103.37	27.59	550	1.09	7.31	23.13	1.51	290	31	0.29	0.004 u 0.004 u	0.14 i 0.15 i	34
12/08/2011	105.37	24.16	528	1.8	7.20	23.04	0.73	320	29	0.29	0.004 u 0.004 u	0.13 i	33
01/05/2012	113.08	17.88	535	0.2	7.23	22.74	0.44	330	32	0.32	0.004 u	0.131 0.097 i	31
02/10/2012	113.86	17.10	511	0.94	7.3	22.89	1.39	310	28	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	310	25	0.22	0.004 u	0.11 i	31
04/05/2012	124.96	6.00	522	1.09	7.08	23.18	0.65	280	28	0.41	0.004 u	0.11 i	29
05/03/2012	126.55	4.41	746	1.6	6.9	23.46	0.81	380	72	2.3	0.004 u	0.54	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	0.23	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	0.69	6.77	23.6	2.23	730	210	3	0.004 u	0.48	78
09/06/2012	91.18	39.66	2,357	0.2	6.51	23.62	1.05	1,300	570	12	0.004 u	1.1	170
10/04/2012	90.19	40.77	1,654	0.6	6.43	23.22	0.46	1,500	650	25	0.004 u	1.9	210
11/07/2012	99.29	31.67	2,488	0.76	6.58	23.03	0.74	1,400	540	15	0.004 u	1.4	180
12/05/2012	101.82	29.14	2,416	0.23	6.49	23.18	0.45	1,300	540	13	0.004 u	1.3	180 j3
01/03/2013	100.65	30.31	2,430	1.1	6.44	23.09	0.42	1,400	500	15	0.004 u	1.3	170 j3
02/07/2013	105.58	25.38	2,206	0.6	6.5	23.1	0.22	1,100	470	13	0.004 u	1.1	160
03/07/2013	110.00	20.96	1,234	0.3	6.61	22.85	0.41	770	290	11	0.004 u	1.1	110
04/04/2013	111.35	19.61	1,252	0.33	6.74	23.15	9.9	870	260	10	0.004 u	1	100
05/02/2013	109.56	21.40	1,615	0.18	6.83	23.16	0.45	810	300	8.6	0.004 u	0.87	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	0.82	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 97.02	ND	1,256	0.46	6.88	23.43	0.2	800 760	290 290	6.8 7.6	0.004 u	0.72	120 110
09/05/2013 10/02/2013	87.92	43.04	1,001	0.61	6.98	23.45	1.17		290	-	0.004 u	0.71 0.79	-
10/02/2013	87.39 97.90	43.57 33.06	1,566 2,145	0.32	6.86 6.69	23.53 23.36	<u>12.6</u> 0.8	1,000 1,200	450	7.4 j3 12	0.004 u 0.004 u	0.79	120 170
12/05/2013	97.90	33.06	2,145		6.69	23.36	0.8	1,200	450	12	0.004 u 0.004 u	0.64	200
12/05/2013	90.50	32.40	2,615	0.39	0.74	23.45	0.58	1,200	580	10	0.004 U	0.65	200

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

Hillsborough County Southeast Landfill Laboratory Analytical Results from IAMP Groundwater Monitoring

TH-76

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	220	13	0.4	0.004 u	1.1	20
06/04/2013	89.91	21.30	401	0.27	7.86	22.9	16.2	240	13	0.4	0.004 u	0.66	22
07/03/2013	79.04	32.17	398	0.19	8	23	28.6	210	12	0.34	0.004 u	0.99	22
08/02/2013	ND	ND	343	0.22	7.57	23.02	42.2	230	13	0.26	0.004 u	1.6	21
09/05/2013	68.22	42.99	278	0.21	7.74	22.97	46	240	12	0.32	0.004 u	1.5	20
10/02/2013	67.69	43.46	399	0.22	7.61	22.99	61.9	120	13	0.38	0.004 u	1.7	20
11/06/2013	78.19	33.02	446	0.64	7.54	22.84	29	260	13	0.36	0.004 u	1.1	20
12/05/2013	78.80	32.41	478	0.48	7.45	22.9	19.2	240	12	0.35	0.004 u	0.96	20

u = parameter was analyzed but not detected

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

1.1 EXCEEDS STANDARD

Hillsborough County Southeast Landfill Laboratory Analytical Results from IAMP Groundwater Monitoring

TH-77

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	190	9.4	0.39	0.004 u	1.2	17
06/04/2013	98.38	21.50	384	0.56	7.86	23.59	35.4	230	8.9	0.42	0.004 u	0.89	18
07/03/2013	87.48	32.40	388	0.41	7.8	23.7	38.4	210	8.9	0.4	0.004 u	1.1	17
08/02/2013	ND	ND	334	0.47	7.44	23.66	42.9	230	9.2	0.36	0.004 u	1.1	18
09/05/2013	76.66	43.22	269	0.83	7.61	23.68	47.1	230	8.9	0.35	0.004 u	0.96	16
10/02/2013	76.14	43.72	383	0.69	7.5	23.59	52.7	240	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	230	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	220	9	0.36	0.004 u	0.58	17

u = parameter was analyzed but not detected

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

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

1.2 EXCEEDS STANDARD



THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Tampa 6712 Benjamin Road Suite 100 Tampa, FL 33634 Tel: (813)885-7427

TestAmerica Job ID: 660-58420-1 Client Project/Site: SELF IAMP Wells

For:

Hillsborough Co Public Utilities Dept Environmental Services Group Brandon Support Operations Complex 332 North Falkenburg Rd, 2nd Floor Tampa, Florida 33619

Attn: David Adams

Authorized for release by: 1/20/2014 4:50:42 PM Nancy Robertson, Project Manager II (813)885-7427 nancy.robertson@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS Review your project results through TOTOL ACCESS Have a Question? Ask The Expert Visit us at: www.testamericainc.com

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Sample Summary

Client: Hillsborough Co Public Utilities Dept Project/Site: SELF IAMP Wells TestAmerica Job ID: 660-58420-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-58420-1	TH-72	Ground Water	01/03/14 13:11	01/03/14 15:53
660-58420-2	TH-76	Ground Water	01/03/14 10:43	01/03/14 15:53
660-58420-3	TH-77	Ground Water	01/03/14 11:50	01/03/14 15:53
660-58420-4	BLANK FIELD	Ground Water	01/03/14 10:07	01/03/14 15:53

Job ID: 660-58420-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-58420-1

Comments

No additional comments.

Receipt

The samples were received on 1/3/2014 3:53 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

Metals

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 144939 were outside control limits for Sodium with parent sample result 4 times greater than spike added. The associated laboratory control sample (LCS) recovery was within acceptance limits. The sample is flagged with J3.

No other analytical or quality issues were noted.

General Chemistry

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 310856 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The sample is flagged with J3.

No other analytical or quality issues were noted.

Indicates that the compound was analyzed for but not detected.

Qualifiers

HPLC/IC		
Qualifier	Qualifier Description	
U	Indicates that the compound was analyzed for but not detected.	5
Metals		
Qualifier	Qualifier Description	
U	Indicates that the compound was analyzed for but not detected.	
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.	
T	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.	
General Ch	emistry	8
Qualifier	Qualifier Description	
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.	<u> </u>

Glossary

U

Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CNF	Contains no Free Liquid	13
DER	Duplicate error ratio (normalized absolute difference)	13
Dil Fac	Dilution Factor	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision level concentration	
MDA	Minimum detectable activity	
EDL	Estimated Detection Limit	
MDC	Minimum detectable concentration	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
NC	Not Calculated	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	
QC	Quality Control	
RER	Relative error ratio	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

Client Sample ID: TH-72

Lab Sample ID: 660-58420-1

Lab Sample ID: 660-58420-2

5

6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	580		10	5.0	mg/L	20	_	300.0	Total/NA
Iron	670		200	50	ug/L	1		6010B	Total
Sodium	230	J3	0.50	0.31	mg/L	1		6010B	Recoverable Total Recoverable
Ammonia as N	25		1.0	0.52	mg/L	20		350.1	Total/NA
Total Dissolved Solids	1200		25	25	mg/L	1		SM 2540C	Total/NA
Field pH	6.83				SU	1		Field Sampling	Total/NA
Field Temperature	22.88				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.84				mg/L	1		Field Sampling	Total/NA
Specific Conductance	2220				uS/cm	1		Field Sampling	Total/NA
Turbidity	1.64				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-76

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		0.50	0.25	mg/L	1	_	300.0	Total/NA
Iron	1100		200	50	ug/L	1		6010B	Total
0	00		0.50	0.01				00405	Recoverable
Sodium	20		0.50	0.31	mg/L	1		6010B	Total
									Recoverable
Ammonia as N	0.23	J3	0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	190		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.67				SU	1		Field Sampling	Total/NA
Field Temperature	22.35				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.58				mg/L	1		Field Sampling	Total/NA
Specific Conductance	398				uS/cm	1		Field Sampling	Total/NA
Turbidity	19.4				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-77

Lab Sample ID: 660-58420-3

Lab Sample ID: 660-58420-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.1		0.50	0.25	mg/L	1	_	300.0	Total/NA
Iron	630		200	50	ug/L	1		6010B	Total
									Recoverable
Sodium	17		0.50	0.31	mg/L	1		6010B	Total
									Recoverable
Ammonia as N	0.39		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	160		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.65				SU	1		Field Sampling	Total/NA
Field Temperature	23.18				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.85				mg/L	1		Field Sampling	Total/NA
Specific Conductance	371				uS/cm	1		Field Sampling	Total/NA
Turbidity	16.5				NTU	1		Field Sampling	Total/NA

Client Sample ID: BLANK FIELD

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Ргер Туре
Sodium	0.49	I	0.50	0.31	mg/L	1	_	6010B	Total
									Recoverable

This Detection Summary does not include radiochemical test results.

Lab Sample ID: 660-58420-1 Matrix: Ground Water

Date Collected: 01/03/14 13:11 Date Received: 01/03/14 15:53

Client Sample ID: TH-72

Method: 300.0 - Anions, Ion C	hromatography								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	580		10	5.0	mg/L			01/09/14 13:13	20
Method: 6010B - Metals (ICP)	- Total Recoverab	le							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		01/06/14 07:42	01/06/14 12:46	1
Iron	670		200	50	ug/L		01/06/14 07:42	01/06/14 12:46	1
Sodium	230	J3	0.50	0.31	mg/L		01/06/14 07:42	01/06/14 12:46	1
– General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	25		1.0	0.52	mg/L			01/09/14 09:43	20
Total Dissolved Solids	1200		25	25	mg/L			01/06/14 08:36	1
– Method: Field Sampling - Fiel	d Sampling								
Analyte	• •	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.83				SU			01/03/14 13:11	1
Field Temperature	22.88				Degrees C			01/03/14 13:11	1
Oxygen, Dissolved	0.84				mg/L			01/03/14 13:11	1
Specific Conductance	2220				uS/cm			01/03/14 13:11	1
Turbidity	1.64				NTU			01/03/14 13:11	1

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Lab Sample ID: 660-58420-2 Matrix: Ground Water

Date Collected: 01/03/14 10:43 Date Received: 01/03/14 15:53

Client Sample ID: TH-76

Method: 300.0 - Anions, Ion Cl	hromatography								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		0.50	0.25	mg/L			01/09/14 13:26	1
Method: 6010B - Metals (ICP) ·	- Total Recoverab	le							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		01/06/14 07:42	01/06/14 12:59	1
Iron	1100		200	50	ug/L		01/06/14 07:42	01/06/14 12:59	1
Sodium	20		0.50	0.31	mg/L		01/06/14 07:42	01/06/14 12:59	1
- General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.23	J3	0.050	0.026	mg/L			01/08/14 16:52	1
Total Dissolved Solids	190		10	10	mg/L			01/06/14 08:36	1
- Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.67				SU			01/03/14 10:43	1
Field Temperature	22.35				Degrees C			01/03/14 10:43	1
Oxygen, Dissolved	0.58				mg/L			01/03/14 10:43	1
Specific Conductance	398				uS/cm			01/03/14 10:43	1
Turbidity	19.4				NTU			01/03/14 10:43	1

TestAmerica Tampa

Lab Sample ID: 660-58420-3 Matrix: Ground Water

Date Collected: 01/03/14 11:50 Date Received: 01/03/14 15:53

Client Sample ID: TH-77

Method: 300.0 - Anions, Ion C	hromatography								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.1		0.50	0.25	mg/L			01/09/14 14:28	1
- Method: 6010B - Metals (ICP)	- Total Recoverab	le							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		01/06/14 07:42	01/06/14 13:02	1
Iron	630		200	50	ug/L		01/06/14 07:42	01/06/14 13:02	1
Sodium	17		0.50	0.31	mg/L		01/06/14 07:42	01/06/14 13:02	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.39		0.050	0.026	mg/L			01/08/14 16:52	1
Total Dissolved Solids	160		10	10	mg/L			01/06/14 08:36	1
- Method: Field Sampling - Field	d Sampling								
Analyte		Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.65				SU			01/03/14 11:50	1
Field Temperature	23.18				Degrees C			01/03/14 11:50	1
Oxygen, Dissolved	0.85				mg/L			01/03/14 11:50	1
Specific Conductance	371				uS/cm			01/03/14 11:50	1
Turbidity	16.5				NTU			01/03/14 11:50	1

PQL

0.50

PQL

10

200

0.50

PQL

0.050

5.0

MDL Unit

0.25 mg/L

MDL Unit

0.31 mg/L

MDL Unit

5.0 mg/L

mg/L

0.026

4.0 ug/L

50 ug/L

D

D

D

Prepared

Prepared

01/06/14 07:42

01/06/14 07:42

01/06/14 07:42

Prepared

Result Qualifier

Result Qualifier

Result Qualifier

4.0 U

50 U

0.49 I

0.026 U

5.0 U

0.25 U

Method: 300.0 - Anions, Ion Chromatography

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: BLANK FIELD

Date Collected: 01/03/14 10:07 Date Received: 01/03/14 15:53

Analyte

Chloride

Analyte

Arsenic

Sodium

Analyte

Ammonia as N

General Chemistry

Total Dissolved Solids

Iron

Lab Sample ID: 660-58420-4

Matrix: Ground Water

Analyzed

01/09/14 14:40

Analyzed

01/06/14 13:06

01/06/14 13:06

01/06/14 13:06

Analyzed

01/08/14 16:52

01/06/14 08:36

	5
	7
	8
	9
	13

Dil Fac

Dil Fac

Dil Fac

1

1

1

1

1

1

1/20/2014

Method: 300.0 - Anions, Ion Chromatography

	35/5											Client	Sample ID:		
Matrix: Water													Prep	Type: To	otal/NA
Analysis Batch: 310885															
Analyta	B	MB	MB Qualifier		PQL		MDL	Unit		D	в.	epared	Analy	ad	Dil Fac
Analyte					0.50					·	PI	epared			
Chloride		0.25	U		0.50		0.25	mg/L					01/09/14	11:09	1
Lab Sample ID: LCS 680-3108	885/6									Cli	ent	Sample	e ID: Lab C	ontrol S	Sample
Matrix: Water													Prep 1	Type: To	otal/NA
Analysis Batch: 310885															
Analuta				Spike Added		LCS Result	LCS	lifior	Unit		D	%Rec	%Rec. Limits		
Analyte							Qua				_	99			
Chloride				10.0		9.90			mg/L			99	90 - 110		
Lab Sample ID: LCSD 680-310	0885/7								CI	lient S	am	ple ID:	Lab Contro	ol Samp	le Dup
Matrix: Water													Prep 1	ype: To	otal/NA
Analysis Batch: 310885															
-				Spike		LCSD	LCS	D					%Rec.		RPD
Analyte				Added		Result	Qual	lifier	Unit		D	%Rec	Limits	RPD	Limit
Chloride				10.0		9.95			mg/L		_	100	90 _ 110	1	30
- Lab Sample ID: 640-46314-F-4	MS											Client	Sample IE	• Matrix	r Sniko
Matrix: Water												onem		Type: To	
Analysis Batch: 310885													Tiep	ype. it	
Analysis Batch. 510005	Sample	Sami	nle	Spike		MS	MS						%Rec.		
Analyte	Result	-		Added		Result		lifier	Unit		D	%Rec	Limits		
Chloride	29			10.0		38.6			mg/L		_	95	80 - 120		
Lab Sample ID: 660-58420-2	vis												Client Sa		
Matrix: Ground Water													Prep	Type: To	otal/NA
Analysis Batch: 310885	0	0	-1-	0			MS						%Rec.		
• • •	Sample			Spike							_	a/ B			
Analyte Chloride	Result	Quai		Added 10.0		Result 22.4	Qua	inter	Unit		D	%Rec 106	Limits 80 - 120		
	12			10.0		22.4			mg/L			100	00 - 120		
Lab Sample ID: 660-58420-2	NSD												Client Sa	nple ID:	TH-76
Matrix: Ground Water													Prep 1	Type: To	otal/NA
Analysis Batch: 310885															
	Sample	Sam	ple	Spike		MSD	MSD)					%Rec.		RPD
Analyte	Result	Qual	ifier	Added		Result	Qual	lifier	Unit		D	%Rec	Limits	RPD	Limit
•	12			10.0		21.9			mg/L		_	100	80 - 120	3	30

Lab Sample ID: MB 660-144939/1-A Matrix: Water Analysis Batch: 144944	МВ	МВ						mple ID: Metho ype: Total Reco Prep Batch:	verable
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		01/06/14 07:42	01/06/14 12:36	1
Iron	50	U	200	50	ug/L		01/06/14 07:42	01/06/14 12:36	1
Sodium	0.31	U	0.50	0.31	mg/L		01/06/14 07:42	01/06/14 12:36	1

TestAmerica Tampa

LCS LCS

MS MS

1060

1710

227 J3

233 J3

Result Qualifier

1030

1110

10.3

Result Qualifier

Unit

ug/L

ug/L

mg/L

Unit

ug/L

ug/L

mg/L

mg/L

Spike

Added

1000

1000

10.0

Spike

Added

1000

1000

10.0

10.0

Sample Sample

4.0 U

230 J3

Sample Sample

4.0 U 670

230 J3

Result Qualifier

670

Result Qualifier

Lab Sample ID: LCS 660-144939/2-A

Lab Sample ID: 660-58420-1 MS

Lab Sample ID: 660-58420-1 MSD

Matrix: Water

Analyte

Arsenic

Sodium

Analyte

Arsenic

Sodium

Analyte

Arsenic

Iron Sodium

Iron

Iron

Analysis Batch: 144944

Matrix: Ground Water

Matrix: Ground Water Analysis Batch: 144944

Analysis Batch: 144944

Method: 6010B - Metals (ICP) (Continued)

Prep Type: Total Recoverable

Prep Batch: 144939

Client Sample ID: TH-72

Prep Batch: 144939

Prep Type: Total Recoverable

Client Sample ID: Lab Control Sample

%Rec.

Limits

80 - 120

80 - 120

80 - 120

%Rec.

Limits

80 - 120

80 - 120

80 - 120

80 - 120

%Rec

103

111

103

%Rec

106

105

2

63

D

D

7 8 9 10 11

Client Sample ID: TH-72
ep Type: Total Recoverable

3

20

13		I Recove Batch: 1	Type: Tota Prep	Prep						
	RPD		%Rec.				MSD	MSD	Spike	
	10.5		/01000.				mob	mob	opino	
	Limit	RPD	Limits	%Rec	D	Unit	Qualifier	Result	Added	
	20	0	80 - 120	106		ug/L		1060	1000	
	20	0	80 - 120	105		ua/L		1720	1000	

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-310856/14 Matrix: Water											Clie	nt S	Sample ID: Metho Prep Type: T	
Analysis Batch: 310856														
		MB	MB											
Analyte	Re	sult	Qualifier		PQL		MDL	Unit		D	Prepar	ed	Analyzed	Dil Fac
Ammonia as N	0.	.026	U		0.050	(0.026	mg/L					01/08/14 17:00	1
Lab Sample ID: LCS 680-310856/13										Clie	nt San	nple	BID: Lab Control	Sample
Matrix: Water													Prep Type: T	otal/NA
Analysis Batch: 310856														
				Spike		LCS	LCS						%Rec.	
Analyte				Added		Result	Qual	ifier	Unit) %R	ес	Limits	
Ammonia as N				1.00		1.04			mg/L		1	04	90 - 110	·
Lab Sample ID: 660-58420-2 MS													Client Sample ID	: TH-76
Matrix: Ground Water													Prep Type: T	otal/NA
Analysis Batch: 310856														
-	Sample	Samp	le	Spike		MS	MS						%Rec.	
Analyte	Result	Quali	fier	Added		Result	Qual	ifier	Unit) %R	ес	Limits	
Ammonia as N	0.23	J3		1.00		0.675	J3		mg/L			45	90 - 110	·

TestAmerica Tampa

Spike

Added

1.00

MSD MSD

0.694 J3

DU DU

25.0

Result Qualifier

Result Qualifier

Unit

mg/L

Unit

mg/L

D

D

%Rec

47

Lab Sample ID: 660-58420-2 MSD

Lab Sample ID: 660-58420-1 DU

Matrix: Ground Water

Matrix: Ground Water

Analysis Batch: 310856

Analyte

Analyte

Ammonia as N

Ammonia as N

Analysis Batch: 310856

Method: 350.1 - Nitrogen, Ammonia (Continued)

Sample Sample

0.23 J3

Sample Sample

25

Result Qualifier

Result Qualifier

%Rec.

Limits

90 - 110

Client Sample ID: TH-76 Prep Type: Total/NA RPD Limit 30 Client Sample ID: TH-72

8

Prep Type: Total/NA RPD RPD Limit

1

30

RPD

Method: SM 2540C -	Solids, Tota	Dissolved	(TDS)

Lab Sample ID: MB 660-144940/1										Client S	Sample ID: Metho	
Matrix: Water											Prep Type:	Total/N
Analysis Batch: 144940												
		MB MB										
Analyte	Re	sult Qualifier	r	PQL		MDL	Unit		D P	repared	Analyzed	Dil Fa
Total Dissolved Solids		5.0 U		5.0		5.0	mg/L				01/06/14 08:36	
_ab Sample ID: LCS 660-144940/2									Client	t Sample	ID: Lab Contro	I Sampl
Matrix: Water											Prep Type:	Total/N
Analysis Batch: 144940												
			Spike		LCS	LCS					%Rec.	
Analyte			Added		Result	Quali	fier	Unit	D	%Rec	Limits	
Fotal Dissolved Solids			10000		9810			mg/L		98	80 - 120	
_ab Sample ID: 640-46301-I-2 DU										Clie	ent Sample ID: D	Duplicat
Matrix: Water											Prep Type:	Total/N
Analysis Batch: 144940												
-	Sample	Sample			DU	DU						RP
Analyte	Result	Qualifier			Result	Quali	fier	Unit	D		RP	D Lim
Fotal Dissolved Solids	130				120			mg/L				1 2

HPLC/IC

Analysis Batch: 310885

Lab Sample ID	Client Sample ID	Prep Type		Method	Prep Batch
640-46314-F-4 MS	Matrix Spike	Total/NA	Water	300.0	
660-58420-1	TH-72	Total/NA	Ground Water	300.0	
660-58420-2	TH-76	Total/NA	Ground Water	300.0	
660-58420-2 MS	TH-76	Total/NA	Ground Water	300.0	
660-58420-2 MSD	TH-76	Total/NA	Ground Water	300.0	
660-58420-3	TH-77	Total/NA	Ground Water	300.0	
660-58420-4	BLANK FIELD	Total/NA	Ground Water	300.0	
LCS 680-310885/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-310885/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-310885/5	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 144939

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
660-58420-1	TH-72	Total Recoverable	Ground Water	3005A	
660-58420-1 MS	TH-72	Total Recoverable	Ground Water	3005A	
660-58420-1 MSD	TH-72	Total Recoverable	Ground Water	3005A	
660-58420-2	TH-76	Total Recoverable	Ground Water	3005A	
660-58420-3	TH-77	Total Recoverable	Ground Water	3005A	
660-58420-4	BLANK FIELD	Total Recoverable	Ground Water	3005A	
LCS 660-144939/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-144939/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 144944

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
660-58420-1	TH-72	Total Recoverable	Ground Water	6010B	144939
660-58420-1 MS	TH-72	Total Recoverable	Ground Water	6010B	144939
660-58420-1 MSD	TH-72	Total Recoverable	Ground Water	6010B	144939
660-58420-2	TH-76	Total Recoverable	Ground Water	6010B	144939
660-58420-3	TH-77	Total Recoverable	Ground Water	6010B	144939
660-58420-4	BLANK FIELD	Total Recoverable	Ground Water	6010B	144939
LCS 660-144939/2-A	Lab Control Sample	Total Recoverable	Water	6010B	144939
MB 660-144939/1-A	Method Blank	Total Recoverable	Water	6010B	144939

General Chemistry

Analysis Batch: 144940

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
640-46301-I-2 DU	Duplicate	Total/NA	Water	SM 2540C	
660-58420-1	TH-72	Total/NA	Ground Water	SM 2540C	
660-58420-2	TH-76	Total/NA	Ground Water	SM 2540C	
660-58420-3	TH-77	Total/NA	Ground Water	SM 2540C	
660-58420-4	BLANK FIELD	Total/NA	Ground Water	SM 2540C	
LCS 660-144940/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-144940/1	Method Blank	Total/NA	Water	SM 2540C	
Analysis Batch: 3108	56				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-58420-1	TH-72	Total/NA	Ground Water	350.1	

TestAmerica Tampa

General Chemistry (Continued)

Analysis Batch: 310856 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
660-58420-1 DU	TH-72	Total/NA	Ground Water	350.1	
660-58420-2	TH-76	Total/NA	Ground Water	350.1	
660-58420-2 MS	TH-76	Total/NA	Ground Water	350.1	
660-58420-2 MSD	TH-76	Total/NA	Ground Water	350.1	
660-58420-3	TH-77	Total/NA	Ground Water	350.1	
660-58420-4	BLANK FIELD	Total/NA	Ground Water	350.1	
LCS 680-310856/13	Lab Control Sample	Total/NA	Water	350.1	
MB 680-310856/14	Method Blank	Total/NA	Water	350.1	

Field Service / Mobile Lab

Analysis Batch: 145111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-58420-1	TH-72	Total/NA	Ground Water	Field Sampling	
660-58420-2	TH-76	Total/NA	Ground Water	Field Sampling	
660-58420-3	TH-77	Total/NA	Ground Water	Field Sampling	

Dilution

Factor

20

1

1

20

1

Run

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Batch

300.0

3005A

6010B

350.1

SM 2540C

Field Sampling

Method

Client Sample ID: TH-72

Date Collected: 01/03/14 13:11

Date Received: 01/03/14 15:53

Prep Type

Total Recoverable

Total Recoverable

Total/NA

Total/NA

Total/NA

Total/NA

Lab Sample ID: 660-58420-3

Lab Sample ID: 660-58420-4

Matrix: Ground Water

Matrix: Ground Water

Lab Sample ID: 660-58420-1 Matrix: Ground Water 5

Lab Sample ID: 660-58420-2 10 **Matrix: Ground Water** 12 13

Client Sample ID: TH-76 Date Collected: 01/03/14 10:43 Date Received: 01/03/14 15:53

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	310885	01/09/14 13:26	PAT	TAL SAV
Total Recoverable	Prep	3005A			144939	01/06/14 07:42	GAF	TAL TAM
Total Recoverable	Analysis	6010B		1	144944	01/06/14 12:59	GAF	TAL TAM
Total/NA	Analysis	SM 2540C		1	144940	01/06/14 08:36	тко	TAL TAM
Total/NA	Analysis	350.1		1	310856	01/08/14 16:52	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	145111	01/03/14 10:43		TAL TAM

Client Sample ID: TH-77

Date Collected: 01/03/14 11:50 Date Received: 01/03/14 15:53

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	310885	01/09/14 14:28	PAT	TAL SAV
Total Recoverable	Prep	3005A			144939	01/06/14 07:42	GAF	TAL TAM
Total Recoverable	Analysis	6010B		1	144944	01/06/14 13:02	GAF	TAL TAM
Total/NA	Analysis	SM 2540C		1	144940	01/06/14 08:36	тко	TAL TAM
Total/NA	Analysis	350.1		1	310856	01/08/14 16:52	JME	TAL SAV
Total/NA	Analysis	Field Sampling		1	145111	01/03/14 11:50		TAL TAM

Client Sample ID: BLANK FIELD Date Collected: 01/03/14 10:07

Date	e e ne e c e a	•
Date	Received:	01/03/14 15:53

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	310885	01/09/14 14:40	PAT	TAL SAV
Total Recoverable	Prep	3005A			144939	01/06/14 07:42	GAF	TAL TAM
Total Recoverable	Analysis	6010B		1	144944	01/06/14 13:06	GAF	TAL TAM
Total/NA	Analysis	SM 2540C		1	144940	01/06/14 08:36	тко	TAL TAM
Total/NA	Analysis	350.1		1	310856	01/08/14 16:52	JME	TAL SAV

TestAmerica Tampa

Batch

Number

310885

144939

144944

144940

310856

Prepared

or Analyzed

01/09/14 13:13

01/06/14 07:42

01/06/14 12:46

01/06/14 08:36

01/09/14 09:43

145111 01/03/14 13:11

Analyst

PAT

GAF

GAF

тко

JME

Lab

TAL SAV

TAL TAM

TAL TAM

TAL TAM

TAL SAV

TAL TAM

Client: Hillsborough Co Public Utilities Dept Project/Site: SELF IAMP Wells

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858 TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

TestAmerica Tampa

Client: Hillsborough Co Public Utilities Dept Project/Site: SELF IAMP Wells

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13

Method	Method Description	Protocol	Laborator
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
6010B	Metals (ICP)	SW846	TAL TAM
350.1	Nitrogen, Ammonia	MCAWW	TAL SAV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
Field Sampling	Field Sampling	EPA	TAL TAM
Protocol Refe	rences:		
EPA = US	Environmental Protection Agency		
MCAWW =	"Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, Mar	rch 1983 And Subsequent Revisions.	
SM = "Star	ndard Methods For The Examination Of Water And Wastewater",		
SW846 = "	Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edi	ition, November 1986 And Its Updates.	
l -h - m t - m - D -	ferences:		
Laboratory Re			
-	= TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912	2)354-7858	

EPA Region

4

4

Certification ID

40610

E84282

Laboratory: TestAmerica Tampa

Authority

Alabama

Florida

Georgia

USDA

Expiration Date

06-30-14

06-30-14

06-30-14

04-20-14

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State Program	4	905	
Federal		P330-11-00177	
annah	nliachta ta thia ranart		
ed. Not all certifications are ap			
Program	EPA Region	Certification ID	
AFCEE		SAVLAB	
DoD ELAP		399.01	
ISO/IEC 17025		399.01	
State Program	4	41450	
State Program	6	88-0692	
NELAP	9	3217CA	
State Program	8	N/A	
State Program	1	PH-0161	
· · · - · · - · ·			

Laboratory: TestAmerica Sava

All certifications held by this laboratory are listed

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Program

NELAP

State Program

hority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
N	DoD ELAP		399.01	02-28-15
	ISO/IEC 17025		399.01	02-28-15
ma	State Program	4	41450	06-30-14
as DEQ	State Program	6	88-0692	02-01-14 *
nia	NELAP	9	3217CA	07-31-14
lo	State Program	8	N/A	12-31-14
ecticut	State Program	1	PH-0161	03-31-15
	NELAP	4	E87052	06-30-14
pt. of Agriculture	State Program	4	N/A	06-30-14
a	State Program	4	N/A	06-30-14
ia	State Program	4	803	06-30-14
	State Program	9	09-005r	04-17-14
	State Program	9	N/A	06-30-14
	NELAP	5	200022	11-30-14
а	State Program	5	N/A	06-30-14
	State Program	7	353	07-01-15
y (DW)	State Program	4	90084	12-31-14
y (UST)	State Program	4	18	06-30-14
а	NELAP	6	LA100015	12-31-14
	State Program	1	GA00006	08-16-14
1	State Program	3	250	12-31-14
usetts	State Program	1	M-GA006	06-30-14
	State Program	5	9925	06-30-14
pi	State Program	4	N/A	06-30-14
	State Program	8	CERT0081	01-01-15
a	State Program	7	TestAmerica-Savannah	06-30-14
sey	NELAP	2	GA769	06-30-14
exico	State Program	6	N/A	06-30-14
ork	NELAP	2	10842	03-31-14
arolina DENR	State Program	4	269	12-31-14
Carolina DHHS	State Program	4	13701	07-31-14
na	State Program	6	9984	08-31-14
Ivania	NELAP	3	68-00474	06-30-14
Rico	State Program	2	GA00006	01-01-14 *
Carolina	State Program	4	98001	06-30-14
see	State Program	4	TN02961	06-30-14
	NELAP	6	T104704185-08-TX	11-30-14
	Federal		SAV 3-04	04-07-14
	NELAP	3	460161	06-14-14
gton	State Program	10	C1794	06-10-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Tampa

Certification Summary

TestAmerica Job ID: 660-58420-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
West Virginia DEP	State Program	3	94	06-30-14
West Virginia DHHR	State Program	3	9950C	12-31-13 *
Wisconsin	State Program	5	999819810	08-31-14
Wyoming	State Program	8	8TMS-L	06-30-14

* Expired certification is currently pending renewal and is considered valid.

Test/	Americ	a Ta	mpa

6712 Benjamin Road Suite 100 Tampa, FL 33634

Phone (813) 885-7427 Fax (813) 885-7049

ANDREW BALLOON Lab PM; Carrier Tracking No(s) COC No: ZALK PATTERSON Robertson, Nancy 660-52926-17218.1 **Client Information** Client Contact E-Mail: Page: Phone Page 1 of 1 Michael Townsel nancy.robertson@testamericainc.com Company: Job # Analysis Requested Hillsborough Co Public Utilities Dept Address. Due Data Requested: Preservation Codes: Environmental Services Group Brandon Support Operations Com A-HCL M - Hexene City: TAT Requested (days): B-NaOH N-None Tampa C - Zn Acetate O - AsNaO2 P - Na2045 D - Nitric Acid State, Zip: E - NaHSO4 Q - Na2SO3 FL, 33619 F-MeOH R-Na2S2SO3 Phone: 0#. G - Amchlor S-H2SO4 DPSW11616001 H - Ascorbic Acid T - TSP Dodecahydrate ana thumber of containers ON 10 SO I-lce U - Acetone Email: WO# V-MCAA J - DI Water townscim@hillsboroughcounty.org 2540C - Total Dissolved Solids W-ph 4-5 K-EDTA Project Name: Project #. ortem MSIMBO (resign 300_ORGFM_28D - Chloride L-EDA Z - other (specify) Sample (Y SELF MWs,SS,Private Wells,NPDES 66003915 SOW#: Other: Sita: 360.1 - Ammonia as N Florida 6010B - AS,FE,NA liered Matrix Sample (W=water, Type S=solid, O=waste/ol. Sample (C=comp, Time Special Instructions/Note: Sample Identification Sample Date G=grab) BT=TIssue A=Air) Preservation Code and the second states and The second second CINE D S TH-72 13.11 X X Water X 1-3-14 4 X 10.43 × X TH-76 Water × 1 X 11.50 × TH-77 X X Water V × × x X FIELD BLANK 10.07 Water 660-58420 Chain of Custody Possible Hazard Identification Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Poison B Return To Client Non-Hazard Flammable Sign irritant Unknown Radiological Disposal By Lab Archive For Months Deliverable Requested: I, II, III, IV, Other Aspecify Special Instructions/QC Requirements: Method of Shipment. Empty Kit Relinguished by: Time: Date: Company TATAN20 Relinquished by: Date/fime: vnsqmo Received by Date/Time Mr MAA 1553 14 1553 1-3-14 3 Relinquished by Date/Time Company Received by Date/Time Company Relingushed by Date/Time: Date/Time Company Company Received by Custody Seals Intact: Custody Seal No .: Cooler Temperature(s) *C and Other Remarks: a C CU 07 il. 1 Yes A No

of 28 Page 21

Chain of Custody Record

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Tampa

6712 Benjamin Road Suite 100

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL LESTING

Tampa, FL 33634 Phone (813) 885-7427 Fax (813) 885-7049

	Client Information (Sub Contract Lab)	Sampler			Ro		n, Nai	ncy						Game	rirac	king Ni	D(E):			660-63392.1		
	Client Contact: Shipping/Receiving	Phone:			E-M		bertso	n@te	estan	nerica	inc.c	om								Page: Page 1 of 1		
	Company: TestAmerica Laboratories, Inc.					I		<u> </u>				sis	Req	ues						Job #: 660-58420-1		
	Address: 5102 LaRoche Avenue, City: Savannah State, Zip: CA. 21404	Due Date Request 1/15/2014 TAT Requested (d		anna Westmanna an	Monte-State															Preservation C A - HCL B - NaOH C - Zn Acetate D - Nitric Acd E - NaHSO4	odes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3	
	GA, 31404 Phone: 912-354-7858(Tel) 912-352-0165(Fax)	P0#.				- 6										1000				F - MeOH G - Amchlor H - Ascorbic Acid	R - Na2S2S S - H2SO4	03
	Email:	WO #:				OLN	2												5	l - Ice J - DI Water	U - Acetone V - MCAA	
	Project Name: SELF MWs,SS,Private Wells,NPDES Site:	Project #: 66003915 SSOW#:	Action of the second se	40000000000000000000000000000000000000	es Astorney, 19		SD (Yes or P Ammonia	Chloride											E	K - EDTA L - EDA Other:	W - oh 4-5 Z - other (sp	ecify)
	Southeast Landfill	330W#.	0	<u> </u>				ō											õ	Other.		
ъ	Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time		Matrix (W=water, S=solid, 0=waste/oil, BT=TIssue, A=Ai	Id Filte	Pestorim MS/M 350.1/ Nitrogen,	300_ORGFW_2											Totel Number	Special I	nstructions/	/Note:
Page				Preserva	ation Code:	\mathbb{A}	Κ												\mathbb{X}			
e N	TH-72 (660-58420-1)	1/3/14	13:11 Eastern		Water		X	X											2			
0	TH-76 (660-58420-2)	1/3/14	10:43 Eastern		Water		X	X				1.1			_			1	2			
22 of 28	TH-7/ (660-58420-3)	1/3/14	11:50 Eastern		Water		x	X											2			
	BLANK FIELD (660-58420-4)	1/3/14	10:07 Eastern		Water		x	X											2			
															-		+	-				
																	-					
							-	-	-			-	-	+		+						
				1.		T							T									
	Possible Hazard Identification Unconfirmed					S		e Dis Retur	posa n To	Clien	fee r	nay b	be as	sess	ed i al By	sam Lab	ples a	ore re	taine Archi	ed longer than ive For	1 month) Months	n
	Deliverable Requested: I, II, III, IV, Other (specify)	and the Atomic Without			11	S	pecial	Instr	nuctio	ns/Q(C Re	quire	ment	S!								
100	Empty Kit Relinguished by:		Date:	and the second	an el la planta de l	Time	9: 9:		50/10/00/00	entity) Same		AND DESCRIPTION OF THE PARTY OF	and the second se	h	iethod	of Shi	pment:	oostawni (dba		ar meni (1740 com, as considered da como	anananin'i Mananananana meriti	No. of Concession, Name
1/2	Relinquished by	Date/Time:	2 14	50	Company 774-7 Company	PA	1	eived I	lin	1	a	1 des	l	6		L		11	14	1 10:3	Company	A
0/2																	-		- AVITTO	Appendiation -	Company	ALL 1
1/20/2014	Relinquished by:	Date/Time:			Company		Reci	eived I	by:							De	ate/Time	9)			Company	
4	Custody Seals Intact: Custocy Seal No.: Δ Yes – Δ No.			Address of	-		Coo	ler Ter	mpera	türe(s)	°C an	d Othe	r Rem	arks:	4	2.	20	- C	e-			

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DEP-SOP-001/01 FS 2200 Groundwater Sampling

28120

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14

Form FD 9000-24 GROUNDWATER SAMPLING LOG

/ELL NO; /ELL		ELF IAM	P			TE CATION:	Litt	hia, Florida			
		TH-72		SAMPLE	1D:				DATE: 1.	3-14	
					PURC	SING DA	ГА				
ELL VOLU	inches): 2 ME PURGE: applicable)		ETER (inches):	0.5 DEP		et to 190 fee TIC DEPTH TO	STATIC D TO WATE D WATER) X	R (feet): 99	.14 OR	RGE PUMP TYP BAILER: DBI)
	VOLUME PU applicable)	RGE: 1 EQU	= (UIPMENT VOL	_, = PUMP VOL	et UME + (TUB allons + (feet) X Y X TU ns/foot X	.16 /BING LENGTH) feet)	+ FLOW CE	LL VOLUME	3 gallons gallons
ITAL PUM	P OR TUBING	1	FINAL PUP	VP OR TUBING		DURCINI	-	DURCING		TOTAL VOLU	
EPTH IN W		189	DEPTH IN	WELL (feet):	189	INITIATE	DAT: 12.25	ENDED AT:	13.11	PURGED (gal	ME 23
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (galions)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. ([°] C)	COND. μS/cm	DISSOLVED OXYGEN mg/L	TURBIDIT (NTUS)	Y COLOR (describe	
2.55	15	15	,50	99.10	6.84	22.89	2215	,85	3.84	NONE	NON
3.03	4	19	.50	99.10	6.84	22.88	2215	.81	2.38		1
3.11	4	23	.50	99,10	6.83	2288	2220	.84	1.64		¥
				· · · · · · · · · · · ·		-	7				-7
	_/				/					/	
		Charles and a second second second			/						
				/		-				/	
				/					/		
			/					a	/		
					·		V				
		-		1			·		1.727		
	CITY (Gallons DE DIA. CAP.		0.75" = 0.02; Ft.): 1/8" = 0.		1.25" = 0.06 = 0.0014;	2'' = 0.16 1/4'' = 0.0026					2" = 5.88 3" = 0.016
JRGING EG	UIPMENT CO	DDES: B	B = Bailer;	BP = Bladder P	ump; E	SP = Electric S	Submersible Purr	np: PP = Ps	eristaltic Pum	p; O = Othe	er (Specify)
						LING DA	TA /				
AMPLED BY	(PRINT) / AF	FILIATION:		SAMPLER(S)	SIGNATURE	151-			10	SAMPLING	
DREW BA		in minuterio	ON			100	fotter	SAMPLING INITIATED AT	13.11	ENDED AT:	13.23
MAREW BA	BING		ON	TUBING		1 del	1			ENDED AT:	3
		189		TUBING MATERIAL CC		T	FIELD-I	INITIATED AT	(N)	ENDED AT:	13.23
JMP OR TU EPTH IN WI		189		TUBING		Т	FIELD-I	INITIATED AT	(N)	ENDED AT:	3
JMP OR TU EPTH IN WI ELD DECO SAMPLI	ELL (feet): NTAMINATIO E CONTAINEF	189 N: FUMP R SPECIFICA	Y N C	TUBING MATERIAL CO	DDE: TUBING SAMPLE PR		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE: INTENDE	Pe: Y	FILTER SIZE	AMPLE PUMF
JMP OR TU EPTH IN WI ELD DECO SAMPLI AMPLE	ELL (feet): NTAMINATIO	189 N: FUMP R SPECIFICA	Y N C	TUBING MATERIAL CC	DDE: TUBING SAMPLE PR VE T		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE:	Pe: Y ED S ND/OR EC	ENDED AT: FILTER SIZE	AMPLE PUMP
JMP OR TU EPTH IN WI ELD DECO SAMPLI AMPLE	ELL (feet): NTAMINATIO E CONTAINEF #	189 N: FUMP R SPECIFICA MATERIAL	ο γ Ν ς Ατίον	TUBING MATERIAL CC Decicated PRESERVATI	DDE: TUBING SAMPLE PR VE T		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE: INTENDE ANALYSIS AN	Pe: Y ED S ND/OR EC	ENDED AT: FILTER SIZE	AMPLE PUMP FLOW RATE
JMP OR TU EPTH IN WI ELD DECO SAMPLI AMPLE	ELL (feet): NTAMINATIO E CONTAINEF #	189 N: FUMP R SPECIFICA MATERIAL	ο γ Ν ς Ατίον	TUBING MATERIAL CC Decicated PRESERVATI	DDE: TUBING SAMPLE PR VE T		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE: INTENDE ANALYSIS AN	Pe: Y ED S ND/OR EC	ENDED AT: FILTER SIZE	AMPLE PUMP FLOW RATE
JMP OR TU EPTH IN WI ELD DECO SAMPLI AMPLE	ELL (feet): NTAMINATIO E CONTAINEF #	189 N: FUMP R SPECIFICA MATERIAL	ο γ Ν ς Ατίον	TUBING MATERIAL CC Decicated PRESERVATI	DDE: TUBING SAMPLE PR VE T		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE: INTENDE ANALYSIS AN	Pe: Y ED S ND/OR EC	ENDED AT: FILTER SIZE	AMPLE PUMF
JMP OR TU EPTH IN WI ELD DECO SAMPLI AMPLE	ELL (feet): NTAMINATIO E CONTAINEF #	189 N: FUMP R SPECIFICA MATERIAL	ο γ Ν ς Ατίον	TUBING MATERIAL CC Decicated PRESERVATI	DDE: TUBING SAMPLE PR VE T		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE: INTENDE ANALYSIS AN	Pe: Y ED S ND/OR EC	ENDED AT: FILTER SIZE	AMPLE PUMP
JMP OR TU EPTH IN WI ELD DECO SAMPLI AMPLE	ELL (feet): NTAMINATIO E CONTAINEF #	189 N: FUMP R SPECIFICA MATERIAL	ο γ Ν ς Ατίον	TUBING MATERIAL CC Decicated PRESERVATI	DDE: TUBING SAMPLE PR VE T		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE: INTENDE ANALYSIS AN	Pe: Y ED S ND/OR EC	ENDED AT: FILTER SIZE	AMPLE PUMP
JMP OR TU EPTH IN WI ELD DECO SAMPLE CODE C	ELL (feet): NTAMINATIO E CONTAINEF # ONTAINERS	189 N: FUMP R SPECIFICA MATERIAL CODE	P Y N C	TUBING MATERIAL CO Decicated PRESERVATI USED	DDE: TUBING SAMPLE PR VE T		FIELD-I Filtration	INITIATED AT FILTERED: Y n Equipment Typ DUPLICATE: INTENDE ANALYSIS AN	Pe: Y ED S ND/OR EC	ENDED AT: FILTER SIZE	AMPLE PUM FLOW RATE
JMP OR TU EPTH IN WI ELD DECO SAMPLE CODE C	ELL (feet): NTAMINATIO E CONTAINER # ONTAINERS	189 N: FUMP R SPECIFICA MATERIAL CODE	P Y N C ATTON VOLUME	TUBING MATERIAL CO Decicated PRESERVATI USED	DDE: TUBING SAMPLE PR VE T ADDE	T Y N DE ESERVATION OTAL VOL D IN FIELD (m D IN FIELD (m D IN FIELD (m)	FIELD-I Filtration Filtration FINAL pH der Pump	INITIATED AT	Y PD/OR SD/OR CD SD/OR CD	ENDED AT: FILTER SIZE	AMPLE PUM FLOW RATE mL per minute
JMP OR TU EPTH IN WI ELD DECO SAMPLE CODE C CODE C EE C.C	ELL (feet): NTAMINATIO E CONTAINER # ONTAINERS	189 N: FUMP R SPECIFICA MATERIAL CODE	P Y N C ATTON VOLUME	TUBING MATERIAL CO Decicated PRESERVATI USED	DDE: TUBING SAMPLE PR VE T ADDE	T Y N DE ESERVATION OTAL VOL D IN FIELD (m D IN FIELD (m)	FIELD-I Filtration	INITIATED AT	Y D D/OR S D/OR EC T T = Te	ENDED AT: FILTER SIZE AMPLING DUIPMENT CODE (I I I I I I I I I I I I I	AMPLE PUMP

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

DEP-SOP-001/01 FS 2200 Groundwater Sampling

Form FD 9000-24 GROUNDWATER SAMPLING LOG

SITE NAME:	SEL	F IAMP			120	TE DCATION:		Lithia, Flori	da			
WELL NO	Т	H-77		SAMPLE	ID;				DATE:	1-3.	-14	
				_	PURC	SING DA	TA					
NELL VOL	(inches): 2 UME PURGE: If applicable)	TUBING DIAMETER 1 WELL VOL		5 154.2 AL WELL DEP	feet to TH - STA	ERVAL DEPT 169.2 feet	H: STATIC E TO WATE O WATER) X	WELL CAPAC	ITY	ORB	ge pump typ Ailer: DBP	
	T VOLUME PU	RGE: 1 EQU		169.2 fee = PUMP VOL			feet) X Y X Ti	.16 JBING LENGTH	gallon) + FLO	w CEL		
			1		illons + (s/foot X	feet			gallons =	gallor
	VIP OR TUBING	168.2	DEPTH IN V	P OR TUBING	168.2	PURGIN	3 DAT: 11.10	PURGING ENDED AT:	11.5	0	TOTAL VOLU PURGED (ga	
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. μS/cm	DISSOLVED OXYGEN mg/L	TUR	BIDITY TUs)	COLOF (describe	ODO
11.36	13.0	13.0	.50	88.19	7.606	23.10	372	.83	14	.9	Instit	4 Now
11.43	3,5	16.5	.50	88.19	7.65	23.17	372	. 84	18	We get the	1	17
11.50	3.5	20.0	.50	88.19	7.65	23.18	371	. 85		.5	V	K
CUBING INS PURGING E SAMPLED E NDREW B DUMP OR T DEPTH IN V TIELD DECC SAMPLE	VELL (feet): ONTAMINATIO LE CONTAINEI #	ACITY (Gal./F DDES: B FILIATION: K PATTERSC 168.2 N: PUMP R SPECIFICA MATERIAL	t.); 1/8" = 0.0 = Bailer; B DN Y N TION	006 3/16" P = Bladder P SAMPLER(S) TUBING MATERIAL CO Dedicate PRESERVATI	ump; E SAMP SIGNATURE DDE: TUBIN SAMPLE PR VE T	$1/4^{"} = 0.0026$ SP = Electric S LING DA (S): T G Y N ESERVATION OTAL VOL	5/16" = 0. Submersible Pur TA FIELD- Filtratic Dedicated FINAL	004; 3/8" = 0 mp; PP = Pi SAMPLING INITIATED A FILTERED; Y pon Equipment Ty DUPLICATE: INTEND: ANALYSIS A	r: 11.5 pe: ND/OR	1/2" = Pump; 50 Y SA EQU	SAMPLING ENDED AT. FILTER SIZ	A.Ο E:μm SAMPLE PUN FLOW RATE
	CONTAINERS	CODE	VOLUME	USED		D IN FIELD (m		METHO	D		CODE	(mL per minut
							/	-		-		
						/						
						/						
					1/	-						
				1	1		1					
EE C	OC TO	CAN		IVEIC								
	O.C. FO					edicated blad		A 600				10
ATERIAL		and the set of	lass; CG =		PE = Poly		P = Polypropyl			= Teflo		er (Specify)
AMPLING	EQUIPMENT C	ODES: A	PP = After Peri PP = Reverse	stattic Pump; Flow Peristal	B = Bail ic Pump;		Bladder Pump; Method (Tubing	ESP = Electr Gravity Drain);				
'ES: 1.	The above d	RI o not const	PP = Reverse	Flow Peristal	le Pump; on require	SM = Straw M d by Chapte	Nethod (Tubing r 62-160, F.A	Gravity Drain);	O = (Other (Specify)	

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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Form FD 9000-24 GROUNDWATER SAMPLING LOG

NAME:		SELF IA	MP	1		TE DCATION:	Lithia, Flori	da			
WELL NO:		TH-76		SAMPLE	ID:				DATE: [-	3-14	1
				-l	PURC	SING DA	TA			a The sector	ter i entre
WELL VOL	(inches): 2 UME PURGE: if applicable)			5 163.35 AL WELL DEP	feet to TH - STA	RVAL DEPTH 178.35 fee TIC DEPTH TO 79.45	t TO WATE D WATER) X	ER (feet): 79 WELL CAPAC	ITY OR E	GE PUMP TY AILER: DE	3P
	T VOLUME Plif applicable)	URGE: 1 EQU	≓ (JIPMENT VOL.	= PUMP VOL	feet — JME + (TUE Ilons + (ING CAPACIT	feet) X Y X TU ns/foot X	.16 BING LENGTH feet	+ FLOW CEL	t = 15.1 L VOLUME gallons	
	VIP OR TUBIN VELL (feet):	G 177.35	FINAL PUM DEPTH IN V	P OR TUBING		DUDOIN	(all and the second sec	PURGING ENDED AT:	······································		
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. µS/cm	DISSOLVED OXYGEN mg/L	TURBIDITY (NTUs)	COLO (descril	R ODO
10.27	16	16	,60	80.67	7.68	22.40	391	. 65	17.0	lisht	ly Now
10,35	4	20	.50	80.67	7.67	22.35	394	. 61	18.6	1	
10.43	ч	24	.50	80.67	7.67	22.35	398	. 58	19.4	V	V.
		2						\		-	-
								1			
					/					1/	
				/							
	1							and the second difference of	1		
	1							1			
											1
AFT CAP											tab and
FUBING INS PURGING E SAMPLED E	ACTIY (Gailon SIDE DIA. CAI QUIPMENT C BY (PRINT) / A ALLOON / ZAG	FFILIATION:	Ft.): 1/8" = 0.0 ≍ Bailer; 8	1" = 0.04; 006; 3/16" P = Bladder P SAMPLER(S) \$	= 0.0014; ump; E SAMP	SP = Electric S	5/16" = 0.0 Submersible Pum TA	04; 3/8" = 0 p; PP = Pe	.006; 1/2" eristaltic Pump	= 0.010; 1 ; 0 = Ot	12" = 5.88 5/8" = 0.016 her (Specify)
FUBING INS PURGING E SAMPLED E ANDREW B PUMP OR T	BIDE DIA. CAI EQUIPMENT C BY (PRINT) / A ALLOON / ZAG 'UBING	PACITY (Gal./F ODES: B FFILIATION: CK PATTERS(FL): 1/8" = 0.0 = Bailer; B DN	008; 3/16" P = Bladder P SAMPLER(S) : TUBING	= 0.0014; ump; E SAMP SIGNATURI	1/4" = 0.0026 SP = Electric S LING DA E(S):	5/16" = 0.0 Submersible Pum TA A Attain FIELD-FII	04; 3/8" = 0 pp; PP = Pe SAMPLING INITIATED AT	.006; 1/2" eristaltic Pump r: 10,413	= 0.010; ; 0 = Ot SAMPLING ENDED A	5/8" = 0.016
PURGING INS PURGING E SAMPLED E ANDREW B PUMP OR T DEPTH IN V	BIDE DIA. CAI EQUIPMENT C BY (PRINT) / A ALLOON / ZAG 'UBING	PACITY (Gal./F ODES: B FFILIATION: CK PATTERSO 177.35	FL): 1/8" = 0.0 = Bailer; B ON	006; 3/16" P = Bladder P SAMPLER(S) S TUBING MATERIAL CO	= 0.0014; ump; E SAMP SIGNATURI DDE:	1/4" = 0.0026 SP = Electric S LING DA E(S):	5: 5/16" = 0.0 Submersible Purr TA http://www.submersible.com FIELD-FII Filtration	04; 3/8" = 0 p; PP = Pe SAMPLING INITIATED AT	.006; 1/2" eristaltic Pump r: 10,43	= 0.010; O = Ot SAMPLING ENDED A FILTER SIZE	5/8" = 0.016 her (Specify) 3 1: 10.5!
FUBING INS PURGING E SAMPLED E ANDREW B PUMP OR T DEPTH IN V FIELD DECC	BIDE DIA. CAI EQUIPMENT C BY (PRINT) / A ALLOON / ZAC UBING VELL (feel):	PACITY (Gal./F CODES: B FFILIATION: CK PATTERSC 177.35 DN: PUMP	FL): 1/8" = 0.0 = Bailer; B DN Y N (1	006; 3/16" P = Bladder P SAMPLER(S) S TUBING MATERIAL CO	= 0.0014; ump; E SAMP SIGNATURI DDE: TUBING	1/4" = 0.0026 SP = Electric S LING DA E(S):	si 5/16" = 0.0 Submersible Purr TA He Alter FIELD-FII Filtration	04; 3/8 [#] = 0 p; PP = Pe SAMPLING INITIATED AT TERED: Y Equipment Type	.006; 1/2" eristaltic Pump r: 10,413	= 0.010; ; 0 = Ot SAMPLING ENDED A	5/8" = 0.016 her (Specify) 3 1: 10.5!
PURGING INS PURGING E SAMPLED E NDREW B PUMP OR T DEPTH IN V FIELD DECC SAMPLE	SIDE DIA. CAI EQUIPMENT C SY (PRINT) / A ALLOON / ZAG 'UBING VELL (feet): DNTAMINATIC	PACITY (Gal./F PODES: B FFILIATION: CK PATTERS(177.35 DN: PUMP R SPECIFICA	FL): 1/8" = 0.0 = Bailer; B ON ; Y N € TION	006; 3/16" P = Bladder P SAMPLER(S) S TUBING MATERIAL CO	= 0.0014; ump; E SAMP SIGNATURE DDE: TUBING SAMPLE PR	1/4" = 0.0026 SP = Electric S LING DA E(S): T Y N	5: 5/16" = 0.0 Submersible Pum TA FIELD-FII Filtration	04; 3/8 [#] = 0 p; PP = Pe SAMPLING INITIATED AT LTERED: Y Equipment Type DUPLICATE:	1/2" eristaltic Pump r: 10,413	SAMPLING SAMPLING ENDED A' FILTER SIZE	5/8" = 0.016 her (Specify) ³ Τ: 10.5! E:μm
FUBING INS PURGING E SAMPLED E ANDREW B PUMP OR T DEPTH IN V FIELD DECC SAMPLE	BIDE DIA. CAI EQUIPMENT C BY (PRINT) / A ALLOON / ZAG UBING VELL (feet): DNTAMINATIC LE CONTAINE #	PACITY (Gal./F CODES: B FFILIATION: CK PATTERS(177.35 DN: PUMP IR SPECIFICA MATERIAL	FL): 1/8" = 0.0 = Bailer; B ON Y N TION	006; 3/16" P = Bladder P SAMPLER(S) S TUBING MATERIAL CO Deficated S PRESERVATIN	= 0.0014; ump; E SAMP SIGNATURE DDE: TUBING SAMPLE PR /E ADDE	1/4" = 0.0026 SP = Electric S LING DA E(S): T Y N ESERVATION TOTAL VOL	5: 5/16" = 0.0 Submersible Pum TA FIELD-FII Filtration FIELD-FII Filtration FINAL pH	04; 3/8" = 0 p; PP = Pe SAMPLING INITIATED AT TERED: Y Equipment Type DUPLICATE: INTENDE ANALYSIS AT	1/2" eristaltic Pump r: 10,413	SAMPLING SAMPLING ENDEDA FILTER SIZE	5/8" = 0.016 her (Specify) G: /О.Б! E:ит SAMPLE PUN FLOW RATI
FUBING INS PURGING E SAMPLED E ANDREW B PUMP OR T DEPTH IN V FIELD DECC SAMPLE	BIDE DIA. CAI EQUIPMENT C BY (PRINT) / A ALLOON / ZAG UBING VELL (feet): DNTAMINATIC LE CONTAINE #	PACITY (Gal./F CODES: B FFILIATION: CK PATTERS(177.35 DN: PUMP IR SPECIFICA MATERIAL	FL): 1/8" = 0.0 = Bailer; B ON Y N TION	006; 3/16" P = Bladder P SAMPLER(S) S TUBING MATERIAL CO Deficated S PRESERVATIN	= 0.0014; ump; E SAMP SIGNATURE DDE: TUBING SAMPLE PR /E ADDE	1/4" = 0.0026 SP = Electric S LING DA E(S): T Y N RESERVATION TOTAL VOL ED IN FIELD (r	5: 5/16" = 0.0 Submersible Pum TA FIELD-FII Filtration FIELD-FII Filtration FINAL pH	04; 3/8" = 0 p; PP = Pe SAMPLING INITIATED AT TERED: Y Equipment Type DUPLICATE: INTENDE ANALYSIS AT	1/2" eristaltic Pump r: 10,413	SAMPLING SAMPLING ENDEDA FILTER SIZE	5/8" = 0.016 her (Specify) G: /О.Б! E:ит SAMPLE PUN FLOW RATI
FUBING INS PURGING E SAMPLED E ANDREW B PUMP OR T DEPTH IN V FIELD DECC SAMPLE D CODE	SIDE DIA. CAI	PACITY (Gal./F PODES: B FFILIATION: CK PATTERSO 177.35 DN: PUMP R SPECIFICA MATERIAL CODE	FL): 1/8" = 0.0 = Bailer; B ON Y N TION	006; 3/16" P = Bladder P SAMPLER(S) S TUBING MATERIAL CO PETERIAL CO PRESERVATIN USED	= 0.0014; ump; E SAMP SIGNATURE DDE: TUBING SAMPLE PR ZE ADDE SAMPLE PR	1/4" = 0.0026 SP = Electric S LING DA E(S): T Y N ESERVATION TOTAL VOL ED IN FIELD (F	5: 5/16" = 0.0 Submersible Pum TA H H Hatan FIELD-FII Filtration Cedicated FINAL pH	04; 3/8" = 0 p; PP = Pe SAMPLING INITIATED AT TERED: Y Equipment Type DUPLICATE: INTENDE ANALYSIS AT	1/2" eristaltic Pump r: 10,413	SAMPLING SAMPLING ENDEDA FILTER SIZE	5/8" = 0.016 her (Specify) G: /О.Б! E:ит SAMPLE PUN FLOW RATI
SAMPLED E SAMPLED E ANDREW B PUMP OR T DEPTH IN V FIELD DECC SAMPLE D CODE	SIDE DIA. CAI	PACITY (Gal./F PODES: B FFILIATION: CK PATTERS(177.35 DN: PUMP IR SPECIFICA MATERIAL CODE R SPECIFICA MATERIAL CODE	FL): 1/8" = 0.0 ≈ Bailer; B ON 1 Y N C TION 1 VOLUME 1 VOLUME 1	1006; 3/16" P = Bladder P SAMPLER(S) S TUBING MATERIAL CO PRESERVATIN USED S PRESERVATIN USED Clear Glass;	= 0.0014; ump; E SAMP SIGNATURE DDE: TUBING SAMPLE PR ZE ADDE SAMPLE PR	1/4" = 0.0026 SP = Electric S LING DA E(S): T Y N ESERVATION TOTAL VOL ED IN FIELD (r E COC E COC	5: 5/16" = 0.0 Submersible Pum TA H H Hatan FIELD-FII Filtration Cedicated FINAL pH	04; 3/8" = 0 p; PP = Pe SAMPLING INITIATED AT LTERED: Y Equipment Type DUPLICATE: INTENDE ANALYSIS AT METHO METHO	1/2" eristaltic Pump r: 10,413 ND/OR SA ND/OR EQ D	<pre>= 0.010;</pre>	5/8" = 0.016 her (Specify) G: /О.Б! E:ит SAMPLE PUN FLOW RATI

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:		SELF	IAMP		SI LO	'E CATION:	Lithia	, Florida	٩		
WELL NO	Fi	eld B	lank	SAMPLE	(D:				DATE:	- 3-14	
					PURG	ING DAT	A				
	(Inches):		TER (Inches):	DEP	L SCREEN I TH: 🦯 fee	et to 🦯 fee	t TO WATE	R (leet):	OF	RGE PUMP T BAILER:	YPE
	UME PURGE: if applicable)	1 WELL VO	DLUME = (TOT) = (AL WELL DEPT	-7	TIC DEPTH TO	WATER) X feet) X	WELL CAPAC	gallons/fo	ot = 7	gallons
	IT VOLUME PI if applicable)	JRGE: 1 EQ	UIPMENT VOL.	= PUMP VOLU	Ilons + (NG CAPACITY galions/	X TC	BING LENGTH) + FLOW C		= gallon:
NITIAL PU	MP OR TUBIN	G	FINAL PUM	P OR TUBING		PURGING	~	PURGING	-	TOTAL VO	LUME
DEPTHIN	WELL (feet):	-	DEPTH IN \	In T	-	INITIATED		ENDED AT: DISSOLVED	-	PURGED (gailons):
TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)		COND. (circle units) μmhos/cm <u>or</u> μS/cm	OXYGEN (circle units) mg/L <u>or</u> % saturation	TURBID (NTUS		
	1									_	
	/				/						
/	1				/		1				
_/				1			th			/	
	·			IT I	FI	D	DI	ANK	1	1-	
	101	• • • • • • • • • • • • • • • • • • •		1 -			/	/////			-/
1		/						/			1
`	~					l					
			0.75" = 0.02; /Ft.): 1/8" = 0.0			2" = 0.16; 1/4" = 0.0026;			5" = 1.02; .006; 1/3	6" = 1.47; 2" = 0,010;	12" = 5.88 5/8" = 0.016
URGING	EQUIPMENT C	ODES: E	3 = Bailer; E	P = Bladder Pt		SP = Electric Su		np; PP = P	eristattic Pur	np; $\mathbf{O} = \mathbf{C}$	ther (Specify)
	BY (PRINT) / A BALLOON / Z		RSON	SAMPLER(S) S			N/IL	SAMPLING	10.07	SAMPLIN	IG 10.19
UMP OR 1				TUBING		-100	FIELD-	FILTERED: Y			IZE:μm
DEPTH IN V	WELL (feet):			MATERIAL CO		т ′	Filtratio	n Equipment Ty	pe:		
				-Dedicated			-Dedicated	DUPLICATE:			
	LE CONTAINE #			PRESERVATIN		ESERVATION	FINAL	INTENDI ANALYSIS A	ND/OR E		SAMPLE PUMI FLOW RATE
D CODE	CONTAINERS	CODE	VOLUME	USED) IN FIELD (mL)		METHO	U	CODE	(mL per minute
										y atalapan tin	
						/					e entres sectors
				And the second s		/					
					-						
			k				1				
SEE C	OC FOR	ANALY	SIS								
		ANALY AG = Amber		Clear Glass;	PE = Polye	thylene; PP	e Polypropyle	ene; S = Silico	ne; T=T	eflon; O = (Other (Specify)

TES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. <u>STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)</u>

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

Client: Hillsborough Co Public Utilities Dept

Login Number: 58420 List Number: 1

Creator: Snead, Joshua

Answer	Comment
N/A	
True	
N/A	
True	
N/A	
True	
True	
N/A	
	N/A True True True True True True True True True True True True True True True N/A True N/A True

Job Number: 660-58420-1

List Source: TestAmerica Tampa

Client: Hillsborough Co Public Utilities Dept

Login Number: 58420 List Number: 1 Creator: Kicklighter, Marilyn D

Question	Answer Co	omment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Job Number: 660-58420-1

List Source: TestAmerica Savannah

List Creation: 01/07/14 12:23 PM