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November 7, 2012

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

**RE: Southeast County Landfill
Laboratory Analytical Results
Initial Assessment Monitoring Plan
Report No. 25**

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. The monthly sampling event was conducted on September 6-7, 2012, 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 findings from this sampling event, and 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 4.24 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 the four (4) upper Floridan groundwater monitoring wells and the two (2) on-site supply wells were all 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. Values ranged from 1.7 to 6.12 Nephelometric Turbidity Units (NTU) in the surficial aquifer wells, and from 0.83 to 7.39 NTU in the upper Floridan wells. Due to elevated turbidity observed in P-18S, the County collected a representative groundwater sample from the surficial aquifer groundwater monitoring well, TH-30.

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 242 to 696 micromhos per centimeter (umhos/cm). The conductivity values observed in the upper Floridan groundwater monitoring wells at the site are generally low. However, during this sampling event TH-72 was observed at 2357 umhos/cm, which is a significant increase from the previous month's value. The conductivity observed in this well is likely attributable to the downward migration of groundwater through the sinkhole and the fluids associated with the grouting materials introduced to stabilize the area. The County will continue evaluating water quality and the higher conductivity values observed.

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 1300 mg/l, indicating impact to the upper Floridan aquifer immediately down gradient of the sinkhole. All the other upper Floridan wells were observed well below the SDWS for TDS.

Chloride

Chloride values in the surficial aquifer groundwater monitoring wells ranged in concentration from 25 to 150 mg/l, which are all below the SDWS of 250 mg/l. The chloride value observed in TH-72 was 570 mg/l, which is a significant increase from the previous month's result of 210 mg/l. Chloride values are historically very low in the upper Floridan aquifer

monitoring wells and limited use potable supply wells, and the other wells all continue to exhibit very low chloride.

Arsenic

The arsenic observed in TH-58 during this sampling event was 0.028 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 have recently been observed in TH-58, the arsenic values have 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 naturally occurring within the soils surrounding the well. Arsenic is likely being mobilized in the anaerobic environment below the lined landfill. The arsenic observed in TH-74 and TH-75 is likely a result of these processes as well, as they are located down gradient of TH-58, just beyond 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. As previously discussed, the elevated iron concentrations observed in the surficial aquifer wells at specific locations across the site are consistent with background water quality, 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 1.1 mg/l. The significant increase in iron concentrations in this well are indicative of impact from ground water passing downward through waste in the sinkhole.

Total Ammonia

Ammonia concentrations in surficial aquifer well TH-28A was observed at 3.0 mg/l, which is slightly above the Groundwater Cleanup Target Level (GCTL) of 2.8 mg/l. TH-74 was observed at 2.8 mg/l. The location of TH-28A is directly south of surficial well TH-73 and south/southwest of the sinkhole. The location of TH-74 is immediately west/northwest of the sinkhole. The upper Floridan well TH-72 also exhibited ammonia above the GCTL at a concentration of 12.0 mg/l. The source of the ammonia observed in the groundwater in the immediate vicinity of the sinkhole is likely attributable to waste that entered 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) surficial aquifer wells. The water level data is collected the day before the IAMP sampling events, and no significant changes have been observed 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. However, over the past several months there have been some anomalous observations in a few of the wells on site. For example, the piezometers P-4S and P-4D exhibit significantly different elevations, 131.95 and 119.67, respectively. When compared to the closest wells in the area, these elevations, specifically P-4D, may represent a perched aquifer and isolation from the normal flow patterns in the subsurface. Additionally, the elevations observed within the wells closest to the sinkhole indicate that flow patterns may be affected in the immediate vicinity, which would not be unexpected. The overall direction of flow remains toward the west/northwest across the site.

Evaluation of Historical Water Quality Data

The County has prepared a database of the analytical data generated to date by the IAMP. Sampling has been conducted on a monthly schedule, during the first week of the month, and the results have consistently been submitted to the Department within the requested time frame. The water quality changes that have been observed have remained in close proximity to the sinkhole and appear to be partially attributable to the fluids introduced into the subsurface by the grout materials injected to stabilize the area. The specific water quality data compiled for each of the eleven groundwater monitoring wells and the two limited use supply wells is discussed in following paragraphs.

P-18S

This surficial aquifer piezometer, which was constructed to monitoring well specifications, is located approximately 600 feet northeast of the sinkhole area. The water quality observed in P-18S has been consistent throughout the period of record. The pH values have been below the acceptable range of values and ranged from 4.47 to 4.88 pH units. Iron has consistently exceeded the standard of 0.3 mg/l. Chloride, TDS, and ammonia have consistently been low. This former piezometer, which was constructed to monitoring well specifications, was initially included in all IAMP events, but later was conditionally sampled based on turbidity values. No impact to water quality has been observed in this well.

TH-28A

This surficial aquifer monitoring well is located approximately 200 feet south/southeast of the sinkhole area. The water quality in TH-28A has also been relatively consistent over the period of record. The pH values have historically been below the acceptable range, which is similar to background water quality for the entire landfill site. Iron values appear to be trending slightly upward since the beginning of the IAMP. Ammonia values have increased to above the standard of 2.8 mg/l over the past five months. Chloride values exhibit a slightly increasing trend from February to July 2012, but began to decrease in August and have stabilized. TDS and conductivity values show no particularly apparent trends.

TH-30

This surficial aquifer monitoring well is located approximately 900 feet north/northeast of the sinkhole area. The water quality in TH-30 is consistent with the historical data for the site. The pH values are below the acceptable range. Iron and Chloride appear to be slowly trending upward, and iron has exceeded the standard over the past seven months.

TH-57

This surficial aquifer monitoring well is located approximately 700 feet south of the sinkhole area. The water quality in TH-57 is consistent with the historical data set and background water quality, with iron exceeding standards and pH below the acceptable range. No apparent impact from the sinkhole or the grouting materials has been observed.

TH-58

This surficial aquifer well is located approximately 200 north of the sinkhole. The water quality observed in TH-58 has exhibited significant changes over the period of record. The pH values have remained very consistent over the IAMP period of record, ranging from 5.6 to 5.9 pH units. The TDS and chloride values began exceeding their respective standards in April 2011, and TDS continued exceeding until March 2012. Chloride values exceeded until January 2012. These impacts are thought to be attributable to the grout materials and fluids introduced into the subsurface to stabilize the area. Arsenic and iron consistently exceed standards over the IAMP period of record. The concentrations of arsenic have remained very consistent for well over ten years, and this observation supports the position that the arsenic is likely attributable to the anaerobic environmental conditions under the lined landfill. Iron concentrations appear to increase and correlate to the period where TDS and chloride values increase, and the increases in iron appear to also be associated with the grouting activities. Increases in conductivity and sodium also correlate to these same months. It should be noted that the water quality changes that were observed have receded back to the background levels prior to the grouting activities.

TH-73

This surficial aquifer monitoring well is located immediately west of the sinkhole area. The water quality in TH-73 has exhibited changes that correlate directly with the grouting activities. TDS, chloride, ammonia, iron, sodium, and conductivity all increased in November 2011, and returned to background levels in February 2012. Based on these observations, these impacts appear attributable to the grouting activities.

TH-74

This surficial aquifer monitoring well is located approximately 100 feet northwest of the sinkhole area and down the slope of the west dike wall. This well was installed as part of the evaluation of water quality in the vicinity of TH-58, but it was appropriately included in the IAMP to evaluate water quality changes along the western margin of the landfill. Water quality in TH-74 has been very consistent with pH values below the acceptable range, TDS in the 200-350 range, chlorides with standards, ammonia hovering just below or just above the standard of 2.8 mg/L, and elevated iron values. The minor impacts observed later in the IAMP period of record appear to be attributable to the grout materials and the slow movement of groundwater away from the sinkhole area.

TH-75

This surficial aquifer monitoring well is located approximately 250 feet north/northwest of the sinkhole area and down the slope of the west dike wall. This well was also installed as part of the evaluation of water quality in the vicinity of TH-58, but it was appropriately included in the IAMP to evaluate water quality changes along the western margin of the landfill. The pH values have consistently been below the acceptable range, with values observed from 5.28 to 6.65 pH units. Iron has consistently exceeded the SDWS with values ranging from 8.3 to 16 mg/L. Arsenic exceeded the PDWS one time in December 2011, but has remained below over the next eight sampling events. Conductivity, chloride, TDS and sodium all exhibit a period of slightly elevated values from March to June 2012, but each constituent decreased significantly in July and August.

TH-19

This upper Floridan aquifer monitoring well is located on the east side of Mine Cut No. 1 in the up gradient direction from the landfill footprint. The observations from IAMP and the landfill operations permit required monitoring program indicate very consistent and stable water quality unaffected by the landfill or any other sources of contamination.

TH-40

This upper Floridan aquifer monitoring well is located on the southwest corner of the site and in the down gradient direction from the landfill footprint. The observations from IAMP and the landfill operations permit required monitoring program indicate very consistent and stable water quality unaffected by the landfill or any other sources of contamination.

TH-42

This upper Floridan aquifer monitoring well is located north of the landfill and in the up/cross gradient direction from the sinkhole. The observations from IAMP indicate relatively consistent and stable water quality unaffected by the landfill or any other sources of contamination. However, this well had not been sampled for several years, and the initial sampling efforts encountered very high turbidity readings and elevated iron values. Over the IAMP period of record the well has cleared up and as turbidity values were reduced, the iron decreased significantly. The iron appears to not be a dissolved component of the groundwater, and is likely attributable to the entrained sediments and potential turbidity associated bias.

TH-72

This upper Floridan aquifer monitoring well is located immediately west and down gradient of the sinkhole. Water quality in this well has been relatively consistent with only short lived minor impacts likely attributable to the sinkhole and fluids associated with the grout materials introduced into the subsurface. However, the most recent data indicate significant increases in conductivity, TDS, chloride, and ammonia. These impacts are likely attributable to the fluids associated with the grouting materials and the waste that dropped into the throat of the sinkhole. Downward and outward migration of the groundwater driven by higher water table elevations and possibly the higher potentiometric surface of the upper Floridan (UFA) may be contributing to the water quality changes in this well. It should be noted that this well is approximately 50 feet from the west edge of the sinkhole, and the impacts to water quality in close proximity were not unexpected.

SUP-1

This limited use potable supply well is located at the Administration and Scale House Building at the site. This well has exhibited very consistent and good water quality with only iron exceeding the SDWS once over the period of record. The observations from IAMP indicate very consistent and stable water quality unaffected by the landfill or any other sources of contamination.

SUP-2

This limited use potable supply well is located at the Waste Management Maintenance Building at the site. This well has also exhibited very consistent and good water quality over the period record. The observations from IAMP indicate very consistent and stable water quality unaffected by the landfill or any other sources of contamination.

Conclusions

The water quality observed in the September 2012 sampling event continues to indicate the wells closest to the sinkhole have exhibited minor changes in water quality. Based on the proximity of the wells and the trends observed, it is apparent that these impacts are likely a result of the waste within the sinkhole and/or the fluids introduced during the grouting activities conducted as part of the initial remediation activities to stabilize the subsurface in the area.

Overall, the water quality observations continue to indicate impacts in close proximity to the sinkhole. The impacts observed in the upper Floridan aquifer monitoring well, TH-72, continue to exhibit increasing concentrations of conductivity, TDS, chloride, ammonia, and iron. The changes in water quality were not unexpected in the upper Floridan monitoring well immediately adjacent to the sinkhole. As presented in the HDR Evaluation of Groundwater Monitoring Plan, which was submitted to the FDEP on December 15, 2010, groundwater would be expected to move less than one foot per day within the surficial aquifer and less than 0.1 foot per day within the upper Floridan. Therefore, the impacts observed would be anticipated to remain in close proximity to the sinkhole in both aquifers, and additional wells do not appear warranted.

The on-site limited use potable supply wells continue to exhibit very good water quality and no significant changes have been observed to date.

Recommendations

The County will continue to evaluate water quality in the IAMP network of monitoring and supply wells. Specific attention to the changes in the upper Floridan aquifer well TH-72 will be a primary focus in the future monthly sampling events.

Based on over 20 months of monthly IAMP sampling and the water quality data observed to date, and the known velocities of groundwater within the surficial and upper Floridan aquifers, the County recommends the IAMP sampling program be reduced to a quarterly schedule in the beginning with this month's sampling event. We strongly believe that the data set compiled supports this recommendation.

As previously discussed, the sampling of these wells could be performed in conjunction with the landfill operations permit required quarterly sampling schedule. Logically, the data for IAMP would continue to be reported separately. If the Department approves of the proposed changes to IAMP the November sampling event would be the final monthly event, and the next IAMP sampling would be conducted in February 2013. Please provide a formal response to this request as soon as possible to allow for scheduling changes.

Mr. John Morris, P.G.
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Enclosed for your review please find a site location map depicting the on-site wells sampled, the water quality data summary table for the September 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 up to August 2012, and the complete analytical data report from our contracted laboratory, Test America, Inc.

Should you have any questions or require any additional information please feel free to call me at my new direct line telephone number, (813) 663-3221.

Respectfully submitted,

 11/7/2012

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



xc: John Lyons, Director, Public Works Department
Patricia Berry, Public Utilities Department
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Brian Miller, DOH
Rich Siemering, HDR
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Hillsborough County Southeast Landfill
Laboratory Analytical Results from Groundwater Monitoring and On-Site Supply Wells
September 6-7, 2012

GENERAL (mg/l) PARAMETERS	Surficial Aquifer Wells							Upper Floridan Aquifer Wells						(MCL) STANDARD
	TH-28A	TH-30	TH-57	TH-58	TH-73	TH-74	TH-75	TH-19	TH-40	TH-42	TH-72	SUP-1	SUP-2	
conductivity (umhos/cm) (field)	269	433	252	696	242	578	360	406	337	519	2357	351	359	NS
dissolved oxygen (mg/l) (field)	0.24	0.11	0.20	0.31	0.50	0.24	0.18	0.23	0.29	0.14	0.20	0.06	0.05	NS
pH (field)	5.27	4.24	4.90	5.60	5.06	5.33	5.41	6.92	7.33	6.98	6.51	7.27	7.24	(6.5 - 8.5)**
temperature (°C) (field)	27.26	23.61	26.79	25.02	24.67	24.08	24.50	23.49	23.59	23.87	23.62	24.48	24.79	NS
turbidity (NTU) (field)	2.55	1.51	0.97	0.83	7.39	2.37	4.41	1.21	0.68	16.9	1.05	0.74	0.5	NS
total dissolved solids (mg/l)	150	220	160	390	140	330	200	230	210	280	1300	210	210	500**
chloride (mg/l)	49	130	40	130	47	110	40	8.4	8.5 J3	18	570	9.7 J3	11	250**
ammonia nitrogen (mg/l as N)	3	2.6	1.1	1.5	1.3	2.8	2	0.35	0.45	0.32	12	0.14	0.15	2.8***
														(MCL) STANDARD
Metals: (mg/l)	TH-28A	TH-30	TH-57	TH-58	TH-73	TH-74	TH-75	TH-19	TH-40	TH-42	TH-72	SUP-1	SUP-2	
arsenic	0.004 <i>u</i>	0.004 <i>u</i>	0.004 <i>u</i>	0.028	0.004 <i>u</i>	0.012	0.01	0.004 <i>u</i>	0.004 <i>u</i>	0.004 <i>u</i>	0.004 <i>u</i>	0.004 <i>u</i>	0.004 <i>u</i>	0.01*
iron	3.6	0.37	0.45	3.5	3.6	21	9.1	0.05 <i>u</i>	0.05 <i>u</i>	0.64	1.1	0.05 <i>u</i>	0.05 <i>u</i>	0.3**
sodium	20	28	14	36	18	36	15	14	16	16	170	8.3	8.4	160*
Note: Ref. Groundwater Guidance Concentrations, FDEP 2012 MCL=MAXIMUM CONTAMINANT LEVEL BDL=BELOW DETECTION LIMIT NTU=NEPHELOMETRIC TURBIDITY UNITS <i>i</i> = reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. <i>u</i> = parameter was analyzed but not detected. * = DENOTES PRIMARY DRINKING WATER STANDARD ** = DENOTES SECONDARY DRINKING WATER STANDARD *** = DENOTES FLORIDA GUIDANCE CONCENTRATION 5.27 EXCEEDS STANDARD ug/l=MICROGRAMS PER LITER mg/l=MILLIGRAMS PER LITER NS=NO STANDARD														

GROUNDWATER AND SURFACE WATER ELEVATIONS FOR SOUTHEAST LANDFILL

September 5, 2012

Measuring Point I.D.	T.O.C. Elevations (NGVD)	09/05/2012		Time
		W.L. B.T.O.C.	W.L. (NGVD)	
P-4D	140.78	21.11	119.67	10:35 AM
P-4S	140.95	9.00	131.95	10:34 AM
P-5D	151.94	Dry	Dry	11:12 AM
P-6D-A	148.01	22.63	125.38	11:20 AM
P-7D	138.92	15.28	123.64	10:09 AM
P-8D	138.34	16.64	121.70	10:03 AM
P-11D	138.02	15.84	122.18	10:25 AM
P-12S	134.97	12.59	122.38	10:01 AM
P-13S	140.21	18.50	123.71	10:19 AM
P-14S	138.56	14.65	123.91	10:15 AM
P-15S	139.19	15.46	123.73	10:13 AM
P-16S	143.38	15.99	127.39	10:53 AM
P-16I	144.15	22.06	122.09	10:52 AM
P-16D	143.84	21.76	122.08	10:51 AM
P-17S	137.35	9.58	127.77	11:28 AM
P-17I	137.32	13.28	124.04	11:27 AM
P-17D	137.22	13.69	123.53	11:26 AM
P-18S	129.86	17.11	112.75	12:01 PM
P-19	133.36	8.76	126.60	11:16 AM
P-20	132.38	9.89	122.49	10:56 AM
P-21	122.79	0.93	121.86	10:41 AM
P-22	128.35	6.41	121.94	10:44 AM
P-23	143.13	21.11	122.02	10:47 AM
TH-19*	130.27	90.81	39.46	11:03 AM
TH-20A	131.86	8.04	123.82	9:45 AM
TH-20B	132.57	8.88	123.69	9:46 AM
TH-22	128.82	4.12	124.70	9:38 AM
TH-22A	129.27	4.75	124.52	9:37 AM
TH-24A	128.23	3.64	124.59	9:41 AM
TH-28A	131.10	27.89	103.21	12:13 PM
TH-30	128.88	23.55	105.33	12:05 PM
TH-32	129.90	10.48	119.42	11:41 AM
TH-35	145.98	28.18	119.80	11:31 AM
TH-36A	152.70	31.74	120.96	11:00 AM
TH-38A	130.68	8.93	121.75	9:56 AM
TH-38B	131.81	9.41	122.40	9:55 AM
TH-40*	124.99	85.90	39.09	9:22 AM
TH-41*	125.00	90.90	34.10	9:21 AM
TH-42*	116.74	69.12	47.62	11:38 AM
TH-57	128.36	18.14	110.22	12:15 PM
TH-58	127.88	27.24	100.64	12:07 PM
TH-61	138.73	15.51	123.22	10:22 AM
TH-61A	139.45	14.52	124.93	10:23 AM
TH-64	139.64	14.98	124.66	10:17 AM
TH-65	135.40	13.07	122.33	9:58 AM
TH-66	130.58	7.10	123.48	9:53 AM
TH-66A	130.66	7.51	123.15	9:52 AM
TH-67	129.51	4.81	124.70	9:49 AM
TH-68	140.01	16.35	123.66	10:11 AM
TH-69A	144.97	24.39	120.58	10:28 AM
TH-70A	146.83	24.30	122.33	10:31 AM
TH-71A	146.95	25.08	121.87	10:37 AM
TH-72	130.96	91.18	39.78	12:10 PM
TH-73	131.07	31.22	99.85	12:09 PM
TH-74	109.08	9.36	99.72	12:19 PM
TH-75	106.92	7.42	99.50	12:22 PM
SW-3A	3.0'=125.53'	0.82	123.35	9:18 AM
SW-3B2B	3.0'=97.97'	1.80	96.77	11:56 AM
SW-3C2	6.0'=92.33'	1.85	88.18	11:51 AM
Mine Cut #1	4.0'=122.14'	3.16	121.30	10:07 AM
Mine Cut #2	6.0'=123.47'	3.24	120.71	11:07 AM
Mine Cut #3	4.0'=112.27'	2.30	110.87	11:37 AM
Mine Cut #4	5.0'=97.54'	1.62	94.16	11:46 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				

**Hillsborough County Southeast Landfill
Laboratory Analytical Results from IAMP Groundwater Monitoring
P-18S**

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	18.9	110.96	94	0.44	4.66	26.4	853.5	110	12	0.58	0.007	4.5	9.4
12/28/2010	19.02	110.84	75	0.56	4.47	26.15	394.2	110	10	0.62	ND	ND	8
01/04/2011	18.94	110.92	77	0.72	4.63	25.85	346.3	100	11	0.48	ND	ND	7.8
01/13/2011	18.91	110.95	104	0.53	4.61	26.2	107.2	82	12	0.52	0.0049	1.6	8.2
01/20/2011	18.74	111.12	116	0.16	4.64	26.33	63	94	14	0.44	0.004 u	1.5	8.3
01/27/2011	18.82	111.04	134	0.47	4.75	25.24	89.9	110	16	0.49	0.004 u	1.9 j3	8.1
03/03/2011	18.93	110.93	132	0.28	4.86	19.62	38.6	92	17	0.45	0.004 u	2.2	8.7
03/07/2012	19.38	110.48	181	0.3	4.88	26.58	20.1	110	26	0.6	0.004 u	2.6	9.3
06/07/2012	19.50	110.36	142	0.64	4.82	26.7	16.3	98	21	1.2	0.004 u	2.2	8.8

ND = NO DATA (Not analyzed)

u = parameter was analyzed but not detected

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

4.66 EXCEEDS STANDARD

**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

ND = NO DATA (Not analyzed)

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

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.

4.45

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

ND = NO DATA (Not analyzed)

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	0.026	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	5.65	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	96
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

ND = NO DATA (Not analyzed)

5.76 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

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

ND = NO DATA (Not analyzed)

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

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
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

ND = NO DATA (Not analyzed)

u = parameter was analyzed but not detected

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-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	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	16
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

ND = NO DATA (Not analyzed)

u = parameter was analyzed but not detected

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-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

ND = NO DATA (Not analyzed)

u = parameter was analyzed but not detected

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

25 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	1100	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

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.

1100 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

ND = NO DATA (Not analyzed)

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

ND = NO DATA (Not analyzed)

u = parameter was analyzed but not detected

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Tampa
6712 Benjamin Road
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Tampa, FL 33634
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TestAmerica Job ID: 660-49839-1
Client Project/Site: Southeast Landfill

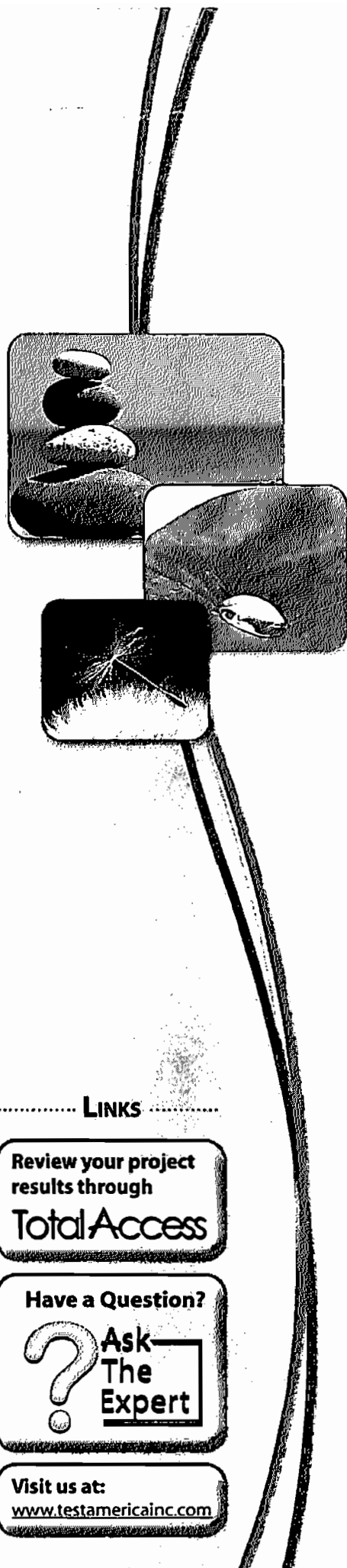
For:
Hillsborough County Public Utilities Dep
Solid Waste Management Group
Brandon Support Operations Complex
332 North Falkenburg Rd, 2nd Floor
Tampa, Florida 33619

Attn: David Adams



Authorized for release by:
9/21/2012 8:45:40 AM

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..... LINKS

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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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Definitions/Glossary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Qualifiers

Metals

Qualifier	Qualifier Description
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
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.
☐	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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
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
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Job ID: 660-49839-1

Laboratory: TestAmerica Tampa

Narrative

**Job Narrative
660-49839-1**

Comments

No additional comments.

Receipt

The samples were received on 9/6/2012 3:20 PM and 9/7/2012 3:18 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3° C and 4.6° C.

Metals

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for sodium in batch 128825 were outside control limits with the parent sample greater than 4x the spike level. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 129101 were outside control limits for Chloride. The associated laboratory control sample (LCS) recovery met acceptance criteria. The sample is flagged with J3.

Method 300.0: Due to the high concentration of Chloride, the matrix spike / matrix spike duplicate (MS/MSD) for batch 129161 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

No other analytical or quality issues were noted.

Detection Summary

Client Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-74

Lab Sample ID: 660-49839-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	12		10	4.0	ug/L	1		6010B	Total Recoverable
Iron	21000		200	50	ug/L	1		6010B	Total Recoverable
Sodium	36		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	110		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	2.8		0.12	0.060	mg/L	2		350.1	Total/NA
Total Dissolved Solids	330		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.33				SU	1		Field Sampling	Total/NA
Field Temperature	24.08				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.24				mg/L	1		Field Sampling	Total/NA
Specific Conductance	578				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.37				NTU	1		Field Sampling	Total/NA

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Client Sample ID: BLANK EQUIPMENT 49839

Lab Sample ID: 660-49839-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	0.51		0.50	0.31	mg/L	1		6010B	Total Recoverable

Client Sample ID: TH-58

Lab Sample ID: 660-49839-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	28		10	4.0	ug/L	1		6010B	Total Recoverable
Iron	3500		200	50	ug/L	1		6010B	Total Recoverable
Sodium	36		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	130		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	1.5		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	390		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.60				SU	1		Field Sampling	Total/NA
Field Temperature	25.02				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.31				mg/L	1		Field Sampling	Total/NA
Specific Conductance	696				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.83				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-57

Lab Sample ID: 660-49839-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	450		200	50	ug/L	1		6010B	Total Recoverable
Sodium	14		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	40		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	1.1		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	160		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	4.90				SU	1		Field Sampling	Total/NA
Field Temperature	26.79				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.20				mg/L	1		Field Sampling	Total/NA
Specific Conductance	252				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.97				NTU	1		Field Sampling	Total/NA

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-40

Lab Sample ID: 660-49839-5

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	8.5	J3	0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.45		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	210		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	7.33				SU	1		Field Sampling	Total/NA
Field Temperature	23.59				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.29				mg/L	1		Field Sampling	Total/NA
Specific Conductance	337				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.68				NTU	1		Field Sampling	Total/NA

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Client Sample ID: TH-30

Lab Sample ID: 660-49839-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	370		200	50	ug/L	1		6010B	Total Recoverable
Sodium	28		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	130		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	2.6		0.12	0.060	mg/L	2		350.1	Total/NA
Total Dissolved Solids	220		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	4.24				SU	1		Field Sampling	Total/NA
Field Temperature	23.61				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.11				mg/L	1		Field Sampling	Total/NA
Specific Conductance	433				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.51				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-75

Lab Sample ID: 660-49839-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	10		10	4.0	ug/L	1		6010B	Total Recoverable
Iron	9100		200	50	ug/L	1		6010B	Total Recoverable
Sodium	15		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	40		1.0	0.40	mg/L	2		300.0	Total/NA
Ammonia as N	2.0		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	200		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.41				SU	1		Field Sampling	Total/NA
Field Temperature	24.50				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.18				mg/L	1		Field Sampling	Total/NA
Specific Conductance	360				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.41				NTU	1		Field Sampling	Total/NA

Client Sample ID: DUPLICATE NOT BLANK 49839

Lab Sample ID: 660-49839-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	10		10	4.0	ug/L	1		6010B	Total Recoverable
Iron	8700		200	50	ug/L	1		6010B	Total Recoverable
Sodium	14		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	39		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	1.9		0.060	0.030	mg/L	1		350.1	Total/NA

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: DUPLICATE NOT BLANK 49839 (Continued)

Lab Sample ID: 660-49839-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	220		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: TH-42

Lab Sample ID: 660-49886-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	640		200	50	ug/L	1		6010B	Total Recoverable
Sodium	16		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	18		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.32		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	280		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	6.98				SU	1		Field Sampling	Total/NA
Field Temperature	23.87				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.14				mg/L	1		Field Sampling	Total/NA
Specific Conductance	519				umhos/cm	1		Field Sampling	Total/NA
Turbidity	16.9				NTU	1		Field Sampling	Total/NA

Client Sample ID: SUP 1

Lab Sample ID: 660-49886-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.3		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	9.7	J3	0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.14		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	210		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	7.27				SU	1		Field Sampling	Total/NA
Field Temperature	24.48				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.06				mg/L	1		Field Sampling	Total/NA
Specific Conductance	351				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.74				NTU	1		Field Sampling	Total/NA

Client Sample ID: SUP 2

Lab Sample ID: 660-49886-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.4		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	11		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.15		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	210		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	7.24				SU	1		Field Sampling	Total/NA
Field Temperature	24.79				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.05				mg/L	1		Field Sampling	Total/NA
Specific Conductance	359				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.50				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-19

Lab Sample ID: 660-49886-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	14		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	8.4		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.35		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	230		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	6.92				SU	1		Field Sampling	Total/NA

Detection Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-19 (Continued)

Lab Sample ID: 660-49886-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Field Temperature	23.49				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.23				mg/L	1		Field Sampling	Total/NA
Specific Conductance	406				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.21				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-73

Lab Sample ID: 660-49886-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3600		200	50	ug/L	1		6010B	Total Recoverable
Sodium	18		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	47		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	1.3		0.060	0.030	mg/L	1		350.1	Total/NA
Total Dissolved Solids	140		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.06				SU	1		Field Sampling	Total/NA
Field Temperature	24.67				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.50				mg/L	1		Field Sampling	Total/NA
Specific Conductance	242				umhos/cm	1		Field Sampling	Total/NA
Turbidity	7.39				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-28A

Lab Sample ID: 660-49886-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3600		200	50	ug/L	1		6010B	Total Recoverable
Sodium	20		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	49		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	3.0		0.12	0.060	mg/L	2		350.1	Total/NA
Total Dissolved Solids	150		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.27				SU	1		Field Sampling	Total/NA
Field Temperature	27.26				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.24				mg/L	1		Field Sampling	Total/NA
Specific Conductance	269				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.55				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-72

Lab Sample ID: 660-49886-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1100		200	50	ug/L	1		6010B	Total Recoverable
Sodium	170		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	570		10	4.0	mg/L	20		300.0	Total/NA
Ammonia as N	12		0.48	0.24	mg/L	8		350.1	Total/NA
Total Dissolved Solids	1300		50	50	mg/L	1		SM 2540C	Total/NA
Field pH	6.51				SU	1		Field Sampling	Total/NA
Field Temperature	23.62				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.20				mg/L	1		Field Sampling	Total/NA
Specific Conductance	2357				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.05				NTU	1		Field Sampling	Total/NA

Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-74

Lab Sample ID: 660-49839-1

Date Collected: 09/06/12 10:44

Matrix: Ground Water

Date Received: 09/06/12 15:20

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12		10	4.0	ug/L		09/07/12 08:53	09/07/12 16:59	1
Iron	21000		200	50	ug/L		09/07/12 08:53	09/07/12 16:59	1
Sodium	36		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 16:59	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		2.0	0.80	mg/L			09/14/12 10:29	4
Ammonia as N	2.8		0.12	0.060	mg/L			09/14/12 18:01	2
Total Dissolved Solids	330		10	10	mg/L			09/12/12 13:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.33				SU			09/06/12 10:44	1
Field Temperature	24.08				Degrees C			09/06/12 10:44	1
Oxygen, Dissolved	0.24				mg/L			09/06/12 10:44	1
Specific Conductance	578				umhos/cm			09/06/12 10:44	1
Turbidity	2.37				NTU			09/06/12 10:44	1

6

Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: BLANK EQUIPMENT 49839

Lab Sample ID: 660-49839-2

Date Collected: 09/06/12 09:30

Matrix: Water

Date Received: 09/06/12 15:20

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/07/12 08:53	09/07/12 17:09	1
Iron	50	U	200	50	ug/L		09/07/12 08:53	09/07/12 17:09	1
Sodium	0.51		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 17:09	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			09/14/12 10:14	1
Ammonia as N	0.030	U	0.060	0.030	mg/L			09/14/12 17:45	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			09/12/12 13:15	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-58

Lab Sample ID: 660-49839-3

Date Collected: 09/06/12 12:57

Matrix: Ground Water

Date Received: 09/06/12 15:20

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		10	4.0	ug/L		09/07/12 08:53	09/07/12 17:13	1
Iron	3500		200	50	ug/L		09/07/12 08:53	09/07/12 17:13	1
Sodium	36		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 17:13	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		2.0	0.80	mg/L			09/14/12 13:50	4
Ammonia as N	1.5		0.060	0.030	mg/L			09/14/12 17:42	1
Total Dissolved Solids	390		10	10	mg/L			09/12/12 13:15	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.60				SU			09/06/12 12:57	1
Field Temperature	25.02				Degrees C			09/06/12 12:57	1
Oxygen, Dissolved	0.31				mg/L			09/06/12 12:57	1
Specific Conductance	696				umhos/cm			09/06/12 12:57	1
Turbidity	0.83				NTU			09/06/12 12:57	1

6

Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-57

Lab Sample ID: 660-49839-4

Date Collected: 09/06/12 10:20

Matrix: Ground Water

Date Received: 09/06/12 15:20

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/07/12 08:53	09/07/12 17:16	1
Iron	450		200	50	ug/L		09/07/12 08:53	09/07/12 17:16	1
Sodium	14		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 17:16	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		0.50	0.20	mg/L			09/14/12 14:05	1
Ammonia as N	1.1		0.060	0.030	mg/L			09/14/12 17:47	1
Total Dissolved Solids	160		5.0	5.0	mg/L			09/13/12 11:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.90				SU			09/06/12 10:20	1
Field Temperature	26.79				Degrees C			09/06/12 10:20	1
Oxygen, Dissolved	0.20				mg/L			09/06/12 10:20	1
Specific Conductance	252				umhos/cm			09/06/12 10:20	1
Turbidity	0.97				NTU			09/06/12 10:20	1

6

Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-40

Lab Sample ID: 660-49839-5

Date Collected: 09/06/12 09:52

Matrix: Ground Water

Date Received: 09/06/12 15:20

Method: 6010B - Metals (ICP) - Total Recoverable									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/07/12 08:53	09/07/12 17:20	1
Iron	50	U	200	50	ug/L		09/07/12 08:53	09/07/12 17:20	1
Sodium	16		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 17:20	1

General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.5	J3	0.50	0.20	mg/L			09/14/12 09:27	1
Ammonia as N	0.45		0.060	0.030	mg/L			09/14/12 17:48	1
Total Dissolved Solids	210		5.0	5.0	mg/L			09/13/12 11:12	1

Method: Field Sampling - Field Sampling									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.33				SU			09/06/12 09:52	1
Field Temperature	23.59				Degrees C			09/06/12 09:52	1
Oxygen, Dissolved	0.29				mg/L			09/06/12 09:52	1
Specific Conductance	337				umhos/cm			09/06/12 09:52	1
Turbidity	0.68				NTU			09/06/12 09:52	1



Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-30

Lab Sample ID: 660-49839-6

Date Collected: 09/06/12 12:23

Matrix: Ground Water

Date Received: 09/06/12 15:20

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

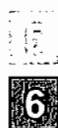
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/07/12 08:53	09/07/12 17:23	1
Iron	370		200	50	ug/L		09/07/12 08:53	09/07/12 17:23	1
Sodium	28		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 17:23	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		2.0	0.80	mg/L			09/14/12 14:21	4
Ammonia as N	2.6		0.12	0.060	mg/L			09/14/12 18:03	2
Total Dissolved Solids	220		10	10	mg/L			09/13/12 11:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.24				SU			09/06/12 12:23	1
Field Temperature	23.61				Degrees C			09/06/12 12:23	1
Oxygen, Dissolved	0.11				mg/L			09/06/12 12:23	1
Specific Conductance	433				umhos/cm			09/06/12 12:23	1
Turbidity	1.51				NTU			09/06/12 12:23	1



Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-75

Lab Sample ID: 660-49839-7

Date Collected: 09/06/12 11:07

Matrix: Ground Water

Date Received: 09/06/12 15:20

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		10	4.0	ug/L		09/07/12 08:53	09/07/12 17:26	1
Iron	9100		200	50	ug/L		09/07/12 08:53	09/07/12 17:26	1
Sodium	15		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 17:26	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		1.0	0.40	mg/L			09/14/12 23:04	2
Ammonia as N	2.0		0.060	0.030	mg/L			09/14/12 17:50	1
Total Dissolved Solids	200		5.0	5.0	mg/L			09/13/12 11:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.41				SU			09/06/12 11:07	1
Field Temperature	24.50				Degrees C			09/06/12 11:07	1
Oxygen, Dissolved	0.18				mg/L			09/06/12 11:07	1
Specific Conductance	360				umhos/cm			09/06/12 11:07	1
Turbidity	4.41				NTU			09/06/12 11:07	1

6

Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: DUPLICATE NOT BLANK 49839

Lab Sample ID: 660-49839-8

Date Collected: 09/06/12 00:00

Matrix: Water

Date Received: 09/06/12 15:20

Method: 6010B - Metals (ICP) - Total Recoverable									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10		10	4.0	ug/L		09/07/12 08:53	09/07/12 17:30	1
Iron	8700		200	50	ug/L		09/07/12 08:53	09/07/12 17:30	1
Sodium	14		0.50	0.31	mg/L		09/07/12 08:53	09/07/12 17:30	1

General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39		0.50	0.20	mg/L			09/14/12 23:20	1
Ammonia as N	1.9		0.060	0.030	mg/L			09/14/12 17:52	1
Total Dissolved Solids	220		5.0	5.0	mg/L			09/13/12 11:12	1



Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-42

Lab Sample ID: 660-49886-1

Date Collected: 09/07/12 11:44

Matrix: Ground Water

Date Received: 09/07/12 15:18

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/11/12 08:42	09/11/12 18:26	1
Iron	640		200	50	ug/L		09/11/12 08:42	09/11/12 18:26	1
Sodium	16		0.50	0.31	mg/L		09/11/12 08:42	09/12/12 12:03	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		0.50	0.20	mg/L			09/13/12 07:05	1
Ammonia as N	0.32		0.060	0.030	mg/L			09/14/12 17:25	1
Total Dissolved Solids	280		10	10	mg/L			09/13/12 13:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.98				SU			09/07/12 11:44	1
Field Temperature	23.87				Degrees C			09/07/12 11:44	1
Oxygen, Dissolved	0.14				mg/L			09/07/12 11:44	1
Specific Conductance	519				umhos/cm			09/07/12 11:44	1
Turbidity	16.9				NTU			09/07/12 11:44	1



Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: SUP 1

Lab Sample ID: 660-49886-2

Date Collected: 09/07/12 13:18

Matrix: Ground Water

Date Received: 09/07/12 15:18

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/11/12 08:42	09/11/12 18:30	1
Iron	50	U	200	50	ug/L		09/11/12 08:42	09/11/12 18:30	1
Sodium	8.3		0.50	0.31	mg/L		09/11/12 08:42	09/12/12 12:06	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.7	J3	0.50	0.20	mg/L			09/14/12 13:03	1
Ammonia as N	0.14		0.060	0.030	mg/L			09/14/12 17:28	1
Total Dissolved Solids	210		5.0	5.0	mg/L			09/13/12 13:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.27				SU			09/07/12 13:18	1
Field Temperature	24.48				Degrees C			09/07/12 13:18	1
Oxygen, Dissolved	0.06				mg/L			09/07/12 13:18	1
Specific Conductance	351				umhos/cm			09/07/12 13:18	1
Turbidity	0.74				NTU			09/07/12 13:18	1



Client Sample Results

Client: Hillsborough County Public Utilities Dept
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: SUP 2

Lab Sample ID: 660-49886-3

Date Collected: 09/07/12 12:51

Matrix: Ground Water

Date Received: 09/07/12 15:18

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/11/12 08:42	09/11/12 18:33	1
Iron	50	U	200	50	ug/L		09/11/12 08:42	09/11/12 18:33	1
Sodium	8.4		0.50	0.31	mg/L		09/11/12 08:42	09/12/12 12:09	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50	0.20	mg/L			09/14/12 15:07	1
Ammonia as N	0.15		0.060	0.030	mg/L			09/14/12 17:29	1
Total Dissolved Solids	210		5.0	5.0	mg/L			09/13/12 13:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.24				SU			09/07/12 12:51	1
Field Temperature	24.79				Degrees C			09/07/12 12:51	1
Oxygen, Dissolved	0.05				mg/L			09/07/12 12:51	1
Specific Conductance	359				umhos/cm			09/07/12 12:51	1
Turbidity	0.50				NTU			09/07/12 12:51	1



Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-19

Lab Sample ID: 660-49886-4

Date Collected: 09/07/12 12:19

Matrix: Ground Water

Date Received: 09/07/12 15:18

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/11/12 08:42	09/11/12 18:36	1
Iron	50	U	200	50	ug/L		09/11/12 08:42	09/11/12 18:36	1
Sodium	14		0.50	0.31	mg/L		09/11/12 08:42	09/12/12 12:13	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.4		0.50	0.20	mg/L			09/14/12 15:22	1
Ammonia as N	0.35		0.060	0.030	mg/L			09/14/12 17:31	1
Total Dissolved Solids	230		5.0	5.0	mg/L			09/13/12 13:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.92				SU			09/07/12 12:19	1
Field Temperature	23.49				Degrees C			09/07/12 12:19	1
Oxygen, Dissolved	0.23				mg/L			09/07/12 12:19	1
Specific Conductance	406				umhos/cm			09/07/12 12:19	1
Turbidity	1.21				NTU			09/07/12 12:19	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-73

Lab Sample ID: 660-49886-5

Date Collected: 09/07/12 09:47

Matrix: Ground Water

Date Received: 09/07/12 15:18

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/11/12 08:42	09/11/12 18:40	1
Iron	3600		200	50	ug/L		09/11/12 08:42	09/11/12 18:40	1
Sodium	18		0.50	0.31	mg/L		09/11/12 08:42	09/12/12 12:22	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47		2.0	0.80	mg/L			09/14/12 15:38	4
Ammonia as N	1.3		0.060	0.030	mg/L			09/14/12 17:32	1
Total Dissolved Solids	140		5.0	5.0	mg/L			09/13/12 13:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.06				SU			09/07/12 09:47	1
Field Temperature	24.67				Degrees C			09/07/12 09:47	1
Oxygen, Dissolved	0.50				mg/L			09/07/12 09:47	1
Specific Conductance	242				umhos/cm			09/07/12 09:47	1
Turbidity	7.39				NTU			09/07/12 09:47	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-28A

Lab Sample ID: 660-49886-6

Date Collected: 09/07/12 10:13

Matrix: Ground Water

Date Received: 09/07/12 15:18

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/11/12 08:42	09/11/12 18:43	1
Iron	3600		200	50	ug/L		09/11/12 08:42	09/11/12 18:43	1
Sodium	20		0.50	0.31	mg/L		09/11/12 08:42	09/12/12 12:26	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		2.0	0.80	mg/L			09/14/12 15:53	4
Ammonia as N	3.0		0.12	0.060	mg/L			09/14/12 17:59	2
Total Dissolved Solids	150		5.0	5.0	mg/L			09/13/12 13:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.27				SU			09/07/12 10:13	1
Field Temperature	27.26				Degrees C			09/07/12 10:13	1
Oxygen, Dissolved	0.24				mg/L			09/07/12 10:13	1
Specific Conductance	269				umhos/cm			09/07/12 10:13	1
Turbidity	2.55				NTU			09/07/12 10:13	1

Client Sample Results

Client: Hillsborough County Public Utilities Dep
 Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-72
Date Collected: 09/07/12 11:01
Date Received: 09/07/12 15:18

Lab Sample ID: 660-49886-7
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		09/11/12 08:42	09/11/12 18:53	1
Iron	1100		200	50	ug/L		09/11/12 08:42	09/11/12 18:53	1
Sodium	170		0.50	0.31	mg/L		09/11/12 08:42	09/12/12 12:29	1

General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	570		10	4.0	mg/L			09/17/12 15:43	20
Ammonia as N	12		0.48	0.24	mg/L			09/14/12 18:05	8
Total Dissolved Solids	1300		50	50	mg/L			09/13/12 13:28	1

Method: Field Sampling - Field Sampling									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.51				SU			09/07/12 11:01	1
Field Temperature	23.62				Degrees C			09/07/12 11:01	1
Oxygen, Dissolved	0.20				mg/L			09/07/12 11:01	1
Specific Conductance	2357				umhos/cm			09/07/12 11:01	1
Turbidity	1.05				NTU			09/07/12 11:01	1



QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49639-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-128702/1-A
Matrix: Water
Analysis Batch: 128724

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 128702

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	4.0	U	10	4.0	ug/L		09/07/12 08:53	09/07/12 16:30	1
Iron	50	U	200	50	ug/L		09/07/12 08:53	09/07/12 16:30	1
Sodium	0.31	U	0.50	0.31	mg/L		09/07/12 08:53	09/07/12 16:30	1

Lab Sample ID: LCS 660-128702/2-A
Matrix: Water
Analysis Batch: 128724

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 128702

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Arsenic	1000	991		ug/L		99	80 - 120	
Iron	1000	1040		ug/L		104	80 - 120	
Sodium	10.0	9.36		mg/L		94	80 - 120	

Lab Sample ID: 660-49833-C-1-B MS
Matrix: Water
Analysis Batch: 128724

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 128702

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	
Arsenic	4.8	I	1000	1030		ug/L		102	80 - 120	
Iron	72	I	1000	1090		ug/L		102	80 - 120	
Sodium	11		10.0	20.7		mg/L		98	80 - 120	

Lab Sample ID: 660-49833-C-1-C MSD
Matrix: Water
Analysis Batch: 128724

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 128702

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits			
Arsenic	4.8	I	1000	1030		ug/L		102	80 - 120	0	20	
Iron	72	I	1000	1100		ug/L		103	80 - 120	1	20	
Sodium	11		10.0	20.7		mg/L		98	80 - 120	0	20	

Lab Sample ID: MB 660-128825/1-A
Matrix: Water
Analysis Batch: 128838

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	4.0	U	10	4.0	ug/L		09/11/12 08:42	09/11/12 17:32	1
Iron	50	U	200	50	ug/L		09/11/12 08:42	09/11/12 17:32	1

Lab Sample ID: MB 660-128825/1-A
Matrix: Water
Analysis Batch: 128903

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Sodium	0.31	U	0.50	0.31	mg/L		09/11/12 08:42	09/12/12 11:43	1

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 650-49839-1

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

Lab Sample ID: LCS 660-128825/2-A
Matrix: Water
Analysis Batch: 128838

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	1000	1020		ug/L		102	80 - 120
Iron	1000	1020		ug/L		102	80 - 120

Lab Sample ID: LCS 660-128825/2-A
Matrix: Water
Analysis Batch: 128903

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Sodium	10.0	10.3		mg/L		103	80 - 120

Lab Sample ID: 640-40215-E-1-C MS
Matrix: Water
Analysis Batch: 128838

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	4.0	U	1000	1080		ug/L		108	80 - 120
Iron	120	I	1000	1110		ug/L		99	80 - 120

Lab Sample ID: 640-40215-E-1-C MS ^10
Matrix: Water
Analysis Batch: 128903

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Sodium	810	J3	10.0	797	J3	mg/L		-146	80 - 120

Lab Sample ID: 640-40215-E-1-D MSD
Matrix: Water
Analysis Batch: 128838

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	4.0	U	1000	1080		ug/L		108	80 - 120	0	20
Iron	120	I	1000	1120		ug/L		100	80 - 120	1	20

Lab Sample ID: 640-40215-E-1-D MSD ^10
Matrix: Water
Analysis Batch: 128903

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 128825

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sodium	810	J3	10.0	806	J3	mg/L		-51	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-129031/45
Matrix: Water
Analysis Batch: 129031

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	DII Fac
Chloride	0.20	U	0.50	0.20	mg/L			09/13/12 02:28	1

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 660-129031/46
Matrix: Water
Analysis Batch: 129031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: 660-49886-1 MS
Matrix: Ground Water
Analysis Batch: 129031

Client Sample ID: TH-42
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	18		10.0	28.6		mg/L		106	90 - 110

Lab Sample ID: 660-49886-1 MSD
Matrix: Ground Water
Analysis Batch: 129031

Client Sample ID: TH-42
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	18		10.0	28.7		mg/L		107	90 - 110	0	30

Lab Sample ID: MB 660-129101/4
Matrix: Water
Analysis Batch: 129101

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			09/14/12 08:57	1

Lab Sample ID: MB 660-129101/43
Matrix: Water
Analysis Batch: 129101

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			09/14/12 18:58	1

Lab Sample ID: LCS 660-129101/44
Matrix: Water
Analysis Batch: 129101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LCS 660-129101/5
Matrix: Water
Analysis Batch: 129101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: 660-49839-5 MS
Matrix: Ground Water
Analysis Batch: 129101

Client Sample ID: TH-40
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.5	J3	10.0	19.6	J3	mg/L		111	90 - 110

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QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 620-49839-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 660-49839-5 MSD
Matrix: Ground Water
Analysis Batch: 129101

Client Sample ID: TH-40
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec. Limits		RPD	
				Result	Qualifier				RPD	Limit		
Chloride	8.5	J3	10.0	19.7	J3	mg/L		112	90 - 110	0	30	

Lab Sample ID: 660-49886-2 MS
Matrix: Ground Water
Analysis Batch: 129101

Client Sample ID: SUP 1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits	
				Result	Qualifier				RPD	Limit
Chloride	9.7	J3	10.0	20.8	J3	mg/L		111	90 - 110	

Lab Sample ID: 660-49886-2 MSD
Matrix: Ground Water
Analysis Batch: 129101

Client Sample ID: SUP 1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec. Limits		RPD	
				Result	Qualifier				RPD	Limit		
Chloride	9.7	J3	10.0	20.9	J3	mg/L		112	90 - 110	0	30	

Lab Sample ID: MB 660-129161/4
Matrix: Water
Analysis Batch: 129161

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	0.20	U	0.50	0.20	mg/L			09/17/12 09:15	1

Lab Sample ID: LCS 660-129161/5
Matrix: Water
Analysis Batch: 129161

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits	
		Result	Qualifier				RPD	Limit
Chloride	10.0	10.4		mg/L		104	90 - 110	

Lab Sample ID: 660-49862-O-12 MS
Matrix: Water
Analysis Batch: 129161

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits	
				Result	Qualifier				RPD	Limit
Chloride	0.20	U J3	10.0	0.20	U J3	mg/L		0	90 - 110	

Lab Sample ID: 660-49862-O-12 MSD
Matrix: Water
Analysis Batch: 129161

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec. Limits		RPD	
				Result	Qualifier				RPD	Limit		
Chloride	0.20	U J3	10.0	0.20	U J3	mg/L		0	90 - 110	NC	30	

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 660-129068/10
Matrix: Water
Analysis Batch: 129068

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.030	U	0.060	0.030	mg/L			09/14/12 17:22	1

Lab Sample ID: LCS 660-129068/11
Matrix: Water
Analysis Batch: 129068

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				Limits
Ammonia as N	0.500	0.534		mg/L		107	90 - 110

Lab Sample ID: 660-49839-3 MS
Matrix: Ground Water
Analysis Batch: 129068

Client Sample ID: TH-58
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia as N	1.5		0.300	1.78		mg/L		100	90 - 110

Lab Sample ID: 660-49839-3 MSD
Matrix: Ground Water
Analysis Batch: 129068

Client Sample ID: TH-58
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
Ammonia as N	1.5		0.300	1.76		mg/L		93	90 - 110	1		30

Lab Sample ID: 660-49886-1 MS
Matrix: Ground Water
Analysis Batch: 129068

Client Sample ID: TH-42
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Ammonia as N	0.32		0.300	0.627		mg/L		103	90 - 110

Lab Sample ID: 660-49886-1 MSD
Matrix: Ground Water
Analysis Batch: 129068

Client Sample ID: TH-42
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits			
Ammonia as N	0.32		0.300	0.626		mg/L		103	90 - 110	0		30

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

Lab Sample ID: MB 660-128900/1
Matrix: Water
Analysis Batch: 128900

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			09/12/12 13:15	1

QC Sample Results

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

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

Lab Sample ID: LCS 660-128900/2
Matrix: Water
Analysis Batch: 128900

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	9940		mg/L		99	80 - 120

Lab Sample ID: 640-40199-C-2 DU
Matrix: Water
Analysis Batch: 128900

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	240		262		mg/L		10	20

Lab Sample ID: MB 660-128953/1
Matrix: Water
Analysis Batch: 128953

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			09/13/12 11:12	1

Lab Sample ID: LCS 660-128953/2
Matrix: Water
Analysis Batch: 128953

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	9880		mg/L		99	80 - 120

Lab Sample ID: 660-49839-6 DU
Matrix: Ground Water
Analysis Batch: 128953

Client Sample ID: TH-30
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	220		216		mg/L		2	20

Lab Sample ID: MB 660-128962/1
Matrix: Water
Analysis Batch: 128962

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			09/13/12 13:28	1

Lab Sample ID: LCS 660-128962/2
Matrix: Water
Analysis Batch: 128962

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	9910		mg/L		99	80 - 120

Lab Sample ID: 660-49886-1 DU
Matrix: Ground Water
Analysis Batch: 128962

Client Sample ID: TH-42
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	280		276		mg/L		0	20

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Metals

Prep Batch: 128702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49833-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-49833-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-49839-1	TH-74	Total Recoverable	Ground Water	3005A	
660-49839-2	BLANK EQUIPMENT 49839	Total Recoverable	Water	3005A	
660-49839-3	TH-58	Total Recoverable	Ground Water	3005A	
660-49839-4	TH-57	Total Recoverable	Ground Water	3005A	
660-49839-5	TH-40	Total Recoverable	Ground Water	3005A	
660-49839-6	TH-30	Total Recoverable	Ground Water	3005A	
660-49839-7	TH-75	Total Recoverable	Ground Water	3005A	
660-49839-8	DUPLICATE NOT BLANK 49839	Total Recoverable	Water	3005A	
LCS 660-128702/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-128702/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 128724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49833-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	128702
660-49833-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	128702
660-49839-1	TH-74	Total Recoverable	Ground Water	6010B	128702
660-49839-2	BLANK EQUIPMENT 49839	Total Recoverable	Water	6010B	128702
660-49839-3	TH-56	Total Recoverable	Ground Water	6010B	128702
660-49839-4	TH-57	Total Recoverable	Ground Water	6010B	128702
660-49839-5	TH-40	Total Recoverable	Ground Water	6010B	128702
660-49839-6	TH-30	Total Recoverable	Ground Water	6010B	128702
660-49839-7	TH-75	Total Recoverable	Ground Water	6010B	128702
660-49839-8	DUPLICATE NOT BLANK 49839	Total Recoverable	Water	6010B	128702
LCS 660-128702/2-A	Lab Control Sample	Total Recoverable	Water	6010B	128702
MB 660-128702/1-A	Method Blank	Total Recoverable	Water	6010B	128702

Prep Batch: 128825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-40215-E-1-C MS	Matrix Spike	Total Recoverable	Water	3005A	
640-40215-E-1-C MS ^10	Matrix Spike	Total Recoverable	Water	3005A	
640-40215-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
640-40215-E-1-D MSD ^10	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-49886-1	TH-42	Total Recoverable	Ground Water	3005A	
660-49886-2	SUP 1	Total Recoverable	Ground Water	3005A	
660-49886-3	SUP 2	Total Recoverable	Ground Water	3005A	
660-49886-4	TH-19	Total Recoverable	Ground Water	3005A	
660-49886-5	TH-73	Total Recoverable	Ground Water	3005A	
660-49886-6	TH-28A	Total Recoverable	Ground Water	3005A	
660-49886-7	TH-72	Total Recoverable	Ground Water	3005A	
LCS 660-128825/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-128825/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 128838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-40215-E-1-C MS	Matrix Spike	Total Recoverable	Water	6010B	128825
640-40215-E-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	128825
660-49886-1	TH-42	Total Recoverable	Ground Water	6010B	128825
660-49886-2	SUP 1	Total Recoverable	Ground Water	6010B	128825
660-49886-3	SUP 2	Total Recoverable	Ground Water	6010B	128825
660-49886-4	TH-19	Total Recoverable	Ground Water	6010B	128825

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Metals (Continued)

Analysis Batch: 128838 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49886-5	TH-73	Total Recoverable	Ground Water	6010B	128825
660-49886-6	TH-28A	Total Recoverable	Ground Water	6010B	128825
660-49886-7	TH-72	Total Recoverable	Ground Water	6010B	128825
LCS 660-128825/2-A	Lab Control Sample	Total Recoverable	Water	6010B	128825
MB 660-128825/1-A	Method Blank	Total Recoverable	Water	6010B	128825

Analysis Batch: 128903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-40215-E-1-C MS ^10	Matrix Spike	Total Recoverable	Water	6010B	128825
640-40215-E-1-D MSD ^10	Matrix Spike Duplicate	Total Recoverable	Water	6010B	128825
660-49886-1	TH-42	Total Recoverable	Ground Water	6010B	128825
660-49886-2	SUP 1	Total Recoverable	Ground Water	6010B	128825
660-49886-3	SUP 2	Total Recoverable	Ground Water	6010B	128825
660-49886-4	TH-19	Total Recoverable	Ground Water	6010B	128825
660-49886-5	TH-73	Total Recoverable	Ground Water	6010B	128825
660-49886-6	TH-28A	Total Recoverable	Ground Water	6010B	128825
660-49886-7	TH-72	Total Recoverable	Ground Water	6010B	128825
LCS 660-128825/2-A	Lab Control Sample	Total Recoverable	Water	6010B	128825
MB 660-128825/1-A	Method Blank	Total Recoverable	Water	6010B	128825

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General Chemistry

Analysis Batch: 128900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-40199-C-2 DU	Duplicate	Total/NA	Water	SM 2540C	
660-49839-1	TH-74	Total/NA	Ground Water	SM 2540C	
660-49839-2	BLANK EQUIPMENT 49839	Total/NA	Water	SM 2540C	
660-49839-3	TH-58	Total/NA	Ground Water	SM 2540C	
LCS 660-128900/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-128900/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 128953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49839-4	TH-57	Total/NA	Ground Water	SM 2540C	
660-49839-5	TH-40	Total/NA	Ground Water	SM 2540C	
660-49839-6	TH-30	Total/NA	Ground Water	SM 2540C	
660-49839-6 DU	TH-30	Total/NA	Ground Water	SM 2540C	
660-49839-7	TH-75	Total/NA	Ground Water	SM 2540C	
660-49839-8	DUPLICATE NOT BLANK 49839	Total/NA	Water	SM 2540C	
LCS 660-128953/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-128953/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 128962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49886-1	TH-42	Total/NA	Ground Water	SM 2540C	
660-49886-1 DU	TH-42	Total/NA	Ground Water	SM 2540C	
660-49886-2	SUP 1	Total/NA	Ground Water	SM 2540C	
660-49886-3	SUP 2	Total/NA	Ground Water	SM 2540C	
660-49886-4	TH-19	Total/NA	Ground Water	SM 2540C	
660-49886-5	TH-73	Total/NA	Ground Water	SM 2540C	
660-49886-6	TH-28A	Total/NA	Ground Water	SM 2540C	
660-49886-7	TH-72	Total/NA	Ground Water	SM 2540C	

QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

General Chemistry (Continued)

Analysis Batch: 128962 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 660-128962/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-128962/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 129031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49886-1	TH-42	Total/NA	Ground Water	300.0	
660-49886-1 MS	TH-42	Total/NA	Ground Water	300.0	
660-49886-1 MSD	TH-42	Total/NA	Ground Water	300.0	
LCS 660-129031/46	Lab Control Sample	Total/NA	Water	300.0	
MB 660-129031/45	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 129068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49839-1	TH-74	Total/NA	Ground Water	350.1	
660-49839-2	BLANK EQUIPMENT 49839	Total/NA	Water	350.1	
660-49839-3	TH-58	Total/NA	Ground Water	350.1	
660-49839-3 MS	TH-58	Total/NA	Ground Water	350.1	
660-49839-3 MSD	TH-58	Total/NA	Ground Water	350.1	
660-49839-4	TH-57	Total/NA	Ground Water	350.1	
660-49839-5	TH-40	Total/NA	Ground Water	350.1	
660-49839-6	TH-30	Total/NA	Ground Water	350.1	
660-49839-7	TH-75	Total/NA	Ground Water	350.1	
660-49839-8	DUPLICATE NOT BLANK 49839	Total/NA	Water	350.1	
660-49886-1	TH-42	Total/NA	Ground Water	350.1	
660-49886-1 MS	TH-42	Total/NA	Ground Water	350.1	
660-49886-1 MSD	TH-42	Total/NA	Ground Water	350.1	
660-49886-2	SUP 1	Total/NA	Ground Water	350.1	
660-49886-3	SUP 2	Total/NA	Ground Water	350.1	
660-49886-4	TH-19	Total/NA	Ground Water	350.1	
660-49886-5	TH-73	Total/NA	Ground Water	350.1	
660-49886-6	TH-28A	Total/NA	Ground Water	350.1	
660-49886-7	TH-72	Total/NA	Ground Water	350.1	
LCS 660-129068/11	Lab Control Sample	Total/NA	Water	350.1	
MB 660-129068/10	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 129101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49839-1	TH-74	Total/NA	Ground Water	300.0	
660-49839-2	BLANK EQUIPMENT 49839	Total/NA	Water	300.0	
660-49839-3	TH-58	Total/NA	Ground Water	300.0	
660-49839-4	TH-57	Total/NA	Ground Water	300.0	
660-49839-5	TH-40	Total/NA	Ground Water	300.0	
660-49839-5 MS	TH-40	Total/NA	Ground Water	300.0	
660-49839-5 MSD	TH-40	Total/NA	Ground Water	300.0	
660-49839-6	TH-30	Total/NA	Ground Water	300.0	
660-49839-7	TH-75	Total/NA	Ground Water	300.0	
660-49839-6	DUPLICATE NOT BLANK 49839	Total/NA	Water	300.0	
660-49886-2	SUP 1	Total/NA	Ground Water	300.0	
660-49886-2 MS	SUP 1	Total/NA	Ground Water	300.0	
660-49886-2 MSD	SUP 1	Total/NA	Ground Water	300.0	
660-49886-3	SUP 2	Total/NA	Ground Water	300.0	
660-49886-4	TH-19	Total/NA	Ground Water	300.0	

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QC Association Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

General Chemistry (Continued)

Analysis Batch: 129101 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49886-5	TH-73	Total/NA	Ground Water	300.0	
660-49886-6	TH-28A	Total/NA	Ground Water	300.0	
LCS 660-129101/44	Lab Control Sample	Total/NA	Water	300.0	
LCS 660-129101/5	Lab Control Sample	Total/NA	Water	300.0	
MB 660-129101/4	Method Blank	Total/NA	Water	300.0	
MB 660-129101/43	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 129161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49862-O-12 MS	Matrix Spike	Total/NA	Water	300.0	
660-49862-O-12 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
660-49886-7	TH-72	Total/NA	Ground Water	300.0	
LCS 660-129161/5	Lab Control Sample	Total/NA	Water	300.0	
MB 660-129161/4	Method Blank	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 128874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49839-1	TH-74	Total/NA	Ground Water	Field Sampling	
660-49839-3	TH-58	Total/NA	Ground Water	Field Sampling	
660-49839-4	TH-57	Total/NA	Ground Water	Field Sampling	
660-49839-5	TH-40	Total/NA	Ground Water	Field Sampling	
660-49839-6	TH-30	Total/NA	Ground Water	Field Sampling	
660-49839-7	TH-75	Total/NA	Ground Water	Field Sampling	
660-49886-1	TH-42	Total/NA	Ground Water	Field Sampling	
660-49886-2	SUP 1	Total/NA	Ground Water	Field Sampling	
660-49886-3	SUP 2	Total/NA	Ground Water	Field Sampling	
660-49886-5	TH-73	Total/NA	Ground Water	Field Sampling	
660-49886-6	TH-28A	Total/NA	Ground Water	Field Sampling	
660-49886-7	TH-72	Total/NA	Ground Water	Field Sampling	

Analysis Batch: 128974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49886-4	TH-19	Total/NA	Ground Water	Field Sampling	

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Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-74
Date Collected: 09/06/12 10:44
Date Received: 09/06/12 15:20

Lab Sample ID: 660-49839-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 16:59	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128900	09/12/12 13:15	TO	TAL TAM
Total/NA	Analysis	350.1		2	129068	09/14/12 18:01	TO	TAL TAM
Total/NA	Analysis	300.0		4	129101	09/14/12 10:29	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/06/12 10:44		TAL TAM

9

Client Sample ID: BLANK EQUIPMENT 49839
Date Collected: 09/06/12 09:30
Date Received: 09/06/12 15:20

Lab Sample ID: 660-49839-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 17:09	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128900	09/12/12 13:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:45	TO	TAL TAM
Total/NA	Analysis	300.0		1	129101	09/14/12 10:14	KW	TAL TAM

Client Sample ID: TH-58
Date Collected: 09/06/12 12:57
Date Received: 09/06/12 15:20

Lab Sample ID: 660-49839-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 17:13	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128900	09/12/12 13:15	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:42	TO	TAL TAM
Total/NA	Analysis	300.0		4	129101	09/14/12 13:50	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/06/12 12:57		TAL TAM

Client Sample ID: TH-57
Date Collected: 09/06/12 10:20
Date Received: 09/06/12 15:20

Lab Sample ID: 660-49839-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 17:16	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128953	09/13/12 11:12	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:47	TO	TAL TAM
Total/NA	Analysis	300.0		1	129101	09/14/12 14:05	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/06/12 10:20		TAL TAM

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-40

Lab Sample ID: 660-49839-5

Date Collected: 09/06/12 09:52

Matrix: Ground Water

Date Received: 09/06/12 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 17:20	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128953	09/13/12 11:12	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:48	TO	TAL TAM
Total/NA	Analysis	300.0		1	129101	09/14/12 09:27	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/06/12 09:52		TAL TAM

9

Client Sample ID: TH-30

Lab Sample ID: 660-49839-6

Date Collected: 09/06/12 12:23

Matrix: Ground Water

Date Received: 09/06/12 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 17:23	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128953	09/13/12 11:12	TO	TAL TAM
Total/NA	Analysis	350.1		2	129068	09/14/12 18:03	TO	TAL TAM
Total/NA	Analysis	300.0		4	129101	09/14/12 14:21	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/06/12 12:23		TAL TAM

Client Sample ID: TH-75

Lab Sample ID: 660-49839-7

Date Collected: 09/06/12 11:07

Matrix: Ground Water

Date Received: 09/06/12 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 17:26	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128953	09/13/12 11:12	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:50	TO	TAL TAM
Total/NA	Analysis	300.0		2	129101	09/14/12 23:04	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/06/12 11:07		TAL TAM

Client Sample ID: DUPLICATE NOT BLANK 49839

Lab Sample ID: 660-49839-8

Date Collected: 09/06/12 00:00

Matrix: Water

Date Received: 09/06/12 15:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128702	09/07/12 08:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128724	09/07/12 17:30	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128953	09/13/12 11:12	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:52	TO	TAL TAM
Total/NA	Analysis	300.0		1	129101	09/14/12 23:20	KW	TAL TAM

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-42
Date Collected: 09/07/12 11:44
Date Received: 09/07/12 15:18

Lab Sample ID: 660-49886-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128825	09/11/12 08:42	TG	TAL TAM
Total Recoverable	Analysis	6010B		1	128838	09/11/12 18:26	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128903	09/12/12 12:03	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128962	09/13/12 13:28	TO	TAL TAM
Total/NA	Analysis	300.0		1	129031	09/13/12 07:05	KW	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:25	TO	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/07/12 11:44		TAL TAM

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Client Sample ID: SUP 1
Date Collected: 09/07/12 13:18
Date Received: 09/07/12 15:18

Lab Sample ID: 660-49886-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128825	09/11/12 08:42	TG	TAL TAM
Total Recoverable	Analysis	6010B		1	128838	09/11/12 18:30	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128903	09/12/12 12:06	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128962	09/13/12 13:28	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:28	TO	TAL TAM
Total/NA	Analysis	300.0		1	129101	09/14/12 13:03	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/07/12 13:18		TAL TAM

Client Sample ID: SUP 2
Date Collected: 09/07/12 12:51
Date Received: 09/07/12 15:18

Lab Sample ID: 660-49886-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128825	09/11/12 08:42	TG	TAL TAM
Total Recoverable	Analysis	6010B		1	128838	09/11/12 18:33	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128903	09/12/12 12:09	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128962	09/13/12 13:28	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:29	TO	TAL TAM
Total/NA	Analysis	300.0		1	129101	09/14/12 15:07	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/07/12 12:51		TAL TAM

Client Sample ID: TH-19
Date Collected: 09/07/12 12:19
Date Received: 09/07/12 15:18

Lab Sample ID: 660-49886-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128825	09/11/12 08:42	TG	TAL TAM
Total Recoverable	Analysis	6010B		1	128838	09/11/12 18:36	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128903	09/12/12 12:13	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128962	09/13/12 13:28	TO	TAL TAM

Lab Chronicle

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Client Sample ID: TH-19

Lab Sample ID: 660-49886-4

Date Collected: 09/07/12 12:19

Matrix: Ground Water

Date Received: 09/07/12 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	350.1		1	129068	09/14/12 17:31	TO	TAL TAM
Total/NA	Analysis	300.0		1	129101	09/14/12 15:22	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128974	09/07/12 12:19		TAL TAM

Client Sample ID: TH-73

Lab Sample ID: 660-49886-5

Date Collected: 09/07/12 09:47

Matrix: Ground Water

Date Received: 09/07/12 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128825	09/11/12 08:42	TG	TAL TAM
Total Recoverable	Analysis	6010B		1	128838	09/11/12 18:40	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128903	09/12/12 12:22	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128962	09/13/12 13:28	TO	TAL TAM
Total/NA	Analysis	350.1		1	129068	09/14/12 17:32	TO	TAL TAM
Total/NA	Analysis	300.0		4	129101	09/14/12 15:38	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/07/12 09:47		TAL TAM

Client Sample ID: TH-28A

Lab Sample ID: 660-49886-6

Date Collected: 09/07/12 10:13

Matrix: Ground Water

Date Received: 09/07/12 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128825	09/11/12 08:42	TG	TAL TAM
Total Recoverable	Analysis	6010B		1	128838	09/11/12 18:43	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128903	09/12/12 12:26	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128962	09/13/12 13:28	TO	TAL TAM
Total/NA	Analysis	350.1		2	129068	09/14/12 17:59	TO	TAL TAM
Total/NA	Analysis	300.0		4	129101	09/14/12 15:53	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/07/12 10:13		TAL TAM

Client Sample ID: TH-72

Lab Sample ID: 660-49886-7

Date Collected: 09/07/12 11:01

Matrix: Ground Water

Date Received: 09/07/12 15:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			128825	09/11/12 08:42	TG	TAL TAM
Total Recoverable	Analysis	6010B		1	128838	09/11/12 18:53	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	128903	09/12/12 12:29	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	128962	09/13/12 13:28	TO	TAL TAM
Total/NA	Analysis	350.1		8	129068	09/14/12 18:05	TO	TAL TAM
Total/NA	Analysis	300.0		20	129161	09/17/12 15:43	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	128874	09/07/12 11:01		TAL TAM

Certification Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 66049839-1

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	NELAC	4	E84282	06-30-13
Georgia	State Program	4	905	07-31-12
USDA	Federal		P330-11-00177	04-20-14



Method Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL TAM
300.0	Anions, Ion Chromatography	MCAWW	TAL TAM
350.1	Nitrogen, Ammonia	MCAWW	TAL TAM
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 TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Sample Summary

Client: Hillsborough County Public Utilities Dep
Project/Site: Southeast Landfill

TestAmerica Job ID: 660-49839-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-49839-1	TH-74	Ground Water	09/06/12 10:44	09/06/12 15:20
660-49839-2	BLANK EQUIPMENT 49839	Water	09/06/12 09:30	09/06/12 15:20
660-49839-3	TH-58	Ground Water	09/06/12 12:57	09/06/12 15:20
660-49839-4	TH-57	Ground Water	09/06/12 10:20	09/06/12 15:20
660-49839-5	TH-40	Ground Water	09/06/12 09:52	09/06/12 15:20
660-49839-6	TH-30	Ground Water	09/06/12 12:23	09/06/12 15:20
660-49839-7	TH-75	Ground Water	09/06/12 11:07	09/06/12 15:20
660-49839-8	DUPLICATE NOT BLANK 49839	Water	09/06/12 00:00	09/06/12 15:20
660-49886-1	TH-42	Ground Water	09/07/12 11:44	09/07/12 15:18
660-49886-2	SUP 1	Ground Water	09/07/12 13:18	09/07/12 15:18
660-49886-3	SUP 2	Ground Water	09/07/12 12:51	09/07/12 15:18
660-49886-4	TH-19	Ground Water	09/07/12 12:19	09/07/12 15:18
660-49886-5	TH-73	Ground Water	09/07/12 09:47	09/07/12 15:18
660-49886-6	TH-28A	Ground Water	09/07/12 10:13	09/07/12 15:18
660-49886-7	TH-72	Ground Water	09/07/12 11:01	09/07/12 15:18

660-49839

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: [Signature] REP. OF SOLID WASTE DEPT. 9.4.12 | 2:10

LOCATION: TH-74 WACS# 28307 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon Clayton

WELL DIAMETER: <u>2</u> INCH:		DATE TIME
TOTAL DEPTH OF WELL: <u>17.00</u> Ft.	PURGE STARTED:	<u>9.4.12 10:34</u>
DEPTH TO WATER: <u>9.34</u> Ft.	PURGE RATE:	<u>0.20</u> GPM.
LENGTH OF WATER COL: <u>7.44</u> Ft.		DATE TIME
VOLUME TO PURGE: <u>1.23</u> Gal.	PURGE ENDED:	<u>9.4.12 10:44</u>
	ACT. VOL. PURGED:	<u>2.00</u> GAL.
	Draw Down:	<u>10.01</u>

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:40	24.14	619	5.31	0.34	3.08 =
AB LC	10:42	24.12	602	5.32	0.27	2.87
AB JC	10:44	24.08	578	5.33	0.24	2.37

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

Colors and Sheens [Signature]

COLLECTED
DATE | TIME
9.4.12 | 10:44

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:		DATE TIME
RELINQUISHED BY: <u>[Signature]</u>	REP. OF SOLID WASTE DEPT.	<u>9.4.12 3:20</u>
ACCEPTED BY: <u>[Signature]</u>	REP. OF CONTRACT LAB.	<u>9.6.12 3:20</u>

COMMENT'S: wo # 0047

4.6° C C107

**HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM
MONITORING WELLS BLANK, EQUIPMENT**

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Asen REP. OF SOLID WASTE DEPT. 9-4-12 2:40

LOCATION: BLANK, EQUIPMENT SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon JL

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
<u>1</u>	250 ml. PLASTIC	<u>2</u>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
<u>1</u>	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

13

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
DATE | TIME
9-6-12 9:30

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____ DATE | TIME

RELINQUISHED BY: Asen REP. OF SOLID WASTE DEPT. 9-6-12 3:20

ACCEPTED BY: Paul McHally REP. OF CONTRACT LAB. 9-6-12 3:20

COMMENT'S: WJH 0087

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: As REP. OF SOLID WASTE DEPT. 9.4.12 | 2:10

LOCATION: TH-58 WACS# 1571 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon A. Clayton

WELL DIAMETER: <u>2.0</u> INCH:		DATE TIME
TOTAL DEPTH OF WELL: <u>32.92</u> Ft.	PURGE STARTED:	<u>9.4.12 12:36</u> 12:49
DEPTH TO WATER: <u>27.28</u> Ft.	PURGE RATE:	<u>0.20</u> GPM.
LENGTH OF WATER COL: <u>5.64</u> Ft.	DATE TIME	
VOLUME TO PURGE: <u>0.90</u> Gal.	PURGE ENDED:	<u>9.4.12 12:57</u>
	ACT. VOL. PURGED:	<u>1.60</u> GAL.
	Draw Down:	<u>28.85</u>

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB SC	12:53	25.09	695	5.73	0.31	1.88 =
AB SC	12:55	25.02	696	5.40	0.28	1.07
AB SC	12:57	25.02	696	5.40	0.31	0.83

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
DATE | TIME
9.4.12 | 12:57

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:		DATE TIME
RELINQUISHED BY: <u>Chris Clayton</u>	REP. OF SOLID WASTE DEPT.	<u>9.4.12 3:20</u>
ACCEPTED BY: <u>Carol McInally</u>	REP. OF CONTRACT LAB.	<u>9.4.12 3:20</u>

COMMENT'S: wo # 0067
Had to stop and restart purge due to rain.

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: *A* REP. OF SOLID WASTE DEPT. 9.4.12 | 2:10

LOCATION: TH-57 WACS# 1570 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon J. Clayton

WELL DIAMETER: <u>2.0</u> INCH:		DATE TIME
TOTAL DEPTH OF WELL: <u>26.83</u> Ft.	PURGE STARTED:	<u>9.6.12 10:09</u>
DEPTH TO WATER: <u>18.15</u> Ft.	PURGE RATE:	<u>0.25</u> GPM.
LENGTH OF WATER COL: <u>8.68</u> Ft.	DATE TIME	
VOLUME TO PURGE: <u>1.39</u> Gal.	PURGE ENDED:	<u>9.6.12 10:20</u>
	ACT. VOL. PURGED:	<u> </u> GAL.
	Draw Down:	<u>19.22</u>

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:16	26.81	258	4.85	0.31	1.54 =
AB JC	10:18	26.80	253	4.87	0.24	1.10
AB JC	10:20	26.79	252	4.90	0.20	0.97

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
DATE | TIME
9.6.12 | 10:20

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____ DATE | TIME

RELINQUISHED BY: *J. Clayton* REP. OF SOLID WASTE DEPT. 9.6.12 | 3:20

ACCEPTED BY: *Carol McHulley* REP. OF CONTRACT LAB. 9.6.12 | 3:20

COMMENT'S: WO # 0067 H₂S odor

13

**HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM**

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: *AS* REP. OF SOLID WASTE DEPT. 9-4-12 2:10

LOCATION: TH-40 WACS# 822 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon JC

WELL DIAMETER: 2.0 INCH:
TOTAL DEPTH OF WELL: 165.90 Ft.
DEPTH TO WATER: 86.05 Ft.
LENGTH OF WATER COL: 79.78 Ft.
VOLUME TO PURGE: 12.78 Gal.

DATE | TIME
PURGE STARTED: 9-6-12 9:39
PURGE RATE: 1.00 GPM.
DATE | TIME
PURGE ENDED: 9-6-12 9:52
ACT. VOL. PURGED: 16.00 GAL.
Draw Down: 86.06

FIELD PARAMETERS:

	BY	TIME	TEMP	COND	PH	DO	TURB
<i>AS</i>	<i>JL</i>	<i>9:46</i>	<i>23.58</i>	<i>344</i>	<i>7.30</i>	<i>0.40</i>	<i>0.94 =</i>
<i>AS</i>	<i>JL</i>	<i>9:50</i>	<i>23.58</i>	<i>339</i>	<i>7.31</i>	<i>0.32</i>	<i>0.92</i>
<i>AS</i>	<i>JL</i>	<i>9:52</i>	<i>23.59</i>	<i>337</i>	<i>7.39</i>	<i>0.29</i>	<i>0.68</i>

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
<i>1</i>	250 ml. PLASTIC	<i>2</i>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
<i>1</i>	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

5 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
DATE | TIME
9-6-12 9:52

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:
RELINQUISHED BY: *AS* REP. OF SOLID WASTE DEPT. 9-6-12 3:20
ACCEPTED BY: *Cand McNulty* REP. OF CONTRACT LAB. 9-6-12 3:20

COMMENT'S: no #0067

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____

REP. OF CONTRACT LAB. _____

ACCEPTED BY: ABC

REP. OF SOLID WASTE DEPT. 8-9-12 2:00

LOCATION: TH-30 WACS# 1065

SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION

A. Balloon JC

WELL DIAMETER: 2.00 INCH:

TOTAL DEPTH OF WELL: 46.19 Ft.

DEPTH TO WATER: 23.57 Ft.

LENGTH OF WATER COL: 22.62 Ft.

VOLUME TO PURGE: 3.62 Gal.

PURGE STARTED:

PURGE RATE:

PURGE ENDED:

ACT. VOL. PURGED:

Draw Down:

DATE | TIME
8-6-12 12:05

0.25 GPM.

DATE | TIME
8-6-12 12:23

4.50 GAL.

23.70

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
<u>ABC</u>	<u>JC 12:19</u>	<u>23.62</u>	<u>430</u>	<u>4.21</u>	<u>0.12</u>	<u>1.78</u> =
<u>ABC</u>	<u>JC 12:21</u>	<u>23.62</u>	<u>432</u>	<u>4.23</u>	<u>0.12</u>	<u>1.41</u>
<u>ABC</u>	<u>JC 12:23</u>	<u>23.61</u>	<u>433</u>	<u>4.24</u>	<u>0.11</u>	<u>1.51</u>

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
<u>1</u>	250 ml. PLASTIC	<u>2</u>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
<u>1</u>	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

5 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED

DATE | TIME

8-6-12 12:23

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: ABC REP. OF SOLID WASTE DEPT. 8-6-12 3:20

ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 8-6-12 3:20

COMMENT'S: W0#0067 H₂S odor

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: AB REP. OF SOLID WASTE DEPT. 9.4.12 | 2:10

LOCATION: TH-75 WACS# 28308 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon J. Clayton

WELL DIAMETER: 2 INCH: _____ DATE | TIME
 TOTAL DEPTH OF WELL: 17.00 Ft. PURGE STARTED: 9.6.12 | 10:56
 DEPTH TO WATER: 7.40 Ft. PURGE RATE: 0.20 GPM.
 LENGTH OF WATER COL: 9.40 Ft. DATE | TIME
 VOLUME TO PURGE: 1.54 Gal. PURGE ENDED: 9.6.12 | 11:07
 ACT. VOL. PURGED: 2.60 GAL. 2.20
 Draw Down: 7.73

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:03	24.52	355	5.83	0.19	4.79 =
AB JC	11:05	24.50	357	5.46	0.18	4.45
AB JC	11:07	24.50	340	5.41	0.18	4.41

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

Colors and Sheens _____

COLLECTED
 DATE | TIME
9.6.12 | 11:07

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____ DATE | TIME
 RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 9.6.12 | 3:20
 ACCEPTED BY: Carol McMillan REP. OF CONTRACT LAB. 9.6.12 | 3:20

COMMENT'S: W06 # 0007

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM
MONITORING WELLS DUPLICATE SAMPLE

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: ABC REP. OF SOLID WASTE DEPT. 9-4-12 2:40

LOCATION: DUPLICATE SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION : A. Balloon TC

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
<u>1</u>	250 ml. PLASTIC	<u>2</u>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
<u>1</u>	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
 DATE | TIME
9-6-12

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____ DATE | TIME

RELINQUISHED BY: ABC REP. OF SOLID WASTE DEPT. 9-6-12 3:18

ACCEPTED BY: CAROL McHULLY REP. OF CONTRACT LAB. 9-6-12 3:18

COMMENT'S: WD# 0067

660-49886

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____

REP. OF CONTRACT LAB. _____

ACCEPTED BY: AC

REP. OF SOLID WASTE DEPT. 9-4-14 2:10

LOCATION: TH-42 WACS# 823

SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION

A. Balloon JC

WELL DIAMETER: 2.0 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 164.00 Ft.

PURGE STARTED: 9-7-12 11:20

DEPTH TO WATER: 68.92 Ft.

PURGE RATE: 0.75 GPM.

LENGTH OF WATER COL: 95.08 Ft.

DATE | TIME

VOLUME TO PURGE: 15.21 Gal.

PURGE ENDED: 9-7-14 11:44

ACT. VOL. PURGED: 18.00 GAL.

Draw Down: 93.70

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
<u>AC</u>	<u>JL</u>	<u>11:40</u>	<u>23.91</u>	<u>518</u>	<u>6.95</u>	<u>0.14</u>
<u>AC</u>	<u>JL</u>	<u>11:42</u>	<u>23.88</u>	<u>519</u>	<u>6.97</u>	<u>0.14</u>
<u>AC</u>	<u>JL</u>	<u>11:44</u>	<u>23.87</u>	<u>519</u>	<u>6.98</u>	<u>0.14</u>

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
<u>1</u>	250 ml. PLASTIC	<u>2</u>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
<u>1</u>	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED DATE | TIME

9-7-12 11:44

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0

SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Ann Clayton

REP. OF SOLID WASTE DEPT. 9-7-12 3:18

DATE | TIME

ACCEPTED BY: Carol McHulley

REP. OF CONTRACT LAB. 9-7-12 3:18

DATE | TIME

COMMENT'S: _____

3.3' c 6/07

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM

13

**HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM**

PRECLEANED SAMPLE CONTAINERS: _____ DATE | TIME _____

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Asa REP. OF SOLID WASTE DEPT. 9.4.12 | 2:10

LOCATION: SUP 1 WACS# 27755 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon J. Clayton

WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 9.7.12 TIME 12:59

ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB DE	1:14	24.55	351	7.22	0.04	1.18 =
AB JC	1:14	24.56	351	7.24	0.05	0.81
AB JC	1:18	24.48	351	7.27	0.04	0.74

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
DATE | TIME
9.7.12 | 1:18

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____ DATE | TIME _____

RELINQUISHED BY: Asa Clayton REP. OF SOLID WASTE DEPT. 9.7.12 | 3:18

ACCEPTED BY: Chad McNeely REP. OF CONTRACT LAB. 9.7.12 | 3:18

COMMENT'S: WQ# 0047

13

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Asu REP. OF SOLID WASTE DEPT. 9.4.12 | 12:10

LOCATION: SUP 2 WACS# 27756 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon J. Clayton

WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 9.7.12 TIME 12:32

ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB	JC	12:47	24.77	358	7.20	0.06
AB	JC	12:49	24.77	358	7.23	0.05
AB	JC	12:51	24.79	359	7.24	0.05

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
 DATE | TIME
9.7.12 | 12:15

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:
 RELINQUISHED BY: Jin Clayton REP. OF SOLID WASTE DEPT. 9.7.12 | 3:18
 ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 9.7.12 | 3:18

COMMENT'S: wo # 0067

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____
 ACCEPTED BY: ABC REP. OF SOLID WASTE DEPT. 9-4-12 2:00

LOCATION: TH-19 WACS# 821 SAMPLE MATRIX: WATER OTHER MATRIX: _____
 PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon JO

WELL DIAMETER: 2.0 INCH: _____
 TOTAL DEPTH OF WELL: 153.60 Ft. PURGE STARTED: 9-7-12 12:05 DATE | TIME
 DEPTH TO WATER: 90.91 Ft. PURGE RATE: 1.00 GPM.
 LENGTH OF WATER COL: 62.69 Ft. DATE | TIME
 VOLUME TO PURGE: 10.03 Gal. PURGE ENDED: 9-7-12 12:19 DATE | TIME
 ACT. VOL. PURGED: 14.00 GAL.
 Draw Down: 9.14

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB	
AB	JL 12:15	23.49	405	6.84	0.29	0.18	= 0.76
AB	JL 12:17	23.49	405	6.88	0.25	0.17	0.89
AB	JL 12:19	23.49	406	6.92	0.23	0.50	12 9-13-12 12:21

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED
DATE | TIME
9-7-12 12:19

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____
 RELINQUISHED BY: ABC REP. OF SOLID WASTE DEPT. 9-7-12 12:19 3:18 DATE | TIME
 ACCEPTED BY: Carol McNeil REP. OF CONTRACT LAB. 9-7-12 3:18

COMMENT'S: W0#0067

**HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM**

PRECLEANED SAMPLE CONTAINERS: _____ DATE | TIME _____

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Asm REP. OF SOLID WASTE DEPT. 9.4.12 | 2:10

LOCATION: TH-73 WACS#27754 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon A. Clayton

WELL DIAMETER: <u>2</u> INCH:		DATE TIME
TOTAL DEPTH OF WELL: <u>43.40</u> Ft.	PURGE STARTED:	<u>9.7.12 9:35</u>
DEPTH TO WATER: <u>31.20</u> Ft.	PURGE RATE:	<u>0.25</u> GPM.
LENGTH OF WATER COL: <u>12.20</u> Ft.		DATE TIME
VOLUME TO PURGE: <u>1.95</u> Gal.	PURGE ENDED:	<u>9.7.12 9:47</u>
	ACT. VOL. PURGED:	<u>3.00</u> GAL.
	Draw Down:	<u>34.42</u>

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB Jc	9:43	24.68	250	5.15	0.52	6.87 =
AB Jc	9:45	24.67	244	5.08	0.48	5.87
AB Jc	9:47	24.67	242	5.06	0.50	7.39

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

Colors and Sheens _____

COLLECTED
DATE | TIME
9.7.12 | 9:47

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:
RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 9.7.12 | 3:18
ACCEPTED BY: Coral McHally REP. OF CONTRACT LAB. 9.7.12 | 3:18

COMMENT'S: W0H0067

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____

REP. OF CONTRACT LAB. _____

ACCEPTED BY: BC

REP. OF SOLID WASTE DEPT. 8-4-12 2:40

LOCATION: **TH-28A WACS# 19862**

SAMPLE MATRIX: **WATER** OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION

A. Balloon **JC**

WELL DIAMETER: **2.0 INCH:**

TOTAL DEPTH OF WELL: 34.30 Ft.

DEPTH TO WATER: 27.87 Ft.

LENGTH OF WATER COL: 6.43 Ft.

VOLUME TO PURGE: 1.03 Gal.

PURGE STARTED: 8-7-12 10:04

PURGE RATE: 0.20 GPM.

PURGE ENDED: 8-7-12 10:13

ACT. VOL. PURGED: 1.80 GAL.

Draw Down: 28.4

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
<u>A</u>	<u>JC 10:09</u>	<u>27.30</u>	<u>274</u>	<u>5.34</u>	<u>0.55</u>	<u>2.88 =</u>
<u>B</u>	<u>JC 10:11</u>	<u>27.28</u>	<u>271</u>	<u>5.30</u>	<u>0.30</u>	<u>2.82</u>
<u>B</u>	<u>JC 10:13</u>	<u>27.24</u>	<u>269</u>	<u>5.27</u>	<u>0.24</u>	<u>2.55</u>

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
<u>1</u>	250 ml. PLASTIC	<u>2</u>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
<u>1</u>	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

**COLLECTED
DATE | TIME**

8-7-12 10:13

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 YES SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: BC

REP. OF SOLID WASTE DEPT. 8-7-12 3:18

ACCEPTED BY: Carol McMurty

REP. OF CONTRACT LAB. 8-7-12 3:18

COMMENT'S: WDH0067

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE DOC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: [Signature] REP. OF SOLID WASTE DEPT. 9.8.12 | 2:10

LOCATION: TH-72 WACS# 27753 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon J. Clayton

WELL DIAMETER: 2 INCH: _____ DATE | TIME
 TOTAL DEPTH OF WELL: 190.00 Ft. PURGE STARTED: 9.8.12 | 9:25 9:54
 DEPTH TO WATER: 91.21 Ft. PURGE RATE: 0.25 ~~91.54~~ GPM.
 LENGTH OF WATER COL: 98.79 Ft. DATE | TIME
 VOLUME TO PURGE: 15.81 Gal. PURGE ENDED: 9.8.12 | 11:01
 ACT. VOL. PURGED: 16.75 GAL.
 Draw Down: 91.29

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB Jc	10:57	23.61	2352	6.50	0.20	1.13 =
AB Jc	10:59	23.60	2354	6.51	0.20	1.00
AB Jc	11:01	23.62	2357	6.51	0.20	1.05

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
1	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
1	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

Colors and Sheens _____

COLLECTED
 DATE | TIME
9.8.12 | 11:01

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES: _____ DATE | TIME

RELINQUISHED BY: [Signature] REP. OF SOLID WASTE DEPT. 9.8.12 | 3:18

ACCEPTED BY: [Signature] REP. OF CONTRACT LAB. 9.8.12 | 3:18

COMMENT'S: WO # 0067

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-49839-1

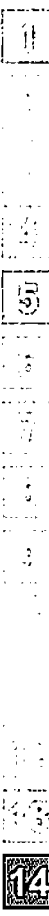
Login Number: 49839

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	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: 660-49839-1

Login Number: 49886

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

