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May 22, 2012

Dept. of Environmental Protection
MAY 24 2012
Southwest District

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. 20

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 April 5-6, 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 4.39 to 5.70 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 has exhibited elevated conductivity values that exhibit an upward trend when evaluated over the past year and a half. However, these values have exhibited an apparent decreasing trend since November 2011. During this monthly sampling event, the conductivity in TH-58 was 606 uhmos/cm .

The conductivity value observed in the surficial aquifer groundwater monitoring wells TH-73, TH-74 and TH-75 are 231, 592 and 584 umhos/cm, respectively. Impacts remain in close proximity to the sinkhole within the surficial aquifer and are not observed within the deeper upper Floridan aquifer monitoring wells. The conductivity value observed in upper Floridan groundwater monitoring well TH-72 during this sampling event was 522 uhmos/cm and remains consistent since its installation in January 2011.

Total Dissolved Solids (TDS)

Surficial aquifer groundwater monitoring well TH-58 exhibited a TDS concentration of 270 mg/l, which is below the SDWS of 500 mg/l. TDS values have continued to decrease in this well and all the wells sampled as part of the IAMP are within compliance for TDS.

Chloride

Surficial aquifer groundwater monitoring wells TH-58 exhibited a chloride concentration of 81 mg/l, which is below the SDWS of 250 mg/l. This value appears to represents a continuing decreasing trend in chloride from the past several IAMP sampling events.

Arsenic
The arsenic observed in TH-58 during this sampling event was 0.026 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 ranged from below the detectable limits to 40 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.

Limited use potable supply well, SUP-1 exhibited a total iron value of 0.41 mg/l. During the period of record since IAMP sampling began, the supply wells have generally been observed with iron below detections limits. The County has already received the analytical data from the May 2012 IAMP sampling event and the preliminary data reviewed indicates that iron is below detection limits in SUP-1 and SUP-2. The County will continue to evaluate water quality in the supply wells on site.

Total Ammonia
Ammonia concentrations observed in all wells sampled were at or below the Groundwater Cleanup Target Level (GCTL) of 2.8 mg/l. The County will continue to evaluate this component of water quality in the future IAMP sampling.

Conclusions
The water quality observed in the April 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 are likely a result of 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 the 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,

5/22/2012

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

DAVID S. ADAMS
LICENSE
No 1607
STATE OF
FLORIDA
PROFESSIONAL GEOLOGIST

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Susan Pelz, FDEP Southwest District
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Andy Schipfer, EPC
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Brian Miller, DOH
Rich Siemering, HDR
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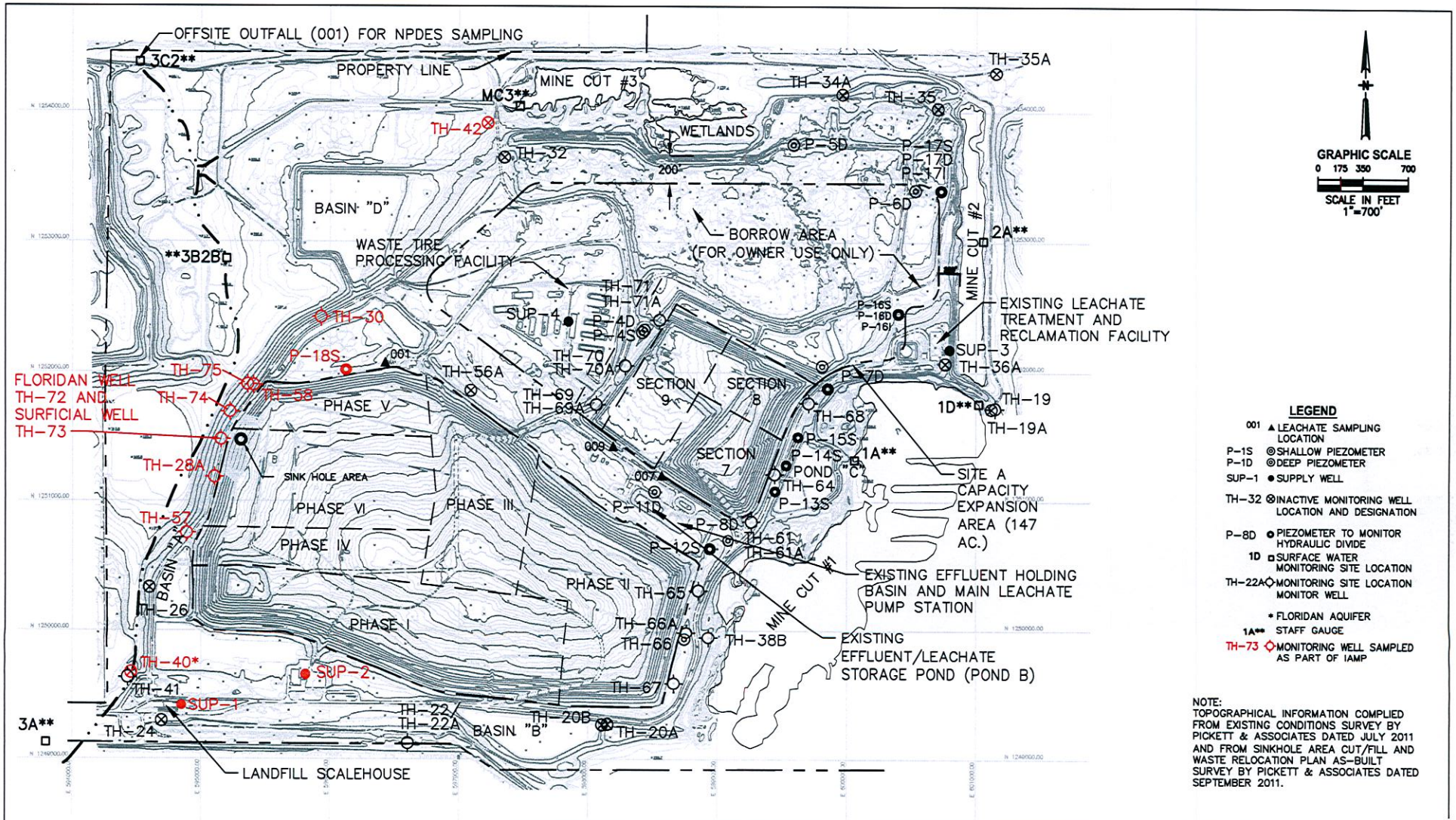
Final copy scanned to LFS/Southeast/Sinkhole/SCLF – IAMP Report No 20.



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\tpa\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
April 5-6, 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)	297	407	139	606	231	592	584	423	351	536	522	363	376	NS
dissolved oxygen (mg/l) (field)	1.83	0.15	0.78	0.40	0.79	0.79	0.33	0.58	0.66	0.19	1.09	0.04	0.04	NS
pH (field)	5.30	4.39	5.16	5.70	5.06	5.13	5.37	7.00	7.37	7.00	7.08	7.37	7.50	(6.5 - 8.5)**
temperature (°C) (field)	26.27	23.67	25.79	25.63	24.94	21.74	21.76	23.44	23.43	23.78	23.18	24.53	24.94	NS
turbidity (NTU) (field)	14.4	0.0	0.46	0.0	4.39	13.7	4.94	0.0	0.86	3.98	0.65	0.0	0.0	NS
total dissolved solids (mg/l)	130	150	80	270	120	270	300	190	170	250	280	150	170	500**
chloride (mg/l)	71	110	29	81	50	120	130	8.1	8.8	17	28	9.4	11	250**
ammonia nitrogen (mg/l as N)	2.2	1.7	0.73	0.9	1.1	2.8	1.3	0.26	0.31	0.25	0.41	0.15	0.14	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	0.026	0.004 u	0.004 u	0.0063 i	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.01*
iron	3.7	0.32	0.29	4	4.1	40	16	0.05 u	0.05 u	0.16 i	0.11 i	0.41	0.05 u	0.3**
sodium	24	27	10	26	20	24	26	14	17	16	29	8.3	8.3	160*

Note: Ref. Groundwater Guidance Concentrations, FDEP 2007
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
5.30
ug/l=MICROGRAMS PER LITER
mg/l=MILLIGRAMS PER LITER
NS=NO STANDARD

Prepared by: Mike Townsel
QA/QC'D by: Cindy Pelley
Final QA/QC by: David Adams

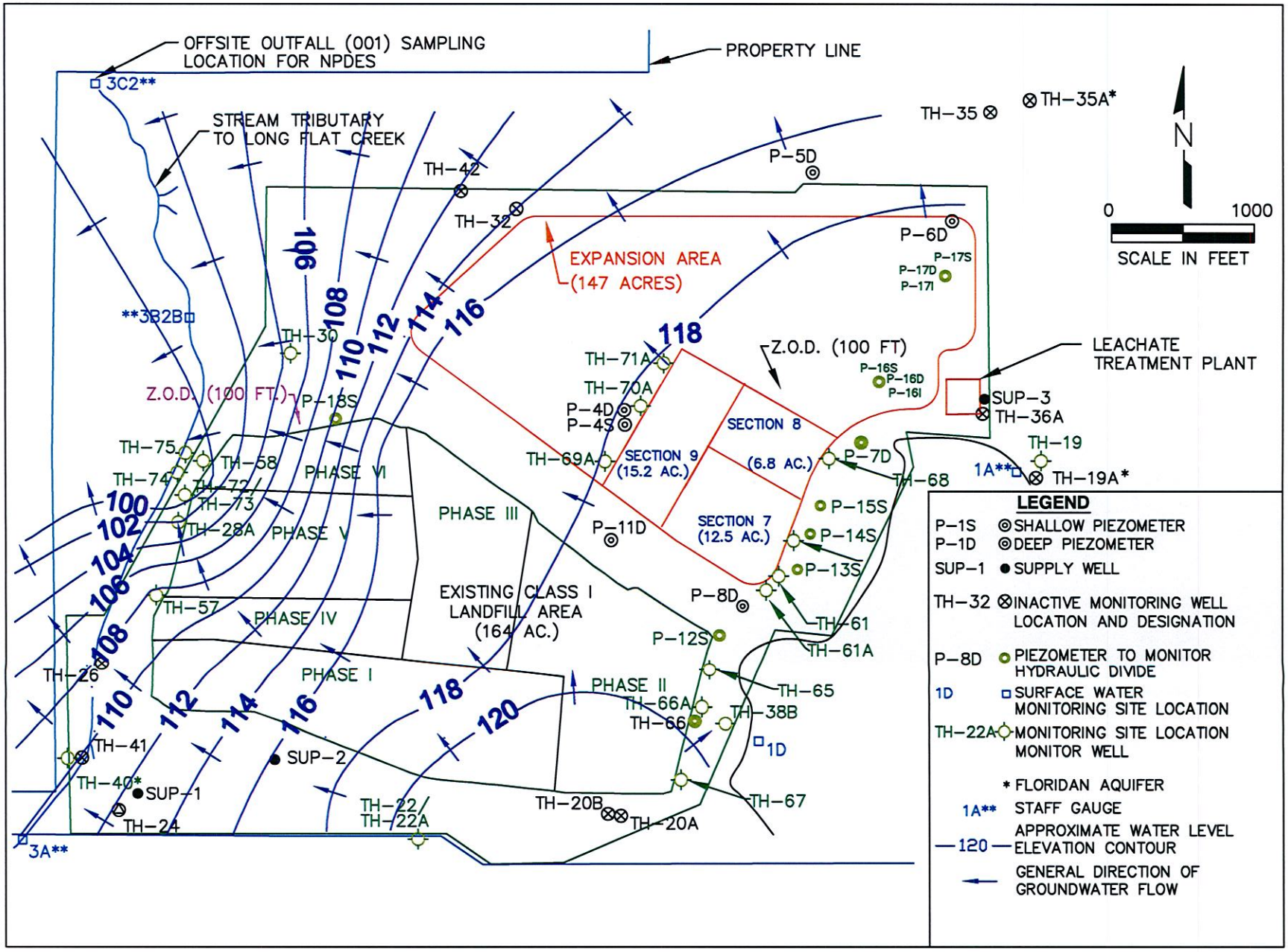
GROUNDWATER AND SURFACE WATER ELEVATIONS FOR

SOUTHEAST LANDFILL

April 4, 2012

Measuring Point I.D.	T.O.C. Elevations (NGVD)	04/04/2012 W.L. B.T.O.C.	W.L. (NGVD)	Time
P-4D	140.78	23.12	117.66	11:52 AM
P-4S	140.95	Dry	Dry	11:51 AM
P-5D	151.94	Dry	Dry	12:55 PM
P-6D-A	148.01	29.41	118.60	12:49 PM
P-7D	138.92	19.50	119.42	1:33 PM
P-8D	138.34	19.62	118.72	12:03 PM
P-11D	138.02	18.95	119.07	12:01 PM
P-12S	134.97	15.85	119.12	12:05 PM
P-13S	140.21	21.15	119.06	1:44 PM
P-14S	138.56	19.55	119.01	1:41 PM
P-15S	139.19	20.18	119.01	1:40 PM
P-16S	143.38	16.50	126.88	12:41 PM
P-16I	144.15	25.54	118.61	12:42 PM
P-16D	143.84	25.26	118.58	12:43 PM
P-17S	137.35	18.00	119.35	1:00 PM
P-17I	137.32	18.80	118.52	1:01 PM
P-17D	137.22	18.80	118.42	1:02 PM
P-18S	129.86	19.28	110.58	10:30 AM
P-19	133.36	15.90	117.46	12:52 PM
P-20	132.38	14.55	117.83	12:46 PM
P-21	122.79	5.35	117.44	12:33 PM
P-22	128.35	10.65	117.70	12:34 PM
P-23	143.13	24.98	118.15	12:38 PM
TH-19*	130.27	120.81	9.46	1:10 PM
TH-20A	131.86	11.58	120.28	12:15 PM
TH-20B	132.57	12.60	119.97	12:16 PM
TH-22	128.82	7.05	121.77	10:00 AM
TH-22A	129.27	7.65	121.62	9:59 AM
TH-24A	128.23	7.56	120.67	10:05 AM
TH-28A	131.10	29.35	101.75	11:05 AM
TH-30	128.88	24.28	104.60	11:14 AM
TH-32	129.90	15.90	114.00	11:40 AM
TH-35	145.98	29.81	116.17	1:04 PM
TH-36A	152.70	34.40	118.30	1:13 PM
TH-38A	130.68	11.88	118.80	12:18 PM
TH-38B	131.81	12.61	119.20	12:19 PM
TH-40*	124.99	118.71	6.28	10:13 AM
TH-41*	125.00	121.32	3.68	10:15 AM
TH-42*	116.74	93.21	23.53	11:38 AM
TH-57	128.36	20.28	108.08	10:19 AM
TH-58	127.88	28.66	99.22	11:11 AM
TH-61	138.73	19.15	119.58	1:46 PM
TH-61A	139.45	19.75	119.70	1:47 PM
TH-64	139.64	19.69	119.95	1:43 PM
TH-65	135.40	16.08	119.32	12:07 PM
TH-66	130.58	10.90	119.68	12:10 PM
TH-66A	130.66	11.36	119.30	12:09 PM
TH-67	129.51	7.50	122.01	12:12 PM
TH-68	140.01	19.77	120.24	1:35 PM
TH-69A	144.97	26.62	118.35	11:57 AM
TH-70A	146.63	ND	ND	11:54 AM
TH-71A	146.95	28.30	118.65	12:29 PM
TH-72	130.96	124.96	6.00	11:08 AM
TH-73	131.07	32.63	98.44	11:07 AM
TH-74	109.08	10.53	98.55	10:23 AM
TH-75	106.92	8.15	98.77	10:25 AM
SW-3A	3.0'=125.53'	Dry	Dry	9:54 AM
SW-3B2B	3.0'=97.97'	Dry	Dry	11:23 AM
SW-3C2	6.0'=92.33'	1.00	87.33	11:28 AM
Mine Cut #1	4.0'=122.14'	Dry	Dry	1:38 PM
Mine Cut #2	6.0'=123.47'	1.18	118.65	1:07 PM
Mine Cut #3	4.0'=112.27'	1.84	110.11	11:36 AM
Mine Cut #4	5.0'=97.54'	1.38	93.92	11:33 AM

NGVD = National Geodetic Vertical Datum
T.O.C. = Top of Casing
B.T.O.C. = Below Top of Casing
* = Floridan Well
ND = Erroneous Data Due to Iron Bacteria in Well
W.L. = Water Level



Southeast County Landfill

Groundwater Elevation Contour Diagram – April 4, 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: 660-46975-1
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:
4/20/2012 12:57:58 PM

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

LINKS

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

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

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

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Definitions/Glossary

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

TestAmerica Job ID: 660-46975-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

General Chemistry

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

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 differenca between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 660-46975-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative
660-46975-1

Comments
No additional comments.

Receipt
The samples were received on 4/5/2012 2:20 PM and 4/6/2012 2:26 PM; the samples arrived in good conditions, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.50 C and 4.90 C.

Metals
No 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: 660-46975-1

5

Client Sample ID: Blank, Equipment 46975 — Lab Sample ID: 660-46975-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	0.34	I	0.50	0.31	mg/L	1		6010B	Total Recovera

Client Sample ID: Duplicate 46975 — Lab Sample ID: 660-46975-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	8.8		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.30		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	160		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: TH-28A WACS#19862 — Lab Sample ID: 660-46975-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3700		200	50	ug/L	1		6010B	Total Recovera
Sodium	24		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	71		1.0	0.40	mg/L	2		300.0	Total/NA
Ammonia as N	2.2		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	130		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.30				SU	1		Field Sampling	Total/NA
Field Temperature	26.27				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.83				mg/L	1		Field Sampling	Total/NA
Specific Conductance	297				umhos/cm	1		Field Sampling	Total/NA
Turbidity	14.40				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-40 WACS#822 — Lab Sample ID: 660-46975-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	8.8		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.31		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	7.37				SU	1		Field Sampling	Total/NA
Field Temperature	23.43				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.66				mg/L	1		Field Sampling	Total/NA
Specific Conductance	351				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.86				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-57 WACS#1570 — Lab Sample ID: 660-46975-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	290		200	50	ug/L	1		6010B	Total Recovera
Sodium	10		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	29		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.73		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	80		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.16				SU	1		Field Sampling	Total/NA
Field Temperature	25.79				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.78				mg/L	1		Field Sampling	Total/NA
Specific Conductance	139				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.46				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-73 WACS#27754 — Lab Sample ID: 660-46975-6

5

Client Sample ID: TH-73 WACS#27754 (Continued) — Lab Sample ID: 660-46975-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	4100		200	50	ug/L	1		6010B	Total Recovera
Sodium	20		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	50		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	1.1		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	120		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.06				SU	1		Field Sampling	Total/NA
Field Temperature	24.94				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.79				mg/L	1		Field Sampling	Total/NA
Specific Conductance	231				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.39				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-72 WACS#27753 — Lab Sample ID: 660-46975-7

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	110	I	200	50	ug/L	1		6010B	Total Recovera
Sodium	29		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	28		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	280		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.08				SU	1		Field Sampling	Total/NA
Field Temperature	23.18				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.09				mg/L	1		Field Sampling	Total/NA
Specific Conductance	522				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.65				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-19 WACS#821 — Lab Sample ID: 660-47005-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	14		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	8.1		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.26		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	7.00				SU	1		Field Sampling	Total/NA
Field Temperature	23.44				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.58				mg/L	1		Field Sampling	Total/NA
Specific Conductance	423				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-42 WACS#823 — Lab Sample ID: 660-47005-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	160	I	200	50	ug/L	1		6010B	Total Recovera
Sodium	16		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	17		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.25		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	7.00				SU	1		Field Sampling	Total/NA
Field Temperature	23.78				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.19				mg/L	1		Field Sampling	Total/NA
Specific Conductance	536				umhos/cm	1		Field Sampling	Total/NA
Turbidity	3.98				NTU	1		Field Sampling	Total/NA

Client Sample ID: SUP 2 WACS#27756 — Lab Sample ID: 660-47005-3

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Client Sample ID: SUP 2 WACS#27756 (Continued) — Lab Sample ID: 660-47005-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.3		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	11		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.14		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	7.50				SU	1		Field Sampling	Total/NA
Field Temperature	24.94				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.04				mg/L	1		Field Sampling	Total/NA
Specific Conductance	376				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-58 WACS#1571 — Lab Sample ID: 660-47005-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	26		10	4.0	ug/L	1		6010B	Total Recovera
Iron	4000		200	50	ug/L	1		6010B	Total Recovera
Sodium	26		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	81		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	0.90		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	270		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.70				SU	1		Field Sampling	Total/NA
Field Temperature	25.63				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.40				mg/L	1		Field Sampling	Total/NA
Specific Conductance	606				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: SUP 1 WACS#27755 — Lab Sample ID: 660-47005-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	410		200	50	ug/L	1		6010B	Total Recovera
Sodium	8.3		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	9.4		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.15		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	150		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.37				SU	1		Field Sampling	Total/NA
Field Temperature	24.53				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.04				mg/L	1		Field Sampling	Total/NA
Specific Conductance	363				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-30 WACS#1065 — Lab Sample ID: 660-47005-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	320		200	50	ug/L	1		6010B	Total Recovera
Sodium	27		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	110		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	1.7		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	150		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	4.39				SU	1		Field Sampling	Total/NA
Field Temperature	23.67				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.15				mg/L	1		Field Sampling	Total/NA
Specific Conductance	407				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: 660-46975-1

Client Sample ID: Blank, Equipment 46975

Lab Sample ID: 660-46975-1

Date Collected: 04/04/12 10:37
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 08:50	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:50	1
Sodium	0.34	I	0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:50	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			04/18/12 11:56	1
Ammonia as N	0.010	U	0.020	0.010	mg/L			04/06/12 15:23	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			04/10/12 14:58	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: Duplicate 46975

Lab Sample ID: 660-46975-2

Date Collected: 04/05/12 00:00
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 08:37	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:37	1
Sodium	17		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:37	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.8		0.50	0.20	mg/L			04/18/12 12:11	1
Ammonia as N	0.30		0.020	0.010	mg/L			04/06/12 15:19	1
Total Dissolved Solids	160		10	10	mg/L			04/10/12 14:58	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-28A WACS#19862

Lab Sample ID: 660-46975-3

Date Collected: 04/05/12 12:14
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 08:54	1
Iron	3700		200	50	ug/L		04/09/12 11:54	04/10/12 08:54	1
Sodium	24		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:54	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71		1.0	0.40	mg/L			04/18/12 17:04	2
Ammonia as N	2.2		0.020	0.010	mg/L			04/06/12 15:24	1
Total Dissolved Solids	130		10	10	mg/L			04/10/12 14:59	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.30				SU			04/05/12 12:14	1
Field Temperature	26.27				Degrees C			04/05/12 12:14	1
Oxygen, Dissolved	1.83				mg/L			04/05/12 12:14	1
Specific Conductance	297				umhos/cm			04/05/12 12:14	1
Turbidity	14.40				NTU			04/05/12 12:14	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-40 WACS#822

Lab Sample ID: 660-46975-4

Date Collected: 04/05/12 09:41
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 08:57	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:57	1
Sodium	**17**		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:57	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.8**		0.50	0.20	mg/L			04/18/12 13:44	1
Ammonia as N	**0.31**		0.020	0.010	mg/L			04/06/12 15:25	1
Total Dissolved Solids	**170**		10	10	mg/L			04/10/12 15:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.37**				SU			04/05/12 09:41	1
Field Temperature	**23.43**				Degrees C			04/05/12 09:41	1
Oxygen, Dissolved	**0.66**				mg/L			04/05/12 09:41	1
Specific Conductance	**351**				umhos/cm			04/05/12 09:41	1
Turbidity	**0.86**				NTU			04/05/12 09:41	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-57 WACS#1570

Lab Sample ID: 660-46975-5

Date Collected: 04/05/12 10:12
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 09:07	1
Iron	290		200	50	ug/L		04/09/12 11:54	04/10/12 09:07	1
Sodium	10		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:07	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		0.50	0.20	mg/L			04/18/12 13:59	1
Ammonia as N	0.73		0.020	0.010	mg/L			04/06/12 15:27	1
Total Dissolved Solids	80		5.0	5.0	mg/L			04/10/12 15:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.16				SU			04/05/12 10:12	1
Field Temperature	26.79				Degrees C			04/05/12 10:12	1
Oxygen, Dissolved	0.78				mg/L			04/05/12 10:12	1
Specific Conductance	139				umhos/cm			04/05/12 10:12	1
Turbidity	0.46				NTU			04/05/12 10:12	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-73 WACS#27754

Lab Sample ID: 660-46975-6

Date Collected: 04/05/12 11:31
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 09:11	1
Iron	4100		200	50	ug/L		04/09/12 11:54	04/10/12 09:11	1
Sodium	20		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:11	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50		5.0	2.0	mg/L			04/18/12 14:15	10
Ammonia as N	1.1		0.020	0.010	mg/L			04/06/12 15:28	1
Total Dissolved Solids	120		5.0	5.0	mg/L			04/10/12 15:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.06				SU			04/05/12 11:31	1
Field Temperature	24.94				Degrees C			04/05/12 11:31	1
Oxygen, Dissolved	0.79				mg/L			04/05/12 11:31	1
Specific Conductance	231				umhos/cm			04/05/12 11:31	1
Turbidity	4.39				NTU			04/05/12 11:31	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-72 WACS#27753

Lab Sample ID: 660-46975-7

Date Collected: 04/05/12 11:55
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 09:14	1
Iron	110	I	200	50	ug/L		04/09/12 11:54	04/10/12 09:14	1
Sodium	29		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:14	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		0.50	0.20	mg/L			04/18/12 14:30	1
Ammonia as N	0.41		0.020	0.010	mg/L			04/06/12 15:29	1
Total Dissolved Solids	280		10	10	mg/L			04/10/12 15:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.08				SU			04/05/12 11:55	1
Field Temperature	23.18				Degrees C			04/05/12 11:55	1
Oxygen, Dissolved	1.09				mg/L			04/05/12 11:55	1
Specific Conductance	522				umhos/cm			04/05/12 11:55	1
Turbidity	0.65				NTU			04/05/12 11:55	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-19 WACS#821

Lab Sample ID: 660-47005-1

Date Collected: 04/06/12 10:22
Date Received: 04/06/12 14:26

Matrix: 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		04/10/12 07:22	04/10/12 12:57	1
Iron	50	U	200	50	ug/L		04/10/12 07:22	04/10/12 12:57	1
Sodium	**14**		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 12:57	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.1**		0.50	0.20	mg/L			04/16/12 18:19	1
Ammonia as N	**0.26**		0.020	0.010	mg/L			04/17/12 21:57	1
Total Dissolved Solids	**190**		10	10	mg/L			04/11/12 14:59	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	**7.00**				SU			04/06/12 10:22	1
Field Temperature	**23.44**				Degrees C			04/06/12 10:22	1
Oxygen, Dissolved	**0.58**				mg/L			04/06/12 10:22	1
Specific Conductance	**423**				umhos/cm			04/06/12 10:22	1
Turbidity	**0.00**				NTU			04/06/12 10:22	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-42 WACS#823

Lab Sample ID: 660-47005-2

Date Collected: 04/06/12 10:57
Date Received: 04/06/12 14:26

Matrix: 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		04/10/12 07:22	04/10/12 13:10	1
Iron	160	I	200	50	ug/L		04/10/12 07:22	04/10/12 13:10	1
Sodium	16		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:10	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		0.50	0.20	mg/L			04/16/12 18:34	1
Ammonia as N	0.25		0.020	0.010	mg/L			04/17/12 21:58	1
Total Dissolved Solids	250		10	10	mg/L			04/11/12 14:56	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.00				SU			04/06/12 10:57	1
Field Temperature	23.78				Degrees C			04/06/12 10:57	1
Oxygen, Dissolved	0.19				mg/L			04/06/12 10:57	1
Specific Conductance	536				umhos/cm			04/06/12 10:57	1
Turbidity	3.98				NTU			04/06/12 10:57	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: SUP 2 WACS#27756

Lab Sample ID: 660-47005-3

Date Collected: 04/06/12 11:54
Date Received: 04/06/12 14:26

Matrix: 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		04/10/12 07:22	04/10/12 13:13	1
Iron	50	U	200	50	ug/L		04/10/12 07:22	04/10/12 13:13	1
Sodium	8.3		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:13	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50	0.20	mg/L			04/16/12 18:49	1
Ammonia as N	0.14		0.020	0.010	mg/L			04/17/12 21:59	1
Total Dissolved Solids	170		10	10	mg/L			04/11/12 14:57	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.50				SU			04/06/12 11:54	1
Field Temperature	24.94				Degrees C			04/06/12 11:54	1
Oxygen, Dissolved	0.04				mg/L			04/06/12 11:54	1
Specific Conductance	376				umhos/cm			04/06/12 11:54	1
Turbidity	0.00				NTU			04/06/12 11:54	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-58 WACS#1571

Lab Sample ID: 660-47005-4

Date Collected: 04/06/12 09:46
Date Received: 04/06/12 14:26

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	26		10	4.0	ug/L		04/10/12 07:22	04/10/12 13:16	1
Iron	4000		200	50	ug/L		04/10/12 07:22	04/10/12 13:16	1
Sodium	26		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:16	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81		5.0	2.0	mg/L			04/17/12 22:34	10
Ammonia as N	0.90		0.020	0.010	mg/L			04/17/12 22:00	1
Total Dissolved Solids	270		10	10	mg/L			04/11/12 14:57	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.70				SU			04/06/12 09:46	1
Field Temperature	25.63				Degrees C			04/06/12 09:46	1
Oxygen, Dissolved	0.40				mg/L			04/06/12 09:46	1
Specific Conductance	606				umhos/cm			04/06/12 09:46	1
Turbidity	0.00				NTU			04/06/12 09:46	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: SUP 1 WACS#27755

Lab Sample ID: 660-47005-5

Date Collected: 04/06/12 12:22
Date Received: 04/06/12 14:26

Matrix: 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		04/10/12 07:22	04/10/12 13:27	1
Iron	410		200	50	ug/L		04/10/12 07:22	04/10/12 13:27	1
Sodium	8.3		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:27	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.4		0.50	0.20	mg/L			04/16/12 19:20	1
Ammonia as N	0.15		0.020	0.010	mg/L			04/17/12 22:02	1
Total Dissolved Solids	150		10	10	mg/L			04/11/12 14:58	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.37				SU			04/06/12 12:22	1
Field Temperature	24.53				Degrees C			04/06/12 12:22	1
Oxygen, Dissolved	0.04				mg/L			04/06/12 12:22	1
Specific Conductance	363				umhos/cm			04/06/12 12:22	1
Turbidity	0.00				NTU			04/06/12 12:22	1

Client Sample Results

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-30 WACS#1065

Lab Sample ID: 660-47005-6

Date Collected: 04/06/12 10:15
Date Received: 04/06/12 14:26

Matrix: 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		04/10/12 07:22	04/10/12 13:30	1
Iron	320		200	50	ug/L		04/10/12 07:22	04/10/12 13:30	1
Sodium	27		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:30	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		5.0	2.0	mg/L			04/17/12 22:49	10
Ammonia as N	1.7		0.020	0.010	mg/L			04/17/12 22:03	1
Total Dissolved Solids	150		10	10	mg/L			04/11/12 14:58	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.39				SU			04/06/12 10:15	1
Field Temperature	23.67				Degrees C			04/06/12 10:15	1
Oxygen, Dissolved	0.15				mg/L			04/06/12 10:15	1
Specific Conductance	407				umhos/cm			04/06/12 10:15	1
Turbidity	0.00				NTU			04/06/12 10:15	1

QC Sample Results

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

TestAmerica Job ID: 660-46975-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-123111/1-A
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		04/09/12 11:54	04/10/12 08:27	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:27	1
Sodium	0.31	U	0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:27	1

Lab Sample ID: LCS 660-123111/2-A
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1040		ug/L		104	75 - 125
Iron	1000	1020		ug/L		102	75 - 125
Sodium	10.0	9.78		mg/L		98	75 - 125

Lab Sample ID: 660-46975-2 MS
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Duplicate 46975
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.0	U	1000	1040		ug/L		104	75 - 125
Iron	50	U	1000	1020		ug/L		102	75 - 125
Sodium	17		10.0	26.6		mg/L		100	75 - 125

Lab Sample ID: 660-46975-2 MSD
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Duplicate 46975
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	1040		ug/L		104	75 - 125	0	20
Iron	50	U	1000	1040		ug/L		104	75 - 125	1	20
Sodium	17		10.0	26.5		mg/L		100	75 - 125	0	20

Lab Sample ID: MB 660-123140/1-A
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 123140

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		04/10/12 07:22	04/10/12 12:47	1
Iron	50	U	200	50	ug/L		04/10/12 07:22	04/10/12 12:47	1
Sodium	0.31	U	0.50	0.31	mg/L		04/10/12 07:22	04/10/12 12:47	1

Lab Sample ID: LCS 660-123140/2-A
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 123140

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1070		ug/L		107	75 - 125
Iron	1000	1000		ug/L		100	75 - 125
Sodium	10.0	9.90		mg/L		99	75 - 125

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

Lab Sample ID: 660-47005-1 MS
Matrix: Water
Analysis Batch: 123151

Client Sample ID: TH-19 WACS#821
Prep Type: Total Recoverable
Prep Batch: 123140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.0	U	1000	1070		ug/L		107	75 - 125
Iron	50	U	1000	1020		ug/L		102	75 - 125
Sodium	14		10.0	24.3		mg/L		105	75 - 125

Lab Sample ID: 660-47005-1 MSD
Matrix: Water
Analysis Batch: 123151

Client Sample ID: TH-19 WACS#821
Prep Type: Total Recoverable
Prep Batch: 123140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	1080		ug/L		108	75 - 125	1	20
Iron	50	U	1000	1000		ug/L		100	75 - 125	1	20
Sodium	14		10.0	24.4		mg/L		106	75 - 125	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-123379/3
Matrix: Water
Analysis Batch: 123379

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			04/16/12 13:41	1

Lab Sample ID: LCS 660-123379/4
Matrix: Water
Analysis Batch: 123379

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	9.75		mg/L		97	90 - 110

Lab Sample ID: 660-46949-D-10 MS ^50
Matrix: Water
Analysis Batch: 123379

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	71		500	538		mg/L		93	90 - 110

Lab Sample ID: 660-46949-D-10 MSD ^50
Matrix: Water
Analysis Batch: 123379

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	71		500	551		mg/L		96	90 - 110	2.46	30

Lab Sample ID: MB 660-123428/3
Matrix: Water
Analysis Batch: 123428

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			04/17/12 22:03	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 660-123428/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123428

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

Lab Sample ID: 660-47005-4 MS — **Client Sample ID: TH-58 WACS#1571**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123428

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	81		100	179		mg/L		98	90 - 110

Lab Sample ID: 660-47005-4 MSD — **Client Sample ID: TH-58 WACS#1571**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123428

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	81		100	189		mg/L		108	90 - 110	5.33	30

Lab Sample ID: MB 660-123465/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			04/18/12 09:06	1

Lab Sample ID: LCS 660-123465/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: 660-46975-4 MS — **Client Sample ID: TH-40 WACS#822**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.8		10.0	19.5		mg/L		106	90 - 110

Lab Sample ID: 660-46975-4 MSD — **Client Sample ID: TH-40 WACS#822**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8.8		10.0	19.3		mg/L		105	90 - 110	1.00	30

QC Sample Results

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

TestAmerica Job ID: 660-46975-1

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 660-123071/3
Matrix: Water
Analysis Batch: 123071

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			04/06/12 15:17	1

Lab Sample ID: LCS 660-123071/4
Matrix: Water
Analysis Batch: 123071

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	0.503		mg/L		101	90 - 110

Lab Sample ID: 660-46975-2 MS
Matrix: Water
Analysis Batch: 123071

Client Sample ID: Duplicate 46975
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.30		1.00	1.25		mg/L		95	90 - 110

Lab Sample ID: 660-46975-2 MSD
Matrix: Water
Analysis Batch: 123071

Client Sample ID: Duplicate 46975
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	0.30		1.00	1.26		mg/L		96	90 - 110	1	30

Lab Sample ID: MB 660-123416/3
Matrix: Water
Analysis Batch: 123416

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			04/17/12 21:49	1

Lab Sample ID: LCS 660-123416/4
Matrix: Water
Analysis Batch: 123416

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	0.525		mg/L		105	90 - 110

Lab Sample ID: 660-46991-C-19 MS
Matrix: Water
Analysis Batch: 123416

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	0.037		1.00	1.09		mg/L		105	90 - 110

Lab Sample ID: 660-46991-C-19 MSD
Matrix: Water
Analysis Batch: 123416

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	0.037		1.00	1.13		mg/L		109	90 - 110	3.60	30

QC Sample Results

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

TestAmerica Job ID: 660-46975-1

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

Lab Sample ID: MB 660-123163/1
Matrix: Water
Analysis Batch: 123163

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			04/10/12 14:56	1

Lab Sample ID: LCS 660-123163/2
Matrix: Water
Analysis Batch: 123163

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	9900		mg/L		99	80 - 120

Lab Sample ID: 660-46975-2 DU
Matrix: Water
Analysis Batch: 123163

Client Sample ID: Duplicate 46975
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	160		160		mg/L		2	20

Lab Sample ID: MB 660-123220/1
Matrix: Water
Analysis Batch: 123220

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			04/11/12 14:47	1

Lab Sample ID: LCS 660-123220/2
Matrix: Water
Analysis Batch: 123220

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	10000	9910		mg/L		99	80 - 120

Lab Sample ID: 660-46991-E-10 DU
Matrix: Water
Analysis Batch: 123220

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	330		348		mg/L		5	20

QC Association Summary

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

TestAmerica Job ID: 660-46975-1

Metals

Prep Batch: 123111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-1	Blank, Equipment 46975	Total Recoverable	Water	3005A	
660-46975-2	Duplicate 46975	Total Recoverable	Water	3005A	
660-46975-2 MS	Duplicate 46975	Total Recoverable	Water	3005A	
660-46975-2 MSD	Duplicate 46975	Total Recoverable	Water	3005A	
660-46975-3	TH-28A WACS#19862	Total Recoverable	Water	3005A	
660-46975-4	TH-40 WACS#822	Total Recoverable	Water	3005A	
660-46975-5	TH-57 WACS#1570	Total Recoverable	Water	3005A	
660-46975-6	TH-73 WACS#27754	Total Recoverable	Water	3005A	
660-46975-7	TH-72 WACS#27753	Total Recoverable	Water	3005A	
LCS 660-123111/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-123111/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 123140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47005-1	TH-19 WACS#821	Total Recoverable	Water	3005A	
660-47005-1 MS	TH-19 WACS#821	Total Recoverable	Water	3005A	
660-47005-1 MSD	TH-19 WACS#821	Total Recoverable	Water	3005A	
660-47005-2	TH-42 WACS#823	Total Recoverable	Water	3005A	
660-47005-3	SUP 2 WACS#27756	Total Recoverable	Water	3005A	
660-47005-4	TH-58 WACS#1571	Total Recoverable	Water	3005A	
660-47005-5	SUP 1 WACS#27755	Total Recoverable	Water	3005A	
660-47005-6	TH-30 WACS#1065	Total Recoverable	Water	3005A	
LCS 660-123140/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-123140/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 123151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-1	Blank, Equipment 46975	Total Recoverable	Water	6010B	123111
660-46975-2	Duplicate 46975	Total Recoverable	Water	6010B	123111
660-46975-2 MS	Duplicate 46975	Total Recoverable	Water	6010B	123111
660-46975-2 MSD	Duplicate 46975	Total Recoverable	Water	6010B	123111
660-46975-3	TH-28A WACS#19862	Total Recoverable	Water	6010B	123111
660-46975-4	TH-40 WACS#822	Total Recoverable	Water	6010B	123111
660-46975-5	TH-57 WACS#1570	Total Recoverable	Water	6010B	123111
660-46975-6	TH-73 WACS#27754	Total Recoverable	Water	6010B	123111
660-46975-7	TH-72 WACS#27753	Total Recoverable	Water	6010B	123111
660-47005-1	TH-19 WACS#821	Total Recoverable	Water	6010B	123140
660-47005-1 MS	TH-19 WACS#821	Total Recoverable	Water	6010B	123140
660-47005-1 MSD	TH-19 WACS#821	Total Recoverable	Water	6010B	123140
660-47005-2	TH-42 WACS#823	Total Recoverable	Water	6010B	123140
660-47005-3	SUP 2 WACS#27756	Total Recoverable	Water	6010B	123140
660-47005-4	TH-58 WACS#1571	Total Recoverable	Water	6010B	123140
660-47005-5	SUP 1 WACS#27755	Total Recoverable	Water	6010B	123140
660-47005-6	TH-30 WACS#1065	Total Recoverable	Water	6010B	123140
LCS 660-123111/2-A	Lab Control Sample	Total Recoverable	Water	6010B	123111
LCS 660-123140/2-A	Lab Control Sample	Total Recoverable	Water	6010B	123140
MB 660-123111/1-A	Method Blank	Total Recoverable	Water	6010B	123111
MB 660-123140/1-A	Method Blank	Total Recoverable	Water	6010B	123140

QC Association Summary

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

TestAmerica Job ID: 660-46975-1

General Chemistry

Analysis Batch: 123071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-1	Blank, Equipment 46975	Total/NA	Water	350.1	
660-46975-2	Duplicate 46975	Total/NA	Water	350.1	
660-46975-2 MS	Duplicate 46975	Total/NA	Water	350.1	
660-46975-2 MSD	Duplicate 46975	Total/NA	Water	350.1	
660-46975-3	TH-28A WACS#19862	Total/NA	Water	350.1	
660-46975-4	TH-40 WACS#822	Total/NA	Water	350.1	
660-46975-5	TH-57 WACS#1570	Total/NA	Water	350.1	
660-46975-6	TH-73 WACS#27754	Total/NA	Water	350.1	
660-46975-7	TH-72 WACS#27753	Total/NA	Water	350.1	
LCS 660-123071/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-123071/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 123163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-1	Blank, Equipment 46975	Total/NA	Water	SM 2540C	
660-46975-2	Duplicate 46975	Total/NA	Water	SM 2540C	
660-46975-2 DU	Duplicate 46975	Total/NA	Water	SM 2540C	
660-46975-3	TH-28A WACS#19862	Total/NA	Water	SM 2540C	
660-46975-4	TH-40 WACS#822	Total/NA	Water	SM 2540C	
660-46975-5	TH-57 WACS#1570	Total/NA	Water	SM 2540C	
660-46975-6	TH-73 WACS#27754	Total/NA	Water	SM 2540C	
660-46975-7	TH-72 WACS#27753	Total/NA	Water	SM 2540C	
LCS 660-123163/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-123163/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 123220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46991-E-10 DU	Duplicate	Total/NA	Water	SM 2540C	
660-47005-1	TH-19 WACS#821	Total/NA	Water	SM 2540C	
660-47005-2	TH-42 WACS#823	Total/NA	Water	SM 2540C	
660-47005-3	SUP 2 WACS#27756	Total/NA	Water	SM 2540C	
660-47005-4	TH-58 WACS#1571	Total/NA	Water	SM 2540C	
660-47005-5	SUP 1 WACS#27755	Total/NA	Water	SM 2540C	
660-47005-6	TH-30 WACS#1065	Total/NA	Water	SM 2540C	
LCS 660-123220/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-123220/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 123379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46949-D-10 MS ^50	Matrix Spike	Total/NA	Water	300.0	
660-46949-D-10 MSD ^50	Matrix Spike Duplicate	Total/NA	Water	300.0	
660-47005-1	TH-19 WACS#821	Total/NA	Water	300.0	
660-47005-2	TH-42 WACS#823	Total/NA	Water	300.0	
660-47005-3	SUP 2 WACS#27756	Total/NA	Water	300.0	
660-47005-5	SUP 1 WACS#27755	Total/NA	Water	300.0	
LCS 660-123379/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123379/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 123416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46991-C-19 MS	Matrix Spike	Total/NA	Water	350.1	
660-46991-C-19 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 123416 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47005-1	TH-19 WACS#821	Total/NA	Water	350.1	
660-47005-2	TH-42 WACS#823	Total/NA	Water	350.1	
660-47005-3	SUP 2 WACS#27756	Total/NA	Water	350.1	
660-47005-4	TH-58 WACS#1571	Total/NA	Water	350.1	
660-47005-5	SUP 1 WACS#27755	Total/NA	Water	350.1	
660-47005-6	TH-30 WACS#1065	Total/NA	Water	350.1	
LCS 660-123416/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-123416/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 123428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47005-4	TH-58 WACS#1571	Total/NA	Water	300.0	
660-47005-4 MS	TH-58 WACS#1571	Total/NA	Water	300.0	
660-47005-4 MSD	TH-58 WACS#1571	Total/NA	Water	300.0	
660-47005-6	TH-30 WACS#1065	Total/NA	Water	300.0	
LCS 660-123428/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123428/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 123465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-1	Blank, Equipment 46975	Total/NA	Water	300.0	
660-46975-2	Duplicate 46975	Total/NA	Water	300.0	
660-46975-3	TH-28A WACS#19862	Total/NA	Water	300.0	
660-46975-4	TH-40 WACS#822	Total/NA	Water	300.0	
660-46975-4 MS	TH-40 WACS#822	Total/NA	Water	300.0	
660-46975-4 MSD	TH-40 WACS#822	Total/NA	Water	300.0	
660-46975-5	TH-57 WACS#1570	Total/NA	Water	300.0	
660-46975-6	TH-73 WACS#27754	Total/NA	Water	300.0	
660-46975-7	TH-72 WACS#27753	Total/NA	Water	300.0	
LCS 660-123465/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123465/3	Method Blank	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 123094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-3	TH-28A WACS#19862	Total/NA	Water	Field Sampling	
660-46975-4	TH-40 WACS#822	Total/NA	Water	Field Sampling	
660-46975-5	TH-57 WACS#1570	Total/NA	Water	Field Sampling	
660-46975-6	TH-73 WACS#27754	Total/NA	Water	Field Sampling	
660-46975-7	TH-72 WACS#27753	Total/NA	Water	Field Sampling	

Analysis Batch: 123143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47005-1	TH-19 WACS#821	Total/NA	Water	Field Sampling	
660-47005-2	TH-42 WACS#823	Total/NA	Water	Field Sampling	
660-47005-3	SUP 2 WACS#27756	Total/NA	Water	Field Sampling	
660-47005-4	TH-58 WACS#1571	Total/NA	Water	Field Sampling	
660-47005-5	SUP 1 WACS#27755	Total/NA	Water	Field Sampling	
660-47005-6	TH-30 WACS#1065	Total/NA	Water	Field Sampling	

Lab Chronicle

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: Blank, Equipment 46975

Lab Sample ID: 660-46975-1
Matrix: Water

Date Collected: 04/04/12 10:37
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 08:50	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:23	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 14:58	TO	TAL TAM
Total/NA	Analysis	300.0		1	123465	04/18/12 11:56	TS	TAL TAM

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Client Sample ID: Duplicate 46975

Lab Sample ID: 660-46975-2
Matrix: Water

Date Collected: 04/05/12 00:00
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 08:37	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:19	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 14:58	TO	TAL TAM
Total/NA	Analysis	300.0		1	123465	04/18/12 12:11	TS	TAL TAM

Client Sample ID: TH-28A WACS#19862

Lab Sample ID: 660-46975-3
Matrix: Water

Date Collected: 04/05/12 12:14
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 08:54	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:24	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 14:59	TO	TAL TAM
Total/NA	Analysis	300.0		2	123465	04/18/12 17:04	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/05/12 12:14		TAL TAM

Client Sample ID: TH-40 WACS#822

Lab Sample ID: 660-46975-4
Matrix: Water

Date Collected: 04/05/12 09:41
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 08:57	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:25	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 15:00	TO	TAL TAM
Total/NA	Analysis	300.0		1	123465	04/18/12 13:44	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/05/12 09:41		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-57 WACS#1570

Lab Sample ID: 660-46975-5
Matrix: Water

Date Collected: 04/05/12 10:12
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 09:07	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:27	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 15:00	TO	TAL TAM
Total/NA	Analysis	300.0		1	123465	04/18/12 13:59	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/05/12 10:12		TAL TAM

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Client Sample ID: TH-73 WACS#27754

Lab Sample ID: 660-46975-6
Matrix: Water

Date Collected: 04/05/12 11:31
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 09:11	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:28	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 15:01	TO	TAL TAM
Total/NA	Analysis	300.0		10	123465	04/18/12 14:15	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/05/12 11:31		TAL TAM

Client Sample ID: TH-72 WACS#27753

Lab Sample ID: 660-46975-7
Matrix: Water

Date Collected: 04/05/12 11:55
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 09:14	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:29	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 15:01	TO	TAL TAM
Total/NA	Analysis	300.0		1	123465	04/18/12 14:30	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/05/12 11:55		TAL TAM

Client Sample ID: TH-19 WACS#821

Lab Sample ID: 660-47005-1
Matrix: Water

Date Collected: 04/06/12 10:22
Date Received: 04/06/12 14:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 12:57	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:59	TO	TAL TAM
Total/NA	Analysis	300.0		1	123379	04/16/12 18:19	TS	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 21:57	TO	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 10:22		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-42 WACS#823

Lab Sample ID: 660-47005-2
Matrix: Water

Date Collected: 04/06/12 10:57
Date Received: 04/06/12 14:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 13:10	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:56	TO	TAL TAM
Total/NA	Analysis	300.0		1	123379	04/16/12 18:34	TS	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 21:58	TO	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 10:57		TAL TAM

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Client Sample ID: SUP 2 WACS#27756

Lab Sample ID: 660-47005-3
Matrix: Water

Date Collected: 04/06/12 11:54
Date Received: 04/06/12 14:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 13:13	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:57	TO	TAL TAM
Total/NA	Analysis	300.0		1	123379	04/16/12 18:49	TS	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 21:59	TO	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 11:54		TAL TAM

Client Sample ID: TH-58 WACS#1571

Lab Sample ID: 660-47005-4
Matrix: Water

Date Collected: 04/06/12 09:46
Date Received: 04/06/12 14:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 13:16	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:57	TO	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 22:00	TO	TAL TAM
Total/NA	Analysis	300.0		10	123428	04/17/12 22:34	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 09:46		TAL TAM

Client Sample ID: SUP 1 WACS#27755

Lab Sample ID: 660-47005-5
Matrix: Water

Date Collected: 04/06/12 12:22
Date Received: 04/06/12 14:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 13:27	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:58	TO	TAL TAM
Total/NA	Analysis	300.0		1	123379	04/16/12 19:20	TS	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 22:02	TO	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 12:22		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-30 WACS#1065

Lab Sample ID: 660-47005-6

Date Collected: 04/06/12 10:15

Matrix: Water

Date Received: 04/06/12 14:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 13:30	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:58	TO	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 22:03	TO	TAL TAM
Total/NA	Analysis	300.0		10	123428	04/17/12 22:49	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 10:15		TAL TAM

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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: 660-46975-1

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: 660-46975-1

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: 660-46975-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-46975-1	Blank, Equipment 46975	Water	04/04/12 10:37	04/05/12 14:20
660-46975-2	Duplicate 46975	Water	04/05/12 00:00	04/05/12 14:20
660-46975-3	TH-28A WACS#19862	Water	04/05/12 12:14	04/05/12 14:20
660-46975-4	TH-40 WACS#822	Water	04/05/12 09:41	04/05/12 14:20
660-46975-5	TH-57 WACS#1570	Water	04/05/12 10:12	04/05/12 14:20
660-46975-6	TH-73 WACS#27754	Water	04/05/12 11:31	04/05/12 14:20
660-46975-7	TH-72 WACS#27753	Water	04/05/12 11:55	04/05/12 14:20
660-47005-1	TH-19 WACS#821	Water	04/06/12 10:22	04/06/12 14:26
660-47005-2	TH-42 WACS#823	Water	04/06/12 10:57	04/06/12 14:26
660-47005-3	SUP 2 WACS#27756	Water	04/06/12 11:54	04/06/12 14:26
660-47005-4	TH-58 WACS#1571	Water	04/06/12 09:46	04/06/12 14:26
660-47005-5	SUP 1 WACS#27755	Water	04/06/12 12:22	04/06/12 14:26
660-47005-6	TH-30 WACS#1065	Water	04/06/12 10:15	04/06/12 14:26

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660-41975

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McMulty REP. OF CONTRACT LAB. 3/26/12 | 1:00

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2:00

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

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

FIELD PARAMETERS: N/A

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SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.4.12 | 10:37

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. 4.5.12 | 2:20
ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 4.5.12 | 2:20

COMMENT'S: WO# 0058 3.5°c CH-07

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

MONITORING WELLS DUPLICATE SAMPLE

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McMulty REP. OF CONTRACT LAB. 3/26/12 | 1500

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 2:00

LOCATION: **DUPLICATE** 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	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.5.12 —

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: Jim Clayton REP. OF SOLID WASTE DEPT. 4.5.12 | 2:20

ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 4.5.12 | 2:20

COMMENT`S: WO # 0058

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS: . DATE | TIME

RELINQUISHED BY: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 1000

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2:00

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

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

WELL DIAMETER: 2.0 INCH:

TOTAL DEPTH OF WELL: 34.30 Ft.

DEPTH TO WATER: 29.30 Ft.

LENGTH OF WATER COL: 5.00 Ft.

VOLUME TO PURGE: 0.80 Gal.

	DATE	TIME
PURGE STARTED:	4.5.12	12:05
PURGE RATE:	0.15 GPM.	
	DATE	TIME
PURGE ENDED:	4.5.12	12:14
ACT. VOL. PURGED:	1.35 GAL.	
Draw Down:	29.40	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	12:10	26.21	304	5.44	2.10	9.74
AB JC	12:12	26.25	301	5.37	1.86	7.14
AB JC	12:14	26.27	297	5.30	1.83	14.40

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SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.5.12 12:14

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.	4.5.12	2:20
ACCEPTED BY: [signature]	REP. OF CONTRACT LAB.	4.5.12	2:20

COMMENT`S: WO # 0058

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 | 800

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 2:00

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

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

WELL DIAMETER: **2.0** INCH:
TOTAL DEPTH OF WELL: 165.90 Ft.
DEPTH TO WATER: 117.95 Ft.
LENGTH OF WATER COL: 47.95 Ft.
VOLUME TO PURGE: 7.67 Gal.

	DATE	TIME
PURGE STARTED:	4.5.12	9:30
PURGE RATE:	1.00	GPM.
	DATE	TIME
PURGE ENDED:	4.5.12	9:41
ACT. VOL. PURGED:	11.00	GAL.
Draw Down:	117.99	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	9:37	28.44	363	7.31	0.58	0.90
AB JC	9:39	23.43	349	7.34	0.65	1.60
AB JC	9:41	23.43	351	7.37	0.66	0.84

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.5.12 | 9:41

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.	4.5.12	2:20
ACCEPTED BY: [signature]	REP. OF CONTRACT LAB.	4.5.12	2:20

COMMENTS: 100 # 0058

13

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McMulty REP. OF CONTRACT LAB. 3/26/12 1000

ACCEPTED BY: Ann Clayton REP. OF SOLID WASTE DEPT. 3.29.12 2:00

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

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

WELL DIAMETER: 2.0 INCH:

TOTAL DEPTH OF WELL: 26.83 Ft.

DEPTH TO WATER: 20.29 Ft.

LENGTH OF WATER COL: 6.54 Ft.

VOLUME TO PURGE: 1.05 Gal.

	DATE	TIME
PURGE STARTED:	4.5.12	10:03
PURGE RATE:	0.20 GPM.	
PURGE ENDED:	4.5.12	10:12
ACT. VOL. PURGED:	1.80 GAL.	
Draw Down:	20.44	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:08	25.78	130	5.27	0.45	0.79
AB JC	10:10	25.78	135	5.20	0.74	0.49
AB JC	10:12	25.79	139	5.14	0.88	0.46

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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 4.5.12 | 10:12

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:

RELINQUISHED BY: Ann Clayton REP. OF SOLID WASTE DEPT. DATE | TIME 4.5.12 | 2:20

ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 4.5.12 2:20

COMMENT`S: WO # 0058

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: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 1100

ACCEPTED BY: J. Clayton REP. OF SOLID WASTE DEPT. 3.29.12 2:00

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: 32.59 Ft.
LENGTH OF WATER COL: 10.81 Ft.
VOLUME TO PURGE: 1.73 Gal.

	DATE	TIME
PURGE STARTED:	4.5.12	1119
PURGE RATE:	0.20 GPM.	
	DATE	TIME
PURGE ENDED:	4.5.12	11:31
ACT. VOL. PURGED:	2.40 GAL.	
Draw Down:	35.02	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:27	24.95	236	5.11	0.75	3.80
AB JC	11:29	24.94	233	5.08	0.80	3.97
AB JC	11:31	24.94	231	5.04	0.79	4.39

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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 4.5.12 | 11:31

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.	4.5.12	2:20
ACCEPTED BY: [signature]	REP. OF CONTRACT LAB.	4.5.12	2:20

COMMENT`S: WO # 0058

13

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 | 10:00

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2:00

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

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

WELL DIAMETER: 2 INCH:
TOTAL DEPTH OF WELL: 190.00 Ft.
DEPTH TO WATER: 124.99 Ft.
LENGTH OF WATER COL: 65.01 Ft.
VOLUME TO PURGE: 10.40 Gal.

	DATE	TIME
PURGE STARTED:	4.5.12	11:25
PURGE RATE:	0.40 GPM.	
PURGE ENDED:	4.5.12	11:55
ACT. VOL. PURGED:	12.00 GAL.	
Draw Down:	124.99	

FIELD PARAMETERS:

BY	TIME	~~TEMP~~ Cond	~~COND~~ pH	~~PH~~ Cond Temp	DO	TURB
AB JC	11:51	522	7.05	23.16	1.19	0.69
AB JC	11:53	522	7.06	23.17	1.14	0.76
AB JC	11:55	522	7.08	23.18	1.09	0.95

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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 4.5.12 | 11:55

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 4.5.12 2:20
ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 4.5.12 2:20

COMMENT'S: WO # 0058

13

660-47005

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 1800

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2:00

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

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

WELL DIAMETER: **2.0** INCH:
TOTAL DEPTH OF WELL: **153.60** Ft.
DEPTH TO WATER: 121.36 Ft.
LENGTH OF WATER COL: 32.24 Ft.
VOLUME TO PURGE: 5.16 Gal.

	DATE	TIME
PURGE STARTED:	4.6.12	11:13
PURGE RATE:	1.00 GPM.	
PURGE ENDED:	4.6.12	10:22
ACT. VOL. PURGED:	9.00 GAL.	
Draw Down:	121.50	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:18	23.41	422	6.92	0.54	0.00
AB JC	10:20	23.44	423	6.94	0.52	0.00
AB JC	10:22	23.44	423	7.00	0.58	0.00

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.6.12 | 10:22

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. 4.6.12 2:26
ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 4.6.12 2:26

COMMENT`S: WO # 0058

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET

13

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 1000

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 2:00

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: 93.55 Ft.
LENGTH OF WATER COL: 70.45 Ft.
VOLUME TO PURGE: 11.27 Gal.

	DATE	TIME
PURGE STARTED:	4.6.12	10:50
PURGE RATE:	0.50 GPM.	
PURGE ENDED:	4.6.12	10:57
ACT. VOL. PURGED:	13.50 GAL.	
Draw Down:	112.50	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:53	23.78	534	7.00	0.20	4.67
AB JC	10:55	23.77	534	7.00	0.20	4.02
AB JC	10:57	23.78	534	7.00	0.19	3.98

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.6.12 | 10:57

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. 4.6.12 | 2:26
ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 4.6.12 | 2:26

COMMENT`S: WO # 0058

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

13

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McMulty REP. OF CONTRACT LAB. 3/26/12 | 1040

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2.00

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 4.6.12 TIME 11:35
ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:50	24.83	375	7.42	0.04	0.00
AB JC	11:52	24.95	379	7.46	0.04	0.00
AB JC	11:54	24.94	376	7.50	0.04	0.00

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.6.12 | 11:54

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. 4.6.12 | 2:26
ACCEPTED BY: Carol McMulty REP. OF CONTRACT LAB. 4.6.12 | 2:26

COMMENTS: W04 0058

13

PRECLEANED SAMPLE CONTAINERS:

		DATE | TIME
RELINQUISHED BY: Carol McNulty	REP. OF CONTRACT LAB.	3/26/12 1000
ACCEPTED BY: Jim Clayton	REP. OF SOLID WASTE DEPT.	3.29.12 2:00

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

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

WELL DIAMETER: 2.0 INCH:
TOTAL DEPTH OF WELL: 32.92 Ft.
DEPTH TO WATER: 28.65 Ft.
LENGTH OF WATER COL: 4.27 Ft.
VOLUME TO PURGE: 0.68 Gal.

	DATE | TIME
PURGE STARTED:	4.6.12 | 9:28
PURGE RATE:	0.10 GPM.
	DATE | TIME
PURGE ENDED:	4.6.12 | 9:46
ACT. VOL. PURGED:	1.80 GAL.
Draw Down:	29.13

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	9:42	25.62	631	5.74	0.47	0.00
AB JC	9:44	25.64	613	5.73	0.43	0.00
AB JC	9:46	25.63	606	5.70	0.40	0.00

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.6.12 | 9:46

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

		DATE | TIME
ABOVE LISTED SAMPLES: RELINQUISHED BY: Jim Clayton	REP. OF SOLID WASTE DEPT.	4.6.12 | 2:26
ACCEPTED BY: Carol McNulty	REP. OF CONTRACT LAB.	4.6.12 2:26

COMMENT`S: WO# 0058 4.9°C 0007

13

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 | 1pm

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2:00

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

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

WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 4.6.12 TIME 12:03

ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	12:18	24.51	363	7.35	0.04	0.00
AB JC	12:20	24.52	363	7:36	0.04	0.00
AB JC	12:22	24.53	363	7.37	0.04	0.00

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.6.12 | 12:22

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. 4.6.12 | 2:26
ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 4.6.12 | 2:26

COMMENT`S: WO# 0058

13

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McMulty REP. OF CONTRACT LAB. 3/26/12 1800

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2:00

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: 24.29 Ft.
LENGTH OF WATER COL: 21.90 Ft.
VOLUME TO PURGE: 3.50 Gal.

	DATE	TIME
PURGE STARTED:	4.6.12	9:57
PURGE RATE:	0.25 GPM.	
	DATE	TIME
PURGE ENDED:	4.6.12	10:15
ACT. VOL. PURGED:	4.50 GAL.	
Draw Down:	24.39	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:11	23.67	402	4.35	0.16	0.00
AB JC	10:13	23.67	405	4.37	0.16	0.00
AB JC	10:15	23.67	407	4.39	0.15	0.00

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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 4.6.12 | 10:15

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES: DATE | TIME
RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 4.6.12 | 2:26
ACCEPTED BY: Carol McMulty REP. OF CONTRACT LAB. 4.6.12 | 2:26

COMMENTS: WO # 0058
H_2S odor

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

13

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46975-1

Login Number: 46975
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	3.5 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	

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Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46975-1

Login Number: 47005
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	4.9 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	

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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: 660-46976-1
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:
4/20/2012 1:00:53 PM

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Definitions/Glossary

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

TestAmerica Job ID: 660-46976-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

General Chemistry

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

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: 660-46976-1

Laboratory: TestAmerica Tampa

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Narrative

Job Narrative
660-46976-1

Comments
No additional comments.

Receipt
The samples were received on 4/5/2012 2:20 PM; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.50 C.

Metals
No analytical or quality issues were noted.

General Chemistry
Method 350.1: The matrix spike(MS) recovery for batch 123071 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Detection Summary

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

TestAmerica Job ID: 660-46976-1

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Client Sample ID: TH-74 WACS #28307 — Lab Sample ID: 660-46976-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	40000		200	50	ug/L	1		6010B	Total Recovera
Sodium	24		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	120		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	2.8		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	270		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.13				SU	1		Field Sampling	Total/NA
Field Temperature	21.74				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.79				mg/L	1		Field Sampling	Total/NA
Specific Conductance	592				umhos/cm	1		Field Sampling	Total/NA
Turbidity	13.70				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-75 WACS #28308 — Lab Sample ID: 660-46976-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	6.3	I	10	4.0	ug/L	1		6010B	Total Recovera
Iron	16000		200	50	ug/L	1		6010B	Total Recovera
Sodium	26		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	130		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	1.3		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	300		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.37				SU	1		Field Sampling	Total/NA
Field Temperature	21.76				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.33				mg/L	1		Field Sampling	Total/NA
Specific Conductance	584				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.94				NTU	1		Field Sampling	Total/NA

Client Sample Results

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

TestAmerica Job ID: 660-46976-1

Client Sample ID: TH-74 WACS #28307

Lab Sample ID: 660-46976-1

Date Collected: 04/05/12 10:37
Date Received: 04/05/12 14:20

Matrix: 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		04/09/12 11:54	04/10/12 09:18	1
Iron	40000		200	50	ug/L		04/09/12 11:54	04/10/12 09:18	1
Sodium	24		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:18	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.0	2.0	mg/L			04/18/12 10:54	10
Ammonia as N	2.8		0.020	0.010	mg/L			04/06/12 15:30	1
Total Dissolved Solids	270		10	10	mg/L			04/10/12 15:02	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.13				SU			04/05/12 10:37	1
Field Temperature	21.74				Degrees C			04/05/12 10:37	1
Oxygen, Dissolved	0.79				mg/L			04/05/12 10:37	1
Specific Conductance	592				umhos/cm			04/05/12 10:37	1
Turbidity	13.70				NTU			04/05/12 10:37	1

Client Sample Results

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

TestAmerica Job ID: 660-46976-1

Client Sample ID: TH-75 WACS #28308

Lab Sample ID: 660-46976-2

Date Collected: 04/05/12 11:01
Date Received: 04/05/12 14:20

Matrix: Water

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3	I	10	4.0	ug/L		04/09/12 11:54	04/10/12 09:21	1
Iron	16000		200	50	ug/L		04/09/12 11:54	04/10/12 09:21	1
Sodium	26		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:21	1

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		5.0	2.0	mg/L			04/18/12 11:10	10
Ammonia as N	1.3		0.020	0.010	mg/L			04/06/12 15:50	1
Total Dissolved Solids	300		10	10	mg/L			04/10/12 15:02	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.37				SU			04/05/12 11:01	1
Field Temperature	21.76				Degrees C			04/05/12 11:01	1
Oxygen, Dissolved	0.33				mg/L			04/05/12 11:01	1
Specific Conductance	584				umhos/cm			04/05/12 11:01	1
Turbidity	4.94				NTU			04/05/12 11:01	1

QC Sample Results

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

TestAmerica Job ID: 660-46976-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-123111/1-A
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		04/09/12 11:54	04/10/12 08:27	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:27	1
Sodium	0.31	U	0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:27	1

Lab Sample ID: LCS 660-123111/2-A
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1040		ug/L		104	75 - 125
Iron	1000	1020		ug/L		102	75 - 125
Sodium	10.0	9.78		mg/L		98	75 - 125

Lab Sample ID: 660-46975-B-2-B MS
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.0	U	1000	1040		ug/L		104	75 - 125
Iron	50	U	1000	1020		ug/L		102	75 - 125
Sodium	17		10.0	26.6		mg/L		100	75 - 125

Lab Sample ID: 660-46975-B-2-C MSD
Matrix: Water
Analysis Batch: 123151

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 123111

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.0	U	1000	1040		ug/L		104	75 - 125	0	20
Iron	50	U	1000	1040		ug/L		104	75 - 125	1	20
Sodium	17		10.0	26.5		mg/L		100	75 - 125	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-123428/3
Matrix: Water
Analysis Batch: 123428

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			04/17/12 22:03	1

Lab Sample ID: LCS 660-123428/4
Matrix: Water
Analysis Batch: 123428

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 660-47005-A-4 MS ^10 — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123428

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	81		100	179		mg/L		98	90 - 110

Lab Sample ID: 660-47005-A-4 MSD ^10 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123428

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	81		100	189		mg/L		108	90 - 110	5.33	30

Lab Sample ID: MB 660-123465/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			04/18/12 09:06	1

Lab Sample ID: LCS 660-123465/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: 660-46976-2 MS — **Client Sample ID: TH-75 WACS #28308**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	130		100	236		mg/L		104	90 - 110

Lab Sample ID: 660-46976-2 MSD — **Client Sample ID: TH-75 WACS #28308**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123465

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	130		100	236		mg/L		104	90 - 110	0.000	30

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 660-123071/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 123071

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			04/06/12 15:17	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 660-123071/4
Matrix: Water
Analysis Batch: 123071

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	0.503		mg/L		101	90 - 110

Lab Sample ID: 660-46965-A-3 MS
Matrix: Water
Analysis Batch: 123071

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	0.024	J3	1.00	0.917	J3	mg/L		89	90 - 110

Lab Sample ID: 660-46965-A-3 MSD
Matrix: Water
Analysis Batch: 123071

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	0.024	J3	1.00	1.03		mg/L		101	90 - 110	12	30

Lab Sample ID: 660-46975-C-2 MS
Matrix: Water
Analysis Batch: 123071

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	0.30		1.00	1.25		mg/L		95	90 - 110

Lab Sample ID: 660-46975-C-2 MSD
Matrix: Water
Analysis Batch: 123071

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	0.30		1.00	1.26		mg/L		96	90 - 110	1	30

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

Lab Sample ID: MB 660-123163/1
Matrix: Water
Analysis Batch: 123163

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			04/10/12 14:56	1

Lab Sample ID: LCS 660-123163/2
Matrix: Water
Analysis Batch: 123163

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	9900		mg/L		99	80 - 120

QC Sample Results

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

TestAmerica Job ID: 660-46976-1

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

Lab Sample ID: 660-46975-A-2 DU
Matrix: Water
Analysis Batch: 123163

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	160			160		mg/L				2	20

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QC Association Summary

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

TestAmerica Job ID: 660-46976-1

Metals

Prep Batch: 123111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-B-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-46975-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-46976-1	TH-74 WACS #28307	Total Recoverable	Water	3005A	
660-46976-2	TH-75 WACS #28308	Total Recoverable	Water	3005A	
LCS 660-123111/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-123111/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 123151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-B-2-B MS	Matrix Spike	Total Recoverable	Water	6010B	123111
660-46975-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	123111
660-46976-1	TH-74 WACS #28307	Total Recoverable	Water	6010B	123111
660-46976-2	TH-75 WACS #28308	Total Recoverable	Water	6010B	123111
LCS 660-123111/2-A	Lab Control Sample	Total Recoverable	Water	6010B	123111
MB 660-123111/1-A	Method Blank	Total Recoverable	Water	6010B	123111

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General Chemistry

Analysis Batch: 123071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46965-A-3 MS	Matrix Spike	Total/NA	Water	350.1	
660-46965-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-46975-C-2 MS	Matrix Spike	Total/NA	Water	350.1	
660-46975-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-46976-1	TH-74 WACS #28307	Total/NA	Water	350.1	
660-46976-2	TH-75 WACS #28308	Total/NA	Water	350.1	
LCS 660-123071/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-123071/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 123163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	
660-46976-1	TH-74 WACS #28307	Total/NA	Water	SM 2540C	
660-46976-2	TH-75 WACS #28308	Total/NA	Water	SM 2540C	
LCS 660-123163/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-123163/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 123428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47005-A-4 MS ^10	Matrix Spike	Total/NA	Water	300.0	
660-47005-A-4 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 660-123428/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123428/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 123465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46976-1	TH-74 WACS #28307	Total/NA	Water	300.0	
660-46976-2	TH-75 WACS #28308	Total/NA	Water	300.0	
660-46976-2 MS	TH-75 WACS #28308	Total/NA	Water	300.0	
660-46976-2 MSD	TH-75 WACS #28308	Total/NA	Water	300.0	
LCS 660-123465/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123465/3	Method Blank	Total/NA	Water	300.0	

QC Association Summary

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

TestAmerica Job ID: 660-46976-1

Field Service / Mobile Lab

Analysis Batch: 123094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46976-1	TH-74 WACS #28307	Total/NA	Water	Field Sampling	
660-46976-2	TH-75 WACS #28308	Total/NA	Water	Field Sampling	

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Lab Chronicle

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

TestAmerica Job ID: 660-46976-1

Client Sample ID: TH-74 WACS #28307

Lab Sample ID: 660-46976-1

Date Collected: 04/05/12 10:37
Matrix: Water
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 09:18	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:30	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 15:02	TO	TAL TAM
Total/NA	Analysis	300.0		10	123465	04/18/12 10:54	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/05/12 10:37		TAL TAM

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Client Sample ID: TH-75 WACS #28308

Lab Sample ID: 660-46976-2

Date Collected: 04/05/12 11:01
Matrix: Water
Date Received: 04/05/12 14:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 09:21	GF	TAL TAM
Total/NA	Analysis	350.1		1	123071	04/06/12 15:50	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	123163	04/10/12 15:02	TO	TAL TAM
Total/NA	Analysis	300.0		10	123465	04/18/12 11:10	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/05/12 11:01		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: 660-46976-1

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: 660-46976-1

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: 660-46976-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-46976-1	TH-74 WACS #28307	Water	04/05/12 10:37	04/05/12 14:20
660-46976-2	TH-75 WACS #28308	Water	04/05/12 11:01	04/05/12 14:20

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660-46976

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McNulty REP. OF CONTRACT LAB. 3/26/12 1:00

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 4. .12 | 2:00

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: 10.51 Ft.
LENGTH OF WATER COL: 6.49 Ft.
VOLUME TO PURGE: 1.04 Gal.

	DATE	TIME
PURGE STARTED:	4.5.12	10:24
PURGE RATE:	0.15 GPM.	
PURGE ENDED:	4.5.12	10:37
ACT. VOL. PURGED:	1.65 GAL.	
Draw Down:	11.25	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10.33	21.78	593	5.08	1.04	6.84 =
AB JC	10.35	21.75	593	5.10	0.77	11.50
AB JC	10.37	21.74	592	5.13	0.79	13.70

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.5.12 | 10:37

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. 4.5.12 | 2:20
ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 4.5.12 | 2:20

COMMENT'S: WO # 0058

3.5°C
CW07

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4/20/2012

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

PRECLEANED SAMPLE CONTAINERS: DATE | TIME

RELINQUISHED BY: Carol McMultry REP. OF CONTRACT LAB. 3/26/12 | 1000

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.29.12 | 2:00

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: 8.14 Ft.
LENGTH OF WATER COL: 8.86 Ft.
VOLUME TO PURGE: 1.41 Gal.

	DATE	TIME
PURGE STARTED:	4.5.12	10:48
PURGE RATE:	0.15 GPM.	
PURGE ENDED:	4.5.12	11:01
ACT. VOL. PURGED:	1.95 GAL.	
Draw Down:	8.42	

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:57	21.74	584	5.35	0.34	4.62 =
AB JC	10:59	21.75	585	5.34	0.31	4.87
AB JC	11:01	21.74	584	5.37	0.33	4.94

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	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
4.5.12 | 11:01

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:
RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 4.5.12 2:20
ACCEPTED BY: [signature] REP. OF CONTRACT LAB. 4.5.12 2:20

COMMENT`S: WO # 0058

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Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46976-1

Login Number: 46976
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	3.5 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	

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