Hillsborough County
Florida

Office of the County Administrator
Michael S. Merrill

July 9, 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. 21

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 May 3-4, 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 for 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 4.01 to 5.66 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. The County attempted to obtain a representative groundwater sample from the piezometer / monitoring well P-18S during this sampling event. However, turbidity values remained elevated during the attempted sampling procedures. Therefore, as agreed, a representative groundwater sample was collected 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. Surficial aquifer groundwater monitoring well TH-58 conductivity values have continued to exhibit a decreasing trend since November 2011. During this monthly sampling event, the conductivity in TH-58 was 540 uhmos/cm.

The conductivity value observed in the surficial aquifer groundwater monitoring wells TH-73, TH-74 and TH-75 are 283, 602 and 588 umhos/cm, respectively. Minor impacts remain in close proximity to the sinkhole within the surficial aquifer. The conductivity value observed in the upper Floridan aquifer groundwater monitoring well TH-72 during this sampling event was 746 uhmos/cm, which is higher than the previous months value. The County will continue to evaluate the conductivity in this well in the coming months.

Total Dissolved Solids (TDS)

TDS values have continued to decrease in TH-58, and all the wells sampled as part of the IAMP are below the compliance criteria of 500 mg/l for TDS.

Chloride

Chloride values remain within the SDWS of 250 mg/l. Surficial aquifer groundwater monitoring wells TH-30, TH-58 TH-74, and TH-75 exhibited values of 110, 65, 110, and 120 mg/l, respectively. As discussed in previous IAMP reports, the chloride values are likely attributable to the grout materials introduced into the subsurface in the area of the sinkhole. The decrease in values observed in TH-73 since January 2012 support this position.

Arsenic

The arsenic observed in TH-58 during this sampling event was 0.025 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 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 likely not attributable to the landfill or the sinkhole, but is likely naturally occurring within the soils surrounding the well and being mobilized in the anaerobic environment below the lined landfill.

Iron

Total iron concentrations in six (6) surficial aquifer wells were observed above the SDWS of 0.3 mg/l. The concentrations of iron across the site ranged from below the detectable limits to 38 mg/l. As previously discussed, the elevated iron concentrations observed in the surficial aquifer wells at specific locations across the site are likely naturally occurring and/or the result of past strip mining activities.

Total Ammonia

Ammonia concentrations observed in the groundwater monitoring wells were at or below the Groundwater Cleanup Target Level (GCTL) of 2.8 mg/l, except for surficial aquifer well TH-28A. A concentration of 3 mg/l was detected during this sampling event and the location is directly south of surficial well TH-73 and south / southwest of the sinkhole. No other impacts have been noted in TH-28A. The County will continue to closely evaluate this component of water quality in future IAMP sampling.

Conclusions

The water quality observed in the May 2012 sampling event continues to indicate the wells closest to the sinkhole have exhibited changes in water quality. Based on the proximity of the wells and the trends observed, it is apparent that these impacts appear to be attributable to the sinkhole and/or the grouting activities conducted as part of the investigation and initial remediation activities conducted at the site.

Overall, water quality observations demonstrate significant improvement in the wells previously exhibiting impacts thought to be attributable to the sinkhole and/or the grout materials. The deeper upper Floridan aquifer monitoring wells continue to exhibit good water quality. The on-site supply wells continue to exhibit good water quality and no significant changes have been observed to date.

Recommendations

Based on the past year of monthly IAMP sampling and the significant overall improvement in water quality observed, the County recommends the IAMP sampling program be reduced to a quarterly schedule in the near future. The sampling of these wells could be performed in

conjunction with the required quarterly sampling of the site. As discussed with the FDEP, the County intends to continue the monthly IAMP sampling schedule, further evaluate the compiled data set, and prepare additional justification for the reduced sampling frequency.

Enclosed for your review please find a site location map depicting the on-site wells sampled, the water quality data summary table, a groundwater elevation data table, groundwater contour and flow diagram, and the complete analytical data report from our contracted laboratory, Test America, Inc. Should you have any questions or require any additional information please feel free to call me at (813) 272-5977, ext. 43944.

Respectfully submitted,

7/9/2012

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

DAVID S. ADAMS LICENSE No 1827 STATE OF FLORIDA PROFESSIONAL GEOLOGIST

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Brian Miller, DOH
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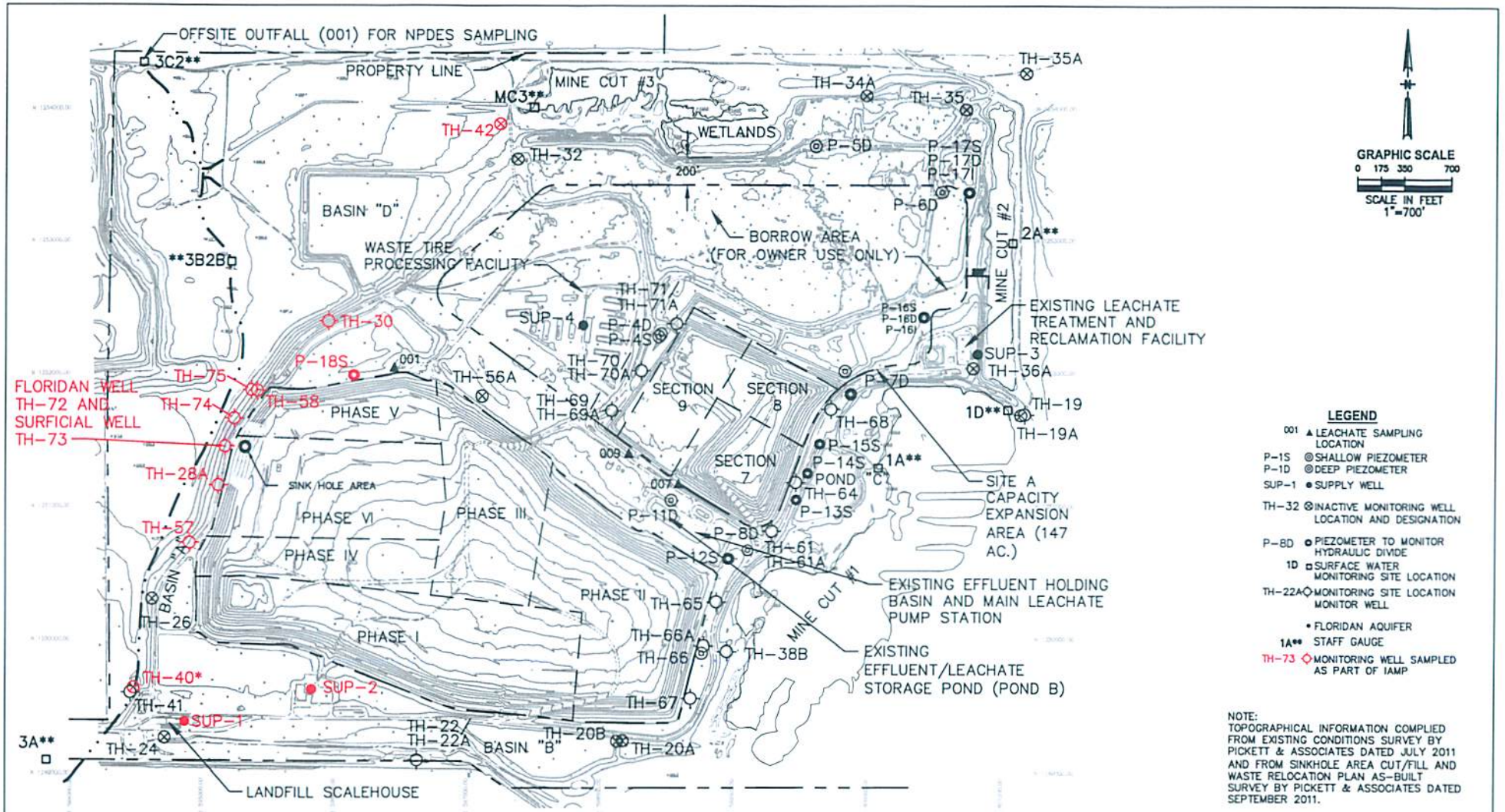
Final copy scanned to LFS/Southeast/Sinkhole/SCLF – IAMP Report No 21.



NOTE:
TOPOGRAPHICAL INFORMATION COMPLIED FROM EXISTING CONDITIONS SURVEY BY PICKETT & ASSOCIATES DATED JULY 2011 AND FROM SINKHOLE AREA CUT/FILL AND WASTE RELOCATION PLAN AS-BUILT SURVEY BY PICKETT & ASSOCIATES DATED SEPTEMBER 2011.

Hillsborough County Florida

SHEET TITLE

MONITORING WELLS, PIEZOMETERS, AND SURFACE WATER MONITORING LOCATIONS HILLSBOROUGH COUNTY, FLORIDA

PROJECT NUMBER	REFERENCE SHEET
SCALE	DRAWING NAME
DATE: DECEMBER 2011	EXHIBIT NUMBER: 1

C:\pwworking\tpak\d0266713\Well Location Map - Revised 12-21-11.dwg, Plot, 12/21/2011 10:08:10 AM, bradjohn

Hillsborough County Southeast Landfill
Laboratory Analytical Results from Groundwater Monitoring and On-Site Supply Wells
May 3-4, 2012

GENERAL (mg/l)	Surficial Aquifer Wells							Upper Floridan Aquifer Wells						(MCL) STANDARD
PARAMETERS	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	F.A.C. 62-550
conductivity (umhos/cm) (field)	305	431	152	540	283	602	588	402	388	511	746	348	364	NS
dissolved oxygen (mg/l) (field)	1.32	0.19	0.28	0.43	0.99	0.86	0.28	0.1	0.47	2.82	1.60	0.07	0.17	NS
pH (field)	5.19	4.01	4.88	5.66	4.80	5.15	5.32	6.85	7.29	7.07	6.90	7.40	7.45	(6.5 - 8.5)**
temperature (°C) (field)	26.64	23.60	25.87	25.84	24.88	21.93	22.06	23.46	23.44	23.80	23.46	24.59	24.79	NS
turbidity (NTU) (field)	9.15	1.93	2.24	0.69	6.47	12.5	0.0	0.0	0.0	4.76	0.81	0.0	0.0	NS
total dissolved solids (mg/l)	110	180	68	250	160	330	350	220	170	260	380	180	190	500**
chloride (mg/l)	61	110	26	65	63	110	120	8.1	8.5	18	72	9.5	11	250**
ammonia nitrogen (mg/l as N)	3	2.3	1.2	1.5	1.9	2.8	1.9	0.48	0.63	0.41	2.3	0.33	0.29	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	F.A.C. 62-550
arsenic	0.004 u	0.004 u	0.004 u	0.025	0.004 u	0.004 u	0.0078 i	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.01*
iron	3.7	0.36	0.31	4.1	4.5	38	16	0.05 u	0.05 u	0.12 i	0.54	0.05 u	0.05 u	0.3**
sodium	25	29	11	24	22	25	33	14	19	17	49	9	8.5	160*

Note: Ref. Groundwater Guidance Concentrations, FDEP 2012
MCL=MAXIMUM CONTAMINANT LEVEL
BDL=BELOW DETECTION LIMIT
NTU=NEPHELOMETRIC TURBIDITY UNITS
i = reported value between the laboratory method detection limit and the laboratory practical quantitation limit
u = parameter was analyzed but not detected.
*=DENOTES PRIMARY DRINKING WATER STANDARD
**=DENOTES SECONDARY DRINKING WATER STANDARD
***=DENOTES FLORIDA GUIDANCE CONCENTRATION
5.19
ug/l=MICROGRAMS PER LITER
mg/l=MILLIGRAMS PER LITER
NS=NO STANDARD

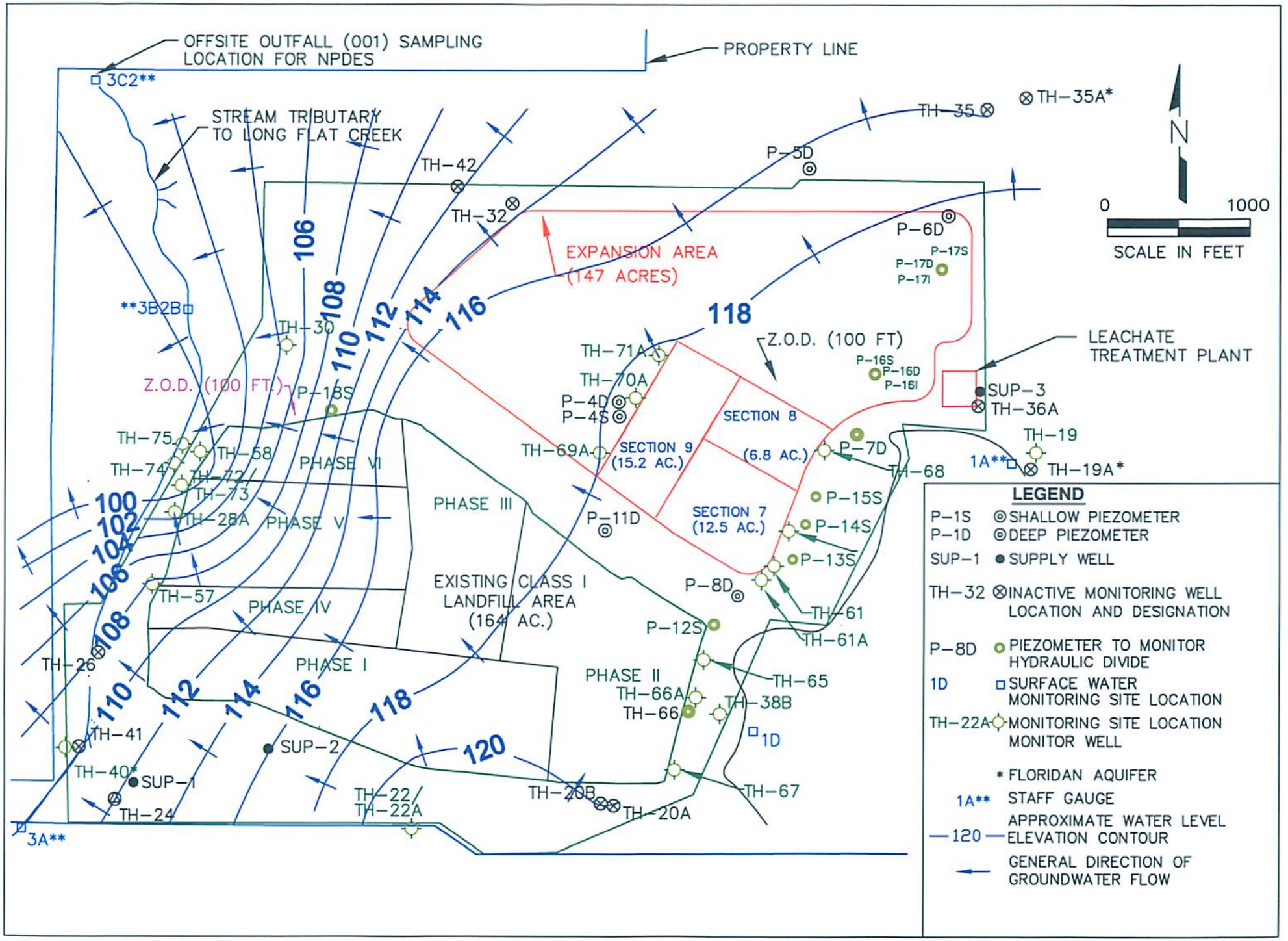
Prepared by: Mike Townsel
QA/QC'D by: Wendy Grimes
Final QA/QC by: David Adams

GROUNDWATER AND SURFACE WATER ELEVATIONS FOR SOUTHEAST LANDFILL

May 2, 2012

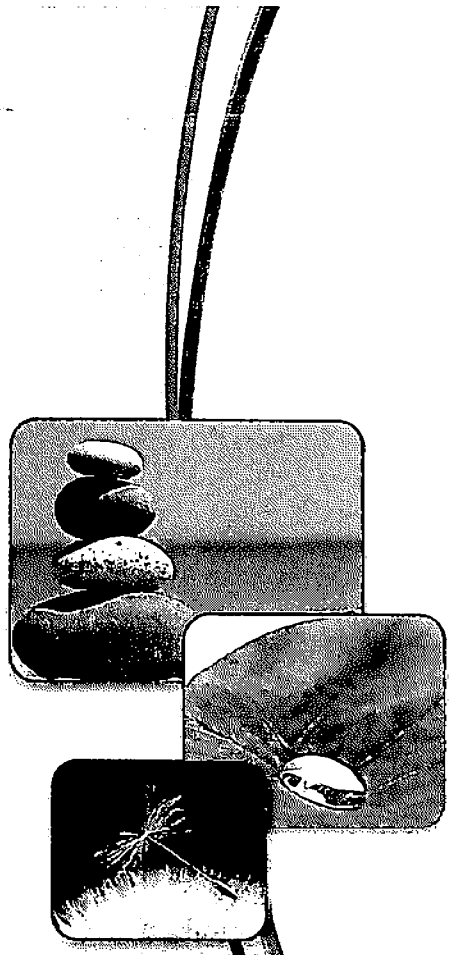
Measuring Point I.D.	T.O.C. Elevations (NGVD)	05/02/2012 W.L. B.T.O.C.	W.L. (NGVD)	Time
P-4D	140.78	23.72	117.06	11:38 AM
P-4S	140.95	Dry	Dry	11:37 AM
P-5D	151.94	Dry	Dry	11:05 AM
P-6D-A	148.01	29.45	118.56	10:58 AM
P-7D	138.92	19.75	119.17	11:45 AM
P-8D	138.34	19.99	118.35	12:09 PM
P-11D	138.02	19.30	118.72	11:49 AM
P-12S	134.97	16.20	118.77	12:11 PM
P-13S	140.21	21.28	118.93	12:04 PM
P-14S	138.56	19.71	118.85	12:00 PM
P-15S	139.19	20.45	118.74	11:48 AM
P-16S	143.38	16.58	126.80	10:52 AM
P-16I	144.15	25.88	118.27	10:51 AM
P-16D	143.84	25.59	118.25	10:50 AM
P-17S	137.35	18.55	118.80	11:13 AM
P-17I	137.32	19.17	118.15	11:12 AM
P-17D	137.22	19.16	118.06	11:11 AM
P-18S	129.86	19.50	110.36	10:18 AM
P-19	133.36	16.16	117.20	11:01 AM
P-20	132.38	14.81	117.57	10:54 AM
P-21	122.79	5.59	117.20	11:28 AM
P-22	128.35	10.88	117.47	11:30 AM
P-23	143.13	25.25	117.88	11:24 AM
TH-19*	130.27	123.35	6.92	10:36 AM
TH-20A	131.86	11.80	120.06	12:25 PM
TH-20B	132.57	12.80	119.77	12:26 PM
TH-22	128.82	7.30	121.52	9:13 AM
TH-22A	129.27	7.91	121.36	9:12 AM
TH-24A	128.23	7.91	120.32	9:19 AM
TH-28A	131.10	29.43	101.67	9:53 AM
TH-30	128.88	24.32	104.56	9:44 AM
TH-32	129.90	16.29	113.61	10:22 AM
TH-35	145.98	30.11	115.87	11:08 AM
TH-36A	152.70	35.00	117.70	10:45 AM
TH-38A	130.68	12.29	118.39	12:20 PM
TH-38B	131.81	13.07	118.74	12:19 PM
TH-40*	124.99	120.35	4.64	9:27 AM
TH-41*	125.00	123.22	1.78	9:28 AM
TH-42*	116.74	95.72	21.02	10:25 AM
TH-57	128.36	20.42	107.94	9:34 AM
TH-58	127.88	28.70	99.18	9:47 AM
TH-61	138.73	19.39	119.34	12:06 PM
TH-61A	139.45	20.00	119.45	12:07 PM
TH-64	139.64	19.88	119.76	12:02 PM
TH-65	135.40	16.41	118.99	12:13 PM
TH-66	130.58	11.25	119.33	12:16 PM
TH-66A	130.66	11.92	118.74	12:15 PM
TH-67	129.51	7.12	122.39	12:21 PM
TH-68	140.01	20.05	119.96	11:56 AM
TH-69A	144.97	26.93	118.04	11:46 AM
TH-70A	146.63	27.42	119.21	11:43 AM
TH-71A	146.95	28.66	118.29	11:34 AM
TH-72	130.96	126.55	4.41	9:51 AM
TH-73	131.07	32.74	98.33	9:49 AM
TH-74	109.08	10.71	98.37	9:38 AM
TH-75	106.92	8.27	98.65	9:40 AM
SW-3A	3.0'=125.53'	Dry	Dry	9:06 AM
SW-3B2B	3.0'=97.97'	Dry	Dry	10:01 AM
SW-3C2	6.0'=92.33'	Dry	Dry	10:07 AM
Mine Cut #1	4.0'=122.14'	Dry	Dry	11:52 AM
Mine Cut #2	6.0'=123.47'	0.80	118.27	10:33 AM
Mine Cut #3	4.0'=112.27'	1.58	109.85	10:27 AM
Mine Cut #4	5.0'=97.54'	1.22	93.76	10:12 AM

NGVD = National Geodetic Vertical Datum
T.O.C. = Top of Casing
B.T.O.C. = Below Top of Casing
* = Floridan Well
ND =No Data
W.L. = Water Level



Southeast County Landfill

Groundwater Elevation Contour Diagram – May 2, 2012



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 660-47461-1
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:
5/17/2012 1:52:53 PM

Nancy Robertson
Project Manager II
nancy.robertson@testamericainc.com

Table of Contents

Definitions/Glossary

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

TestAmerica Job ID: 660-47461-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
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)

Job ID: 660-47461-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative
660-47461-1

Comments
No additional comments.

Receipt
The samples were received on 5/3/2012 2:10 PM and 5/4/2012 3:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 4.1° C and 5.2° C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for iron in batch 124218 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 124448 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. The sample is flagged with J3.

No other analytical or quality issues were noted.

Detection Summary

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

TestAmerica Job ID: 660-47461-1

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Client Sample ID: DUPLICATE NOT BLANK 47461 — Lab Sample ID: 660-47461-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	4600		200	50	ug/L	1		6010B	Total Recoverable
Sodium	23		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	63		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	1.7		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	170		5.0	5.0	mg/L	1		SM 2540C	Total/NA

Client Sample ID: BLANK EQUIPMENT 47461 — Lab Sample ID: 660-47461-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.11		0.020	0.010	mg/L	1		350.1	Total/NA

Client Sample ID: TH-73 — Lab Sample ID: 660-47461-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	4500		200	50	ug/L	1		6010B	Total Recoverable
Sodium	22		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	63		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	1.9		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	160		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	4.80				SU	1		Field Sampling	Total/NA
Field Temperature	24.88				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.99				mg/L	1		Field Sampling	Total/NA
Specific Conductance	283				umhos/cm	1		Field Sampling	Total/NA
Turbidity	6.47				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-58 — Lab Sample ID: 660-47461-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	25		10	4.0	ug/L	1		6010B	Total Recoverable
Iron	4100		200	50	ug/L	1		6010B	Total Recoverable
Sodium	24		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	65		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	1.5		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	250		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.66				SU	1		Field Sampling	Total/NA
Field Temperature	25.84				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.43				mg/L	1		Field Sampling	Total/NA
Specific Conductance	540				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.69				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-57 — Lab Sample ID: 660-47461-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	310		200	50	ug/L	1		6010B	Total Recoverable
Sodium	11		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	26		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	1.2		0.020	0.010	mg/L	1		350.1	Total/NA

Detection Summary

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

TestAmerica Job ID: 660-47461-1

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Client Sample ID: TH-57 (Continued) — Lab Sample ID: 660-47461-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	68		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	4.88				SU	1		Field Sampling	Total/NA
Field Temperature	25.87				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.28				mg/L	1		Field Sampling	Total/NA
Specific Conductance	152				umhos/cm	1		Field Sampling	Total/NA
Turbidity	2.24				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-30 — Lab Sample ID: 660-47461-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	360		200	50	ug/L	1		6010B	Total Recoverable
Sodium	29		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	110		2.5	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	2.3		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	180		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	4.01				SU	1		Field Sampling	Total/NA
Field Temperature	23.60				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.19				mg/L	1		Field Sampling	Total/NA
Specific Conductance	431				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.93				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-28A — Lab Sample ID: 660-47461-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3700		200	50	ug/L	1		6010B	Total Recoverable
Sodium	25		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	61		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	3.0		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	110		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.13				SU	1		Field Sampling	Total/NA
Field Temperature	26.64				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.32				mg/L	1		Field Sampling	Total/NA
Specific Conductance	305				umhos/cm	1		Field Sampling	Total/NA
Turbidity	9.15				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-40 — Lab Sample ID: 660-47478-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	19		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	0.63		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	170		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.29				SU	1		Field Sampling	Total/NA
Field Temperature	23.44				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.47				mg/L	1		Field Sampling	Total/NA
Specific Conductance	388				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-72 — Lab Sample ID: 660-47478-2

5

Client Sample ID: TH-72 (Continued) — Lab Sample ID: 660-47478-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	540		200	50	ug/L	1		6010B	Total Recoverable
Sodium	49		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	72		2.5	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	2.3		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	380		17	17	mg/L	1		SM 2540C	Total/NA
Field pH	6.90				SU	1		Field Sampling	Total/NA
Field Temperature	23.46				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.60				mg/L	1		Field Sampling	Total/NA
Specific Conductance	746				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.81				NTU	1		Field Sampling	Total/NA

Client Sample ID: SUP 2 — Lab Sample ID: 660-47478-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.5		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	0.29		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	190		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.45				SU	1		Field Sampling	Total/NA
Field Temperature	24.79				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.17				mg/L	1		Field Sampling	Total/NA
Specific Conductance	364				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-19 — Lab Sample ID: 660-47478-4

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	8.1		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.48		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	220		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	6.85				SU	1		Field Sampling	Total/NA
Field Temperature	23.46				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.10				mg/L	1		Field Sampling	Total/NA
Specific Conductance	402				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-42 — Lab Sample ID: 660-47478-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	120	I	200	50	ug/L	1		6010B	Total Recoverable
Sodium	17		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	0.41		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	260		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.07				SU	1		Field Sampling	Total/NA
Field Temperature	23.80				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	2.82				mg/L	1		Field Sampling	Total/NA
Specific Conductance	511				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: TH-42 (Continued) — Lab Sample ID: 660-47478-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Turbidity	4.76				NTU	1		Field Sampling	Total/NA

5

Client Sample ID: SUP 1 — Lab Sample ID: 660-47478-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	9.0		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	9.5		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.33		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	180		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.40				SU	1		Field Sampling	Total/NA
Field Temperature	24.59				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.07				mg/L	1		Field Sampling	Total/NA
Specific Conductance	348				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: DUPLICATE NOT BLANK 47461
Date Collected: 05/03/12 00:00
Date Received: 05/03/12 14:10

Lab Sample ID: 660-47461-1
Matrix: Ground Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		05/08/12 09:44	05/09/12 10:10	1
Iron	4600		200	50	ug/L		05/08/12 09:44	05/09/12 10:10	1
Sodium	23		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:10	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63		2.0	0.80	mg/L			05/11/12 17:00	4
Ammonia as N	1.7		0.020	0.010	mg/L			05/10/12 12:06	1
Total Dissolved Solids	170		5.0	5.0	mg/L			05/07/12 13:42	1

Client Sample Results

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: BLANK EQUIPMENT 47461
Date Collected: 05/03/12 09:30
Date Received: 05/03/12 14:10

Lab Sample ID: 660-47461-2
Matrix: Ground Water

6

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		05/08/12 09:44	05/09/12 10:13	1
Iron	50	U	200	50	ug/L		05/08/12 09:44	05/09/12 10:13	1
Sodium	0.31	U	0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:13	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			05/11/12 10:18	1
Ammonia as N	0.11		0.020	0.010	mg/L			05/10/12 12:08	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			05/07/12 13:43	1

Client Sample Results

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-73
Date Collected: 05/03/12 11:19
Date Received: 05/03/12 14:10

Lab Sample ID: 660-47461-3
Matrix: Ground Water

6

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		05/08/12 09:44	05/09/12 10:17	1
Iron	4500		200	50	ug/L		05/08/12 09:44	05/09/12 10:17	1
Sodium	22		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:17	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63		2.0	0.80	mg/L			05/11/12 17:15	4
Ammonia as N	1.9		0.020	0.010	mg/L			05/10/12 12:09	1
Total Dissolved Solids	160		5.0	5.0	mg/L			05/07/12 13:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.80				SU			05/03/12 11:19	1
Field Temperature	24.88				Degrees C			05/03/12 11:19	1
Oxygen, Dissolved	0.99				mg/L			05/03/12 11:19	1
Specific Conductance	283				umhos/cm			05/03/12 11:19	1
Turbidity	6.47				NTU			05/03/12 11:19	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-58
Date Collected: 05/03/12 10:48
Date Received: 05/03/12 14:10

Lab Sample ID: 660-47461-4
Matrix: Ground Water

6

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	25		10	4.0	ug/L		05/08/12 09:44	05/09/12 10:20	1
Iron	4100		200	50	ug/L		05/08/12 09:44	05/09/12 10:20	1
Sodium	24		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:20	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65		2.0	0.80	mg/L			05/11/12 17:31	4
Ammonia as N	1.5		0.020	0.010	mg/L			05/10/12 12:10	1
Total Dissolved Solids	250		10	10	mg/L			05/07/12 13:45	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.66				SU			05/03/12 10:48	1
Field Temperature	26.84				Degrees C			05/03/12 10:48	1
Oxygen, Dissolved	0.43				mg/L			05/03/12 10:48	1
Specific Conductance	540				umhos/cm			05/03/12 10:48	1
Turbidity	0.69				NTU			05/03/12 10:48	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-57
Date Collected: 05/03/12 12:03
Date Received: 05/03/12 14:10

Lab Sample ID: 660-47461-5
Matrix: Ground Water

6

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		05/08/12 09:44	05/09/12 10:30	1
Iron	310		200	50	ug/L		05/08/12 09:44	05/09/12 10:30	1
Sodium	11		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:30	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		0.50	0.20	mg/L			05/11/12 12:07	1
Ammonia as N	1.2		0.020	0.010	mg/L			05/10/12 12:11	1
Total Dissolved Solids	68		5.0	5.0	mg/L			05/07/12 13:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.88				SU			05/03/12 12:03	1
Field Temperature	25.87				Degrees C			05/03/12 12:03	1
Oxygen, Dissolved	0.28				mg/L			05/03/12 12:03	1
Specific Conductance	152				umhos/cm			05/03/12 12:03	1
Turbidity	2.24				NTU			05/03/12 12:03	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-30
Date Collected: 05/03/12 10:20
Date Received: 05/03/12 14:10

Lab Sample ID: 660-47461-6
Matrix: Ground Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		05/08/12 09:44	05/09/12 10:33	1
Iron	360		200	50	ug/L		05/08/12 09:44	05/09/12 10:33	1
Sodium	29		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:33	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		2.5	1.0	mg/L			05/11/12 17:46	5
Ammonia as N	2.3		0.020	0.010	mg/L			05/10/12 12:12	1
Total Dissolved Solids	180		10	10	mg/L			05/07/12 13:46	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.01				SU			05/03/12 10:20	1
Field Temperature	23.60				Degrees C			05/03/12 10:20	1
Oxygen, Dissolved	0.19				mg/L			05/03/12 10:20	1
Specific Conductance	431				umhos/cm			05/03/12 10:20	1
Turbidity	1.93				NTU			05/03/12 10:20	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-28A
Date Collected: 05/03/12 11:43
Date Received: 05/03/12 14:10

Lab Sample ID: 660-47461-7
Matrix: Ground Water

6

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		05/08/12 09:44	05/09/12 10:37	1
Iron	3700		200	50	ug/L		05/08/12 09:44	05/09/12 10:37	1
Sodium	25		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:37	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61		2.0	0.80	mg/L			05/11/12 11:21	4
Ammonia as N	3.0		0.020	0.010	mg/L			05/10/12 12:14	1
Total Dissolved Solids	110		10	10	mg/L			05/07/12 13:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.13				SU			05/03/12 11:43	1
Field Temperature	26.64				Degrees C			05/03/12 11:43	1
Oxygen, Dissolved	1.32				mg/L			05/03/12 11:43	1
Specific Conductance	305				umhos/cm			05/03/12 11:43	1
Turbidity	9.15				NTU			05/03/12 11:43	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-40
Date Collected: 05/04/12 09:26
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47478-1
Matrix: Ground Water

6

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		05/08/12 09:44	05/09/12 08:32	1
Iron	50	U	200	50	ug/L		05/08/12 09:44	05/09/12 08:32	1
Sodium	19		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 08:32	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.5	J3	0.50	0.20	mg/L			05/11/12 13:24	1
Ammonia as N	0.63		0.020	0.010	mg/L			05/10/12 12:21	1
Total Dissolved Solids	170		10	10	mg/L			05/07/12 13:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.29				SU			05/04/12 09:26	1
Field Temperature	23.44				Degrees C			05/04/12 09:26	1
Oxygen, Dissolved	0.47				mg/L			05/04/12 09:26	1
Specific Conductance	388				umhos/cm			05/04/12 09:26	1
Turbidity	0.00				NTU			05/04/12 09:26	1

Client Sample Results

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-72
Date Collected: 05/04/12 11:04
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47478-2
Matrix: Ground Water

6

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		05/08/12 09:44	05/09/12 08:35	1
Iron	540		200	50	ug/L		05/08/12 09:44	05/09/12 08:35	1
Sodium	49		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 08:35	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72		2.5	1.0	mg/L			05/12/12 12:27	5
Ammonia as N	2.3		0.020	0.010	mg/L			05/10/12 12:22	1
Total Dissolved Solids	380		17	17	mg/L			05/07/12 13:49	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.90				SU			05/04/12 11:04	1
Field Temperature	23.46				Degrees C			05/04/12 11:04	1
Oxygen, Dissolved	1.60				mg/L			05/04/12 11:04	1
Specific Conductance	746				umhos/cm			05/04/12 11:04	1
Turbidity	0.81				NTU			05/04/12 11:04	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: SUP 2
Date Collected: 05/04/12 13:00
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47478-3
Matrix: Ground Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		05/08/12 09:44	05/09/12 09:50	1
Iron	50	U	200	50	ug/L		05/08/12 09:44	05/09/12 09:50	1
Sodium	8.5		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 09:50	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50	0.20	mg/L			05/11/12 14:26	1
Ammonia as N	0.29		0.020	0.010	mg/L			05/10/12 12:24	1
Total Dissolved Solids	190		10	10	mg/L			05/07/12 13:49	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.45				SU			05/04/12 13:00	1
Field Temperature	24.79				Degrees C			05/04/12 13:00	1
Oxygen, Dissolved	0.17				mg/L			05/04/12 13:00	1
Specific Conductance	364				umhos/cm			05/04/12 13:00	1
Turbidity	0.00				NTU			05/04/12 13:00	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-19
Date Collected: 05/04/12 12:21
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47478-4
Matrix: Ground Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		05/08/12 09:44	05/09/12 09:53	1
Iron	50	U	200	50	ug/L		05/08/12 09:44	05/09/12 09:53	1
Sodium	14		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 09:53	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.1		0.50	0.20	mg/L			05/11/12 14:41	1
Ammonia as N	0.48		0.020	0.010	mg/L			05/10/12 12:25	1
Total Dissolved Solids	220		10	10	mg/L			05/07/12 13:50	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.85				SU			05/04/12 12:21	1
Field Temperature	23.46				Degrees C			05/04/12 12:21	1
Oxygen, Dissolved	0.10				mg/L			05/04/12 12:21	1
Specific Conductance	402				umhos/cm			05/04/12 12:21	1
Turbidity	0.00				NTU			05/04/12 12:21	1

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-42
Date Collected: 05/04/12 11:56
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47478-5
Matrix: Ground Water

6

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		05/08/12 09:44	05/09/12 09:56	1
Iron	120	I	200	50	ug/L		05/08/12 09:44	05/09/12 09:56	1
Sodium	17		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 09:56	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		0.50	0.20	mg/L			05/11/12 14:57	1
Ammonia as N	0.41		0.020	0.010	mg/L			05/10/12 12:26	1
Total Dissolved Solids	260		10	10	mg/L			05/07/12 13:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.07				SU			05/04/12 11:56	1
Field Temperature	23.80				Degrees C			05/04/12 11:56	1
Oxygen, Dissolved	2.82				mg/L			05/04/12 11:56	1
Specific Conductance	511				umhos/cm			05/04/12 11:56	1
Turbidity	4.76				NTU			05/04/12 11:56	1

Client Sample Results

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: SUP 1
Date Collected: 05/04/12 13:27
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47478-6
Matrix: Ground Water

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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		05/08/12 09:44	05/09/12 10:00	1
Iron	50	U	200	50	ug/L		05/08/12 09:44	05/09/12 10:00	1
Sodium	9.0		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 10:00	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.5		0.50	0.20	mg/L			05/11/12 15:12	1
Ammonia as N	0.33		0.020	0.010	mg/L			05/10/12 12:27	1
Total Dissolved Solids	180		10	10	mg/L			05/07/12 13:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.40				SU			05/04/12 13:27	1
Field Temperature	24.59				Degrees C			05/04/12 13:27	1
Oxygen, Dissolved	0.07				mg/L			05/04/12 13:27	1
Specific Conductance	348				umhos/cm			05/04/12 13:27	1
Turbidity	0.00				NTU			05/04/12 13:27	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-124218/1-A
Matrix: Water
Analysis Batch: 124269

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		05/08/12 09:44	05/09/12 08:06	1
Iron	50	U	200	50	ug/L		05/08/12 09:44	05/09/12 08:06	1
Sodium	0.31	U	0.50	0.31	mg/L		05/08/12 09:44	05/09/12 08:06	1

Lab Sample ID: LCS 660-124218/2-A
Matrix: Water
Analysis Batch: 124269

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1070		ug/L		107	75 - 125
Iron	1000	1100		ug/L		110	75 - 125
Sodium	10.0	10.7		mg/L		107	75 - 125

Lab Sample ID: 660-47477-C-1-B MS
Matrix: Water
Analysis Batch: 124269

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.0	U	1000	1110		ug/L		111	75 - 125
Iron	38000	J3	1000	39900	J3	ug/L		178	75 - 125
Sodium	25		10.0	36.3		mg/L		114	75 - 125

Lab Sample ID: 660-47477-C-1-C MSD
Matrix: Water
Analysis Batch: 124269

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	1120		ug/L		112	75 - 125	2	20
Iron	38000	J3	1000	40300	J3	ug/L		218	75 - 125	1	20
Sodium	25		10.0	36.9		mg/L		120	75 - 125	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-124448/14
Matrix: Water
Analysis Batch: 124448

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			05/11/12 09:16	1

Lab Sample ID: MB 660-124448/58
Matrix: Water
Analysis Batch: 124448

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			05/11/12 18:01	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 660-124448/25
Matrix: Water
Analysis Batch: 124448

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	9.83		mg/L		98	90 - 110

Lab Sample ID: LCS 660-124448/59
Matrix: Water
Analysis Batch: 124448

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	9.91		mg/L		99	90 - 110

Lab Sample ID: LCSD 660-124448/60
Matrix: Water
Analysis Batch: 124448

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.94		mg/L		99	90 - 110	0	30

Lab Sample ID: 660-47461-5 MS
Matrix: Ground Water
Analysis Batch: 124448

Client Sample ID: TH-57
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	26		10.0	36.1		mg/L		96	90 - 110

Lab Sample ID: 660-47461-5 MSD
Matrix: Ground Water
Analysis Batch: 124448

Client Sample ID: TH-57
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	26		10.0	36.1		mg/L		96	90 - 110	0	30

Lab Sample ID: 660-47478-1 MS
Matrix: Ground Water
Analysis Batch: 124448

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	19.8	J3	mg/L		113	90 - 110

Lab Sample ID: 660-47478-1 MSD
Matrix: Ground Water
Analysis Batch: 124448

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8.5	J3	10.0	19.9	J3	mg/L		113	90 - 110	0	30

QC Sample Results

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

TestAmerica Job ID: 660-47461-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 660-124365/11
Matrix: Water
Analysis Batch: 124365

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.010	U	0.020	0.010	mg/L			05/10/12 12:01	1

Lab Sample ID: LCS 660-124365/12
Matrix: Water
Analysis Batch: 124365

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.500	0.517		mg/L		103	90 - 110

Lab Sample ID: 660-47446-E-1 MS
Matrix: Water
Analysis Batch: 124365

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.010	U	1.00	0.946		mg/L		95	90 - 110

Lab Sample ID: 660-47446-E-1 MSD
Matrix: Water
Analysis Batch: 124365

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.010	U	1.00	0.958		mg/L		96	90 - 110	1	30

Lab Sample ID: 660-47478-1 MS
Matrix: Ground Water
Analysis Batch: 124365

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
Ammonia as N	0.63		1.00	1.67		mg/L		104	90 - 110

Lab Sample ID: 660-47478-1 MSD
Matrix: Ground Water
Analysis Batch: 124365

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.63		1.00	1.69		mg/L		106	90 - 110	1	30

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

Lab Sample ID: MB 660-124192/1
Matrix: Water
Analysis Batch: 124192

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			05/07/12 13:41	1

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

Lab Sample ID: LCS 660-124192/2
Matrix: Water
Analysis Batch: 124192

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	9920		mg/L		99	80 - 120

Lab Sample ID: 660-47461-1 DU
Matrix: Ground Water
Analysis Batch: 124192

Client Sample ID: DUPLICATE NOT BLANK 47461
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	170		166		mg/L		2	20

Metals

Prep Batch: 124218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-1	DUPLICATE NOT BLANK 47461	Total Recoverable	Ground Water	3005A	
660-47461-2	BLANK EQUIPMENT 47461	Total Recoverable	Ground Water	3005A	
660-47461-3	TH-73	Total Recoverable	Ground Water	3005A	
660-47461-4	TH-58	Total Recoverable	Ground Water	3005A	
660-47461-5	TH-57	Total Recoverable	Ground Water	3005A	
660-47461-6	TH-30	Total Recoverable	Ground Water	3005A	
660-47461-7	TH-28A	Total Recoverable	Ground Water	3005A	
660-47477-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-47477-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-47478-1	TH-40	Total Recoverable	Ground Water	3005A	
660-47478-2	TH-72	Total Recoverable	Ground Water	3005A	
660-47478-3	SUP 2	Total Recoverable	Ground Water	3005A	
660-47478-4	TH-19	Total Recoverable	Ground Water	3005A	
660-47478-5	TH-42	Total Recoverable	Ground Water	3005A	
660-47478-6	SUP 1	Total Recoverable	Ground Water	3005A	
LCS 660-124218/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-124218/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 124269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47477-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	124218
660-47477-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	124218
660-47478-1	TH-40	Total Recoverable	Ground Water	6010B	124218
660-47478-2	TH-72	Total Recoverable	Ground Water	6010B	124218
LCS 660-124218/2-A	Lab Control Sample	Total Recoverable	Water	6010B	124218
MB 660-124218/1-A	Method Blank	Total Recoverable	Water	6010B	124218

Analysis Batch: 124278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-1	DUPLICATE NOT BLANK 47461	Total Recoverable	Ground Water	6010B	124218
660-47461-2	BLANK EQUIPMENT 47461	Total Recoverable	Ground Water	6010B	124218
660-47461-3	TH-73	Total Recoverable	Ground Water	6010B	124218
660-47461-4	TH-58	Total Recoverable	Ground Water	6010B	124218
660-47461-5	TH-57	Total Recoverable	Ground Water	6010B	124218
660-47461-6	TH-30	Total Recoverable	Ground Water	6010B	124218
660-47461-7	TH-28A	Total Recoverable	Ground Water	6010B	124218
660-47478-3	SUP 2	Total Recoverable	Ground Water	6010B	124218
660-47478-4	TH-19	Total Recoverable	Ground Water	6010B	124218
660-47478-5	TH-42	Total Recoverable	Ground Water	6010B	124218
660-47478-6	SUP 1	Total Recoverable	Ground Water	6010B	124218

General Chemistry

Analysis Batch: 124192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-1	DUPLICATE NOT BLANK 47461	Total/NA	Ground Water	SM 2540C	
660-47461-1 DU	DUPLICATE NOT BLANK 47461	Total/NA	Ground Water	SM 2540C	
660-47461-2	BLANK EQUIPMENT 47461	Total/NA	Ground Water	SM 2540C	
660-47461-3	TH-73	Total/NA	Ground Water	SM 2540C	
660-47461-4	TH-58	Total/NA	Ground Water	SM 2540C	
660-47461-5	TH-57	Total/NA	Ground Water	SM 2540C	
660-47461-6	TH-30	Total/NA	Ground Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 124192 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-7	TH-28A	Total/NA	Ground Water	SM 2540C	
660-47478-1	TH-40	Total/NA	Ground Water	SM 2540C	
660-47478-2	TH-72	Total/NA	Ground Water	SM 2540C	
660-47478-3	SUP 2	Total/NA	Ground Water	SM 2540C	
660-47478-4	TH-19	Total/NA	Ground Water	SM 2540C	
660-47478-5	TH-42	Total/NA	Ground Water	SM 2540C	
660-47478-6	SUP 1	Total/NA	Ground Water	SM 2540C	
LCS 660-124192/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-124192/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 124365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47446-E-1 MS	Matrix Spike	Total/NA	Water	350.1	
660-47446-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-47461-1	DUPLICATE NOT BLANK 47461	Total/NA	Ground Water	350.1	
660-47461-2	BLANK EQUIPMENT 47461	Total/NA	Ground Water	350.1	
660-47461-3	TH-73	Total/NA	Ground Water	350.1	
660-47461-4	TH-58	Total/NA	Ground Water	350.1	
660-47461-5	TH-57	Total/NA	Ground Water	350.1	
660-47461-6	TH-30	Total/NA	Ground Water	350.1	
660-47461-7	TH-28A	Total/NA	Ground Water	350.1	
660-47478-1	TH-40	Total/NA	Ground Water	350.1	
660-47478-1 MS	TH-40	Total/NA	Ground Water	350.1	
660-47478-1 MSD	TH-40	Total/NA	Ground Water	350.1	
660-47478-2	TH-72	Total/NA	Ground Water	350.1	
660-47478-3	SUP 2	Total/NA	Ground Water	350.1	
660-47478-4	TH-19	Total/NA	Ground Water	350.1	
660-47478-5	TH-42	Total/NA	Ground Water	350.1	
660-47478-6	SUP 1	Total/NA	Ground Water	350.1	
LCS 660-124365/12	Lab Control Sample	Total/NA	Water	350.1	
MB 660-124365/11	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-1	DUPLICATE NOT BLANK 47461	Total/NA	Ground Water	300.0	
660-47461-2	BLANK EQUIPMENT 47461	Total/NA	Ground Water	300.0	
660-47461-3	TH-73	Total/NA	Ground Water	300.0	
660-47461-4	TH-58	Total/NA	Ground Water	300.0	
660-47461-5	TH-57	Total/NA	Ground Water	300.0	
660-47461-5 MS	TH-57	Total/NA	Ground Water	300.0	
660-47461-5 MSD	TH-57	Total/NA	Ground Water	300.0	
660-47461-6	TH-30	Total/NA	Ground Water	300.0	
660-47461-7	TH-28A	Total/NA	Ground Water	300.0	
660-47478-1	TH-40	Total/NA	Ground Water	300.0	
660-47478-1 MS	TH-40	Total/NA	Ground Water	300.0	
660-47478-1 MSD	TH-40	Total/NA	Ground Water	300.0	
660-47478-2	TH-72	Total/NA	Ground Water	300.0	
660-47478-3	SUP 2	Total/NA	Ground Water	300.0	
660-47478-4	TH-19	Total/NA	Ground Water	300.0	
660-47478-5	TH-42	Total/NA	Ground Water	300.0	
660-47478-6	SUP 1	Total/NA	Ground Water	300.0	
LCS 660-124448/25	Lab Control Sample	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 124448 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 660-124448/59	Lab Control Sample	Total/NA	Water	300.0	
LCSD 660-124448/60	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 660-124448/14	Method Blank	Total/NA	Water	300.0	
MB 660-124448/58	Method Blank	Total/NA	Water	300.0	

Field Service / Mobile Lab

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Analysis Batch: 124203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-3	TH-73	Total/NA	Ground Water	Field Sampling	
660-47461-4	TH-58	Total/NA	Ground Water	Field Sampling	
660-47461-5	TH-57	Total/NA	Ground Water	Field Sampling	
660-47461-6	TH-30	Total/NA	Ground Water	Field Sampling	
660-47461-7	TH-28A	Total/NA	Ground Water	Field Sampling	
660-47478-1	TH-40	Total/NA	Ground Water	Field Sampling	
660-47478-2	TH-72	Total/NA	Ground Water	Field Sampling	
660-47478-3	SUP 2	Total/NA	Ground Water	Field Sampling	
660-47478-4	TH-19	Total/NA	Ground Water	Field Sampling	
660-47478-5	TH-42	Total/NA	Ground Water	Field Sampling	
660-47478-6	SUP 1	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: DUPLICATE NOT BLANK 47461

Lab Sample ID: 660-47461-1
Matrix: Ground Water

Date Collected: 05/03/12 00:00
Date Received: 05/03/12 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:10	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:42	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:06	TS	TAL TAM
Total/NA	Analysis	300.0		4	124448	05/11/12 17:00	KW	TAL TAM

Client Sample ID: BLANK EQUIPMENT 47461

Lab Sample ID: 660-47461-2
Matrix: Ground Water

Date Collected: 05/03/12 09:30
Date Received: 05/03/12 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:13	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:43	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:08	TS	TAL TAM
Total/NA	Analysis	300.0		1	124448	05/11/12 10:18	KW	TAL TAM

Client Sample ID: TH-73

Lab Sample ID: 660-47461-3
Matrix: Ground Water

Date Collected: 05/03/12 11:19
Date Received: 05/03/12 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:17	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:44	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:09	TS	TAL TAM
Total/NA	Analysis	300.0		4	124448	05/11/12 17:15	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/03/12 11:19		TAL TAM

Client Sample ID: TH-58

Lab Sample ID: 660-47461-4
Matrix: Ground Water

Date Collected: 05/03/12 10:48
Date Received: 05/03/12 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:20	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:45	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:10	TS	TAL TAM
Total/NA	Analysis	300.0		4	124448	05/11/12 17:31	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/03/12 10:48		TAL TAM

Client Sample ID: TH-57 — **Lab Sample ID: 660-47461-5**
Date Collected: 05/03/12 12:03 — **Matrix: Ground Water**
Date Received: 05/03/12 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:30	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:46	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:11	TS	TAL TAM
Total/NA	Analysis	300.0		1	124448	05/11/12 12:07	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/03/12 12:03		TAL TAM

Client Sample ID: TH-30 — **Lab Sample ID: 660-47461-6**
Date Collected: 05/03/12 10:20 — **Matrix: Ground Water**
Date Received: 05/03/12 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:33	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:46	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:12	TS	TAL TAM
Total/NA	Analysis	300.0		5	124448	05/11/12 17:46	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/03/12 10:20		TAL TAM

Client Sample ID: TH-28A — **Lab Sample ID: 660-47461-7**
Date Collected: 05/03/12 11:43 — **Matrix: Ground Water**
Date Received: 05/03/12 14:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:37	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:47	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:14	TS	TAL TAM
Total/NA	Analysis	300.0		4	124448	05/11/12 11:21	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/03/12 11:43		TAL TAM

Client Sample ID: TH-40 — **Lab Sample ID: 660-47478-1**
Date Collected: 05/04/12 09:26 — **Matrix: Ground Water**
Date Received: 05/04/12 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124269	05/09/12 08:32	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:48	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:21	TS	TAL TAM
Total/NA	Analysis	300.0		1	124448	05/11/12 13:24	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 09:26		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: TH-72

Lab Sample ID: 660-47478-2

Date Collected: 05/04/12 11:04

Matrix: Ground Water

Date Received: 05/04/12 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124269	05/09/12 08:35	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:49	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:22	TS	TAL TAM
Total/NA	Analysis	300.0		5	124448	05/12/12 12:27	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 11:04		TAL TAM

Client Sample ID: SUP 2

Lab Sample ID: 660-47478-3

Date Collected: 05/04/12 13:00

Matrix: Ground Water

Date Received: 05/04/12 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 09:50	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:49	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:24	TS	TAL TAM
Total/NA	Analysis	300.0		1	124448	05/11/12 14:26	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 13:00		TAL TAM

Client Sample ID: TH-19

Lab Sample ID: 660-47478-4

Date Collected: 05/04/12 12:21

Matrix: Ground Water

Date Received: 05/04/12 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 09:53	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:50	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:25	TS	TAL TAM
Total/NA	Analysis	300.0		1	124448	05/11/12 14:41	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 12:21		TAL TAM

Client Sample ID: TH-42

Lab Sample ID: 660-47478-5

Date Collected: 05/04/12 11:56

Matrix: Ground Water

Date Received: 05/04/12 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 09:56	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:51	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:26	TS	TAL TAM
Total/NA	Analysis	300.0		1	124448	05/11/12 14:57	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 11:56		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-47461-1

Client Sample ID: SUP 1
Date Collected: 05/04/12 13:27
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47478-6
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124278	05/09/12 10:00	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:51	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:27	TS	TAL TAM
Total/NA	Analysis	300.0		1	124448	05/11/12 15:12	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 13:27		TAL TAM

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

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

TestAmerica Job ID: 660-47461-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Tampa	Alabama	State Program	4	40610
TestAmerica Tampa	Florida	NELAC	4	E84282
TestAmerica Tampa	Georgia	State Program	4	905
TestAmerica Tampa	USDA	Federal		P330-11-00177

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

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

TestAmerica Job ID: 660-47461-1

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: 660-47461-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-47461-1	DUPLICATE NOT BLANK 47461	Ground Water	05/03/12 00:00	05/03/12 14:10
660-47461-2	BLANK EQUIPMENT 47461	Ground Water	05/03/12 09:30	05/03/12 14:10
660-47461-3	TH-73	Ground Water	05/03/12 11:19	05/03/12 14:10
660-47461-4	TH-58	Ground Water	05/03/12 10:48	05/03/12 14:10
660-47461-5	TH-57	Ground Water	05/03/12 12:03	05/03/12 14:10
660-47461-6	TH-30	Ground Water	05/03/12 10:20	05/03/12 14:10
660-47461-7	TH-28A	Ground Water	05/03/12 11:43	05/03/12 14:10
660-47478-1	TH-40	Ground Water	05/04/12 09:26	05/04/12 15:35
660-47478-2	TH-72	Ground Water	05/04/12 11:04	05/04/12 15:35
660-47478-3	SUP 2	Ground Water	05/04/12 13:00	05/04/12 15:35
660-47478-4	TH-19	Ground Water	05/04/12 12:21	05/04/12 15:35
660-47478-5	TH-42	Ground Water	05/04/12 11:56	05/04/12 15:35
660-47478-6	SUP 1	Ground Water	05/04/12 13:27	05/04/12 15:35

660-47461

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: Lin Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

LOCATION: **DUPLICATE** SAMPLE MATRIX: **WATER** OTHER MATRIX: ____

PERSONAL ENGAGED IN SAMPLE COLLECTION : ☐ **A.Balloon** ☐ ☐

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	
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	

13

4 **TOTAL No. OF SAMPLES COLLECTED:**

COLLECTED
DATE | TIME
5.3.12 | _____

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: Lin Clayton REP. OF SOLID WASTE DEPT. 5.3.12 | 3:35
ACCEPTED BY: _____ REP. OF CONTRACT LAB. 5.3.12 | 5:35

COMMENTS: WO# 0059 5.2c CU07

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

660-47461

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: J. Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

LOCATION: **BLANK, EQUIPMENT** SAMPLE MATRIX: **WATER** OTHER MATRIX: ____

PERSONAL ENGAGED IN SAMPLE COLLECTION ☑ A.Balloon ☑ J.Clayton ☐

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	
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
5.3.12 | 9:30

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. 5.3.12 2:10
ACCEPTED BY: Carl McNulty REP. OF CONTRACT LAB. 5.3.12 | 2:20

COMMENT'S: WO # 0059

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: Jim Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☑ A.Balloon ☑ J.Clayton ☐

WELL DIAMETER: 2 INCH:
TOTAL DEPTH OF WELL: 43.40 Ft.
DEPTH TO WATER: 32.77 Ft.
LENGTH OF WATER COL: 10.63 Ft.
VOLUME TO PURGE: 1.70 Gal.

	DATE	TIME
PURGE STARTED:	5.3.12	11:09
PURGE RATE:	0.80 GPM.	
PURGE ENDED:	5.3.12	11:19
ACT. VOL. PURGED:	3.00 GAL.	
Draw Down:	35.49	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:15	24.91	283	4.86	1.07	6.11
AB JC	11:17	24.91	283	4.81	0.90	4.97
AB JC	11:19	24.88	283	4.80	0.99	6.47

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
5.3.12 | 11:19

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. DATE | TIME 5.3.12 | 2:10
ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 5.3.12 | 2:10

COMMENT`S: WO# 0059

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____ | _____

ACCEPTED BY: Lin Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☒ A.Balloon ☒ L.Clayton ☐

WELL DIAMETER: 2.0 INCH:

				DATE	TIME
TOTAL DEPTH OF WELL:	32.92	Ft.	PURGE STARTED:	5.3.12	10:33
DEPTH TO WATER:	28.74	Ft.	PURGE RATE:	0.20	GPM.
LENGTH OF WATER COL:	4.18	Ft.		DATE	TIME
VOLUME TO PURGE:	0.607	Gal.	PURGE ENDED:	5.3.12	10:48
			ACT. VOL. PURGED:	3.00	GAL.
			Draw Down:	29.16	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:44	25.68	563	5.69	0.47	0.97
AB JC	10:46	25.87	552	5.67	0.48	0.56
AB JC	10:48	25.84	540	5.66	0.43	0.69

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
5.3.12 | 10:48

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: Lin Clayton REP. OF SOLID WASTE DEPT. 5.3.12 | 2:10
ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 5.3.12 | 2:10

COMMENT`S: wo# 0059

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____ | _____

ACCEPTED BY: Li Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☑ A.Balloon ☑ A.Clayton ☐

WELL DIAMETER: 2.0 INCH: ~~32.92~~ 26.83 JC

TOTAL DEPTH OF WELL: ~~26.88~~ Ft.

DEPTH TO WATER: ~~26.74~~ 20.45 Ft.

LENGTH OF WATER COL: 6.38 Ft.

VOLUME TO PURGE: 1.02 Gal.

	DATE	TIME
PURGE STARTED:	5.3.12	11:53
PURGE RATE:	0.25 GPM:	
	DATE	TIME
PURGE ENDED:	5.3.12	12:03
ACT. VOL. PURGED:	2.00 GAL.	
Draw Down:	21.34	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:59	25.93	144	4.80	0.49	2.93 =
AB JC	12:01	25.88	14.9	4.87	0.34	3.75
AB JC	12:03	25.87	15.2	4.88	0.28	2.24

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	

2 **TOTAL No. OF SAMPLES COLLECTED:**

COLLECTED
DATE | TIME
5.3.12 | 12:03

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:	REP. OF SOLID WASTE DEPT.	5.3.12	2:10
ACCEPTED BY:	REP. OF CONTRACT LAB.	5.3.12	2:10

COMMENT'S: WO# 0059

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

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____ | _____

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

LOCATION: TH-30 WACS# 1065 SAMPLE MATRIX: WATER OTHER MATRIX: ____

PERSONAL ENGAGED IN SAMPLE COLLECTION ☑ A.Balloon ☑ J. Clayton ☐

WELL DIAMETER: 2.00 INCH:
TOTAL DEPTH OF WELL: 46.19 Ft.
DEPTH TO WATER: 24.35 Ft.
LENGTH OF WATER COL: 21.84 Ft.
VOLUME TO PURGE: 3.49 Gal.

	DATE	TIME
PURGE STARTED:	5.2.12	10:09
PURGE RATE:	0.70 GPM.	
PURGE ENDED:	5.3.12	10:20
ACT. VOL. PURGED:	7.70 GAL.	
Draw Down:	24.69	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:16	25.43	422	4.07	1.75	6.48
AB JC	10:18	23.62	427	4.02	2.07	0.28
AB JC	10:20	23.60	431	4.01	1.93	0.19

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
5.3.12 | 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: Jim Clayton REP. OF SOLID WASTE DEPT. 5.3.12 | 2:10
ACCEPTED BY: Curt McNulty REP. OF CONTRACT LAB. 5.3.12 | 2:10

COMMENT`S: WO# 0059 H_2S 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: Sue Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

LOCATION: TH-28A WACS# 19862 SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION ☑ A.Balloon ☐ S.Clayton ☐

WELL DIAMETER: 2.0 INCH:
TOTAL DEPTH OF WELL: 34.30 Ft.
DEPTH TO WATER: 29.48 Ft.
LENGTH OF WATER COL: 4.82 Ft.
VOLUME TO PURGE: 0.77 Gal.

	DATE	TIME
PURGE STARTED:	5.3.12	11:32
PURGE RATE:	0.10 GPM.	
	DATE	TIME
PURGE ENDED:	5.3.12	11:43
ACT. VOL. PURGED:	1.10 GAL.	
Draw Down:	29.88	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB SC	11:39	24.62	308	5.14	2.16	7.97
AB SC	11:41	24.45	307	5.15	1.64	9.39
AB SC	11:43	24.64	305	5.13	1.32	9.15

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
5.3.12 | 11:43

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: Sue Clayton REP. OF SOLID WASTE DEPT. 5.3.12 | 2:10
ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 5.3.12 | 2:10

COMMENT'S: WO # 0059

4.1°C WET

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET

Login Sample Summary

				Status	Location
Login No:	47461	**Login Date:** 05/03/2012 14:10	**VTSR:** NO	Active	660 TestAmerica Tampa
Project:	66003915			Active	660 TestAmerica Tampa
Site:	Southeast Landfill			Active	660 TestAmerica Tampa
Prj Mgr:	Robertson, Nancy	**Prj Mgr Asst:** McCaughey, Becky			

Login Group: 1 NH3,TDS,CL,6010 Special Wells

Method	Description
350.1	Nitrogen, Ammonia
300.0_28D	Anions, Ion Chromatography
2540C	Solids, Total Dissolved (TDS)
FieldSam	Field Sampling
6010B	Metals (ICP)
3005A	Preparation, Total Recoverable or Dissolved Metals

Sample Distribution

Sample #	Customer Sample ID	Matrix	Sample Date	Received Date	Login Group
1	DUPLICATE NOT BLANK	Water	05/03/2012	05/03/2012 -14:10	1
2	BLANK EQUIPMENT	Water	05/03/2012 -09:30	05/03/2012 -14:10	1
3	TH-73	Water	05/03/2012 -11:19	05/03/2012 -14:10	1
4	TH-58	Water	05/03/2012 -10:48	05/03/2012 -14:10	1
5	TH-57	Water	05/03/2012 -12:03	05/03/2012 -14:10	1
6	TH-30	Water	05/03/2012 -10:20	05/03/2012 -14:10	1
7	TH-28A	Water	05/03/2012 -11:43	05/03/2012 -14:10	1

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660-47478

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____ | _____

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☐ A.Balloon ☑ J.Clayton ☐

WELL DIAMETER: 2.0 INCH:

			DATE	TIME
TOTAL DEPTH OF WELL:	165.90 Ft.	PURGE STARTED:	5.4.12	9:15
DEPTH TO WATER:	120.91 Ft.	PURGE RATE:	1.00	GPM.
LENGTH OF WATER COL:	44.99 Ft.		DATE	TIME
VOLUME TO PURGE:	7.20 Gal.	PURGE ENDED:	5.4.12	9:24
		ACT. VOL. PURGED:	11.00	GAL.
		Draw Down:	121.0"	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	9:22	23.42	399	7.21	0.78	0.18 =
AB JC	9:24	23.43	402	7.25	0.56	0.00
AB JC	9:26	23.44	888	7.29	0.47	0.0 c

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: 5.4.12 | 9:26

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.	5.4.12	3:35
ACCEPTED BY:	[signature]	REP. OF CONTRACT LAB.	5.4.12	3:35

COMMENT'S: WO # 0659 H_2S odor 5.2CC0-07

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET

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: Lin Clayton REP. OF SOLID WASTE DEPT. 5.4.12 | 2:30

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☒ A.Balloon ☒ L.Clayton ☐

WELL DIAMETER: 2 INCH:
TOTAL DEPTH OF WELL: 190.00 Ft.
DEPTH TO WATER: 127.15 Ft.
LENGTH OF WATER COL: 62.85 Ft.
VOLUME TO PURGE: 10.10 Gal.

	DATE	TIME
PURGE STARTED:	5.4.12	~~10:42~~ 10:40
PURGE RATE:	0.50	GPM.
PURGE ENDED:	DATE	TIME
	5.4.12	11:04
ACT. VOL. PURGED:	12.00	GAL.
Draw Down:	127.27	

FIELD PARAMETERS:

BY	TIME	TEMP	COND.	PH	DO	TURB
AB 1L	11:00	23.45	733	6.91	2.03	1.14
AB 1C	11:02	23.45	740	6.90	1.54	0.97
AB 1L	11:04	23.46	744	6.90	1.60	0.81

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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
5.4.12 | 11:04

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: Lin Clayton REP. OF SOLID WASTE DEPT. DATE | TIME 5.4.12 | 3:35
ACCEPTED BY: _____ REP. OF CONTRACT LAB. 5.4.12 | 3:35

COMMENT`S: W20 # 0059

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: J. Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

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 5.4.12 TIME 12:41
ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	12:56	24.66	364	7.41	0.31	0.06
AB JC	12:58	24.75	364	7.44	0.23	0.00
AB JC	1:00	24.79	364	7.45	0.17	0.00

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
5.4.12 | 1:00

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. 5.4.12 | 3:35
ACCEPTED BY: _____ REP. OF CONTRACT LAB. 5.4.12 | 3:35

COMMENTS: WO # 0059

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PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____ | _____

ACCEPTED BY: J. Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

LOCATION: **TH-19 WACS# 821** SAMPLE MATRIX: **WATER** OTHER MATRIX: ____

PERSONAL ENGAGED IN SAMPLE COLLECTION ☑ A.Balloon ☑ J Clayton ☐

WELL DIAMETER: 2.0 INCH:
TOTAL DEPTH OF WELL: 153.60 Ft.
DEPTH TO WATER: 124.10 Ft.
LENGTH OF WATER COL: 29.50 Ft.
VOLUME TO PURGE: 4.72 Gal.

	DATE	TIME
PURGE STARTED:	5.4.12	12:13
PURGE RATE:	1.00 GPM.	
PURGE ENDED:	5.4.12	12:21
ACT. VOL. PURGED:	8.00 GAL.	
Draw Down:	124.28	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
ABJC	12:17	23.40	400	7.06	0.13	0.10 =
AB JC	12:19	23.46	401	6.88	0.10	0.00
AB JC	12:21	23.46	402	6.85	0.10	6.00

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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	

_____ **TOTAL No. OF SAMPLES COLLECTED:**

COLLECTED
DATE | TIME
5.4.12 | 12:21

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: J. Clayton REP. OF SOLID WASTE DEPT. DATE | TIME 5.4.12 | 3:35
ACCEPTED BY: _____ REP. OF CONTRACT LAB. 5.4.12 | 3:35

COMMENT`S: WO# 00 59

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: Jim Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

LOCATION: TH-42 WACS# 823 SAMPLE MATRIX: WATER OTHER MATRIX: ____

PERSONAL ENGAGED IN SAMPLE COLLECTION ☐ A.Balloon ☑ J.Clayton ☐

WELL DIAMETER: 2.0 INCH:
TOTAL DEPTH OF WELL: 164.00 Ft.
DEPTH TO WATER: 95.90 Ft.
LENGTH OF WATER COL: 68.10 Ft.
VOLUME TO PURGE: 10.90 Gal.

	DATE	TIME
PURGE STARTED:	5.4.12	11:02
PURGE RATE:	0.50 GPM.	
	DATE	TIME
PURGE ENDED:	5.4.12	11:56
ACT. VOL. PURGED:	12.00 GAL.	
Draw Down:	114.52	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB	
AB JC	11:52	23.81	511	7.05	3.24	4.93	=
AB JC	11:54	23.81	511	7.06	3.04	4.86	
AB JC	11:56	23.80	511	7.07	2.82	4.76	

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
5.4.12 | 11:56

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic Dissolved Sodium

Dissolved Iron Dissolved 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.	5.4.12	3:35
ACCEPTED BY:	REP. OF CONTRACT LAB.	5.4.12	3:35

COMMENTS: WO # 00589

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

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: L. Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☒ A.Balloon ☒ L. Clayton ☐

WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 5.4.12 TIME 1:08

ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	1:23	24.60	348	7.41	0.10	0.04 =
AB JC	1:25	24.59	348	7.40	0.08	0.00
AB JC	1:27	24.59	348	7.40	0.07	0.00

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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
5.4.12	1:27

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: L. Clayton REP. OF SOLID WASTE DEPT. 5.4.12 | 3:35

ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 5.4.12 | 3:35

COMMENT`S: WO # 0059

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-47461-1

Login Number: 47461
List Number: 1
Creator: McNulty, Carol

List Source: TestAmerica Tampa

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	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	4.1 deg C Cu-07
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 sample IDs on the containers 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.	True	

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-47461-1

Login Number: 47478
List Number: 1
Creator: Edwards, Erricka

List Source: TestAmerica Tampa

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	
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	5.2c CU-07
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 sample IDs on the containers 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.	N/A	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 660-47477-1
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:
5/17/2012 1:57:28 PM

Nancy Robertson
Project Manager II
nancy.robertson@testamericainc.com

Table of Contents

Definitions/Glossary

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

TestAmerica Job ID: 660-47477-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: 660-47477-1

Job ID: 660-47477-1

Laboratory: TestAmerica Tampa

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Narrative

Job Narrative
660-47477-1

Comments
No additional comments.

Receipt
The samples were received on 5/4/2012 3:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.2° C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for iron in batch 124218 were outside control limits with the parent sample greater than 4x the spike level. The associated laboratory control sample (LCS) recovery met acceptance criteria. The sample is flagged with J3.

No other analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Detection Summary

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

TestAmerica Job ID: 660-47477-1

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Client Sample ID: TH-74

Lab Sample ID: 660-47477-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	38000	J3	200	50	ug/L	1		6010B	Total Recoverable
Sodium	25		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		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	330		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.15				SU	1		Field Sampling	Total/NA
Field Temperature	21.93				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.86				mg/L	1		Field Sampling	Total/NA
Specific Conductance	602				umhos/cm	1		Field Sampling	Total/NA
Turbidity	12.5				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-75

Lab Sample ID: 660-47477-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.8	I	10	4.0	ug/L	1		6010B	Total Recoverable
Iron	16000		200	50	ug/L	1		6010B	Total Recoverable
Sodium	33		0.50	0.31	mg/L	1		6010B	Total Recoverable
Chloride	120		2.0	0.80	mg/L	4		300.0	Total/NA
Ammonia as N	1.9		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	350		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.32				SU	1		Field Sampling	Total/NA
Field Temperature	22.06				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.28				mg/L	1		Field Sampling	Total/NA
Specific Conductance	588				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample Results

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

TestAmerica Job ID: 660-47477-1

Client Sample ID: TH-74
Date Collected: 05/04/12 09:58
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47477-1
Matrix: Ground Water

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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		05/08/12 09:44	05/09/12 08:16	1
Iron	38000	J3	200	50	ug/L		05/08/12 09:44	05/09/12 08:16	1
Sodium	25		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 08:16	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		2.0	0.80	mg/L			05/11/12 11:36	4
Ammonia as N	2.8		0.020	0.010	mg/L			05/10/12 12:28	1
Total Dissolved Solids	330		10	10	mg/L			05/07/12 13:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.15				SU			05/04/12 09:58	1
Field Temperature	21.93				Degrees C			05/04/12 09:58	1
Oxygen, Dissolved	0.86				mg/L			05/04/12 09:58	1
Specific Conductance	602				umhos/cm			05/04/12 09:58	1
Turbidity	12.5				NTU			05/04/12 09:58	1

Client Sample Results

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

TestAmerica Job ID: 660-47477-1

Client Sample ID: TH-75
Date Collected: 05/04/12 10:21
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47477-2
Matrix: Ground Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.8	I	10	4.0	ug/L		05/08/12 09:44	05/09/12 08:29	1
Iron	16000		200	50	ug/L		05/08/12 09:44	05/09/12 08:29	1
Sodium	33		0.50	0.31	mg/L		05/08/12 09:44	05/09/12 08:29	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		2.0	0.80	mg/L			05/11/12 11:52	4
Ammonia as N	1.9		0.020	0.010	mg/L			05/10/12 12:30	1
Total Dissolved Solids	350		10	10	mg/L			05/07/12 13:48	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.32				SU			05/04/12 10:21	1
Field Temperature	22.06				Degrees C			05/04/12 10:21	1
Oxygen, Dissolved	0.28				mg/L			05/04/12 10:21	1
Specific Conductance	588				umhos/cm			05/04/12 10:21	1
Turbidity	0.00				NTU			05/04/12 10:21	1

QC Sample Results

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

TestAmerica Job ID: 660-47477-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-124218/1-A
Matrix: Water
Analysis Batch: 124269

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		05/08/12 09:44	05/09/12 08:06	1
Iron	50	U	200	50	ug/L		05/08/12 09:44	05/09/12 08:06	1
Sodium	0.31	U	0.50	0.31	mg/L		05/08/12 09:44	05/09/12 08:06	1

Lab Sample ID: LCS 660-124218/2-A
Matrix: Water
Analysis Batch: 124269

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1070		ug/L		107	75 - 125
Iron	1000	1100		ug/L		110	75 - 125
Sodium	10.0	10.7		mg/L		107	75 - 125

Lab Sample ID: 660-47477-1 MS
Matrix: Ground Water
Analysis Batch: 124269

Client Sample ID: TH-74
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.0	U	1000	1110		ug/L		111	75 - 125
Iron	38000	J3	1000	39900	J3	ug/L		178	75 - 125
Sodium	25		10.0	36.3		mg/L		114	75 - 125

Lab Sample ID: 660-47477-1 MSD
Matrix: Ground Water
Analysis Batch: 124269

Client Sample ID: TH-74
Prep Type: Total Recoverable
Prep Batch: 124218

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	1120		ug/L		112	75 - 125	2	20
Iron	38000	J3	1000	40300	J3	ug/L		218	75 - 125	1	20
Sodium	25		10.0	36.9		mg/L		120	75 - 125	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-124448/14
Matrix: Water
Analysis Batch: 124448

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			05/11/12 09:16	1

Lab Sample ID: LCS 660-124448/25
Matrix: Water
Analysis Batch: 124448

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	9.83		mg/L		98	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 660-47461-B-5 MS
Matrix: Water
Analysis Batch: 124448

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	26		10.0	36.1		mg/L		96	90 - 110

Lab Sample ID: 660-47461-B-5 MSD
Matrix: Water
Analysis Batch: 124448

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	26		10.0	36.1		mg/L		96	90 - 110	0	30

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 660-124365/11
Matrix: Water
Analysis Batch: 124365

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia as N	0.010	U	0.020	0.010	mg/L			05/10/12 12:01	1

Lab Sample ID: LCS 660-124365/12
Matrix: Water
Analysis Batch: 124365

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.500	0.517		mg/L		103	90 - 110

Lab Sample ID: 660-47446-E-1 MS
Matrix: Water
Analysis Batch: 124365

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.010	U	1.00	0.946		mg/L		95	90 - 110

Lab Sample ID: 660-47446-E-1 MSD
Matrix: Water
Analysis Batch: 124365

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.010	U	1.00	0.958		mg/L		96	90 - 110	1	30

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

Lab Sample ID: MB 660-124192/1
Matrix: Water
Analysis Batch: 124192

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			05/07/12 13:41	1

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

Lab Sample ID: LCS 660-124192/2
Matrix: Water
Analysis Batch: 124192

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	9920		mg/L		99	80 - 120		

Lab Sample ID: 660-47461-A-1 DU
Matrix: Water
Analysis Batch: 124192

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	170			166		mg/L				2	20

Metals

Prep Batch: 124218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47477-1	TH-74	Total Recoverable	Ground Water	3005A	
660-47477-1 MS	TH-74	Total Recoverable	Ground Water	3005A	
660-47477-1 MSD	TH-74	Total Recoverable	Ground Water	3005A	
660-47477-2	TH-75	Total Recoverable	Ground Water	3005A	
LCS 660-124218/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-124218/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 124269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47477-1	TH-74	Total Recoverable	Ground Water	6010B	124218
660-47477-1 MS	TH-74	Total Recoverable	Ground Water	6010B	124218
660-47477-1 MSD	TH-74	Total Recoverable	Ground Water	6010B	124218
660-47477-2	TH-75	Total Recoverable	Ground Water	6010B	124218
LCS 660-124218/2-A	Lab Control Sample	Total Recoverable	Water	6010B	124218
MB 660-124218/1-A	Method Blank	Total Recoverable	Water	6010B	124218

General Chemistry

Analysis Batch: 124192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
660-47477-1	TH-74	Total/NA	Ground Water	SM 2540C	
660-47477-2	TH-75	Total/NA	Ground Water	SM 2540C	
LCS 660-124192/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-124192/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 124365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47446-E-1 MS	Matrix Spike	Total/NA	Water	350.1	
660-47446-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-47477-1	TH-74	Total/NA	Ground Water	350.1	
660-47477-2	TH-75	Total/NA	Ground Water	350.1	
LCS 660-124365/12	Lab Control Sample	Total/NA	Water	350.1	
MB 660-124365/11	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 124448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47461-B-5 MS	Matrix Spike	Total/NA	Water	300.0	
660-47461-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
660-47477-1	TH-74	Total/NA	Ground Water	300.0	
660-47477-2	TH-75	Total/NA	Ground Water	300.0	
LCS 660-124448/25	Lab Control Sample	Total/NA	Water	300.0	
MB 660-124448/14	Method Blank	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 124203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47477-1	TH-74	Total/NA	Ground Water	Field Sampling	
660-47477-2	TH-75	Total/NA	Ground Water	Field Sampling	

Lab Chronicle

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

TestAmerica Job ID: 660-47477-1

Client Sample ID: TH-74
Date Collected: 05/04/12 09:58
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47477-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124269	05/09/12 08:16	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:47	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:28	TS	TAL TAM
Total/NA	Analysis	300.0		4	124448	05/11/12 11:36	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 09:58		TAL TAM

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Client Sample ID: TH-75
Date Collected: 05/04/12 10:21
Date Received: 05/04/12 15:35

Lab Sample ID: 660-47477-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			124218	05/08/12 09:44	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	124269	05/09/12 08:29	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	124192	05/07/12 13:48	TO	TAL TAM
Total/NA	Analysis	350.1		1	124365	05/10/12 12:30	TS	TAL TAM
Total/NA	Analysis	300.0		4	124448	05/11/12 11:52	KW	TAL TAM
Total/NA	Analysis	Field Sampling		1	124203	05/04/12 10:21		TAL TAM

Laboratory References:

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

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

TestAmerica Job ID: 660-47477-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Tampa	Alabama	State Program	4	40610
TestAmerica Tampa	Florida	NELAC	4	E84282
TestAmerica Tampa	Georgia	State Program	4	905
TestAmerica Tampa	USDA	Federal		P330-11-00177

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

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

TestAmerica Job ID: 660-47477-1

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: 660-47477-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-47477-1	TH-74	Ground Water	05/04/12 09:58	05/04/12 15:35
660-47477-2	TH-75	Ground Water	05/04/12 10:21	05/04/12 15:35

660-47477

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: Jim Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

LOCATION: **TH-74 WACS# 28307** SAMPLE MATRIX: **WATER** OTHER MATRIX: ____
PERSONAL ENGAGED IN SAMPLE COLLECTION ☑ **A.Balloon** ☑ J.Clayton ☐

WELL DIAMETER: 2 INCH;
TOTAL DEPTH OF WELL: 17.00 Ft.
DEPTH TO WATER: 10.77 Ft.
LENGTH OF WATER COL: 6.23 Ft.
VOLUME TO PURGE: 1.00 Gal.

DATE | TIME
PURGE STARTED: 5.4.12 | 9:46
PURGE RATE: 0.15 GPM.
DATE | TIME
PURGE ENDED: 5.4.12 | 9:58
ACT. VOL. PURGED: 1.80 GAL.
Draw Down: 11.40

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	9:54	21.94	604	5.14	1.04	25.8
AB JC	9:56	21.93	603	5.15	1.18	20.7
AB JC	9:58	21.93	602	5.15	0.64	12.5

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
5.4.12 | 9:58

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. 5.4.12 | 3:35
ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 5.4.12 | 3:35

COMMENT`S: WO # 0059 52CLV-07

13

660-47477

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: Jai Clayton REP. OF SOLID WASTE DEPT. 5.2.12 | 2:30

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☐ A.Balloon ☒ J.Clayton ☐

WELL DIAMETER: 2 INCH:
TOTAL DEPTH OF WELL: 17.00 Ft.
DEPTH TO WATER: 8.58 Ft.
LENGTH OF WATER COL: 8.42 Ft.
VOLUME TO PURGE: 1.38 Gal.

	DATE	TIME
PURGE STARTED:	5.4.12	10:08
PURGE RATE:	0.15	GPM.
PURGE ENDED:	5.4.12	10:21
ACT. VOL. PURGED:	1.95	GAL.
Draw Down:	8.72	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:17	22.05	575	5.32	0.34	0.00
AB JC	10:19	22.04	581	5.32	0.30	0.00
AB JC	10:21	22.04	588	5.32	0.28	0.00

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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
5.4.12 | 10:21

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: Jai Clayton REP. OF SOLID WASTE DEPT. DATE 5.4.12 TIME 3:35
ACCEPTED BY: _____ REP. OF CONTRACT LAB. DATE 5.4.12 TIME 3:35

COMMENTS: WO # 0059 S.2C C0-07

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-47477-1

Login Number: 47477

List Number: 1

Creator: Edwards, Erricka

List Source: TestAmerica Tampa

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	
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	5.2c CU-07
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 sample IDs on the containers 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.	N/A	
Residual Chlorine Checked.	N/A	