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May 20, 2013

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. 31 – March 2013**

Dear Mr. Morris:

The Hillsborough County Public Utilities Department (County) is pleased to provide the analytical results from the monthly 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 in Phase VI of the Southeast County Landfill (SCLF), which was discovered on December 14, 2010. These sampling activities were conducted on March 7- 8, 2013, and the samples collected were analyzed by our contracted laboratory, Test America, Inc.

Representative samples were collected from eleven (11) on-site groundwater monitoring wells and two (2) on-site limited use potable supply wells. Samples collected from the groundwater monitoring wells and the on-site supply wells were analyzed for total dissolved solids (TDS), chloride, total ammonia, arsenic, iron, sodium, and five (5) field parameters. The following paragraphs summarize the parameter specific results pertinent to the evaluation of potential water quality impacts from the sinkhole at the SCLF.

pH

The surficial aquifer monitoring wells continue to exhibit pH values below the Secondary Drinking Water Standard (SDWS) acceptable range of 6.5 to 8.5 pH units. The pH values in the surficial range from 4.35 to 5.60 pH units. The pH values within the surficial aquifer across the SCLF have historically been observed below the acceptable range, and the observed values are consistent with the historical and background water qualities. The pH values observed in each of the four (4) upper Floridan groundwater monitoring wells and the two (2) supply wells were within the acceptable range, and consistent with historical data for the site.

Turbidity

Turbidity values are generally low in the monitoring wells that have been part of the permit required sampling program at the SCLF. During this sampling event, values ranged from 0.26 to 2.71 Nephelometric Turbidity Units (NTU) in the surficial aquifer wells, and from 0.04 to 7.09 NTU in the upper Floridan wells.

Conductivity

The conductivity values in most of the groundwater monitoring wells sampled are relatively low and have remained consistent with historical values associated with the SCLF. The conductivity values observed in the surficial aquifer ranged from 139 to 591 micromhos per centimeter (umhos/cm). The conductivity values observed in the upper Floridan groundwater monitoring wells at the site are historically low. However, during this sampling event TH-72 continues to exhibit an elevated conductivity value of 1,234 uhmos/cm.

Total Dissolved Solids (TDS)

The TDS values observed in the surficial aquifer groundwater monitoring wells were all observed below the SDWS of 500 mg/l. The TDS observed in TH-72 was above the SDWS at 770 mg/l.

Chloride

Chloride values in the surficial aquifer groundwater monitoring wells ranged in concentration from 24 to 170 mg/l, which are all below the SDWS of 250 mg/l. The chloride value observed in TH-72 continued to be elevated this month with a result of 290 mg/l. Chloride values are historically very low in the upper Floridan aquifer monitoring wells and limited use potable supply wells.

Sodium

Sodium values in the surficial aquifer groundwater monitoring wells ranged in concentration from 11 to 35 mg/l, which are all below the PDWS of 160 mg/l. The sodium value observed in TH-72 was 110 mg/l, which was also below the PDWS.

Arsenic

The arsenic observed in TH-58 during this sampling event was 0.024 mg/l, which is above the Primary Drinking Water Standard (PDWS) of 0.01 mg/l. Arsenic has been present in TH-58 at almost the same concentration for well over ten years. Although significant changes in water quality were observed in TH-58 shortly after formation of the sinkhole, the arsenic values continued to remain very stable. This observation continues to support the position that the arsenic is not attributable to the landfill or the sinkhole, and is likely naturally occurring within the soils surrounding the well. Arsenic is potentially being mobilized in the anaerobic environment below the lined landfill.

Iron

Total iron concentrations in the seven (7) surficial aquifer wells were all observed above the SDWS of 0.3 mg/l. The elevated iron concentrations observed in the surficial aquifer wells at specific locations across the site are consistent with background water quality, and are likely naturally occurring and/or the result of past strip mining activities. The concentrations of iron in the upper Floridan wells were below the SDWS, except in TH-72, which exhibited a concentration of 1.1 mg/l, respectively.

Total Ammonia

The upper Floridan well TH-72 continues to exhibit ammonia above the GCTL of 2.8 mg/l at a concentration of 11 mg/l. In addition, surficial aquifer groundwater monitoring wells TH-28A and TH-74 also exhibited ammonia slightly above the GCTL, both with a concentration of 3 ug/l. The source of the ammonia observed in the groundwater in the immediate vicinity of the sinkhole is likely attributable to groundwater migrating downward through waste in the sinkhole and the fluids associated with the grout materials introduced into the subsurface to stabilize the area.

Groundwater Elevations and Direction of Flow

The County has collected monthly groundwater and surface water elevation data at sixty-three (63) points across the site, including twenty eight (28) surficial aquifer wells, five (5) upper Floridan (limestone) aquifer wells, twenty three (23) piezometers, and seven (7) surface water sites. The elevation data is collected the day before the IAMP sampling event, which was March 6, 2013. However, piezometer P-5D was observed to be filled with soil approximately 15.6 feet below the top of casing (ft btoc). It appears that this piezometer has structurally failed and the County would request from the Department to properly abandon this monitoring point.

No significant changes to the patterns of flow in the surficial aquifer were noted in the March data set and the diagram is consistent with the observations over the 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, which would not be unexpected. However, the overall direction of flow remains toward the west/northwest across the site.

Conclusions

The water quality observed in the March 2013 sampling event continues to indicate the wells closest to the sinkhole exhibit changes in water quality. Based on the proximity of the wells and the trends observed, it is apparent that these impacts are likely attributable to the waste within the sinkhole and the fluids introduced during the grouting activities.

The impacts observed in the upper Floridan aquifer monitoring well, TH-72, continue to exhibit elevated concentrations of conductivity, TDS, chloride, ammonia, iron and sodium. These changes in water quality indicate that the sinkhole is providing a downward conduit for contaminants. These impacts were not unexpected within the upper Floridan / Limestone aquifer.

Recommendations

As agreed during our discussions with the FDEP Southwest District, the County has installed two additional upper Floridan / Limestone aquifer monitoring wells in the down gradient direction in order to evaluate the potential horizontal extent of the impacts observed in TH-72. The location of these wells is approximately 200-300 feet west/southwest of the sinkhole and TH-72. The two new wells are designated as TH-76 and TH-77, and a well completion report with a revised IAMP location map will be provided for your review once completed.

Furthermore, The Department granted approval to the County via email on May 1, 2013 for the proposed changes in the monitoring program beginning with the May 2013 sampling event. Upper Floridan monitoring wells TH-72, TH-76, and TH-77 will continue to be monitored on a monthly schedule, and surficial aquifer monitoring wells, TH-73, TH-74, and TH-75 will be monitored on a quarterly schedule.

The County conducted the quarterly sampling event for the six (6) wells on May 2, 2013. The June and July sampling events will only include the three upper Floridan wells. As requested by the Department, reporting of each monthly data set will be submitted to the Department by the end of the following month.

Enclosed for your review please find a site location map depicting the wells sampled, the water quality data summary table for the March 2013 sampling event, a groundwater elevation data table, a groundwater contour and flow diagram, the historical data tables for each well sampled with data from December 2010 through February 2013, and the complete analytical data report from our contracted laboratory, Test America, Inc.

Mr. John Morris, P.G.
May 20, 2013
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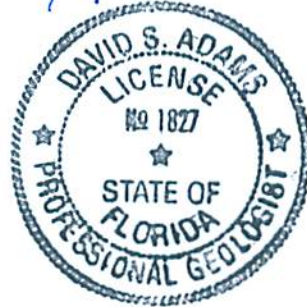
Should you have any questions or require any additional information please feel free to call me at (813) 663-3221.

Respectfully submitted,

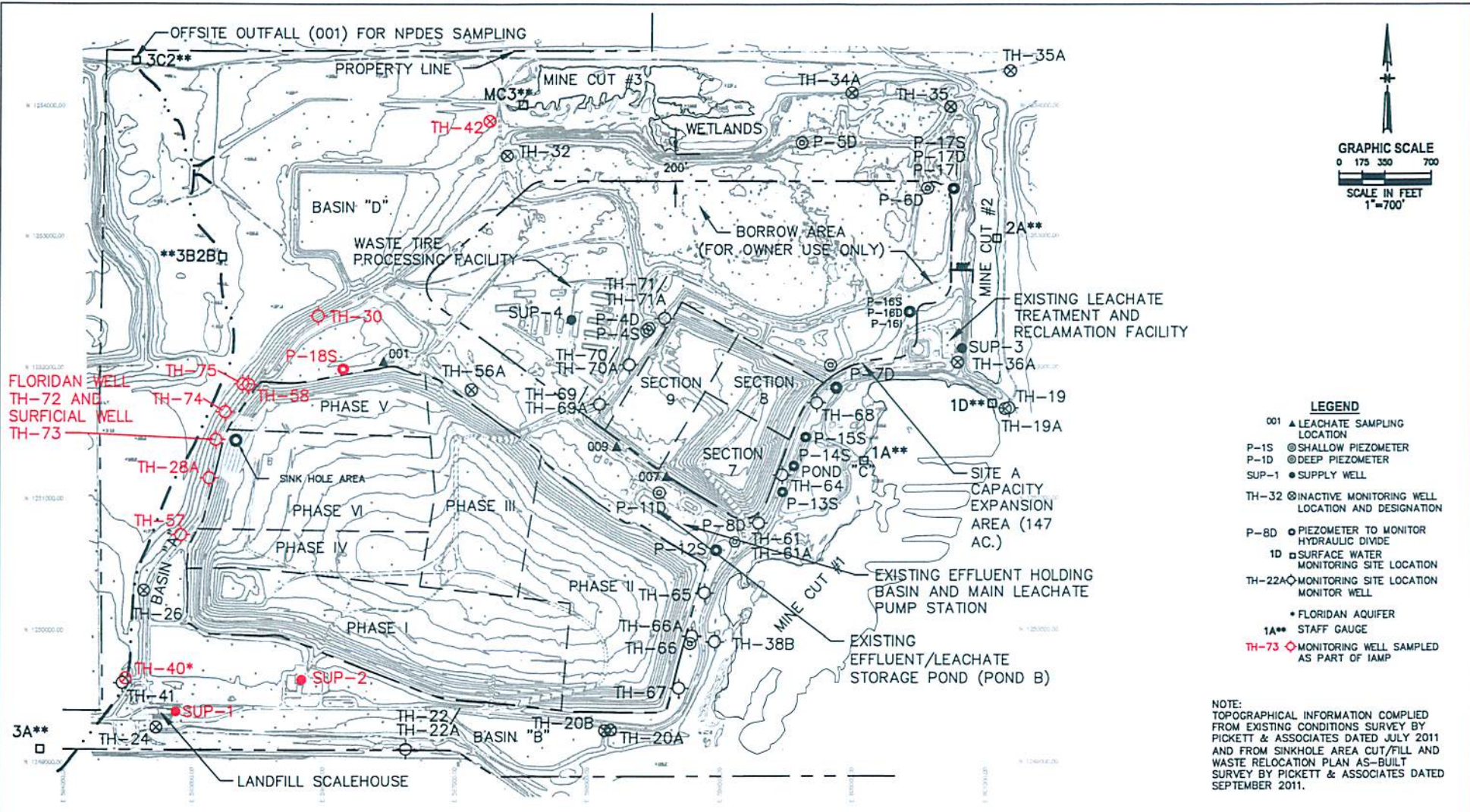


5/20/2013

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



xc: John Lyons, Director, Public Utilities Department
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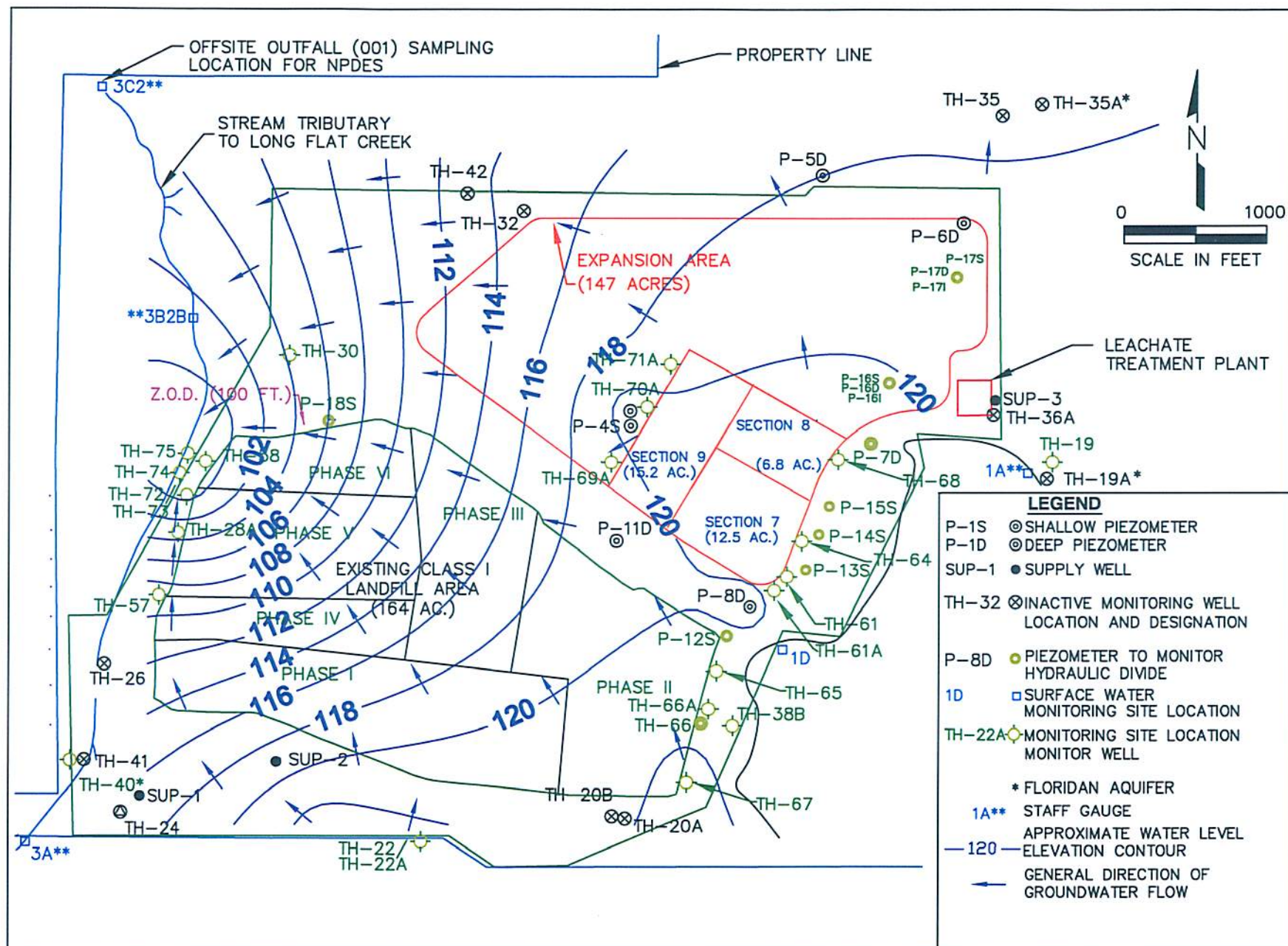
March 7-8, 2013

Note: Ref. Groundwater Guidance Concentrations, FDEP 2012	
MCL=MAXIMUM CONTAMINANT LEVEL	
BDL=BELOW DETECTION LIMIT	
NTU=NEPHELOMETRIC TURBIDITY UNITS	
u = parameter was analyzed but not detected.	
*=DENOTES PRIMARY DRINKING WATER STANDARD	
**=DENOTES SECONDARY DRINKING WATER STANDARD	
***=DENOTES FLORIDA GUIDANCE CONCENTRATION	
4.98	EXCEEDS STANDARD
ug/l=MICROGRAMS PER LITER	
mg/l=MILLIGRAMS PER LITER	
NS=NO STANDARD	

GROUNDWATER AND SURFACE WATER ELEVATIONS FOR SOUTHEAST LANDFILL

March 6, 2013

Measuring Point I.D.	T.O.C. Elevations (NGVD)	03/06/2013 W.L. B.T.O.C.	W.L. (NGVD)	Time
P-4D	140.78	22.60	118.18	11:09 AM
P-4S	140.95	10.09	130.86	11:11 AM
P-5D	151.94	ND	ND	10:38 AM
P-6D-A	148.01	28.54	119.47	10:46 AM
P-7D	138.92	18.43	120.49	12:12 PM
P-8D	138.34	18.65	119.69	11:24 AM
P-11D	138.02	18.12	119.90	11:22 AM
P-12S	134.97	14.91	120.06	11:26 AM
P-13S	140.21	20.09	120.12	11:58 AM
P-14S	138.56	18.49	120.07	12:02 PM
P-15S	139.19	19.15	120.04	12:04 PM
P-16S	143.38	16.55	126.83	10:17 AM
P-16I	144.15	24.58	119.57	10:19 AM
P-16D	143.84	24.31	119.53	10:20 AM
P-17S	137.35	16.89	120.46	10:25 AM
P-17I	137.32	17.80	119.52	10:26 AM
P-17D	137.22	17.78	119.44	10:27 AM
P-18S	129.86	18.85	111.01	9:38 AM
P-19	133.36	15.07	118.29	10:43 AM
P-20	132.38	13.75	118.63	10:51 AM
P-21	122.79	4.71	118.08	11:01 AM
P-22	128.35	9.99	118.36	11:03 AM
P-23	143.13	24.31	118.82	10:57 AM
TH-19*	130.27	110.12	20.15	10:10 AM
TH-20A	131.86	10.13	121.73	11:49 AM
TH-20B	132.57	11.12	121.45	11:47 AM
TH-22	128.82	5.78	123.04	8:55 AM
TH-22A	129.27	6.40	122.87	8:54 AM
TH-24A	128.23	5.98	122.25	8:59 AM
TH-28A	131.10	28.81	102.29	9:24 AM
TH-30	128.88	24.16	104.72	9:33 AM
TH-32	129.90	15.46	114.44	9:58 AM
TH-35	145.98	28.95	117.03	10:34 AM
TH-36A	152.70	33.21	119.49	10:14 AM
TH-38A	130.68	10.60	120.08	11:51 AM
TH-38B	131.81	11.39	120.42	11:52 AM
TH-40*	124.99	105.39	19.60	9:05 AM
TH-41*	125.00	110.46	14.54	9:03 AM
TH-42*	116.74	83.23	33.51	10:00 AM
TH-57	128.36	19.53	108.83	9:10 AM
TH-58	127.88	28.41	99.47	9:31 AM
TH-61	138.73	18.11	120.62	11:55 AM
TH-61A	139.45	18.75	120.70	11:56 AM
TH-64	139.64	18.63	121.01	11:59 AM
TH-65	135.40	15.04	120.36	11:35 AM
TH-66	130.58	9.76	120.82	11:42 AM
TH-66A	130.66	10.22	120.44	11:40 AM
TH-67	129.51	7.19	122.32	11:44 AM
TH-68	140.01	19.88	120.13	12:09 PM
TH-69A	144.97	25.89	119.08	11:18 AM
TH-70A	146.63	25.24	121.39	11:15 AM
TH-71A	146.95	27.79	119.16	11:07 AM
TH-72	130.96	110.00	20.96	9:28 AM
TH-73	131.07	32.41	98.66	9:26 AM
TH-74	109.08	10.23	98.85	9:15 AM
TH-75	106.92	8.04	98.88	9:17 AM
SW-3A	3.0'=125.53'	0.08	122.61	8:50 AM
SW-3B2B	3.0'=97.97'	1.40	96.37	9:43 AM
SW-3C2	6.0'=92.33'	1.08	87.41	9:47 AM
Mine Cut #1	4.0'=122.14'	2.26	120.40	12:06 PM
Mine Cut #2	6.0'=123.47'	2.30	119.77	10:06 AM
Mine Cut #3	4.0'=112.27'	2.00	110.27	9:55 AM
Mine Cut #4	5.0'=97.54'	1.46	94.00	9:52 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 W.L. = Water Level				



Southeast County Landfill
Groundwater Elevation Contour Diagram – March 6, 2013

Historical Groundwater Data Tables
December 2010 – February 2013

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-19

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)
12/21/2010	117.30	12.97	392	1.34	7.37	23.2	0.2	250	7.8	0.25	0.0013 u	0.033 u	14
12/28/2010	118.33	11.94	319	0.78	7.4	23.23	0.2	230	7.9	0.23	ND	ND	16
01/04/2011	117.83	12.44	337	0.94	7.33	23.27	0.2	220	8.3	0.27	ND	ND	14
01/13/2011	114.88	15.39	441	0.42	7.41	23.13	0.2	220	8.6	0.24	0.004 u	0.051 i	14
01/20/2011	113.69	16.58	417	0.5	7.36	23.39	0.6	230	8.5	0.28	0.004 u	0.05 u	14
01/27/2011	110.45	19.82	399	0.49	7.51	23.37	0.2	250	8.2	0.23	0.004 u	0.05 u	14
02/03/2011	107.11	23.16	409	0.83	7.49	23.42	0.2	220	8.3	0.22	0.004 u	0.05 u	12
02/10/2011	104.74	25.53	381	0.8	7.56	23.33	0.7	240	8.9	0.29	0.004 u	0.05 u	14
02/14/2011	102.93	27.34	325	0.92	7.58	23.2	0.5	240	8.4	0.25	0.0013 u	0.033 i	15
02/24/2011	104.04	26.23	432	0.82	7.45	23.37	0.6	250	8.3	0.21	0.004 u	0.05 u	14
03/03/2011	105.78	24.49	419	0.35	7.48	23.4	0.1	240	8.3	0.2	0.004 u	0.05 u	14
03/10/2011	107.24	23.03	400	0.33	7.51	23.34	0.2	230	8.1	0.23	0.004 u	0.05 u	13
03/17/2011	106.66	23.61	300	0.29	7.39	23.38	0.3	240	7.8	0.24	0.004 u	0.05 u	14
03/24/2011	107.74	22.53	353	0.35	7.42	23.4	0.2	240	8.4	0.28	0.004 u	0.05 u	14
04/01/2011	109.40	20.87	377	1.3	7.48	23.09	0.2	240	8.8	0.19	0.004 u	0.05 u	14
04/08/2011	106.35	23.92	419	0.39	7.32	23.46	0.3	220	8.2	0.25	0.004 u	0.05 u	14
05/05/2011	110.09	20.18	408	0.5	7.58	23.56	0.1	230	8.2	0.27	0.004 u	0.05 u	14
06/08/2011	113.57	16.70	432	0.8	7.39	23.48	0.56	250	8.4	0.35	0.004 u	0.05 u	14
07/07/2011	108.42	21.85	430	0.37	7.37	23.53	0.33	260	8.1	0.31	0.004 u	0.05 u	14
08/04/2011	99.25	31.02	391	0.3	7.22	23.55	0	250	7.5	0.32	0.004 u	0.05 u	14
09/08/2011	93.66	36.61	397	0.8	7.35	23.47	0.6	220	7.9	0.35	0.004 u	0.05 u	15
10/04/2011	94.58	35.69	335	0.44	7.33	23.46	0.7	210	7.3	0.24	0.004 u	0.05 u	14
11/03/2011	98.51	31.76	393	0.59	7.28	23.35	1.38	220	8	0.28	0.004 u	0.05 u	14
12/08/2011	101.64	28.63	378	0.26	7.3	23.43	0.37	220	7.2	0.26	0.004 u	0.05 u	14
01/05/2012	107.26	23.01	369	0.45	7.29	23.25	0.24	200	8.3	0.25	0.004 u	0.05 u	15
02/10/2012	109.48	20.79	378	0.26	7.5	23.34	0.44	240	8.6	0.23	0.004 u	0.05 u	14
03/07/2012	116.31	13.96	413	0.84	7.25	23.35	0.4	210	8.1	0.19	0.004 u	0.05 u	14
04/05/2012	120.81	9.46	423	0.58	7	23.44	0	190	8.1	0.26	0.004 u	0.05 u	14
05/03/2012	123.35	6.92	402	0.1	6.85	23.46	0	220	8.1	0.48	0.004 u	0.05 u	14
06/07/2012	119.00	11.27	379	2.13	7.21	23.44	0.6	230	8	0.38	0.004 u	0.05 u	14
07/05/2012	104.99	25.28	304	0.63	6.69	23.49	0.42	210	7.9	0.54	0.004 u	0.05 u	14
08/03/2012	97.45	32.82	260	0.26	6.91	23.49	0.58	240	7.9	0.34	0.004 u	0.05 u	14
09/06/2012	90.81	38.97	406	0.23	6.92	23.49	1.21	230	8.4	0.35	0.004 u	0.05 u	14
10/04/2012	89.85	40.42	363	0.33	7.09	23.48	0.39	240	8.1	0.39 j3	0.004 u	0.05 u	13
11/07/2012	98.98	31.29	424	0.35	7.23	23.49	0.63	210	8.1	0.33	0.004 u	0.05 u	14
12/05/2012	101.14	29.13	430	8	7.14	23.47	0.27	190	8.4	0.29 j3	0.004 u	0.05 u	14
01/03/2013	99.93	30.34	435	0.53	7.12	23.43	0.47	220	7.5	0.31	0.004 u	0.05 u	14
02/07/2013	105.15	25.12	424	0.29	7.11	23.45	0.21	210	8.2	0.29	0.004 u	0.05 u	13

ND = NO DATA (Not analyzed)

New survey data beginning with 10/4/2012.

u = parameter was analyzed but not detected

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

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

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-28A

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)
12/21/2010	28.90	102.20	209	1.71	5.22	25.3	25.9	110	43	1.4	0.0023	2.5	17
12/28/2010	28.75	102.35	171	1.63	5.11	25.81	5	120	42	1.2	ND	ND	17
01/04/2011	28.88	102.22	175	0.91	5.12	25.58	1.7	92	42	1.4	ND	ND	17
01/13/2011	28.67	102.43	235	0.7	5.25	25.59	2.1	110	44	1	0.0059	2.5	17
01/20/2011	28.41	102.69	239	0.43	5.15	26.31	1.5	110	46	1.1	0.004 u	2.4	17
01/27/2011	28.44	102.66	236	0.99	5.09	25.37	1.6	120	45	0.94	0.004 u	2.4	18
02/03/2011	28.32	102.78	233	0.96	5.07	25.9	2.5	110	46	0.91	0.004 u	2.2	16
02/10/2011	28.31	102.79	209	0.61	5.06	25.85	3.1	110	45	1.3	0.004 u	2.4	18
02/14/2011	28.23	102.87	183	0.84	5.14	25.2	0.9	120	46	1.2	0.0022 i	2.5	18
02/24/2011	28.39	102.71	199	0.6	5.32	26.1	4.5	130	45	1.2	0.004 u	2.5	17
03/03/2011	28.45	102.65	229	0.51	5.18	26	13.2	140	43	1.1	0.004 u	2.7	18
03/10/2011	28.51	102.59	210	0.8	5.24	26.54	4.8	110	46	0.88	0.004 u	2.8	18
03/17/2011	28.36	102.74	161	0.64	5.19	26.06	1.9	150	47	1.3	0.004 u	2.7	18
03/24/2011	28.50	102.60	151	0.42	5.26	26.26	1.8	140	45	1.2	0.004 u	2.8	17
04/01/2011	28.10	103.00	231	0.79	5.31	25.75	4.8	120	45	0.72	0.004 u	3.1	18
04/08/2011	27.69	103.41	240	0.63	5.3	26.19	4.1	120	49	1.1	0.004 u	3.1	19
05/05/2011	28.78	102.32	227	0.88	5.15	25.77	7.9	94	41	1.2	0.004 u	2.9	16
06/08/2011	29.31	101.79	226	1.89	5.34	26.34	9.61	120	41	1.3	0.004 u	3.2	16
07/07/2011	28.26	102.84	207	0.58	5.16	26.22	3.4	110	45	1.1	0.004 u	3	16
08/04/2011	27.95	103.15	206	0.97	5.2	27.28	11.5	130	43	0.67	0.004 u	3.1	16
09/08/2011	27.66	103.44	202	0.49	5.24	26.63	4	140	46	1.5	0.004 u	3.4	19
10/04/2011	28.11	102.99	195	1.26	5.17	26.66	3.4	130	46	1	0.004 u	3	18
11/03/2011	28.20	102.90	225	0.8	5.3	26.37	7.4	110	47	1.4	0.004 u	2.9	18
12/08/2011	28.70	102.40	234	1.12	5.3	25.1	6.13	120	45	1.2	0.004 u	3.2	18
01/05/2012	28.94	102.16	231	0.71	5.27	25.35	7.15	140	50	1.2	0.004 u	3.4	18
02/10/2012	28.92	102.18	242	1.58	5.26	25.12	5.08	160	63	1.6	0.004 u	3.6	22
03/07/2012	29.15	101.95	299	0.79	5.24	26.34	5.1	190	59	1.5	0.004 u	3.5	23
04/05/2012	29.35	101.75	297	1.83	5.3	26.27	14.4	130	71	2.2	0.004 u	3.7	24
05/03/2012	29.43	101.67	305	1.32	5.13	26.64	9.15	110	61	3	0.004 u	3.7	25
06/07/2012	29.00	102.10	274	1.18	5.31	26.73	4.36	170	64	3.1	0.004 u	3	25
07/05/2012	28.05	103.05	344	0.49	5.25	26.77	3.53	150	75	3	0.004 u	4	29
08/03/2012	28.48	102.62	219	0.81	5.31	27.56	3.73	150	50	2.9	0.004 u	3.2	21
09/06/2012	27.89	103.40	269	0.24	5.27	27.26	2.55	150	49	3	0.004 u	3.6	20
10/04/2012	28.00	103.10	234	0.31	5.08	27.36	10.7	130	43	2.4	0.004 u	3.4	18
11/07/2012	28.31	102.79	253	0.51	5.18	26.6	2.33	130	46	1.6	0.004 u	3.3	19
12/05/2012	28.60	102.50	251	0.31	5.08	27.04	2.45	130	54	1.6	0.004 u	3.3	18
01/03/2013	28.43	102.67	294	0.4	5.08	26.68	1.8	190	59	2.4 j3	0.004 u	3.8	22
02/07/2013	28.67	102.43	304	0.43	5.03	26.94	1.71	160	63	2.4	0.004 u	3.8	23

ND = NO DATA (Not analyzed)

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.

5.22

EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-30

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)
02/03/2011	24.05	104.83	244	0.27	4.45	23.65	3.6	110	57	0.94	0.004 u	0.2	19
02/10/2011	24.11	104.77	219	0.21	4.36	23.7	4	120	61	1.5	0.004 u	0.2	20
02/14/2011	24.05	104.83	192	0.3	4.45	23.7	1.8	150	57	1	0.004 u	0.2	20
02/24/2011	24.10	104.78	208	0.18	4.81	23.82	3.1	160	57	1.3	0.004 u	0.19 i	20
03/03/2011	24.15	104.73	239	0.3	4.68	24.48	2.4	150	60	0.89	0.004 u	0.25	21
03/10/2011	24.13	104.75	231	0.16	4.71	23.58	3.9	130	57	0.96	0.004 u	0.19 i	20
03/17/2011	24.18	104.70	175	0.12	4.56	23.68	6.9	130	50	1.1	0.004 u	0.24	21
03/24/2011	24.15	104.73	208	0.17	4.58	23.71	2.1	120	59	0.91	0.004 u	0.21	20
04/01/2011	24.11	104.77	252	0.14	4.68	23.56	2.8	140	58	0.8	0.004 u	0.21	20
04/08/2011	23.77	105.11	242	0.19	4.69	23.62	2.3	120	59	1.3	0.004 u	0.21	21
05/05/2011	24.20	104.68	251	0.13	4.61	23.4	3.6	130	64	1.4	0.004 u	0.21	21
06/08/2011	24.32	104.56	261	0.27	4.4	23.45	3.62	150	64	1.9	0.004 u	0.23	20
07/07/2011	24.06	104.82	266	0.3	4.47	23.42	4.25	150	67	1.6	0.004 u	0.2	21
08/04/2011	23.84	105.04	244	0.17	4.49	23.43	3.3	160	63v	1.5	0.004 u	0.23	21
09/08/2011	23.80	105.08	251	0.21	4.44	23.41	4.7	130	66v	1.7	0.004 u	0.24	23
10/04/2011	23.97	104.91	231	0.17	4.63	23.46	3.4	160	70	0.89	0.004 u	0.25	22
11/03/2011	23.94	104.94	266	0.16	4.6	23.72	1.94	170	61	1.2	0.004 u	0.05 u	22
12/08/2011	23.95	104.93	283	0.16	4.66	23.62	1.81	160	71	1.2	0.004 u	0.24	22
01/05/2012	24.10	104.78	277	0.14	4.59	23.67	1.98	150	83	1	0.004 u	0.27	25
02/10/2012	24.08	104.80	302	0.13	4.48	23.74	1.48	230	97	1.1	0.004 u	0.29	24
03/07/2012	24.26	104.62	375	0.21	4.58	23.79	1	170	99	1	0.004 u	0.31	26
04/05/2012	24.28	104.60	407	0.15	4.39	23.67	0	150	110	1.7	0.004 u	0.32	27
05/03/2012	24.32	104.56	431	0.19	4.01	23.6	1.93	180	110	2.3	0.004 u	0.36	29
06/07/2012	24.24	104.64	430	0.17	4.25	23.52	1.09	240	130	2.3	0.004 u	0.37	29
07/05/2012	23.69	105.19	462	0.15	3.94	23.5	1.83	280	130 j3	2.4 j3	0.004 u	0.43	31
08/03/2012	24.02	104.86	297	0.13	4.07	23.51	3.01	280	130	2.4	0.004 u	0.38	30
09/06/2012	23.55	106.43	433	0.11	4.24	23.61	1.51	220	130	2.6	0.004 u	0.37	28
10/04/2012	23.71	105.17	410	0.09	4.32	23.6	2.67	220	120	2.7	0.004 u	0.42	27
11/07/2012	23.89	104.99	451	0.19	4.47	23.77	1.95	230	120	1.9	0.004 u	0.38	28
12/05/2012	23.98	104.90	483	0.27	4.41	23.81	1.86	240	140	2	0.004 u	0.39	28
01/03/2013	23.99	104.89	532	0.2	4.37	23.78	1.9	350	140	2.3	0.004 u	0.44	32
02/07/2013	24.08	104.80	598	0.13	4.39	23.94	1.39	320	160	1.8	0.004 u	0.47	33

New survey data beginning with 10/4/2012.

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

4.45

EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-40

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)
12/21/2010	115.10	9.94	348	1.06	7.61	23.3	0.3	210	8.3	0.31	0.0013 u	0.041	20
12/28/2010	116.90	8.09	304	1.37	7.55	22.7	1.4	220	8	0.42	ND	ND	17
01/04/2011	115.10	9.91	323	2.33	7.2	23.23	1	220	8.7	0.27	ND	ND	16
01/13/2011	112.16	12.83	400	0.74	7.54	23.11	0.5	210	8.5	0.27	0.0048	0.065	16
01/20/2011	111.15	13.84	420	0.58	7.52	23.28	0.8	220	8.6	0.31	0.004 u	0.11	16
01/27/2011	107.91	17.08	359	1.3	7.73	23.38	0.2	220	8.2	0.29	0.004 u	0.063	16
02/03/2011	104.37	20.62	398	0.81	7.74	23.35	0.2	210	8.3	0.32	0.004 u	0.05 u	15
02/10/2011	102.03	22.96	346	0.48	7.68	23.38	0.6	210	8.7	0.31	0.004 u	0.05 u	16
02/14/2011	100.18	24.81	325	0.92	7.58	23.2	0.5	230	8.2	0.38	0.0013 u	0.073 i	18
02/24/2011	101.87	23.12	345	0.46	7.65	23.4	0.3	230	8.2	0.26	0.004 u	0.05 u	16
03/03/2011	103.59	21.40	378	0.34	7.71	23.4	0.1	230	8.4	0.27	0.004 u	0.05 u	16
03/10/2011	105.12	19.87	351	0.43	7.66	23.3	0.1	210	8	0.33	0.004 u	0.05 u	16
03/17/2011	104.60	20.39	274	0.36	7.59	23.31	0.1	220	7.5	0.3	0.004 u	0.05 u	16
03/24/2011	106.11	18.88	309	0.37	7.65	23.44	0.1	210	8.1	0.3	0.004 u	0.05 u	16
04/01/2011	107.77	17.22	355	0.52	7.6	23.33	0.3	230	7.8	0.26	0.004 u	0.05 u	16
04/08/2011	104.35	20.64	387	0.39	7.51	23.46	0.4	210	7.9	0.29	0.004 u	0.05 u	16
05/05/2011	108.11	16.88	392	0.63	7.42	23.44	0.2	220	7.6	0.34	0.004 u	0.05 u	18
06/08/2011	111.06	13.93	417	0.52	7.59	23.5	0.18	240	8.4	0.41	0.004 u	0.05 u	15
07/07/2011	105.55	19.44	430	0.51	7.46	23.53	0.35	230	7.8	0.39	0.004 u	0.098 i	16
08/04/2011	95.76	29.23	361	0.34	7.52	23.64	0	220	7.3	0.4	0.004 u	0.05 u	16
09/08/2011	90.15	34.84	370	1.04	7.59	23.6	0.7	190	7.4	0.45	0.004 u	0.05 u	17
10/04/2011	91.54	33.45	291	0.51	7.58	23.51	0.8	190	6.5	0.33	0.004 u	0.05 u	16
11/03/2011	95.45	29.54	255	0.41	7.67	23.42	0.31	210	7.7	0.32	0.004 u	0.05 u	16
12/08/2011	98.90	26.09	367	0.54	7.58	23.03	0.51	170	7.2	0.33	0.004 u	0.05 u	16
01/05/2012	107.41	17.58	354	0.95	7.48	23.15	0.39	200	8.3	0.3	0.004 u	0.05 u	16
02/10/2012	106.49	18.50	308	0.45	7.66	23.29	0.66	210	8.9	0.3	0.004 u	0.05 u	16
03/07/2012	114.22	10.77	381	1.09	7.56	23.4	0.5	160	8.5	0.23	0.004 u	0.05 u	17
04/05/2012	118.71	6.28	351	0.66	7.37	23.43	0.86	170	8.8	0.31	0.004 u	0.05 u	17
05/03/2012	120.35	4.64	388	0.47	7.29	23.44	0	170	8.5	0.63	0.004 u	0.05 u	19
06/07/2012	114.61	10.38	382	0.75	7.13	23.42	0.48	200	8.9	0.43	0.004 u	0.05 u	18
07/05/2012	100.03	24.96	389	0.6	7.39	23.78	0.18	200	8.5	0.68	0.004 u	0.05 u	18
08/03/2012	92.72	32.27	276	0.29	7.3	23.56	0.47	210	8.3	0.6	0.004 u	0.05 u	17
09/06/2012	85.90	38.47	337	0.29	7.33	23.59	0.68	210	8.5 [3]	0.45	0.004 u	0.05 u	16
10/04/2012	84.99	40.00	328	0.25	7.29	23.5	0.19	200	8.2	0.46	0.004 u	0.05 u	16
11/07/2012	94.30	30.69	356	0.49	7.44	23.46	0.65	200	7.9	0.44	0.004 u	0.05 u	16
12/05/2012	96.88	28.11	361	0.32	7.34	23.58	0.33	200	8.1	0.38	0.004 u	0.05 u	16
01/03/2013	95.40	29.59	400	0.99	7.14	23.26	0.35	180	7.7	0.38	0.004 u	0.05 u	17
02/07/2013	101.05	23.94	391	0.65	7.15	23.37	0.63	220	8.2	0.37	0.004 u	0.05 u	16

ND = NO DATA (Not analyzed)

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Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-42

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)
12/21/2010	89.31	27.43	496	0.77	7.29	23.7	796	320	17	0.36	0.009	25	18
12/28/2010	89.22	27.52	412	0.42	7.21	23.47	156.1	310	17	0.24	ND	ND	15
01/04/2011	90.92	25.82	427	0.81	7.24	23.52	234.4	300	18	0.16	ND	ND	15
01/13/2011	89.73	27.01	556	0.32	7.31	23.22	175.1	300	18	0.2	0.004 u	3.5	16
01/20/2011	88.91	27.83	562	0.22	7.02	23.69	160.3	320	18	0.27	0.004 u	3.8	16
01/27/2011	86.86	29.88	498	0.59	7.43	23.05	202.9	310	18	0.22	0.004 u	3.8	15
02/03/2011	84.45	32.29	536	0.77	7.07	23.51	329.3	290	18	0.24	0.004 u	6.6	15
02/10/2011	82.50	34.24	476	0.84	7.26	23.62	95.6	300	18	0.27	0.004 u	2.5	15
02/14/2011	80.86	35.88	420	0.49	7.28	23.7	55	300	19	0.26	0.004 u	1.6	16
02/24/2011	81.01	35.73	541	2.26	7.29	23.66	41.1	320	18	0.19	0.004 u	1.2	15
03/03/2011	82.17	34.57	527	0.25	7.33	23.7	40.8	310	17	0.17	0.004 u	1.2	16
03/10/2011	83.41	33.33	503	0.37	7.41	23.42	57.5	310	17	0.26	0.004 u	1.2	15
03/17/2011	83.86	32.88	377	0.14	7.26	23.68	25.7	300	16	0.26	0.004 u	1.1	16
03/24/2011	84.20	32.54	443	0.29	7.32	23.77	22.1	300	17	0.27	0.004 u	0.63	16
04/01/2011	86.39	30.35	471	0.7	7.35	23.39	19.5	320	19	0.16	0.004 u	0.94	16
04/08/2011	84.84	31.90	526	0.34	7.2	23.72	16.6	290	17	0.22	0.004 u	0.68	15
05/05/2011	85.80	30.94	535	0.16	7.18	23.59	12.2	290	18	0.29	0.004 u	0.35	15
06/08/2011	89.20	27.54	544	0.32	7.33	23.98	8.87	310	20	0.33	0.004 u	0.22	15
07/07/2011	86.45	30.29	541	0.27	7.26	23.85	18.1	310	18	0.33	0.004 u	0.088 i	16
08/04/2011	78.31	38.43	493	0.13	7.23	24.02	18.3	300	17	0.094	0.004 u	0.52	16
09/08/2011	72.14	44.60	499	0.22	7.36	23.97	18.1	280	17	0.28	0.004 u	0.37	17
10/04/2011	71.42	45.32	421	0.25	7.26	23.93	11.5	230	15	0.25	0.004 u	0.37	16
11/03/2011	74.50	42.24	495	0.23	7.21	23.64	20.6	260	18	0.25	0.004 u	0.36	16
12/08/2011	77.64	39.10	475	0.21	7.18	23.72	11.9	280	16	0.21	0.004 u	0.47	15
01/05/2012	83.90	32.84	466	0.22	7.12	23.67	12	270	18	0.21	0.004 u	0.4	17
02/10/2012	84.26	32.48	474	0.22	7.42	23.62	11.4	290	18	0.23	0.004 u	0.56	16
03/07/2012	88.95	27.79	521	0.17	7.15	23.83	12.4	260	18	0.13	0.004 u	0.4	16
04/05/2012	93.21	23.53	536	0.19	7	23.78	3.98	250	17	0.25	0.004 u	0.16 i	16
05/03/2012	95.72	21.02	511	2.82	7.07	23.8	4.76	260	18	0.41	0.004 u	0.12 i	17
06/07/2012	93.92	22.82	476	1.54	7.18	23.93	8.39	300	18	0.3	0.004 u	0.24	16
07/05/2012	82.84	33.90	454	0.86	6.5	24.06	7.16	280	17	0.53	0.004 u	0.22	16
08/03/2012	75.30	41.44	306	0.57	6.78	24.4	17.2	290	17	0.47	0.004 u	0.53	16
09/06/2012	69.12	47.08	519	0.14	6.98	23.87	16.9	280	18	0.32	0.004 u	0.64	16
10/04/2012	67.42	49.32	366	0.15	7.03	23.93	17.8	270	17	0.35	0.004 u	0.64 j3	15
11/07/2012	73.49	43.25	538	0.27	7.07	23.66	33.1	280	17	0.34	0.004 u	0.6	16
12/05/2012	76.16	40.58	543	0.31	7.04	23.92	18.1	250	18	0.27	0.004 u	0.5	16
01/03/2013	76.85	39.89	549	0.44	7.03	23.72	12.9	280	17	0.31	0.004 u	0.4	16
02/07/2013	78.90	37.84	536	0.23	7.02	23.82	10.3	280	17	0.29	0.004 u	0.27	15

ND = NO DATA (Not analyzed)

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.

25 EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-57

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)
12/21/2010	20.18	108.20	144	1.6	5.05	26.1	0.6	76	35	0.79	0.0013 u	0.32	13
12/28/2010	20.26	108.10	150	1.45	5.21	26.2	0.5	110	44	0.93	ND	ND	13
01/04/2011	20.26	108.10	143	0.33	5.08	26.4	0.4	100	39	0.82	ND	ND	12
01/13/2011	20.19	108.17	207	0.37	5.24	26.41	0.5	80	40	0.85	0.004 u	0.51	12
01/20/2011	20.03	108.33	200	0.39	5.23	26.37	0.4	98	42	0.64	0.004 u	0.52	12
01/27/2011	19.99	108.40	172	0.23	4.99	26.05	0.5	32	36	0.88	0.004 u	0.41	11
02/03/2011	19.99	108.37	189	0.62	5.08	26.13	0.4	88	40	0.87	0.004 u	0.48	11
02/10/2011	19.47	108.89	160	0.42	5.02	26.02	2.1	82	40	1	0.004 u	0.43	11
02/14/2011	20.00	108.36	152	0.5	5.24	25.9	0.2	98	37	1	0.0013 u	0.51	13
02/24/2011	20.10	108.26	164	0.16	5.34	25.97	0.2	110	34	0.92	0.004 u	0.35	11
03/03/2011	19.65	108.71	198	0.24	5.16	25.8	0.6	110	39	0.88	0.004 u	0.48	13
03/10/2011	19.70	108.66	167	0.37	5.24	26.7	0.5	98	38	0.83	0.004 u	0.45	11
03/17/2011	20.15	108.21	133	0.31	5.16	25.76	0.1	130	42	0.81	0.004 u	0.49	12
03/24/2011	19.72	108.64	128	0.21	5.18	25.69	5.1	120	39	0.87	0.004 u	0.48	12
04/01/2011	19.99	108.37	176	0.22	5.2	25.6	0.9	92	35	0.7	0.004 u	0.46	11
04/08/2011	19.40	108.96	187	0.19	5.18	25.56	0.4	80	41	0.87	0.004 u	0.5	12
05/05/2011	20.09	108.27	182	0.51	5.09	25.3	0.2	88	34	1.1	0.004 u	0.4	11
06/08/2011	20.55	107.81	185	0.4	5.17	25.61	3.17	110	39	1.2	0.004 u	0.43	11
07/07/2011	19.66	108.70	157	0.22	5.14	25.81	2.5	200	9.7	0.17	0.004 u	0.05 u	8.6
08/04/2011	19.20	109.57	211	0.15	5.02	26.26	0.3	150	47	0.76	0.004 u	0.63	13
09/08/2011	18.60	109.76	183	0.27	5.08	26.55	2.5	110	42	1.1	0.004 u	0.51	14
10/04/2011	18.96	109.40	144	0.21	5.06	26.76	2.1	110	38	0.8	0.004 u	0.5	14
11/03/2011	19.20	109.16	218	0.25	5.26	26.72	0.66	130	42	1.2	0.004 u	0.54	14
12/08/2011	19.59	108.77	187	0.26	5.32	26.55	0.41	96	37	1	0.004 u	0.39	13
01/05/2012	19.85	108.51	154	0.65	5.24	26.31	0.7	110	36	0.85	0.004 u	0.35	13
02/10/2012	19.94	108.42	156	0.2	5.31	26.19	0.63	120	26	0.84	0.004 u	0.32	12
03/07/2012	20.19	108.17	148	0.53	5.11	25.8	0.3	84	30	0.63	0.004 u	0.3	11
04/05/2012	20.28	108.08	139	0.78	5.16	25.79	0.46	80	29	0.73	0.004 u	0.29	10
05/03/2012	20.42	107.94	152	0.28	4.88	25.87	2.24	68	26	1.2	0.004 u	0.31	11
06/07/2012	20.02	108.34	127	0.29	4.84	26.04	0.82	70	25	0.92	0.004 u	0.29	10
07/05/2012	18.39	109.97	274	0.27	5.11	26.28	1.12	170	54	1.5	0.004 u	1.2	17
08/03/2012	18.75	109.61	160	0.22	4.92	26.44	1.7	120	36	1.5	0.004 u	0.56	13
09/06/2012	18.14	109.40	252	0.2	4.9	26.79	0.97	160	40	1.1	0.004 u	0.45	14
10/04/2012	18.45	109.91	211	0.17	4.93	26.91	2.43	110	37	1.5	0.004 u	0.63	13
11/07/2012	18.72	109.64	220	0.17	5.08	27.01	0.82	120	36	1.1	0.004 u	0.54	14
12/05/2012	18.99	109.37	188	0.15	5.08	26.94	0.49	100	34	1	0.004 u	0.42	13
01/03/2013	19.08	109.28	185	0.15	5.01	26.69	0.71	140	29	1	0.004 u	0.42	13
02/07/2013	19.36	109.00	184	0.24	4.95	26.55	0.51	110	29	0.81	0.004 u	0.37	12

ND = NO DATA (Not analyzed)

New survey data beginning with 10/4/2012.

u = parameter was analyzed but not detected

5.05 EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
TH-58

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)
12/21/2010	28.34	99.54	970	1.2	5.76	26	0.9	490	190	0.66	0.027	4.7	38
12/28/2010	28.34	99.54	570	0.42	5.66	26	0.9	420	130	0.75	ND	ND	30
01/04/2011	28.36	99.52	619	0.44	5.71	25.81	0.6	440	140	0.64	ND	ND	29
01/13/2011	28.31	99.57	736	0.46	5.78	25.58	0.2	390	130	0.61	0.031	5	26
01/20/2011	28.22	99.66	751	0.34	5.74	25.95	0.2	380	120	0.74	0.024	4.9	23
01/27/2011	28.11	99.77	693	0.64	5.76	25.87	0.4	380	97	0.68	0.026	5	22
02/03/2011	28.05	99.83	740	0.86	5.73	25.71	2.2	380	110	0.61	0.027	4.4	23
02/10/2011	28.02	99.86	578	0.56	5.74	25.58	1.3	350	76	0.92	0.026	4.9	20
02/14/2011	28.05	99.83	521	0.58	5.72	25.7	0.6	340	85	0.91	0.027	4.7	20
02/24/2011	28.09	99.79	692	0.59	5.79	25.76	0.5	380	92	0.95	0.025	4	21
03/03/2011	28.21	99.67	591	0.42	5.68	25.6	0.6	300	76	0.61	0.024	4.1	19
03/10/2011	28.24	99.64	524	0.47	5.76	25.38	0.6	280	63	0.68	0.028	4	17
03/17/2011	28.20	99.68	337	0.33	5.69	25.47	0.4	280	65	0.3	0.026	4.1	17
03/24/2011	28.28	99.60	440	0.42	5.72	25.53	0.2	270	57	0.93	0.024	4.3	16
04/01/2011	28.10	99.78	504	0.37	5.8	25.23	0.8	270	56	0.73	0.024	4.2	17
04/08/2011	27.59	100.29	459	0.28	5.73	25.36	0.9	250	57	0.82	0.026	4.6	16
05/05/2011	28.20	99.68	1005	0.36	5.66	25.06	0.9	580	270	2.8	0.027	8.7	45
06/08/2011	28.72	99.16	1210	1.28	5.76	26.69	10.3	800	290	1.2	0.02	7.7	63
07/07/2011	27.99	99.89	998	0.75	5.7	25.62	4.49	560	210	0.94	0.025	5.8	47
08/04/2011	27.61	100.27	2167	0.39	5.6	26.1	2.1	1700	660	1.6	0.028	16	150
09/08/2011	27.42	100.46	1239	0.9	5.7	26.18	3.6	1200	570	0.75	0.026	8.1	120
10/04/2011	27.77	100.11	1416	0.67	5.72	26.01	5.2	1100	400	0.45	0.028	4.5	98
11/03/2011	27.91	99.97	1574	0.87	5.84	26.72	8.36	920	340	0.73	0.026	3.7	81
12/08/2011	28.26	99.62	1307	0.99	5.86	24.98	11.78	570	260	0.77	0.026	3.6	65
01/05/2012	28.40	99.48	1032	1.45	5.9	24.58	8.8	610	230	0.57	0.029	3.5	58
02/10/2012	28.42	99.46	880	0.89	5.8	25.26	5.17	510	160	0.58	0.025	3.2	41
03/07/2012	28.55	99.33	992	2.01	5.94	25.1	3.6	420	160	0.42	0.026	2.8	45
04/05/2012	28.66	99.22	606	0.4	5.7	25.63	0	270	81	0.9	0.026	4	26
05/03/2012	28.70	99.18	540	0.43	5.66	25.84	0.69	250	65	1.5	0.025	4.1	24
06/07/2012	28.60	99.28	379	0.63	5.68	25.53	1.6	200	36	1.6	0.026	3.8	17
07/05/2012	27.23	100.65	527	0.62	5.72	26.35	2.34	310	87	1.4	0.024	3.4	30
08/03/2012	27.93	99.95	445	0.74	5.69	26.71	2.24	480	150	2.2	0.025	4.1	50
09/06/2012	27.24	99.83	696	0.31	5.6	25.02	0.83	390	130	1.5	0.028	3.5	36
10/04/2012	27.66	100.22	645	0.28	5.61	26.51	2.57	410	130	1.2	0.025	3.6	41
11/07/2012	28.00	99.88	652	0.46	5.71	26.24	1.1	320	97	1	0.03	3.6	36
12/05/2012	28.28	99.60	530	0.58	5.64	26.04	0.59	270	64	1.1	0.025	3.7	30
01/03/2013	28.19	99.69	507	1.52	5.63	25.71	1.06	290	47	0.97	0.025	3.3	26
02/07/2013	28.38	99.50	449	7.65	5.94	25.99	3.26	200	33	1.2	0.025	3.9	21

ND = NO DATA (Not analyzed)

New survey data beginning with 10/4/2012.

5.76

EXCEEDS STANDARD

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

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.

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

New survey data beginning with 10/4/2012.

u = parameter was analyzed but not detected

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

ND = NO DATA (Not analyzed)

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.

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

New survey data beginning with 10/4/2012.

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

5.65

EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
SUP-1

	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)
12/28/2010	275	0.49	7.63	24.46	0.1	180	9.9	0.17	ND	ND	11
01/04/2011	387	1.9	7.51	21.04	0.1	210	18	0.18	ND	ND	13
01/13/2011	380	0.27	7.64	24.36	0	190	10	0.13	0.004 u	0.05 u	8.1
01/20/2011	387	0.09	7.45	24.36	0.1	190	10	0.15	0.004 u	0.058	8.5
01/27/2011	378	0.1	7.63	24.43	2	190	9.9	0.17	0.004 u	0.05 u	8.7
02/03/2011	353	0.31	7.59	24.42	0.1	190	9.9	0.14	0.004 u	0.05 u	8.2
02/10/2011	322	0.31	7.66	24.33	0.2	210	9.9	0.11	0.004 u	0.05 u	8.6
02/14/2011	289	0.33	7.6	24.3	0.2	190	10	0.084	0.004 u	0.05 u	8.5
02/24/2011	373	0.5	7.66	24.48	0.1	220	9.9	0.096	0.004 u	0.05 u	8.7
03/03/2011	370	0.08	7.68	24.48	0.3	190	9.9	0.13	0.004 u	0.05 u	8.6
03/10/2011	330	0.07	7.66	24.37	0.3	190	9.7	0.17	0.004 u	0.05 u	8.6
03/17/2011	244	0.06	7.58	24.49	0.2	210	9.6	0.16	0.004 u	0.05 u	8.6
03/24/2011	239	0.06	7.64	24.7	0.7	210	9.7	0.22	0.004 u	0.05 u	8.7
04/01/2011	370	0.06	7.69	24.31	0.4	200	9.3	0.15	0.004 u	0.05 u	8.7
04/08/2011	354	0.04	7.53	24.54	0	190	9.7	0.16	0.004 u	0.05 u	8.7
05/05/2011	351	0.16	7.86	24.59	0.1	210	9.2	0.14	0.004 u	0.05 u	8.7
06/08/2011	373	0.11	7.61	24.6	0.35	220	9.5	0.18	0.004 u	0.05 u	8.4
07/07/2011	350	0.07	7.5	24.47	0.23	210	10	0.16	0.004 u	0.05 u	8.8
08/04/2011	337	0.03	7.49	24.54	0.1	230	9.1	0.27	0.004 u	0.05 u	8.4
09/08/2011	323	0.1	7.52	24.46	0.5	220	9.3	0.19	0.004 u	0.05 u	9
10/04/2011	322	0.18	7.47	24.45	0	190	9	0.16	0.004 u	0.05 u	9
11/03/2011	339	0.5	7.46	24.38	0	170	9.5	0.15	0.004 u	0.05 u	8.6
12/08/2011	328	0.07	7.52	24.51	0.14	200	8.6	0.16	0.004 u	0.05 u	8.6
01/05/2012	317	0.08	7.5	24.34	0.06	150	9.6	0.16	0.004 u	0.05 u	9
02/10/2012	313	0.06	7.45	24.44	0.1	220	10	0.14	0.004 u	0.05 u	8.4
03/07/2012	362	0.05	7.34	24.53	0	190	9.8	0.074	0.004 u	0.05 u	8.5
04/05/2012	363	0.04	7.37	24.53	0	150	9.4	0.15	0.004 u	0.41	8.3
05/03/2012	348	0.07	7.4	24.59	0	180	9.5	0.33	0.004 u	0.05 u	9
06/07/2012	292	0.06	7.29	24.6	0.07	190	9.2	0.23	0.004 u	0.05 u	8.8
07/05/2012	263	0.07	7.27	24.61	0.02	160	9.1	0.57	0.004 u	0.05 u	8.5
08/03/2012	241	0.08	7.1	24.49	0.08	220	9.1	0.34	0.004 u	0.05 u	8.4
09/06/2012	351	0.06	7.27	24.48	0.74	210	9.7 j3	0.14	0.004 u	0.05 u	8.3
10/04/2012	243	0.06	7.29	24.45	0.17	210	9.4	0.15	0.004 u	0.47	8.3
11/07/2012	365	0.24	7.46	24.32	0.49	210	9.3	0.33	0.004 u	0.05 u	8.3
12/05/2012	360	0.11	7.37	24.49	0.38	200	9.7	0.17	0.004 u	0.05 u	8.4
01/03/2013	372	0.06	7.37	24.31	0.02	250	9.4	0.16	0.004 u	0.05 u	8.6
02/07/2013	365	0.07	7.27	24.54	0	200	8.7	0.17	0.004 u	0.05 u	8.2

ND = NO DATA (Not analyzed)

New survey data beginning with 10/4/2012.

u = parameter was analyzed but not detected

0.41 EXCEEDS STANDARD

Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
SUP-2

	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)
12/28/2010	293	0.27	7.59	24.18	0.1	200	12	0.15	ND	ND	13
01/04/2011	378	0.29	7.57	24.19	0.1	200	12	0.16	ND	ND	9.2
01/13/2011	389	0.15	7.42	24.4	0	200	11	0.28	0.004 u	0.05 u	8.1
01/20/2011	392	0.24	7.45	24.4	0	210	11	0.14	0.004 u	0.05 u	8.6
01/27/2011	384	0.11	7.59	24.35	0	210	11	0.13	0.004 u	0.05 u	8.8
02/03/2011	360	1.09	7.62	24.43	0.1	190	11	0.18	0.004 u	0.05 u	8.4
02/10/2011	328	0.98	7.76	24.27	0.1	210	11	0.11	0.004 u	0.05 u	8.7
02/14/2011	296	0.35	7.59	24.5	0.2	200	11	0.084	0.004 u	0.05 u	8.8
02/24/2011	381	0.07	7.69	24.45	0.1	230	11	0.065	0.004 u	0.05 u	8.7
03/03/2011	379	0.43	7.72	24.66	0.8	210	11	0.13	0.004 u	0.05 u	8.6
03/10/2011	332	0.06	7.65	24.33	0.3	190	10	0.17	0.004 u	0.05 u	8.4
03/17/2011	246	0.08	7.54	24.32	0.2	210	10	0.16	0.004 u	0.05 u	8.6
03/24/2011	241	0.07	7.6	24.29	0.5	230	10	0.24	0.004 u	0.05 u	8.6
04/01/2011	372	0.05	7.69	24.31	0	210	9.4	0.11	0.004 u	0.05 u	8.7
04/08/2011	359	0.05	7.5	24.46	0.1	190	10	0.12	0.004 u	0.05 u	8.8
05/05/2011	361	0.17	7.8	26.01	0	210	10	0.17	0.004 u	0.05 u	8.7
06/08/2011	381	0.1	7.6	24.52	0.43	230	11	0.22	0.004 u	0.05 u	8.6
07/07/2011	356	0.07	7.5	24.39	0.19	82	30	0.87	0.004 u	0.4	11
08/04/2011	348	0.1	7.56	25.87	0	240	11	0.2	0.004 u	0.05 u	11
09/08/2011	347	0.28	7.56	26.71	1.6	230	12	0.21	0.004 u	0.05 u	10
10/04/2011	331	0.45	7.59	25.84	0	210	11	0.15	0.004 u	0.05 u	8.9
11/03/2011	347	0.07	7.44	24.62	0	180	10	0.16	0.004 u	0.05 u	8.6
12/08/2011	339	0.37	7.44	24.75	0.33	190	9.6	0.19	0.004 u	0.05 u	8.6
01/05/2012	328	0.3	7.57	24.53	1	180	11	0.15	0.004 u	0.05 u	9
02/10/2012	321	0.04	7.49	24.53	0.34	200	11	0.13	0.004 u	0.05 u	8.2
03/07/2012	373	0.04	7.42	24.85	0.1	190	11	0.089	0.004 u	0.05 u	8.2
04/05/2012	376	0.04	7.5	24.94	0	170	11	0.14	0.004 u	0.05 u	8.3
05/03/2012	364	0.17	7.45	24.79	0	190	11	0.29	0.004 u	0.05 u	8.5
06/07/2012	304	0.1	7.15	25.07	0.05	220	10	0.15	0.004 u	0.05 u	8.8
07/05/2012	275	0.08	7.35	24.69	0.07	190	10	0.04	0.004 u	0.05 u	8.6
08/03/2012	265	0.07	7.11	24.82	0.45	220	11	0.61	0.004 u	0.05 u	8.7
09/06/2012	359	0.05	7.24	24.79	0.5	210	11	0.15	0.004 u	0.05 u	8.4
10/04/2012	261	0.06	7.26	24.82	0.12	220	11	0.15	0.004 u	0.05 u	8.4
11/07/2012	381	0.29	7.47	24.47	0.36	210	11	0.16	0.004 u	0.05 u	8.7
12/05/2012	383	0.1	7.39	24.74	0.23	210	13	0.16	0.004 u	0.05 u	9.1
01/03/2013	389	0.06	7.36	24.45	0.22	270	11	0.13	0.004 u	0.05 u	8.5
02/07/2013	385	0.07	7.22	24.61	0.07	200	11	0.16	0.004 u	0.05 u	8.4

ND = NO DATA (Not analyzed)

New survey data beginning with 10/4/2012.

u = parameter was analyzed but not detected

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: 660-53093-1

Client Project/Site: SELF IAMP Monitoring Wells

For:

Hillsborough County Public Utilities Dep
Solid Waste Management Group
Brandon Support Operations Complex
332 North Falkenburg Rd, 2nd Floor
Tampa, Florida 33619

Attn: David Adams



Authorized for release by:
3/25/2013 10:21:18 AM

Nancy Robertson
Project Manager II
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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 County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-53093-1	BLANK EQUIPMENT 53093	Ground Water	03/07/13 09:30	03/07/13 16:05
660-53093-2	TH-40	Ground Water	03/07/13 09:57	03/07/13 16:05
660-53093-3	TH-19	Ground Water	03/07/13 10:32	03/07/13 16:05
660-53093-4	TH-42	Ground Water	03/07/13 11:31	03/07/13 16:05
660-53093-5	TH-73	Ground Water	03/07/13 12:50	03/07/13 16:05
660-53093-6	TH-72	Ground Water	03/07/13 13:45	03/07/13 16:05
660-53093-7	TH-57	Ground Water	03/07/13 14:11	03/07/13 16:05
660-53116-1	TH-30	Ground Water	03/08/13 10:01	03/08/13 15:48
660-53116-2	TH-58	Ground Water	03/08/13 10:41	03/08/13 15:48
660-53116-3	TH-28A	Ground Water	03/08/13 11:20	03/08/13 15:48
660-53116-4	TH-74	Ground Water	03/08/13 12:00	03/08/13 15:48
660-53116-5	TH-75	Ground Water	03/08/13 12:35	03/08/13 15:48
660-53116-6	SUP 2	Ground Water	03/08/13 13:13	03/08/13 15:48
660-53116-7	SUP 1	Ground Water	03/08/13 13:43	03/08/13 15:48
660-53116-8	DUPLICATE NOT BLANK	Ground Water	03/08/13 00:00	03/08/13 15:48

Case Narrative

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Job ID: 660-53093-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative
660-53093-1

Comments

No additional comments.

Receipt

The samples were received on 3/7/2013 4:05 PM and 3/8/2013 3:48 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.1° C and 5.0° C.

Metals

No analytical or quality issues were noted.

General Chemistry

Method 350.1: The matrix spike (MS) recovery for batch 269497 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Qualifiers

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.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)
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 County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: BLANK EQUIPMENT 53093

Lab Sample ID: 660-53093-1

No Detections.

Client Sample ID: TH-40

Lab Sample ID: 660-53093-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Sodium	16		0.50	0.31	mg/L	1			6010B	Total Recoverable
Chloride	7.9		5.0	1.0	mg/L	5			300.0	Total/NA
Ammonia as N	0.31		0.050	0.026	mg/L	1			350.1	Total/NA
Total Dissolved Solids	190		5.0	5.0	mg/L	1			SM 2540C	Total/NA
Field pH	7.29				SU	1			Field Sampling	Total/NA
Field Temperature	23.34				Degrees C	1			Field Sampling	Total/NA
Oxygen, Dissolved	0.42				mg/L	1			Field Sampling	Total/NA
Specific Conductance	292				umhos/cm	1			Field Sampling	Total/NA
Turbidity	0.16				NTU	1			Field Sampling	Total/NA

Client Sample ID: TH-19

Lab Sample ID: 660-53093-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Sodium	13		0.50	0.31	mg/L	1			6010B	Total Recoverable
Chloride	8.3		5.0	1.0	mg/L	5			300.0	Total/NA
Ammonia as N	0.34		0.050	0.026	mg/L	1			350.1	Total/NA
Total Dissolved Solids	230		5.0	5.0	mg/L	1			SM 2540C	Total/NA
Field pH	7.19				SU	1			Field Sampling	Total/NA
Field Temperature	23.27				Degrees C	1			Field Sampling	Total/NA
Oxygen, Dissolved	0.31				mg/L	1			Field Sampling	Total/NA
Specific Conductance	338				umhos/cm	1			Field Sampling	Total/NA
Turbidity	0.14				NTU	1			Field Sampling	Total/NA

Client Sample ID: TH-42

Lab Sample ID: 660-53093-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Iron	180	I	200	50	ug/L	1			6010B	Total Recoverable
Sodium	16		0.50	0.31	mg/L	1			6010B	Total Recoverable
Chloride	18		5.0	1.0	mg/L	5			300.0	Total/NA
Ammonia as N	0.35		0.050	0.026	mg/L	1			350.1	Total/NA
Total Dissolved Solids	220		10	10	mg/L	1			SM 2540C	Total/NA
Field pH	7.06				SU	1			Field Sampling	Total/NA
Field Temperature	23.55				Degrees C	1			Field Sampling	Total/NA
Oxygen, Dissolved	0.34				mg/L	1			Field Sampling	Total/NA
Specific Conductance	421				umhos/cm	1			Field Sampling	Total/NA
Turbidity	7.09				NTU	1			Field Sampling	Total/NA

Client Sample ID: TH-73

Lab Sample ID: 660-53093-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Iron	3100		200	50	ug/L	1			6010B	Total Recoverable
Sodium	17		0.50	0.31	mg/L	1			6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-73 (Continued)

Lab Sample ID: 660-53093-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	45		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	1.2		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	110		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	4.78				SU	1		Field Sampling	Total/NA
Field Temperature	24.46				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.23				mg/L	1		Field Sampling	Total/NA
Specific Conductance	179				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.64				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-72

Lab Sample ID: 660-53093-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1100		200	50	ug/L	1		6010B	Total Recoverable
Sodium	110		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	290		10	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	11		0.50	0.26	mg/L	10		350.1	Total/NA
Total Dissolved Solids	770		25	25	mg/L	1		SM 2540C	Total/NA
Field pH	6.61				SU	1		Field Sampling	Total/NA
Field Temperature	22.85				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.30				mg/L	1		Field Sampling	Total/NA
Specific Conductance	1234				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.41				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-57

Lab Sample ID: 660-53093-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	310		200	50	ug/L	1		6010B	Total Recoverable
Sodium	11		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	27		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	1.0		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	88		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.02				SU	1		Field Sampling	Total/NA
Field Temperature	26.31				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.18				mg/L	1		Field Sampling	Total/NA
Specific Conductance	139				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.26				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-30

Lab Sample ID: 660-53116-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	460		200	50	ug/L	1		6010B	Total Recoverable
Sodium	35		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	170		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	2.4		0.10	0.052	mg/L	2		350.1	Total/NA
Total Dissolved Solids	280		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	4.35				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-30 (Continued)

Lab Sample ID: 660-53116-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field Temperature	23.84				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.31				mg/L	1		Field Sampling	Total/NA
Specific Conductance	591				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.93				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-58

Lab Sample ID: 660-53116-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	24		10	4.0	ug/L	1		6010B	Total Recoverable
Iron	3800		200	50	ug/L	1		6010B	Total Recoverable
Sodium	18		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	24		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	1.4		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	220		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.60				SU	1		Field Sampling	Total/NA
Field Temperature	25.65				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.90				mg/L	1		Field Sampling	Total/NA
Specific Conductance	413				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.42				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-28A

Lab Sample ID: 660-53116-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3700		200	50	ug/L	1		6010B	Total Recoverable
Sodium	26		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	75		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	3.0		0.10	0.052	mg/L	2		350.1	Total/NA
Total Dissolved Solids	180		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	4.98				SU	1		Field Sampling	Total/NA
Field Temperature	26.79				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.39				mg/L	1		Field Sampling	Total/NA
Specific Conductance	339				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.66				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-74

Lab Sample ID: 660-53116-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	20000		200	50	ug/L	1		6010B	Total Recoverable
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	47		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	3.0		0.10	0.052	mg/L	2		350.1	Total/NA
Total Dissolved Solids	180		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.38				SU	1		Field Sampling	Total/NA
Field Temperature	21.06				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.35				mg/L	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-74 (Continued)

Lab Sample ID: 660-53116-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Specific Conductance	363				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.24				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-75

Lab Sample ID: 660-53116-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.1	I	10	4.0	ug/L	1		6010B	Total Recoverable
Iron	8000		200	50	ug/L	1		6010B	Total Recoverable
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	40		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	1.9		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	200		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.40				SU	1		Field Sampling	Total/NA
Field Temperature	21.38				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.27				mg/L	1		Field Sampling	Total/NA
Specific Conductance	379				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.71				NTU	1		Field Sampling	Total/NA

Client Sample ID: SUP 2

Lab Sample ID: 660-53116-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.8		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	11		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	0.17		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	220		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	7.32				SU	1		Field Sampling	Total/NA
Field Temperature	24.70				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.09				mg/L	1		Field Sampling	Total/NA
Specific Conductance	379				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.04				NTU	1		Field Sampling	Total/NA

Client Sample ID: SUP 1

Lab Sample ID: 660-53116-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.8		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	9.3		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	0.16		0.050	0.026	mg/L	1		350.1	Total/NA
Total Dissolved Solids	200		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	7.33				SU	1		Field Sampling	Total/NA
Field Temperature	24.45				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.02				mg/L	1		Field Sampling	Total/NA
Specific Conductance	358				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.10				NTU	1		Field Sampling	Total/NA

Client Sample ID: DUPLICATE NOT BLANK

Lab Sample ID: 660-53116-8

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: DUPLICATE NOT BLANK (Continued)

Lab Sample ID: 660-53116-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	460		200	50	ug/L	1		6010B	Total
									Recoverable
Sodium	35		0.50	0.31	mg/L	1		6010B	Total
									Recoverable
Chloride	170		5.0	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	2.5		0.10	0.052	mg/L	2		350.1	Total/NA
Total Dissolved Solids	290		10	10	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Tampa

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: BLANK EQUIPMENT 53093

Lab Sample ID: 660-53093-1

Date Collected: 03/07/13 09:30

Matrix: Ground Water

Date Received: 03/07/13 16:05

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		03/08/13 07:50	03/08/13 15:22	1
Iron	50	U	200	50	ug/L		03/08/13 07:50	03/08/13 15:22	1
Sodium	0.31	U	0.50	0.31	mg/L		03/08/13 07:50	03/08/13 15:22	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	5.0	1.0	mg/L			03/20/13 20:21	5
Ammonia as N	0.026	U	0.050	0.026	mg/L			03/13/13 12:35	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/13/13 10:15	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-40

Date Collected: 03/07/13 09:57

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-2

Matrix: Ground Water

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		03/08/13 07:50	03/08/13 15:25	1
Iron	50	U	200	50	ug/L		03/08/13 07:50	03/08/13 15:25	1
Sodium	16		0.50	0.31	mg/L		03/08/13 07:50	03/08/13 15:25	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.9		5.0	1.0	mg/L			03/20/13 20:33	5
Ammonia as N	0.31		0.050	0.026	mg/L			03/13/13 12:35	1
Total Dissolved Solids	190		5.0	5.0	mg/L			03/13/13 10:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.29				SU			03/07/13 09:57	1
Field Temperature	23.34				Degrees C			03/07/13 09:57	1
Oxygen, Dissolved	0.42				mg/L			03/07/13 09:57	1
Specific Conductance	292				umhos/cm			03/07/13 09:57	1
Turbidity	0.16				NTU			03/07/13 09:57	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-19

Date Collected: 03/07/13 10:32

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-3

Matrix: Ground Water

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		03/08/13 07:50	03/08/13 15:29	1
Iron	50	U	200	50	ug/L		03/08/13 07:50	03/08/13 15:29	1
Sodium	13		0.50	0.31	mg/L		03/08/13 07:50	03/08/13 15:29	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.3		5.0	1.0	mg/L			03/20/13 20:45	5
Ammonia as N	0.34		0.050	0.026	mg/L			03/13/13 12:35	1
Total Dissolved Solids	230		5.0	5.0	mg/L			03/13/13 10:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.19				SU			03/07/13 10:32	1
Field Temperature	23.27				Degrees C			03/07/13 10:32	1
Oxygen, Dissolved	0.31				mg/L			03/07/13 10:32	1
Specific Conductance	338				umhos/cm			03/07/13 10:32	1
Turbidity	0.14				NTU			03/07/13 10:32	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-42

Date Collected: 03/07/13 11:31

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-4

Matrix: Ground Water

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		03/08/13 07:50	03/08/13 15:32	1
Iron	180	I	200	50	ug/L		03/08/13 07:50	03/08/13 15:32	1
Sodium	16		0.50	0.31	mg/L		03/08/13 07:50	03/08/13 15:32	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		5.0	1.0	mg/L			03/20/13 20:58	5
Ammonia as N	0.35		0.050	0.026	mg/L			03/13/13 12:35	1
Total Dissolved Solids	220		10	10	mg/L			03/13/13 10:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.06				SU			03/07/13 11:31	1
Field Temperature	23.55				Degrees C			03/07/13 11:31	1
Oxygen, Dissolved	0.34				mg/L			03/07/13 11:31	1
Specific Conductance	421				umhos/cm			03/07/13 11:31	1
Turbidity	7.09				NTU			03/07/13 11:31	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-73

Date Collected: 03/07/13 12:50

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-5

Matrix: Ground Water

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		03/08/13 07:50	03/08/13 15:36	1
Iron	3100		200	50	ug/L		03/08/13 07:50	03/08/13 15:36	1
Sodium	17		0.50	0.31	mg/L		03/08/13 07:50	03/08/13 15:36	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45		5.0	1.0	mg/L			03/20/13 21:10	5
Ammonia as N	1.2		0.050	0.026	mg/L			03/14/13 17:45	1
Total Dissolved Solids	110		5.0	5.0	mg/L			03/13/13 10:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.78				SU			03/07/13 12:50	1
Field Temperature	24.46				Degrees C			03/07/13 12:50	1
Oxygen, Dissolved	0.23				mg/L			03/07/13 12:50	1
Specific Conductance	179				umhos/cm			03/07/13 12:50	1
Turbidity	2.64				NTU			03/07/13 12:50	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-72

Date Collected: 03/07/13 13:45

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-6

Matrix: Ground Water

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		03/08/13 07:50	03/08/13 15:39	1
Iron	1100		200	50	ug/L		03/08/13 07:50	03/08/13 15:39	1
Sodium	110		0.50	0.31	mg/L		03/08/13 07:50	03/08/13 15:39	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		10	2.0	mg/L			03/22/13 02:39	10
Ammonia as N	11		0.50	0.26	mg/L			03/14/13 18:47	10
Total Dissolved Solids	770		25	25	mg/L			03/13/13 10:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.61				SU			03/07/13 13:45	1
Field Temperature	22.85				Degrees C			03/07/13 13:45	1
Oxygen, Dissolved	0.30				mg/L			03/07/13 13:45	1
Specific Conductance	1234				umhos/cm			03/07/13 13:45	1
Turbidity	0.41				NTU			03/07/13 13:45	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-57
Date Collected: 03/07/13 14:11
Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-7
Matrix: Ground Water

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		03/08/13 07:50	03/08/13 15:50	1
Iron	310		200	50	ug/L		03/08/13 07:50	03/08/13 15:50	1
Sodium	11		0.50	0.31	mg/L		03/08/13 07:50	03/08/13 15:50	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		5.0	1.0	mg/L			03/20/13 21:35	5
Ammonia as N	1.0		0.050	0.026	mg/L			03/13/13 12:35	1
Total Dissolved Solids	88		5.0	5.0	mg/L			03/13/13 10:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.02				SU			03/07/13 14:11	1
Field Temperature	26.31				Degrees C			03/07/13 14:11	1
Oxygen, Dissolved	0.18				mg/L			03/07/13 14:11	1
Specific Conductance	139				umhos/cm			03/07/13 14:11	1
Turbidity	0.26				NTU			03/07/13 14:11	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-30
Date Collected: 03/08/13 10:01
Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-1
Matrix: Ground Water

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		03/12/13 10:05	03/13/13 10:50	1
Iron	460		200	50	ug/L		03/12/13 10:05	03/13/13 10:50	1
Sodium	35		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 10:50	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		5.0	1.0	mg/L			03/14/13 18:09	5
Ammonia as N	2.4		0.10	0.052	mg/L			03/13/13 13:37	2
Total Dissolved Solids	280		10	10	mg/L			03/14/13 14:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.35				SU			03/08/13 10:01	1
Field Temperature	23.84				Degrees C			03/08/13 10:01	1
Oxygen, Dissolved	0.31				mg/L			03/08/13 10:01	1
Specific Conductance	591				umhos/cm			03/08/13 10:01	1
Turbidity	1.93				NTU			03/08/13 10:01	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-58

Date Collected: 03/08/13 10:41

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-2

Matrix: Ground Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24		10	4.0	ug/L		03/12/13 10:05	03/13/13 10:54	1
Iron	3800		200	50	ug/L		03/12/13 10:05	03/13/13 10:54	1
Sodium	18		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 10:54	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		5.0	1.0	mg/L			03/14/13 18:46	5
Ammonia as N	1.4		0.050	0.026	mg/L			03/13/13 13:27	1
Total Dissolved Solids	220		10	10	mg/L			03/14/13 14:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.60				SU			03/08/13 10:41	1
Field Temperature	25.65				Degrees C			03/08/13 10:41	1
Oxygen, Dissolved	0.90				mg/L			03/08/13 10:41	1
Specific Conductance	413				umhos/cm			03/08/13 10:41	1
Turbidity	0.42				NTU			03/08/13 10:41	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-28A

Date Collected: 03/08/13 11:20

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-3

Matrix: Ground Water

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		03/12/13 10:05	03/13/13 10:57	1
Iron	3700		200	50	ug/L		03/12/13 10:05	03/13/13 10:57	1
Sodium	26		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 10:57	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75		5.0	1.0	mg/L			03/14/13 18:58	5
Ammonia as N	3.0		0.10	0.052	mg/L			03/13/13 13:37	2
Total Dissolved Solids	180		5.0	5.0	mg/L			03/14/13 14:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.98				SU			03/08/13 11:20	1
Field Temperature	26.79				Degrees C			03/08/13 11:20	1
Oxygen, Dissolved	0.39				mg/L			03/08/13 11:20	1
Specific Conductance	339				umhos/cm			03/08/13 11:20	1
Turbidity	0.66				NTU			03/08/13 11:20	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-74

Date Collected: 03/08/13 12:00

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-4

Matrix: Ground Water

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		03/12/13 10:05	03/13/13 11:01	1
Iron	20000		200	50	ug/L		03/12/13 10:05	03/13/13 11:01	1
Sodium	17		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 11:01	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47		5.0	1.0	mg/L			03/14/13 19:11	5
Ammonia as N	3.0		0.10	0.052	mg/L			03/13/13 13:37	2
Total Dissolved Solids	180		5.0	5.0	mg/L			03/14/13 14:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.38				SU			03/08/13 12:00	1
Field Temperature	21.06				Degrees C			03/08/13 12:00	1
Oxygen, Dissolved	0.35				mg/L			03/08/13 12:00	1
Specific Conductance	363				umhos/cm			03/08/13 12:00	1
Turbidity	1.24				NTU			03/08/13 12:00	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-75

Date Collected: 03/08/13 12:35

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-5

Matrix: Ground Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.1	I	10	4.0	ug/L		03/12/13 10:05	03/13/13 11:04	1
Iron	8000		200	50	ug/L		03/12/13 10:05	03/13/13 11:04	1
Sodium	17		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 11:04	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		5.0	1.0	mg/L			03/14/13 19:23	5
Ammonia as N	1.9		0.050	0.026	mg/L			03/13/13 13:27	1
Total Dissolved Solids	200		5.0	5.0	mg/L			03/14/13 14:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.40				SU			03/08/13 12:35	1
Field Temperature	21.38				Degrees C			03/08/13 12:35	1
Oxygen, Dissolved	0.27				mg/L			03/08/13 12:35	1
Specific Conductance	379				umhos/cm			03/08/13 12:35	1
Turbidity	2.71				NTU			03/08/13 12:35	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: SUP 2

Date Collected: 03/08/13 13:13

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-6

Matrix: Ground Water

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		03/12/13 10:05	03/13/13 11:08	1
Iron	50	U	200	50	ug/L		03/12/13 10:05	03/13/13 11:08	1
Sodium	8.8		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 11:08	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		5.0	1.0	mg/L			03/14/13 20:00	5
Ammonia as N	0.17		0.050	0.026	mg/L			03/14/13 17:37	1
Total Dissolved Solids	220		5.0	5.0	mg/L			03/14/13 14:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.32				SU			03/08/13 13:13	1
Field Temperature	24.70				Degrees C			03/08/13 13:13	1
Oxygen, Dissolved	0.09				mg/L			03/08/13 13:13	1
Specific Conductance	379				umhos/cm			03/08/13 13:13	1
Turbidity	0.04				NTU			03/08/13 13:13	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: SUP 1

Date Collected: 03/08/13 13:43

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-7

Matrix: Ground Water

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		03/12/13 10:05	03/13/13 11:12	1
Iron	50	U	200	50	ug/L		03/12/13 10:05	03/13/13 11:12	1
Sodium	8.8		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 11:12	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.3		5.0	1.0	mg/L			03/14/13 20:25	5
Ammonia as N	0.16		0.050	0.026	mg/L			03/14/13 17:37	1
Total Dissolved Solids	200		5.0	5.0	mg/L			03/14/13 14:22	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.33				SU			03/08/13 13:43	1
Field Temperature	24.45				Degrees C			03/08/13 13:43	1
Oxygen, Dissolved	0.02				mg/L			03/08/13 13:43	1
Specific Conductance	358				umhos/cm			03/08/13 13:43	1
Turbidity	0.10				NTU			03/08/13 13:43	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: DUPLICATE NOT BLANK

Lab Sample ID: 660-53116-8

Date Collected: 03/08/13 00:00

Matrix: Ground Water

Date Received: 03/08/13 15:48

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		03/12/13 10:05	03/13/13 11:15	1
Iron	460		200	50	ug/L		03/12/13 10:05	03/13/13 11:15	1
Sodium	35		0.50	0.31	mg/L		03/12/13 10:05	03/13/13 11:15	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	170		5.0	1.0	mg/L			03/14/13 20:38	5
Ammonia as N	2.5		0.10	0.052	mg/L			03/14/13 18:04	2
Total Dissolved Solids	290		10	10	mg/L			03/14/13 16:10	1

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-135182/1-A

Matrix: Water

Analysis Batch: 135214

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 135182

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/08/13 07:50	03/08/13 13:55	1
Iron	50	U	200	50	ug/L		03/08/13 07:50	03/08/13 13:55	1
Sodium	0.31	U	0.50	0.31	mg/L		03/08/13 07:50	03/08/13 13:55	1

Lab Sample ID: LCS 660-135182/2-A

Matrix: Water

Analysis Batch: 135214

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 135182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	972		ug/L		97	80 - 120
Iron	1000	1010		ug/L		101	80 - 120
Sodium	10.0	9.79		mg/L		98	80 - 120

Lab Sample ID: 660-53067-B-1-B MS

Matrix: Water

Analysis Batch: 135214

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 135182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.0	U	1000	990		ug/L		99	80 - 120
Iron	50	U	1000	987		ug/L		99	80 - 120
Sodium	23		10.0	33.2		mg/L		100	80 - 120

Lab Sample ID: 660-53067-B-1-C MSD

Matrix: Water

Analysis Batch: 135214

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 135182

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	998		ug/L		100	80 - 120	1	20
Iron	50	U	1000	1000		ug/L		100	80 - 120	2	20
Sodium	23		10.0	33.8		mg/L		107	80 - 120	2	20

Lab Sample ID: MB 660-135291/1-A

Matrix: Water

Analysis Batch: 135333

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 135291

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/12/13 10:05	03/13/13 08:49	1
Iron	50	U	200	50	ug/L		03/12/13 10:05	03/13/13 08:49	1
Sodium	0.31	U	0.50	0.31	mg/L		03/12/13 10:05	03/13/13 08:49	1

Lab Sample ID: LCS 660-135291/2-A

Matrix: Water

Analysis Batch: 135333

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 135291

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	984		ug/L		98	80 - 120
Iron	1000	1040		ug/L		104	80 - 120
Sodium	10.0	9.92		mg/L		99	80 - 120

TestAmerica Tampa

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

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

Lab Sample ID: LCSD 660-135291/3-A

Matrix: Water

Analysis Batch: 135333

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 135291

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1000	973		ug/L		97	80 - 120	1	20
Iron	1000	1050		ug/L		105	80 - 120	0	20
Sodium	10.0	9.90		mg/L		99	80 - 120	0	20

Lab Sample ID: 640-42592-A-2-B MS

Matrix: Water

Analysis Batch: 135333

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 135291

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	976		ug/L		98	80 - 120		
Iron	50	U	1000	1030		ug/L		103	80 - 120		
Sodium	0.31	U	10.0	9.85		mg/L		99	80 - 120		

Lab Sample ID: 640-42592-A-2-C MSD

Matrix: Water

Analysis Batch: 135333

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 135291

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	979		ug/L		98	80 - 120	0	20
Iron	50	U	1000	1040		ug/L		104	80 - 120	1	20
Sodium	0.31	U	10.0	9.97		mg/L		100	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 680-269532/9

Matrix: Water

Analysis Batch: 269532

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	5.0	1.0	mg/L			03/14/13 16:54	5

Lab Sample ID: LCS 680-269532/10

Matrix: Water

Analysis Batch: 269532

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	50.0	50.8		mg/L		102	90 - 110		

Lab Sample ID: LCSD 680-269532/11

Matrix: Water

Analysis Batch: 269532

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	50.0	50.9		mg/L		102	90 - 110	0	30

TestAmerica Tampa

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 660-53116-1 MS

Matrix: Ground Water

Analysis Batch: 269532

Client Sample ID: TH-30

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	170		50.0	220		mg/L		101	90 - 110

Lab Sample ID: 660-53116-1 MSD

Matrix: Ground Water

Analysis Batch: 269532

Client Sample ID: TH-30

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	170		50.0	221		mg/L		101	90 - 110	0	30

Lab Sample ID: 660-53116-6 MS

Matrix: Ground Water

Analysis Batch: 269532

Client Sample ID: SUP 2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	11		50.0	64.0		mg/L		105	90 - 110

Lab Sample ID: MB 680-270223/2

Matrix: Water

Analysis Batch: 270223

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	5.0	1.0	mg/L			03/20/13 16:37	5

Lab Sample ID: LCS 680-270223/3

Matrix: Water

Analysis Batch: 270223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	52.1		mg/L		104	90 - 110

Lab Sample ID: LCSD 680-270223/4

Matrix: Water

Analysis Batch: 270223

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	50.0	52.1		mg/L		104	90 - 110	0	30

Lab Sample ID: 660-53093-7 MS

Matrix: Ground Water

Analysis Batch: 270223

Client Sample ID: TH-57

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	27		50.0	80.9		mg/L		107	90 - 110

Lab Sample ID: 680-88217-I-1 MS

Matrix: Water

Analysis Batch: 270223

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	19		50.0	72.1		mg/L		105	90 - 110

TestAmerica Tampa

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Lab Sample ID: 680-88217-I-1 MSD

Matrix: Water

Analysis Batch: 270223

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	19		50.0	73.4		mg/L		108	90 - 110	2	30

Lab Sample ID: MB 680-270315/2

Matrix: Water

Analysis Batch: 270315

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.0	U	5.0	1.0	mg/L			03/21/13 22:56	5

Lab Sample ID: LCS 680-270315/3

Matrix: Water

Analysis Batch: 270315

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.4		mg/L		103	90 - 110

Lab Sample ID: LCSD 680-270315/4

Matrix: Water

Analysis Batch: 270315

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	50.0	51.5		mg/L		103	90 - 110	0	30

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 680-269268/14

Matrix: Water

Analysis Batch: 269268

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			03/13/13 12:44	1

Lab Sample ID: LCS 680-269268/27

Matrix: Water

Analysis Batch: 269268

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	1.00		mg/L		100	90 - 110

Lab Sample ID: 680-87975-H-1 MS

Matrix: Water

Analysis Batch: 269268

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
Ammonia as N	0.16		1.00	1.11		mg/L		95	90 - 110

TestAmerica Tampa

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 680-87975-H-1 MSD

Matrix: Water

Analysis Batch: 269268

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
Ammonia as N	0.16		1.00	1.11		mg/L		95	90 - 110	0	30

Lab Sample ID: 660-53093-1 DU

Matrix: Ground Water

Analysis Batch: 269268

Client Sample ID: BLANK EQUIPMENT 53093

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia as N	0.026	U	0.026	U	mg/L		NC	30

Lab Sample ID: MB 680-269497/2

Matrix: Water

Analysis Batch: 269497

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			03/14/13 17:37	1

Lab Sample ID: LCS 680-269497/1

Matrix: Water

Analysis Batch: 269497

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	0.993		mg/L		99	90 - 110

Lab Sample ID: 680-88063-F-1 MS

Matrix: Water

Analysis Batch: 269497

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
Ammonia as N	0.20	J3	1.00	1.34	J3	mg/L		114	90 - 110

Lab Sample ID: 680-88063-F-1 MSD

Matrix: Water

Analysis Batch: 269497

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
Ammonia as N	0.20	J3	1.00	1.29		mg/L		110	90 - 110	4	30

Lab Sample ID: 640-42410-J-1 DU

Matrix: Water

Analysis Batch: 269497

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia as N	6.5		6.40		mg/L		1	30

TestAmerica Tampa

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

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

Lab Sample ID: MB 660-135334/1

Matrix: Water

Analysis Batch: 135334

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			03/13/13 10:15	1

Lab Sample ID: LCS 660-135334/2

Matrix: Water

Analysis Batch: 135334

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	9820		mg/L		98	80 - 120

Lab Sample ID: 660-53052-C-1 DU

Matrix: Water

Analysis Batch: 135334

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	510		467		mg/L		8	20

Lab Sample ID: MB 660-135411/1

Matrix: Water

Analysis Batch: 135411

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			03/14/13 14:22	1

Lab Sample ID: LCS 660-135411/2

Matrix: Water

Analysis Batch: 135411

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	9870		mg/L		99	80 - 120

Lab Sample ID: 660-53116-7 DU

Matrix: Ground Water

Analysis Batch: 135411

Client Sample ID: SUP 1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	200		194		mg/L		2	20

Lab Sample ID: MB 660-135418/1

Matrix: Water

Analysis Batch: 135418

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			03/14/13 16:10	1

Lab Sample ID: LCS 660-135418/2

Matrix: Water

Analysis Batch: 135418

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	9830		mg/L		98	80 - 120

TestAmerica Tampa

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Lab Sample ID: 660-53116-8 DU

Matrix: Ground Water

Analysis Batch: 135418

Client Sample ID: DUPLICATE NOT BLANK

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	290		288		mg/L		0	20

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QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Metals

Prep Batch: 135182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53067-B-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-53067-B-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-53093-1	BLANK EQUIPMENT 53093	Total Recoverable	Ground Water	3005A	
660-53093-2	TH-40	Total Recoverable	Ground Water	3005A	
660-53093-3	TH-19	Total Recoverable	Ground Water	3005A	
660-53093-4	TH-42	Total Recoverable	Ground Water	3005A	
660-53093-5	TH-73	Total Recoverable	Ground Water	3005A	
660-53093-6	TH-72	Total Recoverable	Ground Water	3005A	
660-53093-7	TH-57	Total Recoverable	Ground Water	3005A	
LCS 660-135182/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-135182/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 135214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53067-B-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	135182
660-53067-B-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	135182
660-53093-1	BLANK EQUIPMENT 53093	Total Recoverable	Ground Water	6010B	135182
660-53093-2	TH-40	Total Recoverable	Ground Water	6010B	135182
660-53093-3	TH-19	Total Recoverable	Ground Water	6010B	135182
660-53093-4	TH-42	Total Recoverable	Ground Water	6010B	135182
660-53093-5	TH-73	Total Recoverable	Ground Water	6010B	135182
660-53093-6	TH-72	Total Recoverable	Ground Water	6010B	135182
660-53093-7	TH-57	Total Recoverable	Ground Water	6010B	135182
LCS 660-135182/2-A	Lab Control Sample	Total Recoverable	Water	6010B	135182
MB 660-135182/1-A	Method Blank	Total Recoverable	Water	6010B	135182

Prep Batch: 135291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-42592-A-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	
640-42592-A-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-53116-1	TH-30	Total Recoverable	Ground Water	3005A	
660-53116-2	TH-58	Total Recoverable	Ground Water	3005A	
660-53116-3	TH-28A	Total Recoverable	Ground Water	3005A	
660-53116-4	TH-74	Total Recoverable	Ground Water	3005A	
660-53116-5	TH-75	Total Recoverable	Ground Water	3005A	
660-53116-6	SUP 2	Total Recoverable	Ground Water	3005A	
660-53116-7	SUP 1	Total Recoverable	Ground Water	3005A	
660-53116-8	DUPLICATE NOT BLANK	Total Recoverable	Ground Water	3005A	
LCS 660-135291/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 660-135291/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 660-135291/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 135333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-42592-A-2-B MS	Matrix Spike	Total Recoverable	Water	6010B	135291
640-42592-A-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	135291
660-53116-1	TH-30	Total Recoverable	Ground Water	6010B	135291
660-53116-2	TH-58	Total Recoverable	Ground Water	6010B	135291
660-53116-3	TH-28A	Total Recoverable	Ground Water	6010B	135291
660-53116-4	TH-74	Total Recoverable	Ground Water	6010B	135291
660-53116-5	TH-75	Total Recoverable	Ground Water	6010B	135291

TestAmerica Tampa

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Metals (Continued)

Analysis Batch: 135333 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53116-6	SUP 2	Total Recoverable	Ground Water	6010B	135291
660-53116-7	SUP 1	Total Recoverable	Ground Water	6010B	135291
660-53116-8	DUPLICATE NOT BLANK	Total Recoverable	Ground Water	6010B	135291
LCS 660-135291/2-A	Lab Control Sample	Total Recoverable	Water	6010B	135291
LCSD 660-135291/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	135291
MB 660-135291/1-A	Method Blank	Total Recoverable	Water	6010B	135291

General Chemistry

Analysis Batch: 135334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53052-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	
660-53093-1	BLANK EQUIPMENT 53093	Total/NA	Ground Water	SM 2540C	
660-53093-2	TH-40	Total/NA	Ground Water	SM 2540C	
660-53093-3	TH-19	Total/NA	Ground Water	SM 2540C	
660-53093-4	TH-42	Total/NA	Ground Water	SM 2540C	
660-53093-5	TH-73	Total/NA	Ground Water	SM 2540C	
660-53093-6	TH-72	Total/NA	Ground Water	SM 2540C	
660-53093-7	TH-57	Total/NA	Ground Water	SM 2540C	
LCS 660-135334/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-135334/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 135411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53116-1	TH-30	Total/NA	Ground Water	SM 2540C	
660-53116-2	TH-58	Total/NA	Ground Water	SM 2540C	
660-53116-3	TH-28A	Total/NA	Ground Water	SM 2540C	
660-53116-4	TH-74	Total/NA	Ground Water	SM 2540C	
660-53116-5	TH-75	Total/NA	Ground Water	SM 2540C	
660-53116-6	SUP 2	Total/NA	Ground Water	SM 2540C	
660-53116-7	SUP 1	Total/NA	Ground Water	SM 2540C	
660-53116-7 DU	SUP 1	Total/NA	Ground Water	SM 2540C	
LCS 660-135411/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-135411/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 135418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53116-8	DUPLICATE NOT BLANK	Total/NA	Ground Water	SM 2540C	
660-53116-8 DU	DUPLICATE NOT BLANK	Total/NA	Ground Water	SM 2540C	
LCS 660-135418/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-135418/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 269268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53093-1	BLANK EQUIPMENT 53093	Total/NA	Ground Water	350.1	
660-53093-1 DU	BLANK EQUIPMENT 53093	Total/NA	Ground Water	350.1	
660-53093-2	TH-40	Total/NA	Ground Water	350.1	
660-53093-3	TH-19	Total/NA	Ground Water	350.1	
660-53093-4	TH-42	Total/NA	Ground Water	350.1	
660-53093-7	TH-57	Total/NA	Ground Water	350.1	

TestAmerica Tampa

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

General Chemistry (Continued)

Analysis Batch: 269268 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53116-1	TH-30	Total/NA	Ground Water	350.1	
660-53116-2	TH-58	Total/NA	Ground Water	350.1	
660-53116-3	TH-28A	Total/NA	Ground Water	350.1	
660-53116-4	TH-74	Total/NA	Ground Water	350.1	
660-53116-5	TH-75	Total/NA	Ground Water	350.1	
680-87975-H-1 MS	Matrix Spike	Total/NA	Water	350.1	
680-87975-H-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
LCS 680-269268/27	Lab Control Sample	Total/NA	Water	350.1	
MB 680-269268/14	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 269497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-42410-J-1 DU	Duplicate	Total/NA	Water	350.1	
660-53093-5	TH-73	Total/NA	Ground Water	350.1	
660-53093-6	TH-72	Total/NA	Ground Water	350.1	
660-53116-6	SUP 2	Total/NA	Ground Water	350.1	
660-53116-7	SUP 1	Total/NA	Ground Water	350.1	
660-53116-8	DUPLICATE NOT BLANK	Total/NA	Ground Water	350.1	
680-88063-F-1 MS	Matrix Spike	Total/NA	Water	350.1	
680-88063-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
LCS 680-269497/1	Lab Control Sample	Total/NA	Water	350.1	
MB 680-269497/2	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 269532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53116-1	TH-30	Total/NA	Ground Water	300.0	
660-53116-1 MS	TH-30	Total/NA	Ground Water	300.0	
660-53116-1 MSD	TH-30	Total/NA	Ground Water	300.0	
660-53116-2	TH-58	Total/NA	Ground Water	300.0	
660-53116-3	TH-28A	Total/NA	Ground Water	300.0	
660-53116-4	TH-74	Total/NA	Ground Water	300.0	
660-53116-5	TH-75	Total/NA	Ground Water	300.0	
660-53116-6	SUP 2	Total/NA	Ground Water	300.0	
660-53116-6 MS	SUP 2	Total/NA	Ground Water	300.0	
660-53116-7	SUP 1	Total/NA	Ground Water	300.0	
660-53116-8	DUPLICATE NOT BLANK	Total/NA	Ground Water	300.0	
LCS 680-269532/10	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-269532/11	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-269532/9	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 270223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53093-1	BLANK EQUIPMENT 53093	Total/NA	Ground Water	300.0	
660-53093-2	TH-40	Total/NA	Ground Water	300.0	
660-53093-3	TH-19	Total/NA	Ground Water	300.0	
660-53093-4	TH-42	Total/NA	Ground Water	300.0	
660-53093-5	TH-73	Total/NA	Ground Water	300.0	
660-53093-7	TH-57	Total/NA	Ground Water	300.0	
660-53093-7 MS	TH-57	Total/NA	Ground Water	300.0	
680-88217-I-1 MS	Matrix Spike	Total/NA	Water	300.0	
680-88217-I-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

TestAmerica Tampa

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

General Chemistry (Continued)

Analysis Batch: 270223 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 680-270223/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-270223/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-270223/2	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 270315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53093-6	TH-72	Total/NA	Ground Water	300.0	
LCS 680-270315/3	Lab Control Sample	Total/NA	Water	300.0	
LCSD 680-270315/4	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 680-270315/2	Method Blank	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 135186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53093-2	TH-40	Total/NA	Ground Water	Field Sampling	
660-53093-3	TH-19	Total/NA	Ground Water	Field Sampling	
660-53093-4	TH-42	Total/NA	Ground Water	Field Sampling	
660-53093-5	TH-73	Total/NA	Ground Water	Field Sampling	
660-53093-6	TH-72	Total/NA	Ground Water	Field Sampling	
660-53093-7	TH-57	Total/NA	Ground Water	Field Sampling	

Analysis Batch: 135242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53116-1	TH-30	Total/NA	Ground Water	Field Sampling	
660-53116-2	TH-58	Total/NA	Ground Water	Field Sampling	
660-53116-3	TH-28A	Total/NA	Ground Water	Field Sampling	
660-53116-4	TH-74	Total/NA	Ground Water	Field Sampling	
660-53116-5	TH-75	Total/NA	Ground Water	Field Sampling	
660-53116-6	SUP 2	Total/NA	Ground Water	Field Sampling	
660-53116-7	SUP 1	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: BLANK EQUIPMENT 53093

Lab Sample ID: 660-53093-1

Date Collected: 03/07/13 09:30

Matrix: Ground Water

Date Received: 03/07/13 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135182	03/08/13 07:50	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	135214	03/08/13 15:22	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135334	03/13/13 10:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	269268	03/13/13 12:35	JE	TAL SAV
Total/NA	Analysis	300.0		5	270223	03/20/13 20:21	PAT	TAL SAV

Client Sample ID: TH-40

Lab Sample ID: 660-53093-2

Date Collected: 03/07/13 09:57

Matrix: Ground Water

Date Received: 03/07/13 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135182	03/08/13 07:50	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	135214	03/08/13 15:25	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135334	03/13/13 10:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	269268	03/13/13 12:35	JE	TAL SAV
Total/NA	Analysis	300.0		5	270223	03/20/13 20:33	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135186	03/07/13 09:57		TAL TAM

Client Sample ID: TH-19

Lab Sample ID: 660-53093-3

Date Collected: 03/07/13 10:32

Matrix: Ground Water

Date Received: 03/07/13 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135182	03/08/13 07:50	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	135214	03/08/13 15:29	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135334	03/13/13 10:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	269268	03/13/13 12:35	JE	TAL SAV
Total/NA	Analysis	300.0		5	270223	03/20/13 20:45	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135186	03/07/13 10:32		TAL TAM

Client Sample ID: TH-42

Lab Sample ID: 660-53093-4

Date Collected: 03/07/13 11:31

Matrix: Ground Water

Date Received: 03/07/13 16:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135182	03/08/13 07:50	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	135214	03/08/13 15:32	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135334	03/13/13 10:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	269268	03/13/13 12:35	JE	TAL SAV
Total/NA	Analysis	300.0		5	270223	03/20/13 20:58	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135186	03/07/13 11:31		TAL TAM

TestAmerica Tampa

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-73

Date Collected: 03/07/13 12:50

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135182	03/08/13 07:50	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	135214	03/08/13 15:36	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135334	03/13/13 10:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	269497	03/14/13 17:45	RW	TAL SAV
Total/NA	Analysis	300.0		5	270223	03/20/13 21:10	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135186	03/07/13 12:50		TAL TAM

Client Sample ID: TH-72

Date Collected: 03/07/13 13:45

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135182	03/08/13 07:50	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	135214	03/08/13 15:39	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135334	03/13/13 10:15	TO	TAL TAM
Total/NA	Analysis	350.1		10	269497	03/14/13 18:47	RW	TAL SAV
Total/NA	Analysis	300.0		10	270315	03/22/13 02:39	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135186	03/07/13 13:45		TAL TAM

Client Sample ID: TH-57

Date Collected: 03/07/13 14:11

Date Received: 03/07/13 16:05

Lab Sample ID: 660-53093-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135182	03/08/13 07:50	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	135214	03/08/13 15:50	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135334	03/13/13 10:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	269268	03/13/13 12:35	JE	TAL SAV
Total/NA	Analysis	300.0		5	270223	03/20/13 21:35	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135186	03/07/13 14:11		TAL TAM

Client Sample ID: TH-30

Date Collected: 03/08/13 10:01

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 10:50	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135411	03/14/13 14:22	TO	TAL TAM
Total/NA	Analysis	350.1		2	269268	03/13/13 13:37	JE	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 18:09	PAT	TAL SAV

TestAmerica Tampa

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-30

Date Collected: 03/08/13 10:01

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Field Sampling		1	135242	03/08/13 10:01		TAL TAM

Client Sample ID: TH-58

Date Collected: 03/08/13 10:41

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 10:54	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135411	03/14/13 14:22	TO	TAL TAM
Total/NA	Analysis	350.1		1	269268	03/13/13 13:27	JE	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 18:46	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135242	03/08/13 10:41		TAL TAM

Client Sample ID: TH-28A

Date Collected: 03/08/13 11:20

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-3

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 10:57	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135411	03/14/13 14:22	TO	TAL TAM
Total/NA	Analysis	350.1		2	269268	03/13/13 13:37	JE	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 18:58	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135242	03/08/13 11:20		TAL TAM

Client Sample ID: TH-74

Date Collected: 03/08/13 12:00

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-4

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 11:01	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135411	03/14/13 14:22	TO	TAL TAM
Total/NA	Analysis	350.1		2	269268	03/13/13 13:37	JE	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 19:11	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135242	03/08/13 12:00		TAL TAM

TestAmerica Tampa

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Client Sample ID: TH-75

Date Collected: 03/08/13 12:35

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 11:04	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135411	03/14/13 14:22	TO	TAL TAM
Total/NA	Analysis	350.1		1	269268	03/13/13 13:27	JE	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 19:23	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135242	03/08/13 12:35		TAL TAM

Client Sample ID: SUP 2

Date Collected: 03/08/13 13:13

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 11:08	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135411	03/14/13 14:22	TO	TAL TAM
Total/NA	Analysis	350.1		1	269497	03/14/13 17:37	RW	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 20:00	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135242	03/08/13 13:13		TAL TAM

Client Sample ID: SUP 1

Date Collected: 03/08/13 13:43

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 11:12	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135411	03/14/13 14:22	TO	TAL TAM
Total/NA	Analysis	350.1		1	269497	03/14/13 17:37	RW	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 20:25	PAT	TAL SAV
Total/NA	Analysis	Field Sampling		1	135242	03/08/13 13:43		TAL TAM

Client Sample ID: DUPLICATE NOT BLANK

Date Collected: 03/08/13 00:00

Date Received: 03/08/13 15:48

Lab Sample ID: 660-53116-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			135291	03/12/13 10:05	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	135333	03/13/13 11:15	SR	TAL TAM
Total/NA	Analysis	SM 2540C		1	135418	03/14/13 16:10	TO	TAL TAM
Total/NA	Analysis	350.1		2	269497	03/14/13 18:04	RW	TAL SAV
Total/NA	Analysis	300.0		5	269532	03/14/13 20:38	PAT	TAL SAV

TestAmerica Tampa

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

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

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Method Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL TAM
300.0	Anions, Ion Chromatography	MCAWW	TAL SAV
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 County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

TestAmerica Job ID: 660-53093-1

Laboratory: TestAmerica Tampa

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40610	06-30-13
Florida	NELAP	4	E84282	06-30-13
Georgia	State Program	4	905	06-30-13
USDA	Federal		P330-11-00177	04-20-14

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
A2LA	DoD ELAP		0399-01	03-31-13
A2LA	ISO/IEC 17025		399.01	03-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
Iowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	03-31-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13

TestAmerica Tampa

Certification Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: SELF IAMP Monitoring Wells

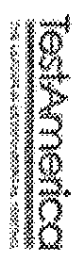
TestAmerica Job ID: 660-53093-1

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	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD



660-53093

TestAmerica Tampa
6712 Benjamin Rd, Suite 100
Tampa, FL 33634
Phone: (813) 885 7427
Fax: (813) 885 7049
Alternate Laboratory Name/Location:
Phone:
Fax:

Serial Number

PROJECT REFERENCE SELF-JAMP Monitoring Wells		PROJECT NO.		PROJECT LOCATION Lithia, FL		MATRIX TYPE		STANDARD REPORT DELIVERY ☐		DATE DUE ☐	
TESTAMERICA (LAB) PROJECT MANAGER Nancy Robertson		P.O. NUMBER		CONTRACT NO.		COMPOSITE (C) OR GRAB (G) INDICATE		H2SO4 Ammonia-N		TDS	
CLIENT (SITE) PM Michael Townsend		CLIENT PHONE (813) 663-3222		CLIENT FAX (813) 274-6801		AQUEOUS (WATER)		Ice		Chloride	
CLIENT NAME Hills County Public Utilities		CLIENT EMAIL townselm@hillsboroughcounty.org				SOLID OR SEMISOLID		Ice		As, Fe, Na	
CLIENT ADDRESS 332 North Falkenburg Road						AIR		HNO3			
COMPANY CONTRACTING THIS WORK		SAMPLERS SIGNATURE 				NONAQUEOUS LIQUID (OIL, SOLVENT...)					
SAMPLE DATE 3-7-13		TIME 0930		SAMPLE IDENTIFICATION EQUIPMENT BLANK				NUMBER OF CONTAINERS SUBMITTED		REMARKS	
3-7-13		0957		TH-40		GX		1 1 1 1			
3-7-13		1032		TH-19		GX		1 1 1 1			
3-7-13		1131		TH-42		GX		1 1 1 1			
3-7-13		1250		TH-73		GX		1 1 1 1			
3-7-13		1345		TH-72		GX		1 1 1 1			
3-7-13		1411		TH-57		GX		1 1 1 1			
REINQUISHED BY: (SIGNATURE)		DATE 3-7-13		TIME 4:05		REINQUISHED BY: (SIGNATURE)		DATE		TIME	
RECEIVED BY SIGNATURE 		DATE 3/7/13		TIME 1605		RECEIVED BY: (SIGNATURE)		DATE		TIME	
RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE		TIME		CUSTODY INTACT YES ☒ NO ☐		CUSTODY SEAL NO.		STL LOG NO.	
LABORATORY USE ONLY		LABORATORY REMARKS 2106403									

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Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	White
2	Light Gray
3	Blue
4	Teal
5	Green
6	Yellow
7	Orange
8	Red
9	Magenta
10	Purple
11	Dark Blue
12	Dark Green
13	Dark Red
14	Black

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

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Yellow	Orange	Red	Pink	Purple	Blue	Green	Teal	Cyan	Light Blue	Dark Blue	Black	White	Grey

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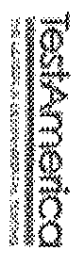
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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

660-58116

TestAmerica Tampa
6712 Benjamin Rd, Suite 100
Tampa, FL 33634
Phone: (813) 885 7427
Fax: (813) 885 7049
www.testamericainc.com

Serial Number

Phone:
Fax:

PROJECT REFERENCE SELF-IAMP Monitoring Wells	PROJECT NO.	PROJECT LOCATION Lithia, FL	MATRIX TYPE
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TESTAMERICA (LAB) PROJECT MANAGER Nancy Robertson	P.O. NUMBER	CONTRACT NO.
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CLIENT (SITE) PM Michael T. Townsend	CLIENT PHONE (813) 663-3222	CLIENT FAX (813) 274-6801
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CLIENT NAME Hills County Public Utilities	CLIENT EMAIL townselm@hillsboroughcounty.org
--	---

CLIENT ADDRESS 332 North Falkenburg Road	COMPANY CONTRACTING THIS WORK
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SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	SAMPLER'S SIGNATURE	COMPOSITE (C) OR GRAB (G) INDICATE	NUMBER OF CONTAINERS SUBMITTED	REMARKS
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3-8-13	10:01	TH-30	G	X	1	1	1	
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3-8-13	10:41	TH-58	G	X	1	1	1	
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3-8-13	11:20	TH-284	G	X	1	1	1	
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3-8-13	12:00	TH-74	G	X	1	1	1	
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3-8-13	12:35	TH-75	G	X	1	1	1	
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3-8-13	13:13	SUP-2	G	X	1	1	1	
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3-8-13	13:43	SUP-1	G	X	1	1	1	
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3-8-13	—	DUPLICATE	G	X	1	1	1	
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RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
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RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
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RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT YES NO	CUSTODY SEAL NO	STL LOG NO.	LABORATORY REMARKS
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PURGING DATA				
WELL DIAMETER (Inches): 4	TUBING DIAMETER (Inches): N/A	WELL SCREEN INTERVAL DEPTH: N/A feet to N/A feet	STATIC DEPTH TO WATER (feet): N/A	PURGE PUMP TYPE OR BAILER: ESP-Valve
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) $= (N/A \text{ feet} - N/A \text{ feet}) \times N/A \text{ gallons/foot} = N/A \text{ gallons}$				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) $= \text{gallons} + (\text{gallons/foot} \times \text{feet}) + \text{gallons} = \text{gallons}$				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: 1250	PURGING ENDED AT: 1311	TOTAL VOLUME PURGED (gallons): 105

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" = 0.0028; 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)									

[illegible]

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 12, 2009

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13 The following are the names of the people who were involved in the project:

[illegible]

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13 The following are the names of the people who were involved in the project:

[illegible]

13 The following are the names of the people who were involved in the project:

13 The following are the names of the people who were involved in the project:

[illegible]

TestAmerica Tampa
6712 Benjamin Road Suite 100
Tampa, FL 33634
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:						
Client Contact: Shipping/Receiving		Phone:	Robertson, Nancy		860-53785.1						
Company: TestAmerica Laboratories, Inc.			E-Mail: nancy.robertson@testamericainc.com		Page: 1 of 1						
Address: 5102 LaRoche Avenue, Savannah State, Zip: GA, 31404 Phone: 912-354-7858(Tel) 912-352-0165(Fax) Email:		Due Date Requested: 3/15/2013 TAT Requested (days): PO #: WO #: Project #: 66003915 Site: Southeast Landfill	Analysis Requested								
Project Name: SELF MWs, SS, Private Wells NPDES		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylate U - Acetone V - MCAA W - ph 4.5 Z - other (specify)									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, BT=biological tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0, 280 Chloride	350.1 Nitrogen, Ammonia	Total Number of Containers	Special Instructions/Note:
TH-30 (660-53116-1)		3/8/13	10:01 Eastern		Water	X	X	X	X	2	
TH-58 (660-53116-2)		3/8/13	10:41 Eastern		Water	X	X	X	X	2	
TH-28A (660-53116-3)		3/8/13	11:20 Eastern		Water	X	X	X	X	2	
TH-74 (660-53116-4)		3/8/13	12:00 Eastern		Water	X	X	X	X	2	
TH-75 (660-53116-5)		3/8/13	12:35 Eastern		Water	X	X	X	X	2	
SUP 2 (660-53116-6)		3/8/13	13:13 Eastern		Water	X	X	X	X	2	
SUP 1 (660-53116-7)		3/8/13	13:43 Eastern		Water	X	X	X	X	2	
DUPLICATE NOT BLANK (660-53116-8)		3/8/13	Eastern		Water	X	X	X	X	2	
Possible Hazard Identification											
Unconfirmed											
Deliverable Requested: I, II, III, IV, Other (specify)											
Empty Kit Relinquished by:											
Relinquished by:											
Date/Time:											
Company:											
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Relinquished by:											
Date/Time:											
Company:											
Custody Seal No.:											
Custody Seals Intact: ☐ Yes ☐ No											
Cooler Temperature(s) °C and Other Remarks:											

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-53093-1

Login Number: 53093

List Source: TestAmerica Tampa

List Number: 1

Creator: Snead, Joshua

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?	True	
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 $<6\text{mm}$ (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 County Public Utilities Dep

Job Number: 660-53093-1

Login Number: 53093

List Number: 1

Creator: Conner, Keaton

List Source: TestAmerica Savannah

List Creation: 03/08/13 08:42 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
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").	True	
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 County Public Utilities Dep

Job Number: 660-53093-1

Login Number: 53116

List Source: TestAmerica Tampa

List Number: 1

Creator: Snead, Joshua

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?	True	
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 $<6\text{mm}$ (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 County Public Utilities Dep

Job Number: 660-53093-1

Login Number: 53116

List Number: 1

Creator: Barnett, Eddie T

List Source: TestAmerica Savannah

List Creation: 03/11/13 07:57 AM

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?	True	
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	