



Public Utilities

October 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. 49 – September 2014**

Dear Mr. Morris:

The Hillsborough County Public Utilities Department (County) is pleased to provide the analytical results from the September 2014 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 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 (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 September 5, 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.

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pH

pH was observed at 8.18 pH units in new upper Floridan aquifer (UFA) monitoring well, TH-78. The elevated pH values observed in this well do not appear to be representative of the unaffected UFA. Based on the pH values decreasing since installation, the County believes the elevated values observed are likely attributable to the grout materials utilized during construction of this monitoring well. The pH values in down gradient monitoring wells TH-72, TH-76, and TH-77 were recorded at 6.74, 7.28, and 7.31 pH units.

Turbidity

Turbidity values in the upper Floridan / Limestone aquifer monitoring wells TH-72, TH-76, TH-77, and TH-78 were recorded at 1.96, 19, 1.02, and 3.86 NTUs, respectively.

Conductivity

The conductivity values observed in monitoring wells TH-72, TH-76, TH-77, and TH-78 were 3,156, 596, 578, and 680 micromhos per centimeter (umhos/cm), respectively. Monitoring well TH-72 is the closest location to the sinkhole, and continues to exhibit water quality impacts. The elevated conductivity observed is likely attributable to the waste in the deep areas of the sinkhole and the subsurface grouting processes conducted as part of the sinkhole stabilization and remediation. Conductivity values in down gradient monitoring wells TH-76, TH-77, and TH-78 are relatively low and appear to be consistent with the unaffected deep wells across the site.

Total Dissolved Solids (TDS)

The TDS in monitoring well TH-72 was observed at 1,400 mg/l, which continues to be above the SDWS of 500 mg/l. The remaining three (3) down gradient UFA monitoring wells, TH-76, TH-77, and TH-78 exhibited TDS values of 240, 210, and 270 mg/l, respectively, which is consistent with the water quality of the unaffected deep wells across the site.

Chloride

Chloride was observed at 510 mg/l in monitoring well TH-72, which is above the SDWS of 250 mg/l. The elevated chloride value observed is likely attributable to waste in the sinkhole and the grout materials injected into the subsurface as part of the sinkhole stabilization and remediation. Chloride values in the down gradient UFA monitoring wells TH-76, TH-77, and TH-78 were observed at 12, 9.8, and 36 mg/l, which is consistent with the unaffected deep wells across the site. The value of 36 mg/l observed in TH-78 is also thought to potentially be attributable to the grout materials used to seal the casing in the new well.

Iron

Total iron concentrations in two (2) of the four (4) upper Floridan/Limestone aquifer monitoring wells were observed above the SDWS of 0.3 mg/l. Monitoring wells TH-72 and TH-76 exhibited iron at 0.65 and 0.61 mg/l, respectively. Monitor wells TH-77 and TH-78 exhibited iron below the SDWS at 0.15i and 0.27 mg/l. The iron concentrations observed have been consistent, and the iron appears to be naturally occurring in some areas of the limestone formation, or may be the result of impacts from the strip mining activities conducted in area prior to the landfill operations.

Sodium

Sodium was observed at a concentration of 210 mg/l in monitoring well 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 materials, as previously discussed. Sodium values in down gradient monitoring wells TH-76, TH-77, and TH-78 were observed at 20, 17, and 35 mg/l, which is consistent with the unaffected deep wells across the site.

Groundwater Elevations and Direction of Flow

On September 2, 2014, the County collected groundwater and surface water 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. No significant changes to the patterns of flow in the surficial aquifer were noted in the data set, and the flow diagram provided is consistent with the observations over the extensive period of record. The elevations observed within the wells closest to the sinkhole indicate that flow patterns continue to be affected in that area, 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 and the general area around the sinkhole, and it is included with this submittal. This diagram was generated manually in AutoCad™ utilizing the four data points closest to the sinkhole. During this sampling event, the changes in elevations between TH-72 and TH-76 is - 0.05 ft., and TH-72 and TH-77 is + 0.15 ft. Elevation of newly installed monitor well TH-78 indicated an elevation of approximately 5 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 the surface water body in this area, or some other geologic formation anomaly may be creating this potentiometric high. However, even though the elevation at TH-78 indicates that the well can be down gradient of the sinkhole area, the County believes that the well provides a valuable data point, and will continue to evaluate the water quality and elevations at this site. For this report, the elevation data was not used to prepare the UFA contour diagram.

Conclusions

The water quality observed in the September 2014 IAMP sampling event indicates that the monitoring well TH-72, which is closest to the sinkhole, continues to exhibit impacts to water quality in the upper Floridan / Limestone aquifer. The impacts observed include elevated conductivity, TDS, chloride, iron and sodium. The values have remained relatively stable, and do not appear to be migrating to the down gradient wells installed to evaluate this possibility. These impacts were not unexpected in the immediate vicinity of the sinkhole, and TH-72 is less than fifty feet away from the former surface expression, and likely even closer to the subsurface karst feature where waste and grout materials are likely present. Down gradient monitoring wells, TH-76 and TH-77, and TH-78 exhibit good water quality with no evidence of impact from the sinkhole. Conductivity values, pH, TDS, sodium and chloride are all very low and consistent with the historical data sets for the unaffected upper Floridan aquifer groundwater monitoring wells at the SCLF.

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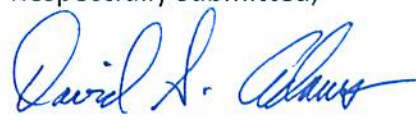
Recommendations

The County continues to move forward with implementation of the IAMP, which includes the monthly sampling of the four upper Floridan / Limestone aquifer groundwater monitoring wells, TH-72, TH-76, TH-77, and TH-78, and quarterly sampling of the three surficial aquifer wells, TH-73, TH-74, and TH-75. The County will continue to evaluate any water quality changes in both the surficial and upper Floridan aquifer wells, and present the findings in the monthly IAMP reports. Monthly sampling shall continue for the short term.

However, it should be noted the IAMP has been conducted for over three and half years, and the consistency of the data set supports closure of this monitoring plan. A select group of the IAMP wells, designed to provide long term protectiveness, should be included in the semi-annual sampling required by the Landfill Operations Permit No. 35435-022-SO/01. It is anticipated that an application for modification of that permit will include this proposed approach. If you have any specific concerns with this concept, please provide your feedback as soon as possible, so we can incorporate any suggestions into our strategy moving forward.

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, 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,

 10/28/2014

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
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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
September 5, 2014**

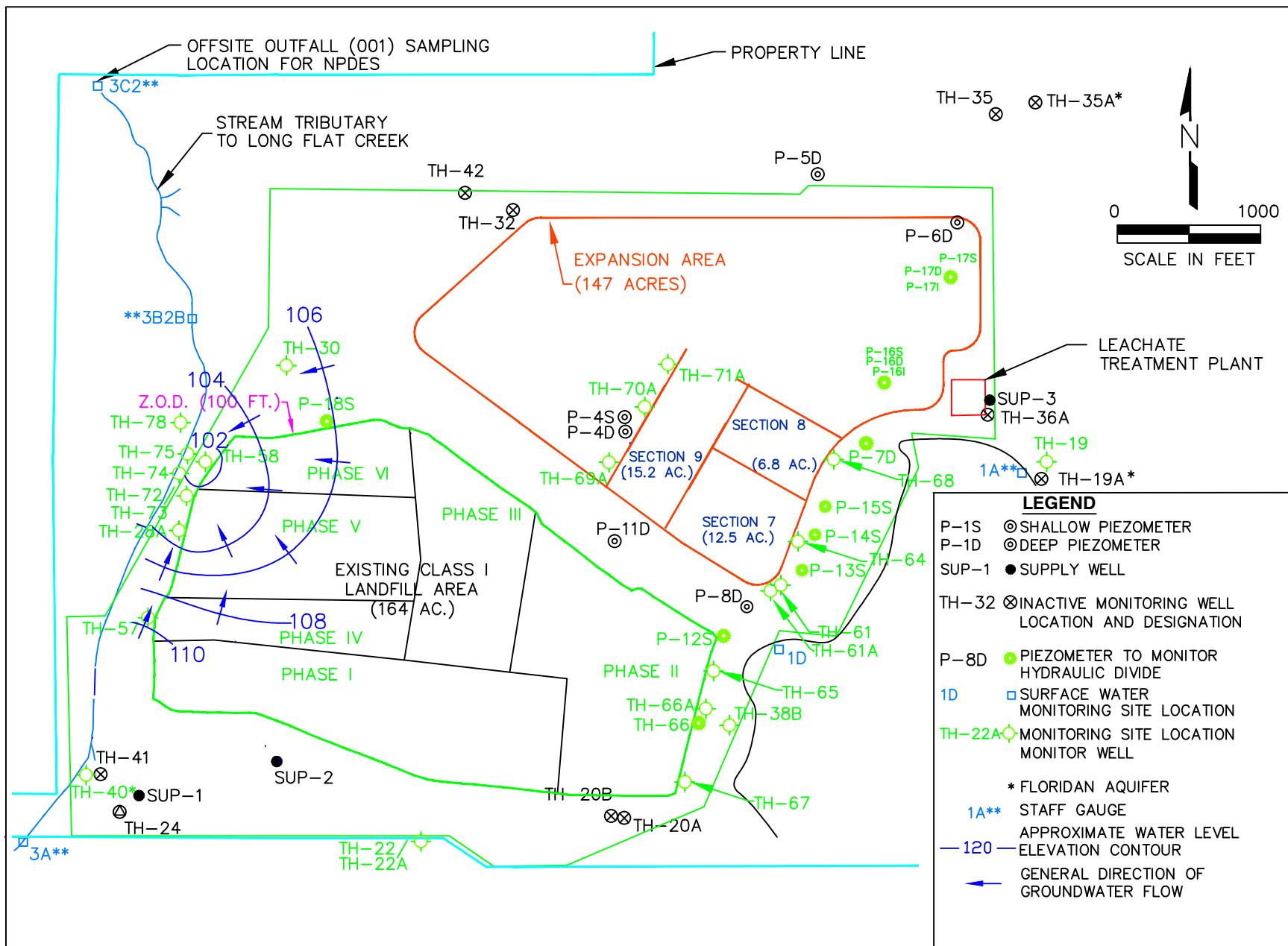
GENERAL	Upper Floridan Wells				MCL STANDARD
PARAMETERS	TH-72	TH-76	TH-77	TH-78	
conductivity (umhos/cm) (field)	3,156	596	578	680	NS
dissolved oxygen (mg/l) (field)	0.46	0.20	0.37	0.15	NS
pH (field)	6.74	7.28	7.31	8.18	(6.5 - 8.5)**
temperature (°C) (field)	23.61	22.92	23.62	23.46	NS
turbidity (NTU) (field)	1.96	19	1.02	3.86	NS
total dissolved solids (mg/l)	1,400	240	210	270	500**
chloride (mg/l)	510	12	9.8	36	250**
ammonia nitrogen (mg/l as N)	20	0.72	0.51	0.4	NS
METALS (mg/l)					MCL STANDARD
arsenic	0.004 u	0.004 u	0.004 u	0.004 u	0.01*
iron	0.65	0.61	0.15 i	0.27	0.3**
sodium	210	20	17	35	160*
Note: Ref. Groundwater Guidance Concentrations, FDEP 2012					
MCL = Maximum Contaminant Level					
NTU = Nephelometric Turbidity Units					
NS = No Standard					
i = reported value is between the laboratory method detection limit and practical quantitation limit.					
u = parameter was analyzed but not detected.					
* = Primary Drinking Water Standard					
** = Secondary Drinking Water Standard					
1,400					
ug/l = micrograms per liter					
mg/l = milligrams per liter					

Southeast County Landfill

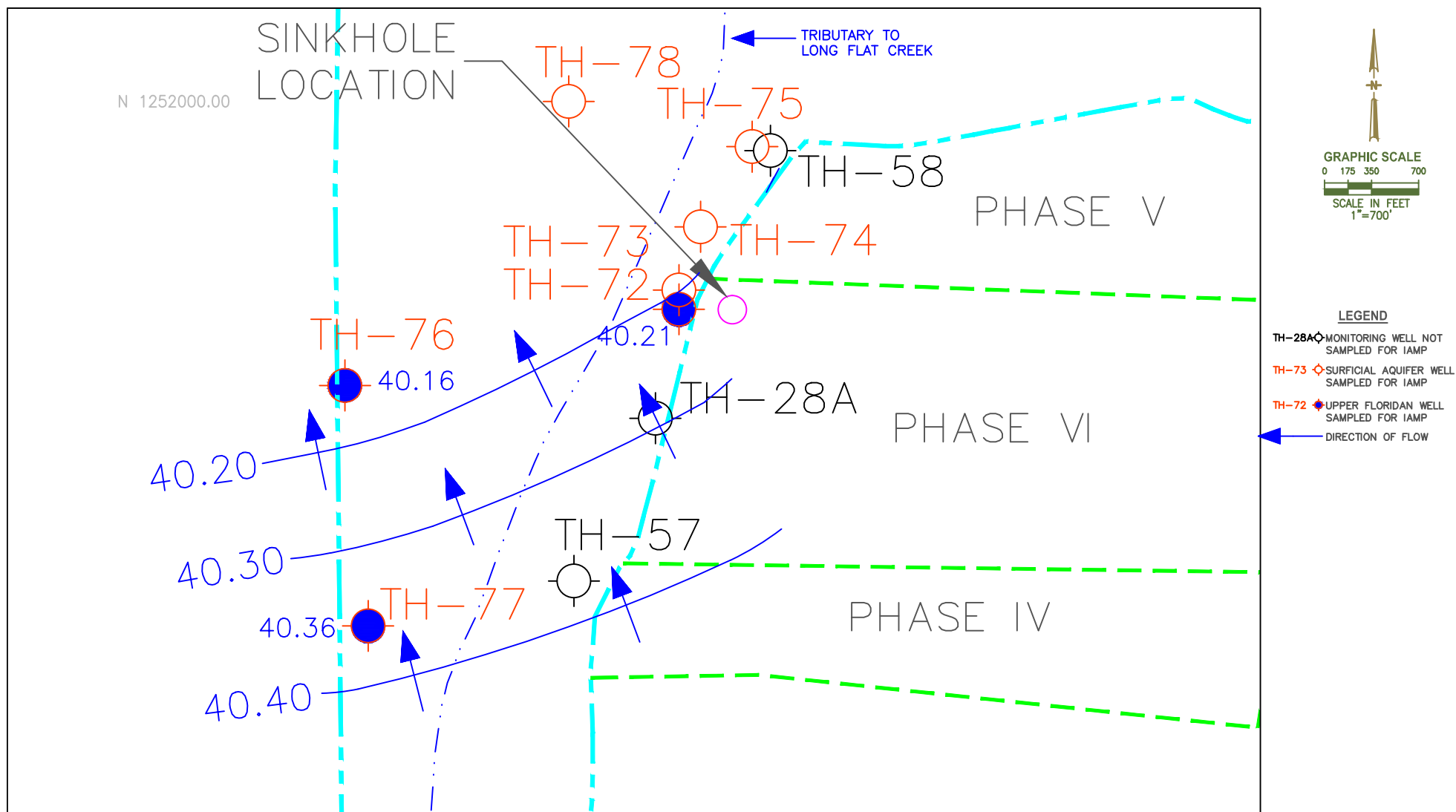
Groundwater Elevations

September 2, 2014

Measuring Point I.D.	T.O.C. Elevations (NGVD)	W.L. B.T.O.C.	W.L. (NGVD)	Time
TH-28A	131.10	28.18	102.92	10:56 AM
TH-30	128.88	23.92	104.96	10:44 AM
TH-57	128.36	18.87	109.49	11:00 AM
TH-58	127.88	28.08	99.80	10:47 AM
TH-72*	130.96	90.75	40.21	10:52 AM
TH-73	131.07	30.69	100.38	10:51 AM
TH-74	109.08	9.50	99.58	11:06 AM
TH-75	106.92	7.90	99.02	11:08 AM
TH-76*	111.21	71.05	40.16	10:28 AM
TH-77*	119.88	79.52	40.36	10:24 AM
TH-78*	120.75	75.12	45.63	10:36 AM
NGVD = National Geodetic Vertical Datum				
T.O.C. = Top of Casing				
B.T.O.C. = Below Top of Casing				
* = Floridan Well				
ND = No Data - Potential Error in Survey				
W.L. = Water Level				



Southeast County Landfill
 Groundwater Elevation Contour Diagram – September 2, 2014



SEPTEMBER 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

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	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	113.30	17.66	606	0.72	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	33	0.21	0.004 u	0.18 i	34
09/08/2011	97.99	32.97	536	1.11	7.29	23.2	0.6	340	34	0.41	0.004 u	0.18 i	36
10/04/2011	99.45	31.51	471	1.69	7.31	23.13	1.1	290	31	0.3	0.004 u	0.14 i	34
11/03/2011	103.37	27.59	550	1.8	7.28	23.04	1.51	290	32	0.29	0.004 u	0.15 i	34
12/08/2011	106.80	24.16	528	1.92	7.31	22.9	0.73	320	29	0.32	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	0.29	0.004 u	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	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	0.32	6.86	23.53	12.6	1,000	350	7.4 j3	0.004 u	0.79	120
11/06/2013	97.90	33.06	2,145	0.16	6.69	23.36	0.8	1,200	450	12	0.004 u	0.64	170
12/05/2013	98.50	32.46	2,615	0.39	6.74	23.45	0.58	1,200	580	16	0.004 u	0.65	200
01/03/2014	99.02	31.94	2,220	0.84	6.83	22.88	1.64	1,200	580	25	0.004 u	0.67	230 j3
02/06/2014	99.50	31.46	2,452	0.13	6.69	23.13	2.07	1,300	580	23 j3	0.004 u	0.71	210
03/04/2014	97.91	33.05	2,173	0.24	6.67	23.4	1.33	1,500	580	22	0.004 u	0.74	220
04/03/2014	96.22	34.74	1,992	0.22	6.74	23.35	1.33	1,400	590	27	0.0013 u	0.71	220
05/06/2014	100.22	30.74	2,247	0.46	6.81	23.5	1.22	1,400	590	24	0.004 u	0.64	230
06/03/2014	102.58	28.38	2,771	0.34	6.45	23.46	0.96	1,400	570	27	0.004 u	0.73	220
07/03/2014	97.64	33.32	2,388	0.29	6.86	23.54	1.34	1,300	570	24	0.004 u	0.72	220
08/12/2014	90.40	40.56	2,375	0.28	6.87	23.55	0.81	1,300	540	23	0.004 u	0.62	200 j3

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-73

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	30.99	100.08	440	1.7	5.53	25.01	22.2	180	69	2.3	0.004 u	15	38
02/03/2011	30.85	100.22	400	1.78	5.62	26.12	17.6	140	56	1.9	0.004 u	31	26
02/10/2011	30.76	100.31	336	1.44	5.62	25.86	12	160	56	2	0.004 u	26	27
02/14/2011	30.82	100.25	312	0.56	5.54	26	15.5	190	55	2.6	0.004 u	34	24
02/24/2011	30.78	100.29	340	0.38	5.62	26.15	16.4	170	61	3	0.004 u	17	28
03/03/2011	30.87	100.20	382	0.53	5.56	26	19.4	200	61	2.1	0.004 u	21	29
03/10/2011	30.87	100.20	371	0.66	5.56	25.97	8.3	170	60	1.7	0.004 u	21	27
03/17/2011	30.76	100.31	266	1.22	5.35	26	14.3	150	69	2.1	0.004 u	12	33
03/24/2011	30.78	100.29	346	0.61	5.47	26.02	8	140	63	2	0.004 u	13	27
04/01/2011	31.11	99.96	366	0.78	5.53	25.89	19.8	160	68	1.7	0.004 u	14	29
04/08/2011	30.65	100.42	331	0.62	5.35	25.97	18	140	66	2.1	0.004 u	11	30
05/05/2011	31.70	99.37	361	0.4	5.34	25.64	12.2	150	66	2	0.004 u	20	28
06/08/2011	32.54	98.53	391	0.7	5.41	25.69	14	150	63	2.2	0.004 u	14	27
07/07/2011	31.55	99.52	306	0.35	5.13	25.34	19.2	350	33	0.52	0.004 u	0.22	31
08/04/2011	31.40	99.67	262	0.89	5.12	25.44	19.9	140	60	1.2	0.004 u	8.2	24
09/08/2011	30.66	100.41	259	0.49	5.24	25.41	28.1	170	62	1.9	0.004 u	8.5	27
10/04/2011	31.16	99.91	345	0.89	5.2	25.48	12	220	96	1.8	0.004 u	9.1	33
11/03/2011	31.27	99.80	1273	0.3	5.21	25.55	8.16	720	360	7.3	0.004 u	22	97
12/08/2011	31.96	99.11	1499	0.62	5.3	25.24	2.64	820	500	3	0.004 u	26	110
01/05/2012	32.31	98.76	1188	0.71	5.16	25.18	2.05	750	350	3.3	0.004 u	19	80
02/10/2012	32.25	98.82	304	0.55	5.28	25.24	3.31	190	67	1.6	0.004 u	4.9	23
03/07/2012	32.42	98.65	312	1.08	5.22	25.24	3.3	150	56	1.2	0.004 u	4.7	22
04/05/2012	32.63	98.44	231	0.79	5.06	24.94	4.39	120	50	1.1	0.004 u	4.1	20
05/03/2012	32.74	98.33	283	0.99	4.8	24.88	6.47	160	63	1.9	0.004 u	4.5	22
06/07/2012	32.40	98.67	224	0.87	4.82	24.64	5.6	140	48	1.6	0.004 u	3.3	18
07/05/2012	31.51	99.56	232	0.31	4.77	24.63	9	140	50	1.7	0.004 u	4	18
08/03/2012	32.09	98.98	201	0.71	5.02	24.63	5.13	160	52	1.7	0.004 u	3.8	19
09/06/2012	31.22	99.76	242	0.5	5.06	24.67	7.39	140	47	1.3	0.004 u	3.6	18
10/04/2012	31.46	99.61	222	0.18	4.86	24.68	7.56	130	43	1.2	0.004 u	3.4	16
11/07/2012	31.84	99.23	231	0.39	5.06	24.75	5.54	130	45	0.94	0.004 u	3.6	16
12/05/2012	32.14	98.93	237	0.2	5.03	24.9	3.26	110	46	0.84	0.004 u	3.5	17
01/03/2013	31.91	99.16	237	0.49	4.95	24.84	2.47	130	45	1.1	0.004 u	3.2	16
02/07/2013	32.11	98.96	221	0.69	4.84	24.79	4.8	120	47	0.84	0.004 u	3	15
03/07/2013	32.41	98.66	179	0.23	4.78	24.46	2.64	110	45	1.2	0.004 u	3.1	17
04/04/2013	32.41	98.66	191	0.2	4.73	24.42	2.49	140	53	1.1	0.004 u	3.4	20
05/02/2013	31.40	99.67	240	0.24	5.12	24.43	8.82	120	52	0.99	0.004 u	3.4	16
08/02/2013	ND	ND	395	0.23	5.13	24.85	10.4	270	130	2.3	0.004 u	7.8	38
11/06/2013	30.36	100.71	319	0.62	5.01	25.54	6.35	200	76	2.2	0.004 u	3.8	25
03/04/2014	30.78	100.29	381	0.39	4.92	25.11	6.23	230	96	1.9	0.004 u	4.6	31
05/06/2014	30.66	100.41	340	1.13	5.05	25.59	4.01	210	90	3.3	0.004 u	4	31
08/13/2014	30.22	100.85	426	0.18	4.76	25.08	3.38	240	93	3.1	0.004 u	4.5	32

New survey data beginning with 10/4/2012.

u = parameter was analyzed but not detected

NS = No Sample Collected (Surficial wells are now sampled quarterly)

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

5.53

EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-74

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)
11/03/2011	9.65	ND	485	0.51	5.56	23.62	5.45	280	48	2.9	0.004 u	26	20
12/08/2011	10.11	98.97	445	0.89	5.64	22.9	14.7	270	40	2.3	0.0042 i	27	21
01/05/2012	10.30	98.78	474	0.66	5.66	21.97	16.8	240	59	1.8	0.004 u	30	26
02/10/2012	10.22	98.86	501	0.6	5.42	21.48	9.99	350	95	2.5	0.004 u	34	22
03/07/2012	10.40	98.68	618	0.53	5.24	21.57	8.7	210	120	2.3	0.004 u	38	22
04/05/2012	10.53	98.55	592	0.79	5.13	21.74	13.7	270	120	2.8	0.004 u	40	24
05/03/2012	10.71	98.37	602	0.86	5.15	21.93	12.5	330	110	2.8	0.004 u	38	25
06/07/2012	10.45	98.63	334	0.75	5.35	22.48	6.92	210	37	3	0.004 u	20	16
07/05/2012	9.45	99.63	495	0.32	4.99	23.09	5.33	240	73	2.1	0.004 u	11	27
08/03/2012	9.99	99.09	261	0.37	5.18	23.63	6.12	210	47	3	0.004 u	19	15
09/06/2012	9.36	99.66	578	0.24	5.33	24.08	2.37	330	110	2.8	0.012	21	36
10/04/2012	9.53	99.55	369	0.25	5.36	24.12	3.98	260	76	3.5	0.0055 i	19	22
11/07/2012	9.91	99.17	385	0.36	5.47	23.53	3.21	240	60	1.9	0.0045 i	18	20
12/05/2012	10.14	98.94	398	0.34	5.44	22.82	3.08	230	59	2.7	0.004 u	21	19
01/03/2013	9.96	99.12	418	0.31	5.43	22.03	3.03	280	59	2.7	0.004 u	20	20
02/07/2013	10.16	98.92	394	0.34	5.43	21.66	1.95	200	45	1.9	0.004 u	20	16
03/07/2013	10.23	98.85	363	0.35	5.38	21.06	1.24	180	47	3	0.004 u	20	17
04/04/2013	10.52	98.56	273	0.38	5.34	20.75	5.85	210	43	1.9	0.004 u	20	16
05/02/2013	9.94	99.14	357	0.39	5.61	21.28	2.62	190	37	2.8	0.004 u	21	14
08/02/2013	ND	ND	508	0.29	5.55	23.26	1.3	240	63	3.2	0.004 u	31	20
11/06/2013	9.37	99.71	1,348	1.41	5.43	23.98	9.71	890	370	3.2	0.004 u	60	78
03/04/2014	9.52	99.56	570	0.58	5.55	21.83	2.26	370	95	3.5	0.004 u	29	44
05/06/2014	9.22	99.86	549	0.57	5.56	22.06	3.93	310	92	3.1	0.004 u	31	40
08/13/2014	8.99	100.09	466	0.31	5.43	23.95	4.87	240	26	3.4	0.004 u	26	19

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.
NS = No Sample Collected (Surficial wells are now sampled quarterly)
ND = No Data - water levels collected during quarterly ADR.

5.56 EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-75

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)
11/03/2011	7.68	ND	396	0.25	5.65	23.63	11.6	220	49	1.4	0.0085 i	11	14
12/08/2011	7.90	99.02	301	0.46	5.57	22.9	20.1	150	23	1.1	0.011	8.9	11
01/05/2012	8.01	98.91	300	0.92	5.58	21.69	18.9	180	25	1.1	0.0071 i	8.6	10
02/10/2012	8.00	98.92	422	0.51	5.48	21.5	17.9	280	81	1.1	0.0072 i	12	20
03/07/2012	8.14	98.78	495	0.26	5.39	21.5	19.6	220	79	0.96	0.0079 i	13	22
04/05/2012	8.15	98.77	584	0.33	5.37	21.76	4.94	300	130	1.3	0.0063 i	16	26
05/03/2012	8.27	98.65	588	0.28	5.32	22.06	0.0	350	120	1.9	0.0078 i	16	33
06/07/2012	8.14	98.78	702	0.39	5.61	22.87	5.69	480	140	1.5	0.0095 i	10	40
07/05/2012	7.36	99.56	344	0.22	5.35	23.52	6.48	180	37	2	0.01	9.8	15
08/03/2012	7.80	99.12	241	0.28	5.28	24.07	4.21	190	25	1.8	0.008 i	8.3	14
09/06/2012	7.42	99.50	360	0.18	5.41	24.5	4.41	200	40	2	0.01	9.1	15
10/04/2012	7.55	99.37	346	0.15	5.35	24.54	6.73	240	51	2.5	0.0084 i	9.2	15
11/07/2012	7.79	99.13	422	0.3	5.48	23.8	2.51	200	54	1.6	0.0086 i	9.8	17
12/05/2012	7.98	98.94	395	0.31	5.5	22.97	7.22	210	48	1.4	0.0067 i	9.2	16
01/03/2013	7.88	99.04	447	0.37	5.53	21.89	13.9	400	60	1.3	0.0065 i	8.1	21
02/07/2013	8.02	98.90	453	0.2	5.48	21.71	6.35	240	62	1.5	0.0076 i	9.8	19
03/07/2013	8.04	98.88	379	0.27	5.4	21.38	2.71	200	40	1.9	0.0061 i	8	17
04/04/2013	8.23	98.69	245	0.25	5.34	21.08	4.92	180	22	1.7	0.0068 i	7.3	14
05/02/2013	8.00	98.92	340	0.21	5.61	21.72	1.59	170	26	1.3	0.0071 i	7.6	13
08/02/2013	ND	ND	356	0.21	5.63	23.9	2.1	170	28	1.3	0.0096 i	7.6	18
11/06/2013	7.81	99.11	353	1.13	5.78	24.32	12.3	200	31	1.3	0.0046 i	6.5	14
03/04/2014	7.87	99.05	338	0.39	5.66	22.51	5.3	200	27	1.5	0.0067 i	6.1	16
05/06/2014	7.63	99.29	341	0.37	5.67	22.61	3.01	200	27	1.8	0.0066 i	6.1	18
08/13/2014	7.54	99.38	343	0.23	5.43	24.52	2.84	190	18	1.5	0.011	7.5	12

New survey data beginning with 10/4/2012.

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

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

5.65 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
01/03/2014	79.38	31.83	398	0.58	7.67	22.35	19.4	190	12	0.23 j3	0.004 u	1.1	20
02/06/2014	79.87	31.34	446	0.14	7.54	22.57	18.1	230	12	0.45	0.004 u	0.96	20
03/04/2014	78.20	33.01	434	0.18	7.36	22.7	26.2	230	12	0.33	0.004 u	0.69	20
04/03/2014	76.54	34.67	441	0.18	7.46	22.82	24.7	210	12	0.6	0.0013 u	0.34	19
05/06/2014	80.52	30.69	427	0.24	7.56	22.85	12.7	220	12	0.38	0.004 u	0.65	21
06/03/2014	82.85	28.36	423	0.3	7.47	22.82	16.8	240	12	0.47	0.004 u	0.64	20
07/03/2014	77.98	33.23	421	0.3	7.46	22.83	19.5	230	12	0.49	0.004 u	0.2	20
08/13/2014	70.72	40.49	445	0.25	7.37	22.81	17	240	12	0.5	0.004 u	0.7	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
01/03/2014	87.87	32.01	371	0.85	7.65	23.18	16.5	160	9.1	0.39	0.004 u	0.63	17
02/06/2014	88.30	31.58	424	0.09	7.53	23.39	4.62	250	9.2	0.27	0.004 u	0.26	16
03/04/2014	86.70	33.18	418	0.36	7.34	23.38	1.12	230	9.3	0.32	0.004 u	0.21	16
04/03/2014	85.02	34.86	430	0.28	7.45	23.47	1.97	220	9.4	0.61	0.0013 u	0.18	15
05/06/2014	89.02	30.86	414	0.34	7.52	23.47	1.01	220	9.7	0.59	0.004 u	0.19	17
06/03/2014	91.34	28.54	464	0.27	7.47	23.49	0.88	230	9.7	0.75	0.004 u	0.19	17
07/03/2014	86.40	33.48	409	0.34	7.44	23.65	1.56	230	9.6	0.48	0.004 u	0.14 i	17
08/13/2014	79.19	40.69	436	0.36	7.39	23.76	0.61	260	9.5	0.49	0.004 u	0.16 i	16

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.

1.2	EXCEEDS STANDARD
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Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-78

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)
07/02/2014	ND	ND	363	0.41	9.08	23.89	19.3	210	43	0.44	0.0019 i	1	38
08/12/2014	75.51	45.24	467	0.4	9.55	23.56	7.37	240	38	0.42 j3	0.004 u	0.48	34

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 - survey data was not complete.

1.2

EXCEEDS STANDARD

TestAmerica

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: 660-62676-1

Client Project/Site: SELF IAMP

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:

9/19/2014 9:13:03 AM

Nancy Robertson, Project Manager II
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LINKS

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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.

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Sample Summary

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

TestAmerica Job ID: 660-62676-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-62676-1	DUPLICATE NOT BLANK	Ground Water	09/05/14 00:00	09/05/14 15:30
660-62676-2	BLANK FIELD	Ground Water	09/05/14 10:00	09/05/14 15:30
660-62676-3	TH-77	Ground Water	09/05/14 10:47	09/05/14 15:30
660-62676-4	TH-76	Ground Water	09/05/14 12:01	09/05/14 15:30
660-62676-5	TH-78	Ground Water	09/05/14 13:16	09/05/14 15:30
660-62676-6	TH-72	Ground Water	09/05/14 14:23	09/05/14 15:30

Case Narrative

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

TestAmerica Job ID: 660-62676-1

Job ID: 660-62676-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative
660-62676-1

Comments

No additional comments.

Receipt

The samples were received on 9/5/2014 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.6° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

Method 350.1: The positive result for ammonia in the Blank Field was confirmed..

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

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

TestAmerica Job ID: 660-62676-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates that 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.

General Chemistry

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)

Detection Summary

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: DUPLICATE NOT BLANK

Lab Sample ID: 660-62676-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.8		0.50	0.25	mg/L	1		300.0	Total/NA
Iron	160	I	200	50	ug/L	1		6010B	Total Recoverable
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recoverable
Ammonia as N	0.82		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	210		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BLANK FIELD

Lab Sample ID: 660-62676-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.45		0.050	0.026	mg/L	1		350.1	Total/NA

Client Sample ID: TH-77

Lab Sample ID: 660-62676-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.8		0.50	0.25	mg/L	1		300.0	Total/NA
Iron	150	I	200	50	ug/L	1		6010B	Total Recoverable
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recoverable
Ammonia as N	0.51		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	210		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.31				SU	1		Field Sampling	Total/NA
Field Temperature	23.62				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.37				mg/L	1		Field Sampling	Total/NA
Specific Conductance	578				uS/cm	1		Field Sampling	Total/NA
Turbidity	1.02				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-76

Lab Sample ID: 660-62676-4

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	610		200	50	ug/L	1		6010B	Total Recoverable
Sodium	20		0.50	0.31	mg/L	1		6010B	Total Recoverable
Ammonia as N	0.72		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	240		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.28				SU	1		Field Sampling	Total/NA
Field Temperature	22.92				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.20				mg/L	1		Field Sampling	Total/NA
Specific Conductance	596				uS/cm	1		Field Sampling	Total/NA
Turbidity	19.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-78

Lab Sample ID: 660-62676-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	36		0.50	0.25	mg/L	1		300.0	Total/NA
Iron	270		200	50	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Detection Summary

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: TH-78 (Continued)

Lab Sample ID: 660-62676-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	35		0.50	0.31	mg/L	1		6010B	Total Recoverable
Ammonia as N	0.40		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	270		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	8.18				SU	1		Field Sampling	Total/NA
Field Temperature	23.46				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.15				mg/L	1		Field Sampling	Total/NA
Specific Conductance	680				uS/cm	1		Field Sampling	Total/NA
Turbidity	3.86				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-72

Lab Sample ID: 660-62676-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	510		10	5.0	mg/L	20		300.0	Total/NA
Iron	650		200	50	ug/L	1		6010B	Total Recoverable
Sodium	210		0.50	0.31	mg/L	1		6010B	Total Recoverable
Ammonia as N	20		1.0	0.52	mg/L	20		350.1	Total/NA
Total Dissolved Solids	1400		25	25	mg/L	1		SM 2540C	Total/NA
Field pH	6.74				SU	1		Field Sampling	Total/NA
Field Temperature	23.61				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.46				mg/L	1		Field Sampling	Total/NA
Specific Conductance	3156				uS/cm	1		Field Sampling	Total/NA
Turbidity	1.96				NTU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Client Sample Results

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: DUPLICATE NOT BLANK

Lab Sample ID: 660-62676-1

Date Collected: 09/05/14 00:00

Matrix: Ground Water

Date Received: 09/05/14 15:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.8		0.50	0.25	mg/L			09/16/14 16:34	1

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/08/14 10:01	09/11/14 10:34	1
Iron	160	I	200	50	ug/L		09/08/14 10:01	09/11/14 10:34	1
Sodium	17		0.50	0.31	mg/L		09/08/14 10:01	09/11/14 10:34	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.82		0.050	0.026	mg/L			09/15/14 15:39	1
Total Dissolved Solids	210		10	10	mg/L			09/09/14 06:35	1

Client Sample Results

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: BLANK FIELD

Lab Sample ID: 660-62676-2

Date Collected: 09/05/14 10:00

Matrix: Ground Water

Date Received: 09/05/14 15:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			09/16/14 16:50	1

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/08/14 10:01	09/11/14 10:50	1
Iron	50	U	200	50	ug/L		09/08/14 10:01	09/11/14 10:50	1
Sodium	0.31	U	0.50	0.31	mg/L		09/08/14 10:01	09/11/14 10:50	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.45		0.050	0.026	mg/L			09/15/14 16:28	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			09/09/14 06:35	1

Client Sample Results

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: TH-77

Date Collected: 09/05/14 10:47

Date Received: 09/05/14 15:30

Lab Sample ID: 660-62676-3

Matrix: Ground Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.8		0.50	0.25	mg/L			09/16/14 17:05	1

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/08/14 10:01	09/11/14 10:22	1
Iron	150	I	200	50	ug/L		09/08/14 10:01	09/11/14 10:22	1
Sodium	17		0.50	0.31	mg/L		09/08/14 10:01	09/11/14 10:22	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.51		0.050	0.026	mg/L			09/15/14 15:39	1
Total Dissolved Solids	210		10	10	mg/L			09/09/14 06:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.31				SU			09/05/14 10:47	1
Field Temperature	23.62				Degrees C			09/05/14 10:47	1
Oxygen, Dissolved	0.37				mg/L			09/05/14 10:47	1
Specific Conductance	578				uS/cm			09/05/14 10:47	1
Turbidity	1.02				NTU			09/05/14 10:47	1

TestAmerica Tampa

Client Sample Results

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: TH-76

Date Collected: 09/05/14 12:01

Date Received: 09/05/14 15:30

Lab Sample ID: 660-62676-4

Matrix: Ground Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		0.50	0.25	mg/L			09/16/14 18:22	1

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/08/14 10:01	09/11/14 10:53	1
Iron	610		200	50	ug/L		09/08/14 10:01	09/11/14 10:53	1
Sodium	20		0.50	0.31	mg/L		09/08/14 10:01	09/11/14 10:53	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.72		0.050	0.026	mg/L			09/15/14 15:39	1
Total Dissolved Solids	240		10	10	mg/L			09/09/14 06:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.28				SU			09/05/14 12:01	1
Field Temperature	22.92				Degrees C			09/05/14 12:01	1
Oxygen, Dissolved	0.20				mg/L			09/05/14 12:01	1
Specific Conductance	596				uS/cm			09/05/14 12:01	1
Turbidity	19.00				NTU			09/05/14 12:01	1

TestAmerica Tampa

Client Sample Results

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: TH-78

Date Collected: 09/05/14 13:16

Date Received: 09/05/14 15:30

Lab Sample ID: 660-62676-5

Matrix: Ground Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36		0.50	0.25	mg/L			09/16/14 18:38	1

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/08/14 10:01	09/11/14 10:56	1
Iron	270		200	50	ug/L		09/08/14 10:01	09/11/14 10:56	1
Sodium	35		0.50	0.31	mg/L		09/08/14 10:01	09/11/14 10:56	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.40		0.050	0.026	mg/L			09/15/14 15:39	1
Total Dissolved Solids	270		10	10	mg/L			09/09/14 06:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.18				SU			09/05/14 13:16	1
Field Temperature	23.46				Degrees C			09/05/14 13:16	1
Oxygen, Dissolved	0.15				mg/L			09/05/14 13:16	1
Specific Conductance	680				uS/cm			09/05/14 13:16	1
Turbidity	3.86				NTU			09/05/14 13:16	1

TestAmerica Tampa

Client Sample Results

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: TH-72

Date Collected: 09/05/14 14:23

Date Received: 09/05/14 15:30

Lab Sample ID: 660-62676-6

Matrix: Ground Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	510		10	5.0	mg/L			09/16/14 18:53	20

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/08/14 10:01	09/11/14 11:00	1
Iron	650		200	50	ug/L		09/08/14 10:01	09/11/14 11:00	1
Sodium	210		0.50	0.31	mg/L		09/08/14 10:01	09/11/14 11:00	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	20		1.0	0.52	mg/L			09/15/14 15:47	20
Total Dissolved Solids	1400		25	25	mg/L			09/09/14 06:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.74				SU			09/05/14 14:23	1
Field Temperature	23.61				Degrees C			09/05/14 14:23	1
Oxygen, Dissolved	0.46				mg/L			09/05/14 14:23	1
Specific Conductance	3156				uS/cm			09/05/14 14:23	1
Turbidity	1.96				NTU			09/05/14 14:23	1

TestAmerica Tampa

QC Sample Results

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

TestAmerica Job ID: 660-62676-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-349141/5

Matrix: Water

Analysis Batch: 349141

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			09/16/14 10:56	1

Lab Sample ID: LCS 680-349141/6

Matrix: Water

Analysis Batch: 349141

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-349141/7

Matrix: Water

Analysis Batch: 349141

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.2		mg/L		102	90 - 110	0	30

Lab Sample ID: 660-62766-E-8 MS

Matrix: Water

Analysis Batch: 349141

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	16		10.0	26.2		mg/L		98	80 - 120

Lab Sample ID: 660-62766-E-8 MSD

Matrix: Water

Analysis Batch: 349141

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	16		10.0	26.1		mg/L		98	80 - 120	0	30

Lab Sample ID: MB 680-349230/31

Matrix: Water

Analysis Batch: 349230

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.25	U	0.50	0.25	mg/L			09/16/14 17:36	1

Lab Sample ID: LCS 680-349230/32

Matrix: Water

Analysis Batch: 349230

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 680-349230/33

Matrix: Water

Analysis Batch: 349230

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	10.1		mg/L		101	90 - 110	0	30

TestAmerica Tampa

QC Sample Results

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

TestAmerica Job ID: 660-62676-1

Lab Sample ID: 660-62676-6 MS
Matrix: Ground Water
Analysis Batch: 349230

Client Sample ID: TH-72
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	510		200	720		mg/L		105	80 - 120

Lab Sample ID: 660-62676-6 MSD
Matrix: Ground Water
Analysis Batch: 349230

Client Sample ID: TH-72
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	510		200	733		mg/L		112	80 - 120	2	30

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-151373/1-A
Matrix: Water
Analysis Batch: 151466

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 151373

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/08/14 10:01	09/11/14 10:12	1
Iron	50	U	200	50	ug/L		09/08/14 10:01	09/11/14 10:12	1
Sodium	0.31	U	0.50	0.31	mg/L		09/08/14 10:01	09/11/14 10:12	1

Lab Sample ID: LCS 660-151373/2-A
Matrix: Water
Analysis Batch: 151466

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 151373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1050		ug/L		105	80 - 120
Iron	1000	1030		ug/L		103	80 - 120
Sodium	10.0	9.91		mg/L		99	80 - 120

Lab Sample ID: 660-62676-3 MS
Matrix: Ground Water
Analysis Batch: 151466

Client Sample ID: TH-77
Prep Type: Total Recoverable
Prep Batch: 151373

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.0	U	1000	1060		ug/L		106	80 - 120
Iron	150	I	1000	1190		ug/L		104	80 - 120
Sodium	17		10.0	27.2		mg/L		106	80 - 120

Lab Sample ID: 660-62676-3 MSD
Matrix: Ground Water
Analysis Batch: 151466

Client Sample ID: TH-77
Prep Type: Total Recoverable
Prep Batch: 151373

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	1070		ug/L		107	80 - 120	1	20
Iron	150	I	1000	1200		ug/L		105	80 - 120	1	20
Sodium	17		10.0	27.3		mg/L		108	80 - 120	0	20

TestAmerica Tampa

QC Sample Results

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

TestAmerica Job ID: 660-62676-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-349021/2

Matrix: Water

Analysis Batch: 349021

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.026	U	0.050	0.026	mg/L			09/15/14 15:39	1

Lab Sample ID: LCS 680-349021/1

Matrix: Water

Analysis Batch: 349021

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	1.00	1.03		mg/L		103	90 - 110

Lab Sample ID: 660-62676-3 MS

Matrix: Ground Water

Analysis Batch: 349021

Client Sample ID: TH-77

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.51		1.00	1.58		mg/L		107	90 - 110

Lab Sample ID: 660-62676-3 MSD

Matrix: Ground Water

Analysis Batch: 349021

Client Sample ID: TH-77

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.51		1.00	1.58		mg/L		107	90 - 110	0	30

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

Lab Sample ID: MB 660-151385/1

Matrix: Water

Analysis Batch: 151385

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			09/09/14 06:35	1

Lab Sample ID: LCS 660-151385/2

Matrix: Water

Analysis Batch: 151385

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	10000	9850		mg/L		99	80 - 120

Lab Sample ID: 660-62676-5 DU

Matrix: Ground Water

Analysis Batch: 151385

Client Sample ID: TH-78

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	270		272		mg/L		1	20

TestAmerica Tampa

QC Association Summary

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

TestAmerica Job ID: 660-62676-1

HPLC/IC

Analysis Batch: 349141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-62676-1	DUPLICATE NOT BLANK	Total/NA	Ground Water	300.0	
660-62676-2	BLANK FIELD	Total/NA	Ground Water	300.0	
660-62676-3	TH-77	Total/NA	Ground Water	300.0	
660-62766-E-8 MS	Matrix Spike	Total/NA	Water	300.0	
660-62766-E-8 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 680-349141/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-349141/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-349141/5	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 349230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-62676-4	TH-76	Total/NA	Ground Water	300.0	
660-62676-5	TH-78	Total/NA	Ground Water	300.0	
660-62676-6	TH-72	Total/NA	Ground Water	300.0	
660-62676-6 MS	TH-72	Total/NA	Ground Water	300.0	
660-62676-6 MSD	TH-72	Total/NA	Ground Water	300.0	
LCS 680-349230/32	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-349230/33	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-349230/31	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 151373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-62676-1	DUPLICATE NOT BLANK	Total Recoverable	Ground Water	3005A	
660-62676-2	BLANK FIELD	Total Recoverable	Ground Water	3005A	
660-62676-3	TH-77	Total Recoverable	Ground Water	3005A	
660-62676-3 MS	TH-77	Total Recoverable	Ground Water	3005A	
660-62676-3 MSD	TH-77	Total Recoverable	Ground Water	3005A	
660-62676-4	TH-76	Total Recoverable	Ground Water	3005A	
660-62676-5	TH-78	Total Recoverable	Ground Water	3005A	
660-62676-6	TH-72	Total Recoverable	Ground Water	3005A	
LCS 660-151373/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-151373/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 151466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-62676-1	DUPLICATE NOT BLANK	Total Recoverable	Ground Water	6010B	151373
660-62676-2	BLANK FIELD	Total Recoverable	Ground Water	6010B	151373
660-62676-3	TH-77	Total Recoverable	Ground Water	6010B	151373
660-62676-3 MS	TH-77	Total Recoverable	Ground Water	6010B	151373
660-62676-3 MSD	TH-77	Total Recoverable	Ground Water	6010B	151373
660-62676-4	TH-76	Total Recoverable	Ground Water	6010B	151373
660-62676-5	TH-78	Total Recoverable	Ground Water	6010B	151373
660-62676-6	TH-72	Total Recoverable	Ground Water	6010B	151373
LCS 660-151373/2-A	Lab Control Sample	Total Recoverable	Water	6010B	151373
MB 660-151373/1-A	Method Blank	Total Recoverable	Water	6010B	151373

TestAmerica Tampa

QC Association Summary

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

TestAmerica Job ID: 660-62676-1

General Chemistry

Analysis Batch: 151385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-62676-1	DUPLICATE NOT BLANK	Total/NA	Ground Water	SM 2540C	
660-62676-2	BLANK FIELD	Total/NA	Ground Water	SM 2540C	
660-62676-3	TH-77	Total/NA	Ground Water	SM 2540C	
660-62676-4	TH-76	Total/NA	Ground Water	SM 2540C	
660-62676-5	TH-78	Total/NA	Ground Water	SM 2540C	
660-62676-5 DU	TH-78	Total/NA	Ground Water	SM 2540C	
660-62676-6	TH-72	Total/NA	Ground Water	SM 2540C	
LCS 660-151385/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-151385/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 349021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-62676-1	DUPLICATE NOT BLANK	Total/NA	Ground Water	350.1	
660-62676-2	BLANK FIELD	Total/NA	Ground Water	350.1	
660-62676-3	TH-77	Total/NA	Ground Water	350.1	
660-62676-3 MS	TH-77	Total/NA	Ground Water	350.1	
660-62676-3 MSD	TH-77	Total/NA	Ground Water	350.1	
660-62676-4	TH-76	Total/NA	Ground Water	350.1	
660-62676-5	TH-78	Total/NA	Ground Water	350.1	
660-62676-6	TH-72	Total/NA	Ground Water	350.1	
LCS 680-349021/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-349021/2	Method Blank	Total/NA	Water	350.1	

Field Service / Mobile Lab

Analysis Batch: 151428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-62676-3	TH-77	Total/NA	Ground Water	Field Sampling	
660-62676-4	TH-76	Total/NA	Ground Water	Field Sampling	
660-62676-5	TH-78	Total/NA	Ground Water	Field Sampling	
660-62676-6	TH-72	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: DUPLICATE NOT BLANK

Lab Sample ID: 660-62676-1

Date Collected: 09/05/14 00:00

Matrix: Ground Water

Date Received: 09/05/14 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	349141	09/16/14 16:34	DAS	TAL SAV
Total Recoverable	Prep	3005A			151373	09/08/14 10:01	GH1	TAL TAM
Total Recoverable	Analysis	6010B		1	151466	09/11/14 10:34	GAF	TAL TAM
Total/NA	Analysis	350.1		1	349021	09/15/14 15:39	JME	TAL SAV
Total/NA	Analysis	SM 2540C		1	151385	09/09/14 06:35	TKO	TAL TAM

Client Sample ID: BLANK FIELD

Lab Sample ID: 660-62676-2

Date Collected: 09/05/14 10:00

Matrix: Ground Water

Date Received: 09/05/14 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	349141	09/16/14 16:50	DAS	TAL SAV
Total Recoverable	Prep	3005A			151373	09/08/14 10:01	GH1	TAL TAM
Total Recoverable	Analysis	6010B		1	151466	09/11/14 10:50	GAF	TAL TAM
Total/NA	Analysis	350.1		1	349021	09/15/14 16:28	JME	TAL SAV
Total/NA	Analysis	SM 2540C		1	151385	09/09/14 06:35	TKO	TAL TAM

Client Sample ID: TH-77

Lab Sample ID: 660-62676-3

Date Collected: 09/05/14 10:47

Matrix: Ground Water

Date Received: 09/05/14 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	349141	09/16/14 17:05	DAS	TAL SAV
Total Recoverable	Prep	3005A			151373	09/08/14 10:01	GH1	TAL TAM
Total Recoverable	Analysis	6010B		1	151466	09/11/14 10:22	GAF	TAL TAM
Total/NA	Analysis	350.1		1	349021	09/15/14 15:39	JME	TAL SAV
Total/NA	Analysis	SM 2540C		1	151385	09/09/14 06:35	TKO	TAL TAM
Total/NA	Analysis	Field Sampling		1	151428	09/05/14 10:47	FS	TAL TAM

Client Sample ID: TH-76

Lab Sample ID: 660-62676-4

Date Collected: 09/05/14 12:01

Matrix: Ground Water

Date Received: 09/05/14 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	349230	09/16/14 18:22	DAS	TAL SAV
Total Recoverable	Prep	3005A			151373	09/08/14 10:01	GH1	TAL TAM
Total Recoverable	Analysis	6010B		1	151466	09/11/14 10:53	GAF	TAL TAM
Total/NA	Analysis	350.1		1	349021	09/15/14 15:39	JME	TAL SAV
Total/NA	Analysis	SM 2540C		1	151385	09/09/14 06:35	TKO	TAL TAM
Total/NA	Analysis	Field Sampling		1	151428	09/05/14 12:01	FS	TAL TAM

TestAmerica Tampa

Lab Chronicle

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

TestAmerica Job ID: 660-62676-1

Client Sample ID: TH-78

Date Collected: 09/05/14 13:16

Date Received: 09/05/14 15:30

Lab Sample ID: 660-62676-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	349230	09/16/14 18:38	DAS	TAL SAV
Total Recoverable	Prep	3005A			151373	09/08/14 10:01	GH1	TAL TAM
Total Recoverable	Analysis	6010B		1	151466	09/11/14 10:56	GAF	TAL TAM
Total/NA	Analysis	350.1		1	349021	09/15/14 15:39	JME	TAL SAV
Total/NA	Analysis	SM 2540C		1	151385	09/09/14 06:35	TKO	TAL TAM
Total/NA	Analysis	Field Sampling		1	151428	09/05/14 13:16	FS	TAL TAM

Client Sample ID: TH-72

Date Collected: 09/05/14 14:23

Date Received: 09/05/14 15:30

Lab Sample ID: 660-62676-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		20	349230	09/16/14 18:53	DAS	TAL SAV
Total Recoverable	Prep	3005A			151373	09/08/14 10:01	GH1	TAL TAM
Total Recoverable	Analysis	6010B		1	151466	09/11/14 11:00	GAF	TAL TAM
Total/NA	Analysis	350.1		20	349021	09/15/14 15:47	JME	TAL SAV
Total/NA	Analysis	SM 2540C		1	151385	09/09/14 06:35	TKO	TAL TAM
Total/NA	Analysis	Field Sampling		1	151428	09/05/14 14:23	FS	TAL TAM

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

Method Summary

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

TestAmerica Job ID: 660-62676-1

Method	Method Description	Protocol	Laboratory
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 References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

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

Certification Summary

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

TestAmerica Job ID: 660-62676-1

Laboratory: TestAmerica Tampa

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E84282	06-30-15

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-15
A2LA	ISO/IEC 17025		399.01	02-28-15
Alabama	State Program	4	41450	06-30-15
Arkansas DEQ	State Program	6	88-0692	01-31-15
California	NELAP	9	3217CA	07-31-14 *
Colorado	State Program	8	N/A	12-31-14
Connecticut	State Program	1	PH-0161	03-31-15
Florida	NELAP	4	E87052	06-30-15
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	N/A	06-30-15
Georgia	State Program	4	803	06-30-15
Guam	State Program	9	09-005r	04-16-15
Hawaii	State Program	9	N/A	06-30-15
Illinois	NELAP	5	200022	11-30-14
Indiana	State Program	5	N/A	06-30-15
Iowa	State Program	7	353	07-01-15
Kentucky (DW)	State Program	4	90084	12-31-14
Kentucky (UST)	State Program	4	18	06-30-15
Louisiana	NELAP	6	30690	06-30-14 *
Louisiana (DW)	NELAP	6	LA140023	12-31-14
Maine	State Program	1	GA00006	08-16-14 *
Maryland	State Program	3	250	12-31-14
Massachusetts	State Program	1	M-GA006	06-30-15
Michigan	State Program	5	9925	06-30-15
Mississippi	State Program	4	N/A	06-30-15
Montana	State Program	8	CERT0081	01-01-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-15
New Jersey	NELAP	2	GA769	06-30-15
New Mexico	State Program	6	N/A	06-30-15
New York	NELAP	2	10842	03-31-15
North Carolina (DW)	State Program	4	13701	07-31-15
North Carolina (WW/SW)	State Program	4	269	12-31-14
Oklahoma	State Program	6	9984	08-31-15
Pennsylvania	NELAP	3	68-00474	06-30-15
Puerto Rico	State Program	2	GA00006	12-31-14
South Carolina	State Program	4	98001	06-30-14 *
Tennessee	State Program	4	TN02961	06-30-15
Texas	NELAP	6	T104704185-08-TX	11-30-14
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-15
Washington	State Program	10	C805	06-10-15
West Virginia (DW)	State Program	3	9950C	12-31-14
West Virginia DEP	State Program	3	94	06-30-15

* Certification renewal pending - certification considered valid.

TestAmerica Tampa

Certification Summary

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

TestAmerica Job ID: 660-62676-1

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
Wisconsin	State Program	5	999819810	08-31-15
Wyoming	State Program	8	8TMS-L	06-30-15

[illegible]

PURGING DATA

SAMPLING DATA

SEE C.O.C. FOR SAMPLE ANALYSIS

DBP =Dedicated Bladder Pump

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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

Revision Date: February 2009

PURGING DATA

SAMPLING DATA

SEE C.O.C. FOR SAMPLE ANALYSIS

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

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

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

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~~9/19/2014~~

Form FD 9000-24
GROUNDWATER SAMPLING LOG

PURGING DATA

SAMPLING DATA

SEE C.O.C. FOR SAMPLE ANALYSIS

DBP= Dedicated bladder pump

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump;
RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

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

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

9/19/2014

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: Southeast County landfill IAMP	SITE LOCATION: Lithia, FL	
WELL NO: Duplicate	SAMPLE ID: Duplicate	DATE: 9-5-14

PURGING DATA

WELL DIAMETER (inches): N/A	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: N/A
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: N/A	PURGING ENDED AT: N/A	TOTAL VOLUME PURGED (gallons): N/A

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
DUPLICATE											

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.66; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0028; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump, O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: ANDREW BALLOON / ZACK PATTERSON				SAMPLER(S) SIGNATURE(S):				SAMPLING INITIATED AT: N/A		SAMPLING ENDED AT: N/A	
PUMP OR TUBING DEPTH IN WELL (feet): N/A				TUBING MATERIAL CODE: T		FIELD-FILTERED: Y ☒ N ☐ Filtration Equipment Type:			FILTER SIZE: _____ μm		
FIELD DECONTAMINATION: PUMP Y ☒ N ☐ Dedicated				TUBING Y ☒ N ☐ Dedicated		DUPLICATE: Y ☐ N ☒					

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL. ADDED IN FIELD (mL)	FINAL pH			
SEE COC FOR ANALYSIS									

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPF = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

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

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

Revision Date: February 2009

Form FD 9000-24
GROUNDWATER SAMPLING LOG

SITE NAME: <u>Southeast County Landfill JAMP</u>	SITE LOCATION: <u>Lithia, FL</u>
WELL NO: <u>FIELD BLANK</u>	SAMPLE ID: <u>FIELD BLANK</u> DATE: <u>9-5-14</u>

PURGING DATA

WELL DIAMETER (inches): <u>N/A</u>	TUBING DIAMETER (inches): <u>N/A</u>	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): <u>N/A</u>	PURGE PUMP TYPE OR BAILER: <u>N/A</u>
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): <u>N/A</u>	FINAL PUMP OR TUBING DEPTH IN WELL (feet): <u>N/A</u>	PURGING INITIATED AT: <u>N/A</u>	PURGING ENDED AT: <u>N/A</u>	TOTAL VOLUME PURGED (gallons): <u>N/A</u>

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) μmhos/cm or μS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
FIELD BLANK											

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer, BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: <u>ANDREW BALLOON / ZACK PATTERSON</u>				SAMPLER(S) SIGNATURE: <u>[Signature]</u>				SAMPLING INITIATED AT: <u>10:00</u>		SAMPLING ENDED AT: <u>10:05</u>	
PUMP OR TUBING DEPTH IN WELL (feet): <u>N/A</u>				TUBING MATERIAL CODE: <u>T</u>		FIELD-FILTERED: Y <u>(N)</u> FILTER SIZE: ____ μm			Filtration Equipment Type: _____		
FIELD DECONTAMINATION: <u>PUMP</u> Y <u>N</u> Dedicated				TUBING Y <u>N</u> Dedicated				DUPLICATE: Y <u>(N)</u>			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml. per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

SEE COC FOR ANALYSIS ↗

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
 2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
 pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 2009

Chain of Custody Record

Client Information (Sub Contract Lab) Client Contact: _____ Shipping/Receiving: _____ Company: TestAmerica Laboratories, Inc. Address: 5102 LaRoche Avenue, City: Savannah State, Zip: GA, 31404 Phone: 912-354-7858(Tel) 912-352-0165(Fax) Email: _____ Project Name: SELF MWs, SS Private Wells, NPDES Site: Southeast Landfill		Sampler: _____ Lab PM: Robertson, Nancy E-Mail: nancy.robertson@testamericainc.com Phone: _____ Carrier Tracking No(s): 660-71682.1 Page: Page 1 of 1 Job #: 660-62676-1							
Due Date Requested: 9/17/2014 TAT Requested (days): _____ PO #: _____ WO #: _____ Project #: 66003915 SSOW#: _____		Analysis Requested Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2SO4 E - NaHCO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other: _____							
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	300 ORGFM, 280 Chloride	350, 1 Nitrogen, Ammonia	Total Number of Containers	Special Instructions/Note:
DUPLICATE NOT BLANK (660-62676-1)	9/5/14	Eastern	Water	Water		X	X	2	
BLANK FIELD (660-62676-2)	9/5/14	10:00 Eastern	Water	Water		X	X	2	
TH-77 (660-62676-3)	9/5/14	10:47 Eastern	Water	Water		X	X	2	
TH-76 (660-62676-4)	9/5/14	12:01 Eastern	Water	Water		X	X	2	
TH-78 (660-62676-5)	9/5/14	13:16 Eastern	Water	Water		X	X	2	
TH-72 (660-62676-6)	9/5/14	14:23 Eastern	Water	Water		X	X	2	
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months									
Special Instructions/QC Requirements: _____									
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Date: 9/05/14 1700 Date/Time: 9/05/14 1700 Date/Time: _____ Date/Time: _____		Method of Shipment: _____ Received by: _____ Received by: _____ Received by: _____		Date/Time: 09/06/14 0939 Date/Time: _____ Date/Time: _____		Company: TAS Company: _____ Company: _____	
Custody Seals Intact Δ Yes Δ No		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: _____		Date: 09/05/14		Signature: _____	

Login Sample Receipt Checklist

Client: Hillsborough Co Public Utilities Dept

Job Number: 660-62676-1

Login Number: 62676

List Source: TestAmerica Tampa

List Number: 1

Creator: Conner, Keaton

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Hillsborough Co Public Utilities Dept

Job Number: 660-62676-1

Login Number: 62676

List Number: 2

Creator: Etheridge, Jora M

List Source: TestAmerica Savannah

List Creation: 09/15/14 12:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	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	

