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April 5, 2012

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

**RE: Southeast County Landfill
Laboratory Analytical Results
Initial Assessment Monitoring Plan
Report No. 19**

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 March 7-9, 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 4.58 to 5.94 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 was able to obtain a representative groundwater sample from piezometer/monitoring well P-18S as the turbidity value was recorded at 20.1 Nephelometric Turbidity Units (NTU).

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. During this monthly sampling event, the conductivity in TH-58 was 992 uhmos/cm. Conductivity in TH-58 continues to be observed higher than background values.

The conductivity value observed in the surficial aquifer groundwater monitoring well TH-73 was 312 uhmos/cm, which is consistent with the February results. 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 575 uhmos/cm, which is consistent with the data set collected since the installation in January 2011.

Total Dissolved Solids (TDS)

Surficial aquifer groundwater monitoring well TH-58 exhibited a TDS concentration of 420 mg/l, which is below the SDWS of 500 mg/l. Several wells exhibited noticeable decreases in TDS values, specifically TH-58 and the two new wells TH-74 and TH-75. The County will continue to closely observe and evaluate TDS values in the surficial aquifer.

Chloride

Surficial aquifer groundwater monitoring wells TH-58 exhibited a chloride concentration of 160 which is below the SDWS of 250 mg/l and unchanged from the February analysis. Chloride values remain stable and below standards in the wells tested.

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 well over ten years. Although significant changes in water quality have recently been observed in TH-58, the arsenic values have continued to remain very stable. This observation continues to support the position that the arsenic is 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

Iron concentrations in seven (7) surficial aquifer wells and one (1) upper Floridan well were observed above the SDWS of 0.3 mg/l. The concentrations of iron ranged from below the detectable limits to 38 mg/l. As previously discussed, the elevated iron concentrations observed in the surficial aquifer wells at specific locations across the site are likely naturally occurring and/or the result of past strip mining activities. The iron value observed in TH-42 at 0.4 mg/l is likely naturally occurring in the weathered limestone and clayey strata within the screened interval of this well.

Total Ammonia

Ammonia concentrations observed in all wells sampled were 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 March 2012 sampling event continues to indicate the wells closest to the sinkhole have exhibited changes in conductivity, total dissolved solids, and chloride. However, there appears to be a trend of improving water quality in the vicinity of the sinkhole as conductivity, TDS and ammonia nitrogen values have decreased over the past few sampling events. Overall, water quality has improved significantly in the wells previously exhibiting impact thought to be attributable to the sinkhole or grouting activities.

Mr. John Morris, P.G.
April 5, 2012
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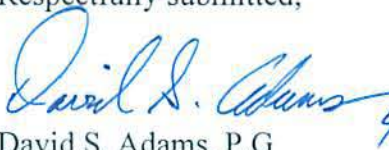
The deeper upper Floridan aquifer monitoring wells continue to exhibit good water quality. The two on-site supply wells continue to exhibit good water quality and no changes have been observed over the period of record.

Recommendations

Based on the past year of monthly IAMP sampling and the significant overall improvement in water quality observed, the County continues to recommend that 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 permit required quarterly sampling currently performed at the site. The County is currently compiling the IAMP data set, preparing the supporting information, and intends to submit a formal request to the Department for consideration within the next month.

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,

 4/5/2012

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



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Patricia Berry, Public Utilities Department
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Hillsborough County Southeast Landfill
Laboratory Analytical Results from Groundwater Monitoring and On-Site Supply Wells
March 7-9, 2012

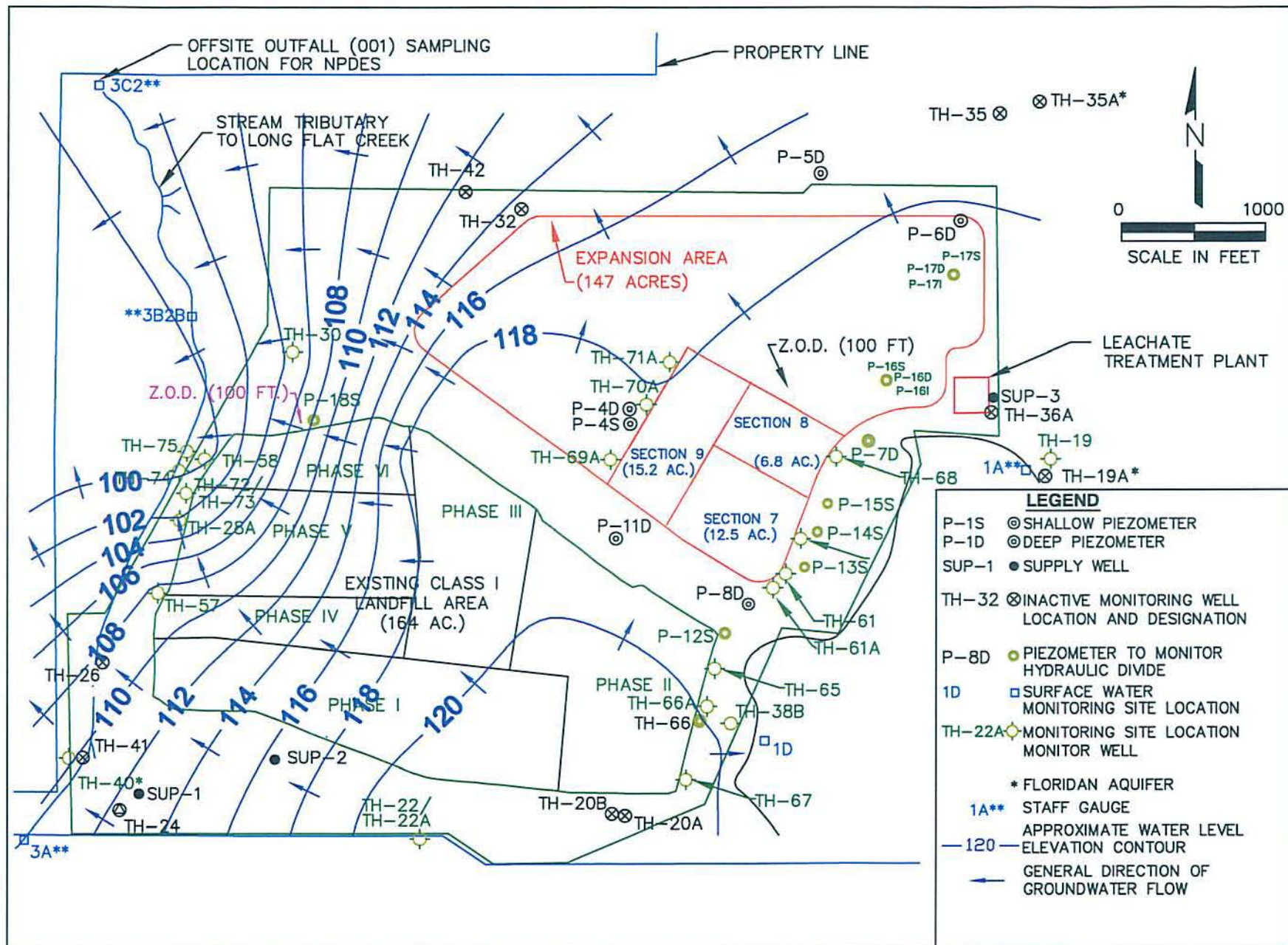
GENERAL (mg/l)	Surficial Aquifer Wells								Upper Floridan Aquifer Wells						(MCL) STANDARD
PARAMETERS	P-18S	TH-28A	TH-30	TH-57	TH-58	TH-73	TH-74	TH-75	TH-19	TH-40	TH-42	TH-72	SUP-1	SUP-2	F.A.C. 62-550
conductivity (umhos/cm) (field)	181	299	375	148	992	312	618	495	413	381	521	575	362	373	NS
dissolved oxygen (mg/l) (field)	0.3	0.79	0.21	0.53	2.01	1.08	0.53	0.26	0.84	1.09	0.17	0.27	0.05	0.04	NS
pH (field)	4.88	5.24	4.58	5.11	5.94	5.22	5.24	5.39	7.25	7.56	7.15	7.15	7.34	7.42	(6.5 - 8.5)**
temperature (°C) (field)	26.58	26.34	23.79	25.80	25.10	25.24	21.57	21.50	23.35	23.40	23.83	23.23	24.53	24.85	NS
turbidity (NTU) (field)	20.1	5.1	1	0.3	3.6	3.3	8.7	19.6	0.4	0.5	12.4	0.5	0	0.1	NS
total dissolved solids (mg/l)	110	190	170	84	420	150	210	220	210	160	260	310	190	190	500**
chloride (mg/l)	26	59	99	30	160	56	120	79	8.1	8.5	18	25	9.8	11	250**
ammonia nitrogen (mg/l as N)	0.6 v	1.5	1	0.63	0.42	1.2	2.3	0.96	0.19	0.23	0.13	0.22	0.074	0.089	2.8***
Metals: (mg/l)	P-18S	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	(MCL) STANDARD F.A.C. 62-550
arsenic	0.004 u	0.004 u	0.004 u	0.004 u	0.026	0.004 u	0.004 u	0.0079 i	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.01*
iron	2.6	3.5	0.31	0.3	2.8	4.7	38	13	0.05 u	0.05 u	0.40	0.11 i	0.05 u	0.05 u	0.3**
sodium	9.3	23	26	11	45	22	22	22	14	17	16	31	8.5	8.2	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															
4.88															
ug/l=MICROGRAMS PER LITER															
mg/l=MILLIGRAMS PER LITER															
NS=NO STANDARD															

GROUNDWATER AND SURFACE WATER ELEVATIONS FOR

SOUTHEAST LANDFILL

March 7, 2012

Measuring Point I.D.	T.O.C. Elevations (NGVD)	03/07/2012 W.L. B.T.O.C.	W.L. (NGVD)	Time
P-4D	140.78	22.96	117.82	11:21 AM
P-4S	140.95	Dry	Dry	11:20 AM
P-5D	151.94	Dry	Dry	11:51 AM
P-6D-A	148.01	29.19	118.82	11:44 AM
P-7D	138.92	19.19	119.73	12:14 PM
P-8D	138.34	19.36	118.98	12:33 PM
P-11D	138.02	18.84	119.18	11:11 AM
P-12S	134.97	15.65	119.32	12:34 PM
P-13S	140.21	20.91	119.30	12:28 PM
P-14S	138.56	19.30	119.26	12:23 PM
P-15S	139.19	19.90	119.29	12:21 PM
P-16S	143.38	16.60	126.78	11:35 AM
P-16I	144.15	25.33	118.82	11:37 AM
P-16D	143.84	25.04	118.80	11:38 AM
P-17S	137.35	17.66	119.69	11:39 AM
P-17I	137.32	18.49	118.83	11:58 AM
P-17D	137.22	18.49	118.73	11:57 AM
P-18S	129.86	19.38	110.48	10:11 AM
P-19	133.36	15.62	117.74	11:46 AM
P-20	132.38	14.33	118.05	11:41 AM
P-21	122.79	5.10	117.69	11:27 AM
P-22	128.35	10.40	117.95	11:29 AM
P-23	143.13	24.76	118.37	11:32 AM
TH-19*	130.27	116.31	13.96	12:08 PM
TH-20A	131.86	11.29	120.57	12:47 PM
TH-20B	132.57	12.30	120.27	12:48 PM
TH-22	128.82	6.73	122.09	9:17 AM
TH-22A	129.27	7.32	121.95	9:16 AM
TH-24A	128.23	7.20	121.03	9:21 AM
TH-28A	131.10	29.15	101.95	10:32 AM
TH-30	128.88	24.28	104.62	10:22 AM
TH-32	129.90	15.51	114.39	10:08 AM
TH-35	145.98	29.51	118.47	12:02 PM
TH-36A	152.70	34.06	118.64	12:11 PM
TH-38A	130.68	11.51	119.17	12:42 PM
TH-38B	131.81	12.29	119.52	12:41 PM
TH-40*	124.99	114.22	10.77	9:33 AM
TH-41*	125.00	116.90	8.10	9:32 AM
TH-42*	116.74	88.95	27.79	10:03 AM
TH-57	128.36	20.19	108.17	9:37 AM
TH-58	127.88	28.55	99.33	10:26 AM
TH-61	138.73	18.80	119.93	12:30 PM
TH-61A	139.45	19.50	119.95	12:30 PM
TH-64	139.64	19.43	120.21	12:26 PM
TH-65	135.40	15.85	119.55	12:36 PM
TH-66	130.58	10.84	119.74	12:39 PM
TH-66A	130.66	11.10	119.56	12:38 PM
TH-67	129.51	7.46	122.05	12:44 PM
TH-68	140.01	19.61	120.40	12:16 PM
TH-69A	144.97	26.49	118.48	11:14 AM
TH-70A	146.63	27.50	119.13	11:17 AM
TH-71A	146.95	28.00	118.95	11:23 AM
TH-72	130.96	121.00	9.98	10:29 AM
TH-73	131.07	32.42	98.65	10:30 AM
TH-74	109.08	10.40	98.68	9:41 AM
TH-75	108.92	8.14	98.78	9:43 AM
SW-3A	3.0'=125.53'	Dry	Dry	9:12 AM
SW-3B2B	3.0'=97.97'	Dry	Dry	9:48 AM
SW-3C2	6.0'=92.33'	1.10	87.43	9:53 AM
Mine Cut #1	4.0'=122.14'	1.10	119.24	12:19 PM
Mine Cut #2	6.0'=123.47'	1.80	119.07	12:05 PM
Mine Cut #3	4.0'=112.27'	2.00	110.27	10:01 AM
Mine Cut #4	5.0'=97.54'	1.40	93.94	9:58 AM
NGVD = National Geodetic Vertical Datum				
T.O.C. = Top of Casing				
B.T.O.C. = Below Top of Casing				
* = Floridan Well				
ND = No Data				
W.L. = Water Level				



Southeast County Landfill
 Groundwater Elevation Contour Diagram – March 7, 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: 660-46516-1

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:

3/23/2012 2:36:57 PM

Nancy Robertson

Project Manager II

nancy.robertson@testamericainc.com

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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: 660-46516-1

3

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.
V	Indicates the analyte was detected in both the sample and the associated method blank.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☆	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 660-46516-1

Job ID: 660-46516-1

Laboratory: TestAmerica Tampa



Narrative

Job Narrative
660-46516-1

Comments

No additional comments.

Receipt

The samples were received direct from field and therefore the temperature is acceptable.

Metals

No analytical or quality issues were noted.

General Chemistry

Method 300.0: The matrix spike (MS) recovery for batch 122343 was outside control limits for chloride. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 350.1: The method blank for batch 121970 contained ammonia above the method detection limit (MDL). The associated samples contained detects for this analyte at concentrations greater than 10X the value found in the method blank; therefore, re-analysis of samples was not performed. The sample is flagged with V.

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 122196 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 122197 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria. The sample is flagged with J3.

No other analytical or quality issues were noted.

Detection Summary

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: Blank, Equipment 46516

Lab Sample ID: 660-46516-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	0.40	I	0.50	0.31	mg/L	1		6010B	Total Recovera

Client Sample ID: SUP 2 WACS# 27756

Lab Sample ID: 660-46516-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.2		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	0.089		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	7.42				SU	1		Field Sampling	Total/NA
Field Temperature	24.85				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.04				mg/L	1		Field Sampling	Total/NA
Specific Conductance	373				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.10				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-40 WACS# 822

Lab Sample ID: 660-46516-3

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	8.5		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.23		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	160		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.56				SU	1		Field Sampling	Total/NA
Field Temperature	23.40				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.09				mg/L	1		Field Sampling	Total/NA
Specific Conductance	381				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.50				NTU	1		Field Sampling	Total/NA

Client Sample ID: P-18S WACS# 27752

Lab Sample ID: 660-46516-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	2600		200	50	ug/L	1		6010B	Total Recovera
Sodium	9.3		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	26		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.60	V	0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	110		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	4.88				SU	1		Field Sampling	Total/NA
Field Temperature	26.58				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.30				mg/L	1		Field Sampling	Total/NA
Specific Conductance	181				umhos/cm	1		Field Sampling	Total/NA
Turbidity	20.1				NTU	1		Field Sampling	Total/NA

Client Sample ID: Duplicate 46516

Lab Sample ID: 660-46516-5

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	8.5		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.19	J3	0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	200		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: TH-42 WACS# 823

Lab Sample ID: 660-46516-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	400		200	50	ug/L	1		6010B	Total Recovera

Detection Summary

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-42 WACS# 823 (Continued)

Lab Sample ID: 660-46516-6

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	16		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	18		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.13		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	260		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.15				SU	1		Field Sampling	Total/NA
Field Temperature	23.83				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.17				mg/L	1		Field Sampling	Total/NA
Specific Conductance	521				umhos/cm	1		Field Sampling	Total/NA
Turbidity	12.4				NTU	1		Field Sampling	Total/NA

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Client Sample ID: TH-19 WACS# 821

Lab Sample ID: 660-46516-7

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		1.0	0.40	mg/L	2		300.0	Total/NA
Ammonia as N	0.19		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	210		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.25				SU	1		Field Sampling	Total/NA
Field Temperature	23.35				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.84				mg/L	1		Field Sampling	Total/NA
Specific Conductance	413				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.40				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-57 WACS# 1570

Lab Sample ID: 660-46516-8

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	300		200	50	ug/L	1		6010B	Total Recovera
Sodium	11		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	30		1.0	0.40	mg/L	2		300.0	Total/NA
Ammonia as N	0.63		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	84		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.11				SU	1		Field Sampling	Total/NA
Field Temperature	25.80				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.53				mg/L	1		Field Sampling	Total/NA
Specific Conductance	148				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.30				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-73 WACS# 27754

Lab Sample ID: 660-46526-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	4700		200	50	ug/L	1		6010B	Total Recovera
Sodium	22		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	56		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	1.2		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	150		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.22				SU	1		Field Sampling	Total/NA
Field Temperature	25.24				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.08				mg/L	1		Field Sampling	Total/NA
Specific Conductance	312				umhos/cm	1		Field Sampling	Total/NA
Turbidity	3.30				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-58 WACS# 1571

Lab Sample ID: 660-46526-2

Detection Summary

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-58 WACS# 1571 (Continued)

Lab Sample ID: 660-46526-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	26		10	4.0	ug/L	1		6010B	Total Recovera
Iron	2800		200	50	ug/L	1		6010B	Total Recovera
Sodium	45		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	160	J3	5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	0.42		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	420		17	17	mg/L	1		SM 2540C	Total/NA
Field pH	5.94				SU	1		Field Sampling	Total/NA
Field Temperature	25.10				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	2.01				mg/L	1		Field Sampling	Total/NA
Specific Conductance	992				umhos/cm	1		Field Sampling	Total/NA
Turbidity	3.60				NTU	1		Field Sampling	Total/NA

5

Client Sample ID: SUP 1 WACS# 27755

Lab Sample ID: 660-46526-3

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.5		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	9.8		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.074		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	7.34				SU	1		Field Sampling	Total/NA
Field Temperature	24.53				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.05				mg/L	1		Field Sampling	Total/NA
Specific Conductance	362				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-72 WACS# 27753

Lab Sample ID: 660-46526-4

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	110		200	50	ug/L	1		6010B	Total Recovera
Sodium	31		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	25		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	0.22		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	310		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.15				SU	1		Field Sampling	Total/NA
Field Temperature	23.23				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.27				mg/L	1		Field Sampling	Total/NA
Specific Conductance	575				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.50				NTU	1		Field Sampling	Total/NA

Client Sample ID: TH-30 WACS# 1065

Lab Sample ID: 660-46526-5

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	310		200	50	ug/L	1		6010B	Total Recovera
Sodium	26		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	99		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	1.0		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	4.58				SU	1		Field Sampling	Total/NA
Field Temperature	23.79				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.21				mg/L	1		Field Sampling	Total/NA
Specific Conductance	375				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.00				NTU	1		Field Sampling	Total/NA

Detection Summary

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-28A WACS# 19862

Lab Sample ID: 660-46526-6

Analyte	Result	Qualifier	PQL	MDL	Unit	DII Fac	D	Method	Prep Type
Iron	3500		200	50	ug/L	1		6010B	Total Recovera
Sodium	23		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	59		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	1.5		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	190		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.24				SU	1		Field Sampling	Total/NA
Field Temperature	26.34				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.79				mg/L	1		Field Sampling	Total/NA
Specific Conductance	299				umhos/cm	1		Field Sampling	Total/NA
Turbidity	5.10				NTU	1		Field Sampling	Total/NA

5

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: Blank, Equipment 46516

Lab Sample ID: 660-46516-1

Date Collected: 03/07/12 10:00

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:30	1
Iron	50	U	200	50	ug/L		03/13/12 09:26	03/15/12 14:30	1
Sodium	0.40	I	0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:30	1

6

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.20	U	0.50	0.20	mg/L			03/20/12 20:44	1
Ammonia as N	0.010	U	0.020	0.010	mg/L			03/15/12 21:39	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/14/12 10:30	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: SUP 2 WACS# 27756

Lab Sample ID: 660-46516-2

Date Collected: 03/08/12 12:10

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:17	1
Iron	50	U	200	50	ug/L		03/13/12 09:26	03/15/12 14:17	1
Sodium	8.2		0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:17	1

6

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50	0.20	mg/L			03/20/12 21:01	1
Ammonia as N	0.069		0.020	0.010	mg/L			03/15/12 21:40	1
Total Dissolved Solids	190		10	10	mg/L			03/14/12 10:31	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.42				SU			03/08/12 12:10	1
Field Temperature	24.85				Degrees C			03/08/12 12:10	1
Oxygen, Dissolved	0.04				mg/L			03/08/12 12:10	1
Specific Conductance	373				umhos/cm			03/08/12 12:10	1
Turbidity	0.10				NTU			03/08/12 12:10	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-40 WACS# 822

Lab Sample ID: 660-46516-3

Date Collected: 03/08/12 09:20

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:34	1
Iron	50	U	200	50	ug/L		03/13/12 09:26	03/15/12 14:34	1
Sodium	17		0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:34	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.5		0.50	0.20	mg/L			03/20/12 21:17	1
Ammonia as N	0.23		0.020	0.010	mg/L			03/15/12 21:41	1
Total Dissolved Solids	160		10	10	mg/L			03/14/12 10:32	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.56				SU			03/08/12 09:20	1
Field Temperature	23.40				Degrees C			03/08/12 09:20	1
Oxygen, Dissolved	1.09				mg/L			03/08/12 09:20	1
Specific Conductance	381				umhos/cm			03/08/12 09:20	1
Turbidity	0.50				NTU			03/08/12 09:20	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: P-18S WACS# 27752

Lab Sample ID: 660-46516-4

Date Collected: 03/07/12 10:55

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:37	1
Iron	2600		200	50	ug/L		03/13/12 09:26	03/15/12 14:37	1
Sodium	9.3		0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:37	1

6

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		0.50	0.20	mg/L			03/20/12 21:34	1
Ammonia as N	0.60	V	0.020	0.010	mg/L			03/10/12 17:55	1
Total Dissolved Solids	110		5.0	5.0	mg/L			03/14/12 10:33	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.88				SU			03/07/12 10:55	1
Field Temperature	26.58				Degrees C			03/07/12 10:55	1
Oxygen, Dissolved	0.30				mg/L			03/07/12 10:55	1
Specific Conductance	181				umhos/cm			03/07/12 10:55	1
Turbidity	20.1				NTU			03/07/12 10:55	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: Duplicate 46516

Lab Sample ID: 660-46516-5

Date Collected: 03/08/12 00:00

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:40	1
Iron	50	U	200	50	ug/L		03/13/12 09:26	03/15/12 14:40	1
Sodium	14		0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:40	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.5		0.50	0.20	mg/L			03/20/12 21:50	1
Ammonia as N	0.19	J3	0.020	0.010	mg/L			03/15/12 21:46	1
Total Dissolved Solids	200		10	10	mg/L			03/14/12 10:33	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-42 WACS# 823

Lab Sample ID: 660-46516-6

Date Collected: 03/08/12 11:11

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:44	1
Iron	400		200	50	ug/L		03/13/12 09:26	03/15/12 14:44	1
Sodium	16		0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:44	1

6

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		0.50	0.20	mg/L			03/20/12 23:13	1
Ammonia as N	0.13		0.020	0.010	mg/L			03/15/12 21:50	1
Total Dissolved Solids	260		10	10	mg/L			03/14/12 10:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.15				SU			03/08/12 11:11	1
Field Temperature	23.83				Degrees C			03/08/12 11:11	1
Oxygen, Dissolved	0.17				mg/L			03/08/12 11:11	1
Specific Conductance	521				umhos/cm			03/08/12 11:11	1
Turbidity	12.4				NTU			03/08/12 11:11	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-19 WACS# 821

Lab Sample ID: 660-46516-7

Date Collected: 03/08/12 11:37

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:47	1
Iron	50	U	200	50	ug/L		03/13/12 09:26	03/15/12 14:47	1
Sodium	14		0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:47	1

6

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.1		1.0	0.40	mg/L			03/20/12 23:29	2
Ammonia as N	0.19		0.020	0.010	mg/L			03/15/12 21:51	1
Total Dissolved Solids	210		10	10	mg/L			03/14/12 10:34	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.25				SU			03/08/12 11:37	1
Field Temperature	23.35				Degrees C			03/08/12 11:37	1
Oxygen, Dissolved	0.84				mg/L			03/08/12 11:37	1
Specific Conductance	413				umhos/cm			03/08/12 11:37	1
Turbidity	0.40				NTU			03/08/12 11:37	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-57 WACS# 1570

Lab Sample ID: 660-46516-8

Date Collected: 03/08/12 09:48

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 14:57	1
Iron	300		200	50	ug/L		03/13/12 09:26	03/15/12 14:57	1
Sodium	11		0.50	0.31	mg/L		03/13/12 09:26	03/15/12 14:57	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30		1.0	0.40	mg/L			03/20/12 23:46	2
Ammonia as N	0.63		0.020	0.010	mg/L			03/15/12 21:52	1
Total Dissolved Solids	84		5.0	5.0	mg/L			03/14/12 10:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.11				SU			03/08/12 09:48	1
Field Temperature	25.80				Degrees C			03/08/12 09:48	1
Oxygen, Dissolved	0.53				mg/L			03/08/12 09:48	1
Specific Conductance	148				umhos/cm			03/08/12 09:48	1
Turbidity	0.30				NTU			03/08/12 09:48	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-73 WACS# 27754

Lab Sample ID: 660-46526-1

Date Collected: 03/09/12 10:49

Matrix: Water

Date Received: 03/09/12 14:15

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 12:46	03/14/12 13:58	1
Iron	4700		200	50	ug/L		03/13/12 12:46	03/14/12 13:58	1
Sodium	22		0.50	0.31	mg/L		03/13/12 12:46	03/14/12 13:58	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		5.0	2.0	mg/L			03/20/12 15:31	10
Ammonia as N	1.2		0.020	0.010	mg/L			03/15/12 20:52	1
Total Dissolved Solids	150		5.0	5.0	mg/L			03/14/12 10:37	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.22				SU			03/09/12 10:49	1
Field Temperature	25.24				Degrees C			03/09/12 10:49	1
Oxygen, Dissolved	1.08				mg/L			03/09/12 10:49	1
Specific Conductance	312				umhos/cm			03/09/12 10:49	1
Turbidity	3.30				NTU			03/09/12 10:49	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-58 WACS# 1571

Lab Sample ID: 660-46526-2

Date Collected: 03/09/12 10:21

Matrix: Water

Date Received: 03/09/12 14:15

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	26		10	4.0	ug/L		03/13/12 12:46	03/14/12 14:01	1
Iron	2800		200	50	ug/L		03/13/12 12:46	03/14/12 14:01	1
Sodium	45		0.50	0.31	mg/L		03/13/12 12:46	03/14/12 14:01	1

6

General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160	J3	5.0	2.0	mg/L			03/20/12 15:47	10
Ammonia as N	0.42		0.020	0.010	mg/L			03/15/12 20:53	1
Total Dissolved Solids	420		17	17	mg/L			03/14/12 10:37	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.94				SU			03/09/12 10:21	1
Field Temperature	25.10				Degrees C			03/09/12 10:21	1
Oxygen, Dissolved	2.01				mg/L			03/09/12 10:21	1
Specific Conductance	992				umhos/cm			03/09/12 10:21	1
Turbidity	3.60				NTU			03/09/12 10:21	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: SUP 1 WACS# 27755

Lab Sample ID: 660-46526-3

Date Collected: 03/09/12 12:18

Matrix: Water

Date Received: 03/09/12 14:15

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 12:46	03/14/12 14:05	1
Iron	50	U	200	50	ug/L		03/13/12 12:46	03/14/12 14:05	1
Sodium	8.5		0.50	0.31	mg/L		03/13/12 12:46	03/14/12 14:05	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.8		0.50	0.20	mg/L			03/20/12 16:04	1
Ammonia as N	0.074		0.020	0.010	mg/L			03/15/12 20:54	1
Total Dissolved Solids	190		10	10	mg/L			03/14/12 10:38	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.34				SU			03/09/12 12:18	1
Field Temperature	24.53				Degrees C			03/09/12 12:18	1
Oxygen, Dissolved	0.05				mg/L			03/09/12 12:18	1
Specific Conductance	362				umhos/cm			03/09/12 12:18	1
Turbidity	0.00				NTU			03/09/12 12:18	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-72 WACS# 27753

Lab Sample ID: 660-46526-4

Date Collected: 03/09/12 11:21

Matrix: Water

Date Received: 03/09/12 14:15

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 12:46	03/14/12 14:08	1
Iron	110	I	200	50	ug/L		03/13/12 12:46	03/14/12 14:08	1
Sodium	31		0.50	0.31	mg/L		03/13/12 12:46	03/14/12 14:08	1

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General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		5.0	2.0	mg/L			03/20/12 16:20	10
Ammonia as N	0.22		0.020	0.010	mg/L			03/15/12 21:07	1
Total Dissolved Solids	310		10	10	mg/L			03/14/12 10:39	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.15				SU			03/09/12 11:21	1
Field Temperature	23.23				Degrees C			03/09/12 11:21	1
Oxygen, Dissolved	0.27				mg/L			03/09/12 11:21	1
Specific Conductance	575				umhos/cm			03/09/12 11:21	1
Turbidity	0.50				NTU			03/09/12 11:21	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-30 WACS# 1065

Lab Sample ID: 660-46526-5

Date Collected: 03/09/12 10:01

Matrix: Water

Date Received: 03/09/12 14:15

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 12:46	03/14/12 14:11	1
Iron	310		200	50	ug/L		03/13/12 12:46	03/14/12 14:11	1
Sodium	26		0.50	0.31	mg/L		03/13/12 12:46	03/14/12 14:11	1

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General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99		5.0	2.0	mg/L			03/20/12 16:37	10
Ammonia as N	1.0		0.020	0.010	mg/L			03/15/12 21:08	1
Total Dissolved Solids	170		10	10	mg/L			03/14/12 10:39	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.58				SU			03/09/12 10:01	1
Field Temperature	23.79				Degrees C			03/09/12 10:01	1
Oxygen, Dissolved	0.21				mg/L			03/09/12 10:01	1
Specific Conductance	375				umhos/cm			03/09/12 10:01	1
Turbidity	1.00				NTU			03/09/12 10:01	1

Client Sample Results

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-28A WACS# 19862

Lab Sample ID: 660-46526-6

Date Collected: 03/09/12 11:48

Matrix: Water

Date Received: 03/09/12 14:15

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 12:46	03/14/12 14:15	1
Iron	3500		200	50	ug/L		03/13/12 12:46	03/14/12 14:15	1
Sodium	23		0.50	0.31	mg/L		03/13/12 12:46	03/14/12 14:15	1

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General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59		5.0	2.0	mg/L			03/20/12 16:53	10
Ammonia as N	1.5		0.020	0.010	mg/L			03/15/12 21:09	1
Total Dissolved Solids	190		5.0	5.0	mg/L			03/14/12 10:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.24				SU			03/09/12 11:48	1
Field Temperature	26.34				Degrees C			03/09/12 11:48	1
Oxygen, Dissolved	0.79				mg/L			03/09/12 11:48	1
Specific Conductance	299				umhos/cm			03/09/12 11:48	1
Turbidity	5.10				NTU			03/09/12 11:48	1

QC Sample Results

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

TestAmerica Job ID: 660-46516-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-122043/1-A
Matrix: Water
Analysis Batch: 122160

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 122043

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 09:26	03/15/12 13:58	1
Iron	50	U	200	50	ug/L		03/13/12 09:26	03/15/12 13:58	1
Sodium	0.31	U	0.50	0.31	mg/L		03/13/12 09:26	03/15/12 13:58	1

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Lab Sample ID: LCS 660-122043/2-A
Matrix: Water
Analysis Batch: 122160

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 122043

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Arsenic	1000	1040		ug/L		104	75 - 125	
Iron	1000	1050		ug/L		105	75 - 125	
Sodium	10.0	10.1		mg/L		101	75 - 125	

Lab Sample ID: 660-46516-2 MS
Matrix: Water
Analysis Batch: 122160

Client Sample ID: SUP 2 WACS# 27756
Prep Type: Total Recoverable
Prep Batch: 122043

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier		Result	Qualifier				Limits	
Arsenic	4.0	U	1000	1060		ug/L		106	75 - 125	
Iron	50	U	1000	1090		ug/L		109	75 - 125	
Sodium	8.2		10.0	18.7		mg/L		105	75 - 125	

Lab Sample ID: 660-46516-2 MSD
Matrix: Water
Analysis Batch: 122160

Client Sample ID: SUP 2 WACS# 27756
Prep Type: Total Recoverable
Prep Batch: 122043

Analyte	Sample Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits			
Arsenic	4.0	U	1000	1050		ug/L		105	75 - 125		1	20
Iron	50	U	1000	1080		ug/L		108	75 - 125		1	20
Sodium	8.2		10.0	18.9		mg/L		106	75 - 125		1	20

Lab Sample ID: MB 660-122063/1-A
Matrix: Water
Analysis Batch: 122134

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 122063

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 12:46	03/14/12 13:25	1
Iron	50	U	200	50	ug/L		03/13/12 12:46	03/14/12 13:25	1
Sodium	0.31	U	0.50	0.31	mg/L		03/13/12 12:46	03/14/12 13:25	1

Lab Sample ID: LCS 660-122063/2-A
Matrix: Water
Analysis Batch: 122134

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 122063

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Arsenic	1000	1010		ug/L		101	75 - 125	
Iron	1000	1040		ug/L		104	75 - 125	
Sodium	10.0	10.1		mg/L		101	75 - 125	

QC Sample Results

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

TestAmerica Job ID: 660-46516-1

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

Lab Sample ID: 660-46519-A-1-B MS
Matrix: Water
Analysis Batch: 122134

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 122063

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier		Result	Qualifier				Limits	
Arsenic	4.0	U	1000	1040		ug/L		104	75 - 125	
Iron	280		1000	1300		ug/L		102	75 - 125	
Sodium	8.0		10.0	18.3		mg/L		103	75 - 125	

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Lab Sample ID: 660-46519-A-1-C MSD
Matrix: Water
Analysis Batch: 122134

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 122063

Analyte	Sample		Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
Arsenic	4.0	U	1000	1050		ug/L		105	75 - 125	1		20
Iron	280		1000	1320		ug/L		104	75 - 125	2		20
Sodium	8.0		10.0	18.5		mg/L		105	75 - 125	1		20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-122343/3
Matrix: Water
Analysis Batch: 122343

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

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	0.20	U	0.50	0.20	mg/L			03/20/12 10:01	1

Lab Sample ID: LCS 660-122343/4
Matrix: Water
Analysis Batch: 122343

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

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	
Chloride	10.0	10.0		mg/L		100	90 - 110	

Lab Sample ID: 660-46526-2 MS
Matrix: Water
Analysis Batch: 122343

Client Sample ID: TH-58 WACS# 1571
Prep Type: Total/NA

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	%Rec.	
	Result	Qualifier		Result	Qualifier				Limits	
Chloride	160	J3	100	271	J3	mg/L		111	90 - 110	

Lab Sample ID: 660-46526-2 MSD
Matrix: Water
Analysis Batch: 122343

Client Sample ID: TH-58 WACS# 1571
Prep Type: Total/NA

Analyte	Sample		Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
Chloride	160	J3	100	259		mg/L		99	90 - 110	5		30

Lab Sample ID: MB 660-122377/3
Matrix: Water
Analysis Batch: 122377

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

Analyte	MB MB		PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	0.20	U	0.50	0.20	mg/L			03/20/12 18:32	1

QC Sample Results

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

TestAmerica Job ID: 660-46516-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 660-122377/4
Matrix: Water
Analysis Batch: 122377

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

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

Lab Sample ID: 660-46516-6 MS
Matrix: Water
Analysis Batch: 122377

Client Sample ID: TH-42 WACS# 823
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	18		10.0	28.8		mg/L		107	90 - 110

Lab Sample ID: 660-46516-6 MSD
Matrix: Water
Analysis Batch: 122377

Client Sample ID: TH-42 WACS# 823
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	18		10.0	29.1		mg/L		110	90 - 110	1	30

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 660-121970/11
Matrix: Water
Analysis Batch: 121970

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	0.0383		0.020	0.010	mg/L			03/10/12 17:45	1

Lab Sample ID: LCS 660-121970/12
Matrix: Water
Analysis Batch: 121970

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	0.501		mg/L		100	90 - 110

Lab Sample ID: 660-46516-C-2 MS
Matrix: Water
Analysis Batch: 121970

Client Sample ID: 660-46516-C-2 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.15		1.00	1.22		mg/L		107	90 - 110

Lab Sample ID: 660-46516-C-2 MSD
Matrix: Water
Analysis Batch: 121970

Client Sample ID: 660-46516-C-2 MSD
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	0.15		1.00	1.22		mg/L		107	90 - 110	0	30

QC Sample Results

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

TestAmerica Job ID: 660-46516-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 660-122196/11
Matrix: Water
Analysis Batch: 122196

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			03/15/12 20:43	1

Lab Sample ID: LCS 660-122196/12
Matrix: Water
Analysis Batch: 122196

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

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

Lab Sample ID: 660-46509-A-1 MS
Matrix: Water
Analysis Batch: 122196

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	0.55		1.00	1.53		mg/L		98	90 - 110

Lab Sample ID: 660-46509-A-1 MSD
Matrix: Water
Analysis Batch: 122196

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	0.55		1.00	1.53		mg/L		98	90 - 110	0	30

Lab Sample ID: 660-46558-A-3 MS
Matrix: Water
Analysis Batch: 122196

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.010	U J3	1.00	0.885	J3	mg/L		89	90 - 110

Lab Sample ID: 660-46558-A-3 MSD
Matrix: Water
Analysis Batch: 122196

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.010	U J3	1.00	0.885	J3	mg/L		89	90 - 110	0	30

Lab Sample ID: MB 660-122197/3
Matrix: Water
Analysis Batch: 122197

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			03/15/12 21:27	1

Lab Sample ID: LCS 660-122197/4
Matrix: Water
Analysis Batch: 122197

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	0.516		mg/L		103	90 - 110

QC Sample Results

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

TestAmerica Job ID: 660-46516-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 660-46516-5 MS
Matrix: Water
Analysis Batch: 122197

Client Sample ID: Duplicate 46516
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.19	J3	1.00	0.941	J3	mg/L		76	90 - 110

Lab Sample ID: 660-46516-5 MSD
Matrix: Water
Analysis Batch: 122197

Client Sample ID: Duplicate 46516
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	0.19	J3	1.00	0.962	J3	mg/L		78	90 - 110	2	30

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

Lab Sample ID: MB 660-122107/1
Matrix: Water
Analysis Batch: 122107

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

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/14/12 10:28	1

Lab Sample ID: LCS 660-122107/2
Matrix: Water
Analysis Batch: 122107

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	9840		mg/L		98	80 - 120

Lab Sample ID: 660-46516-2 DU
Matrix: Water
Analysis Batch: 122107

Client Sample ID: SUP 2 WACS# 27756
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	190		176		mg/L		7	20

QC Association Summary

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

TestAmerica Job ID: 660-46516-1

Metals

Prep Batch: 122043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-1	Blank, Equipment 46516	Total Recoverable	Water	3005A	
660-46516-2	SUP 2 WACS# 27756	Total Recoverable	Water	3005A	
660-46516-2 MS	SUP 2 WACS# 27756	Total Recoverable	Water	3005A	
660-46516-2 MSD	SUP 2 WACS# 27756	Total Recoverable	Water	3005A	
660-46516-3	TH-40 WACS# 822	Total Recoverable	Water	3005A	
660-46516-4	P-18S WACS# 27752	Total Recoverable	Water	3005A	
660-46516-5	Duplicate 46516	Total Recoverable	Water	3005A	
660-46516-6	TH-42 WACS# 823	Total Recoverable	Water	3005A	
660-46516-7	TH-19 WACS# 821	Total Recoverable	Water	3005A	
660-46516-8	TH-57 WACS# 1570	Total Recoverable	Water	3005A	
LCS 660-122043/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-122043/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 122063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46519-A-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-46519-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-46526-1	TH-73 WACS# 27754	Total Recoverable	Water	3005A	
660-46526-2	TH-58 WACS# 1571	Total Recoverable	Water	3005A	
660-46526-3	SUP 1 WACS# 27755	Total Recoverable	Water	3005A	
660-46526-4	TH-72 WACS# 27753	Total Recoverable	Water	3005A	
660-46526-5	TH-30 WACS# 1065	Total Recoverable	Water	3005A	
660-46526-6	TH-28A WACS# 19862	Total Recoverable	Water	3005A	
LCS 660-122063/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-122063/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 122134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46519-A-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	122063
660-46519-A-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	122063
660-46526-1	TH-73 WACS# 27754	Total Recoverable	Water	6010B	122063
660-46526-2	TH-58 WACS# 1571	Total Recoverable	Water	6010B	122063
660-46526-3	SUP 1 WACS# 27755	Total Recoverable	Water	6010B	122063
660-46526-4	TH-72 WACS# 27753	Total Recoverable	Water	6010B	122063
660-46526-5	TH-30 WACS# 1065	Total Recoverable	Water	6010B	122063
660-46526-6	TH-28A WACS# 19862	Total Recoverable	Water	6010B	122063
LCS 660-122063/2-A	Lab Control Sample	Total Recoverable	Water	6010B	122063
MB 660-122063/1-A	Method Blank	Total Recoverable	Water	6010B	122063

Analysis Batch: 122160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-1	Blank, Equipment 46516	Total Recoverable	Water	6010B	122043
660-46516-2	SUP 2 WACS# 27756	Total Recoverable	Water	6010B	122043
660-46516-2 MS	SUP 2 WACS# 27756	Total Recoverable	Water	6010B	122043
660-46516-2 MSD	SUP 2 WACS# 27756	Total Recoverable	Water	6010B	122043
660-46516-3	TH-40 WACS# 822	Total Recoverable	Water	6010B	122043
660-46516-4	P-18S WACS# 27752	Total Recoverable	Water	6010B	122043
660-46516-5	Duplicate 46516	Total Recoverable	Water	6010B	122043
660-46516-6	TH-42 WACS# 823	Total Recoverable	Water	6010B	122043
660-46516-7	TH-19 WACS# 821	Total Recoverable	Water	6010B	122043
660-46516-8	TH-57 WACS# 1570	Total Recoverable	Water	6010B	122043
LCS 660-122043/2-A	Lab Control Sample	Total Recoverable	Water	6010B	122043

QC Association Summary

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

TestAmerica Job ID: 660-46516-1

Metals (Continued)

Analysis Batch: 122160 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-122043/1-A	Method Blank	Total Recoverable	Water	6010B	122043

General Chemistry

Analysis Batch: 121970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-4	P-18S WACS# 27752	Total/NA	Water	350.1	
660-46516-C-2 MS	660-46516-C-2 MS	Total/NA	Water	350.1	
660-46516-C-2 MSD	660-46516-C-2 MSD	Total/NA	Water	350.1	
LCS 660-121970/12	Lab Control Sample	Total/NA	Water	350.1	
MB 660-121970/11	Method Blank	Total/NA	Water	350.1	

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Analysis Batch: 122107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-1	Blank, Equipment 46516	Total/NA	Water	SM 2540C	
660-46516-2	SUP 2 WACS# 27756	Total/NA	Water	SM 2540C	
660-46516-2 DU	SUP 2 WACS# 27756	Total/NA	Water	SM 2540C	
660-46516-3	TH-40 WACS# 822	Total/NA	Water	SM 2540C	
660-46516-4	P-18S WACS# 27752	Total/NA	Water	SM 2540C	
660-46516-5	Duplicate 46516	Total/NA	Water	SM 2540C	
660-46516-6	TH-42 WACS# 823	Total/NA	Water	SM 2540C	
660-46516-7	TH-19 WACS# 821	Total/NA	Water	SM 2540C	
660-46516-8	TH-57 WACS# 1570	Total/NA	Water	SM 2540C	
660-46526-1	TH-73 WACS# 27754	Total/NA	Water	SM 2540C	
660-46526-2	TH-58 WACS# 1571	Total/NA	Water	SM 2540C	
660-46526-3	SUP 1 WACS# 27755	Total/NA	Water	SM 2540C	
660-46526-4	TH-72 WACS# 27753	Total/NA	Water	SM 2540C	
660-46526-5	TH-30 WACS# 1065	Total/NA	Water	SM 2540C	
660-46526-6	TH-28A WACS# 19862	Total/NA	Water	SM 2540C	
LCS 660-122107/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-122107/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 122196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46509-A-1 MS	Matrix Spike	Total/NA	Water	350.1	
660-46509-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-46526-1	TH-73 WACS# 27754	Total/NA	Water	350.1	
660-46526-2	TH-58 WACS# 1571	Total/NA	Water	350.1	
660-46526-3	SUP 1 WACS# 27755	Total/NA	Water	350.1	
660-46526-4	TH-72 WACS# 27753	Total/NA	Water	350.1	
660-46526-5	TH-30 WACS# 1065	Total/NA	Water	350.1	
660-46526-6	TH-28A WACS# 19862	Total/NA	Water	350.1	
660-46558-A-3 MS	Matrix Spike	Total/NA	Water	350.1	
660-46558-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
LCS 660-122196/12	Lab Control Sample	Total/NA	Water	350.1	
MB 660-122196/11	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 122197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-1	Blank, Equipment 46516	Total/NA	Water	350.1	
660-46516-2	SUP 2 WACS# 27756	Total/NA	Water	350.1	
660-46516-3	TH-40 WACS# 822	Total/NA	Water	350.1	

QC Association Summary

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

TestAmerica Job ID: 660-46516-1

General Chemistry (Continued)

Analysis Batch: 122197 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-5	Duplicate 46516	Total/NA	Water	350.1	
660-46516-5 MS	Duplicate 46516	Total/NA	Water	350.1	
660-46516-5 MSD	Duplicate 46516	Total/NA	Water	350.1	
660-46516-6	TH-42 WACS# 823	Total/NA	Water	350.1	
660-46516-7	TH-19 WACS# 821	Total/NA	Water	350.1	
660-46516-8	TH-57 WACS# 1570	Total/NA	Water	350.1	
LCS 660-122197/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-122197/3	Method Blank	Total/NA	Water	350.1	

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Analysis Batch: 122343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46526-1	TH-73 WACS# 27754	Total/NA	Water	300.0	
660-46526-2	TH-58 WACS# 1571	Total/NA	Water	300.0	
660-46526-2 MS	TH-58 WACS# 1571	Total/NA	Water	300.0	
660-46526-2 MSD	TH-58 WACS# 1571	Total/NA	Water	300.0	
660-46526-3	SUP 1 WACS# 27755	Total/NA	Water	300.0	
660-46526-4	TH-72 WACS# 27753	Total/NA	Water	300.0	
660-46526-5	TH-30 WACS# 1065	Total/NA	Water	300.0	
660-46526-6	TH-28A WACS# 19862	Total/NA	Water	300.0	
LCS 660-122343/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-122343/3	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 122377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-1	Blank, Equipment 46516	Total/NA	Water	300.0	
660-46516-2	SUP 2 WACS# 27756	Total/NA	Water	300.0	
660-46516-3	TH-40 WACS# 822	Total/NA	Water	300.0	
660-46516-4	P-18S WACS# 27752	Total/NA	Water	300.0	
660-46516-5	Duplicate 46516	Total/NA	Water	300.0	
660-46516-6	TH-42 WACS# 823	Total/NA	Water	300.0	
660-46516-6 MS	TH-42 WACS# 823	Total/NA	Water	300.0	
660-46516-6 MSD	TH-42 WACS# 823	Total/NA	Water	300.0	
660-46516-7	TH-19 WACS# 821	Total/NA	Water	300.0	
660-46516-8	TH-57 WACS# 1570	Total/NA	Water	300.0	
LCS 660-122377/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-122377/3	Method Blank	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 121987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-2	SUP 2 WACS# 27756	Total/NA	Water	Field Sampling	
660-46516-3	TH-40 WACS# 822	Total/NA	Water	Field Sampling	
660-46516-4	P-18S WACS# 27752	Total/NA	Water	Field Sampling	
660-46516-6	TH-42 WACS# 823	Total/NA	Water	Field Sampling	
660-46516-7	TH-19 WACS# 821	Total/NA	Water	Field Sampling	
660-46516-8	TH-57 WACS# 1570	Total/NA	Water	Field Sampling	
660-46526-1	TH-73 WACS# 27754	Total/NA	Water	Field Sampling	
660-46526-2	TH-58 WACS# 1571	Total/NA	Water	Field Sampling	
660-46526-3	SUP 1 WACS# 27755	Total/NA	Water	Field Sampling	
660-46526-4	TH-72 WACS# 27753	Total/NA	Water	Field Sampling	
660-46526-5	TH-30 WACS# 1065	Total/NA	Water	Field Sampling	

QC Association Summary

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

TestAmerica Job ID: 660-46516-1

Field Service / Mobile Lab (Continued)

Analysis Batch: 121987 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46526-6	TH-28A WACS# 19862	Total/NA	Water	Field Sampling	



Lab Chronicle

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: Blank, Equipment 46516

Lab Sample ID: 660-46516-1

Date Collected: 03/07/12 10:00

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:30	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:30	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:39	TO	TAL TAM
Total/NA	Analysis	300.0		1	122377	03/20/12 20:44	TS	TAL TAM

Client Sample ID: SUP 2 WACS# 27756

Lab Sample ID: 660-46516-2

Date Collected: 03/08/12 12:10

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:17	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:31	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:40	TO	TAL TAM
Total/NA	Analysis	300.0		1	122377	03/20/12 21:01	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/08/12 12:10		TAL TAM

Client Sample ID: TH-40 WACS# 822

Lab Sample ID: 660-46516-3

Date Collected: 03/08/12 09:20

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:34	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:32	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:41	TO	TAL TAM
Total/NA	Analysis	300.0		1	122377	03/20/12 21:17	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/08/12 09:20		TAL TAM

Client Sample ID: P-18S WACS# 27752

Lab Sample ID: 660-46516-4

Date Collected: 03/07/12 10:55

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:37	GF	TAL TAM
Total/NA	Analysis	350.1		1	121970	03/10/12 17:55	TO	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:33	TO	TAL TAM
Total/NA	Analysis	300.0		1	122377	03/20/12 21:34	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/07/12 10:55		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: Duplicate 46516

Lab Sample ID: 660-46516-5

Date Collected: 03/08/12 00:00

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:40	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:33	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:46	TO	TAL TAM
Total/NA	Analysis	300.0		1	122377	03/20/12 21:50	TS	TAL TAM

Client Sample ID: TH-42 WACS# 823

Lab Sample ID: 660-46516-6

Date Collected: 03/08/12 11:11

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:44	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:34	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:50	TO	TAL TAM
Total/NA	Analysis	300.0		1	122377	03/20/12 23:13	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/08/12 11:11		TAL TAM

Client Sample ID: TH-19 WACS# 821

Lab Sample ID: 660-46516-7

Date Collected: 03/08/12 11:37

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:47	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:34	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:51	TO	TAL TAM
Total/NA	Analysis	300.0		2	122377	03/20/12 23:29	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/08/12 11:37		TAL TAM

Client Sample ID: TH-57 WACS# 1570

Lab Sample ID: 660-46516-8

Date Collected: 03/08/12 09:48

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122043	03/13/12 09:26	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122160	03/15/12 14:57	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:35	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:52	TO	TAL TAM
Total/NA	Analysis	300.0		2	122377	03/20/12 23:46	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/08/12 09:48		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-73 WACS# 27754

Lab Sample ID: 660-46526-1

Date Collected: 03/09/12 10:49

Matrix: Water

Date Received: 03/09/12 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122063	03/13/12 12:46	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	122134	03/14/12 13:58	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:37	TO	TAL TAM
Total/NA	Analysis	350.1		1	122196	03/15/12 20:52	TO	TAL TAM
Total/NA	Analysis	300.0		10	122343	03/20/12 15:31	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/09/12 10:49		TAL TAM

9

Client Sample ID: TH-58 WACS# 1571

Lab Sample ID: 660-46526-2

Date Collected: 03/09/12 10:21

Matrix: Water

Date Received: 03/09/12 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122063	03/13/12 12:46	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	122134	03/14/12 14:01	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:37	TO	TAL TAM
Total/NA	Analysis	350.1		1	122196	03/15/12 20:53	TO	TAL TAM
Total/NA	Analysis	300.0		10	122343	03/20/12 15:47	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/09/12 10:21		TAL TAM

Client Sample ID: SUP 1 WACS# 27755

Lab Sample ID: 660-46526-3

Date Collected: 03/09/12 12:18

Matrix: Water

Date Received: 03/09/12 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122063	03/13/12 12:46	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	122134	03/14/12 14:05	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:38	TO	TAL TAM
Total/NA	Analysis	350.1		1	122196	03/15/12 20:54	TO	TAL TAM
Total/NA	Analysis	300.0		1	122343	03/20/12 16:04	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/09/12 12:18		TAL TAM

Client Sample ID: TH-72 WACS# 27753

Lab Sample ID: 660-46526-4

Date Collected: 03/09/12 11:21

Matrix: Water

Date Received: 03/09/12 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122063	03/13/12 12:46	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	122134	03/14/12 14:08	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:39	TO	TAL TAM
Total/NA	Analysis	350.1		1	122196	03/15/12 21:07	TO	TAL TAM
Total/NA	Analysis	300.0		10	122343	03/20/12 16:20	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/09/12 11:21		TAL TAM

Lab Chronicle

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

TestAmerica Job ID: 660-46516-1

Client Sample ID: TH-30 WACS# 1065

Lab Sample ID: 660-46526-5

Date Collected: 03/09/12 10:01

Matrix: Water

Date Received: 03/09/12 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122063	03/13/12 12:46	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	122134	03/14/12 14:11	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:39	TO	TAL TAM
Total/NA	Analysis	350.1		1	122196	03/15/12 21:08	TO	TAL TAM
Total/NA	Analysis	300.0		10	122343	03/20/12 16:37	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/09/12 10:01		TAL TAM

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Client Sample ID: TH-28A WACS# 19862

Lab Sample ID: 660-46526-6

Date Collected: 03/09/12 11:48

Matrix: Water

Date Received: 03/09/12 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122063	03/13/12 12:46	SR	TAL TAM
Total Recoverable	Analysis	6010B		1	122134	03/14/12 14:15	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:40	TO	TAL TAM
Total/NA	Analysis	350.1		1	122196	03/15/12 21:09	TO	TAL TAM
Total/NA	Analysis	300.0		10	122343	03/20/12 16:53	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/09/12 11:48		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: 660-46516-1

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: 660-46516-1

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: 660-46516-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-46516-1	Blank, Equipment 46516	Water	03/07/12 10:00	03/08/12 14:17
660-46516-2	SUP 2 WACS# 27756	Water	03/08/12 12:10	03/08/12 14:17
660-46516-3	TH-40 WACS# 822	Water	03/08/12 09:20	03/08/12 14:17
660-46516-4	P-18S WACS# 27752	Water	03/07/12 10:55	03/08/12 14:17
660-46516-5	Duplicate 46516	Water	03/08/12 00:00	03/08/12 14:17
660-46516-6	TH-42 WACS# 823	Water	03/08/12 11:11	03/08/12 14:17
660-46516-7	TH-19 WACS# 821	Water	03/08/12 11:37	03/08/12 14:17
660-46516-8	TH-57 WACS# 1570	Water	03/08/12 09:48	03/08/12 14:17
660-46526-1	TH-73 WACS# 27754	Water	03/09/12 10:49	03/09/12 14:15
660-46526-2	TH-58 WACS# 1571	Water	03/09/12 10:21	03/09/12 14:15
660-46526-3	SUP 1 WACS# 27755	Water	03/09/12 12:18	03/09/12 14:15
660-46526-4	TH-72 WACS# 27753	Water	03/09/12 11:21	03/09/12 14:15
660-46526-5	TH-30 WACS# 1065	Water	03/09/12 10:01	03/09/12 14:15
660-46526-6	TH-28A WACS# 19862	Water	03/09/12 11:48	03/09/12 14:15

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660-46516

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35LOCATION: BLANK, EQUIPMENT SAMPLE MATRIX: WATER OTHER MATRIX: _____PERSONAL ENGAGED IN SAMPLE COLLECTION ☒ A. Balloon ☒ J. Clayton ☐

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

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

3.7.12 | 10:00

ANALYSIS REQUESTED: _____

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron ArsenicPRESERVED SAMPLES PH < 2.0 ☒ SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.8.12 | 2:17ACCEPTED BY: Carol McNeilly REP. OF CONTRACT LAB. 3.8.12 | 2:17COMMENT'S: W0 # 0057

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim Clifton REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35

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 3.8.12 TIME 11:51

ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	12:04	24.74	373	7.42	0.05	0.10
AB JC	12:08	24.77	373	7.42	0.05	0.10
AB JC	12:10	24.85	373	7.42	0.04	0.10

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.8.12 | 12:10

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 Clifton REP. OF SOLID WASTE DEPT. 3.8.12 2:17

ACCEPTED BY: Michael REP. OF CONTRACT LAB. 3.8.12 2:17

COMMENT'S: WO # 0057

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim Claggett REP. OF SOLID WASTE DEPT. 3.8.12 | 1:35

LOCATION: TH-40 WACS# 822

SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION

☒ A. Balloon ☒ J. Claggett ☐ _____

WELL DIAMETER: 2.0 INCH:

TOTAL DEPTH OF WELL: 165.90 Ft.

DEPTH TO WATER: 113.47 Ft.

LENGTH OF WATER COL: 52.43 Ft.

VOLUME TO PURGE: 8.39 Gal.

PURGE STARTED:

DATE | TIME

3.8.12 | 9:08

PURGE RATE:

1.00 GPM.

PURGE ENDED:

DATE | TIME

3.8.12 | 9:20

ACT. VOL. PURGED:

12.0 GAL.

Draw Down:

113.50

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	9:14	23.41	381	7.42	1.10	0.40 =
AB JC	9:18	23.41	381	7.62	1.09	0.60
AB JC	9:20	23.40	381	7.54	1.09	0.50

13

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.8.12 | 9:20

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Jim Claggett REP. OF SOLID WASTE DEPT.

ACCEPTED BY: Carol McHugh REP. OF CONTRACT LAB.

DATE | TIME

3.8.12 | 2:17

3.8.12 | 2:17

COMMENT'S: WO # 0057

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: J. Clayton REP. OF SOLID WASTE DEPT. 3.4.12 1:35

LOCATION: P-18S WACS# 27752 SAMPLE MATRIX: WATER OTHER MATRIX: _____

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

WELL DIAMETER: 2.0 INCH:

TOTAL DEPTH OF WELL: 42.50 Ft.

DEPTH TO WATER: 19.38 Ft.

LENGTH OF WATER COL: 23.12 Ft.

VOLUME TO PURGE: 3.70 Gal.

PURGE STARTED: 3.7.12 10:37

PURGE RATE: 0.25 GPM.

PURGE ENDED: 3.7.12 10:55

ACT. VOL. PURGED: 4.75 GAL.

Draw Down: 19.78

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB Jc	10:51	20.54	180	4.91	0.34	20.8 =
AB Jc	10:53	24.57	182	4.90	0.31	21.2
AB Jc	10:55	26.58	181	4.88	0.30	20.1

13

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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
3.7.12 10:55

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: J. Clayton REP. OF SOLID WASTE DEPT. 3.8.12 2:17

ACCEPTED BY: Carol McHenry REP. OF CONTRACT LAB. 3.6.12 2:17

COMMENT'S: _____
_____ 4.7 c cu07

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: *Jim Clayton* REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35

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	
<u>1</u>	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
<u>1</u>	250 ml. PLASTIC	<u>1</u>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	<u>1</u>	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
3.8.12 | _____

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. 3.8.12 | 2:25

ACCEPTED BY: *Carol McNulty* REP. OF CONTRACT LAB. 3.8.12 | 2:25

COMMENT'S: WO # 0057

13

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____

REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim ClaytonREP. OF SOLID WASTE DEPT. 3.6.12 | 1:35LOCATION: TH-42 WACS# 823SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION

☒ A. Balloon ☒ Clayton ☐WELL DIAMETER: 2.0 INCH:TOTAL DEPTH OF WELL: 164.00 Ft.DEPTH TO WATER: 89.24 Ft.LENGTH OF WATER COL: 74.76 Ft.VOLUME TO PURGE: 11.96 Gal.PURGE STARTED: 3.8.12 | 10:50PURGE RATE: 0.70 GPM.

DATE | TIME

PURGE ENDED: 3.8.12 | 11:11ACT. VOL. PURGED: 14.70 GAL.Draw Down: 108.20

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:07	23.64	522	7.13	0.19	12.8 =
AB JC	11:09	23.83	522	7.13	0.18	13.6
AB JC	11:11	23.83	521	7.15	0.17	12.4

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.8.12 | 11:11

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:

RELINQUISHED BY: Jim ClaytonREP. OF SOLID WASTE DEPT. 3.8.12 | 4:17ACCEPTED BY: Carol McHughREP. OF CONTRACT LAB. 3.8.12 | 2:17COMMENT'S: WO # 0057HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET
SOUTHEAST LANDFILL WELL MONITORING PROGRAM

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☒ A. Balloon ☒ clayton ☐

WELL DIAMETER: 2.0 INCH:

TOTAL DEPTH OF WELL: 153.60 Ft.

DEPTH TO WATER: 116.35 Ft.

LENGTH OF WATER COL: 37.25 Ft.

VOLUME TO PURGE: 5.94 Gal.

PURGE STARTED:

PURGE RATE:

PURGE ENDED:

ACT. VOL. PURGED:

Draw Down:

DATE | TIME

3.8.12 | 11:27

1.00 GPM.

DATE | TIME

3.8.12 | 11:37

10.00 GAL.

116.46

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:33	23.21	412	7.32	0.89	0.30 =
AB JC	11:35	23.32	412	7.27	0.84	0.50
AB JC	11:37	23.35	413	7.25	0.84	0.40

13

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.8.12 | 11:37

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. 3.8.12 | 2:17

ACCEPTED BY: Carol McWhorter REP. OF CONTRACT LAB. 3.8.12 | 2:17

COMMENT'S: WO # 0057

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35

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: 20.11 Ft.

LENGTH OF WATER COL: 6.72 Ft.

VOLUME TO PURGE: 1.08 Gal.

PURGE STARTED: 3.8.12 | 9:39

PURGE RATE: 0.20 GPM.

PURGE ENDED: 3.8.12 | 9:48

ACT. VOL. PURGED: 1.80 GAL.

Draw Down: 20.45

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	9:44	25.87	145	5.15	0.58	0.40 =
AB JC	9:46	25.80	144	5.11	0.54	0.30
AB JC	9:48	25.60	148	5.11	0.53	0.30

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.8.12 | 9:48

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.8.12 | 2:17

ACCEPTED BY: Carol McHugh REP. OF CONTRACT LAB. 3.8.12 | 2:17

COMMENT'S: wo # 0057

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

660-46526

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Air Clayton REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35LOCATION: 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: 32.38 Ft.LENGTH OF WATER COL: 11.02 Ft.VOLUME TO PURGE: 1.76 Gal.PURGE STARTED: 3.9.12 | 10:38PURGE RATE: 0.25 GPM.

DATE | TIME

PURGE ENDED: 3.9.12 | 10:49ACT. VOL. PURGED: 2.75 GAL.Draw Down: 33.51

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:45	25.22	322	5.27	1.09	5.30 =
AB JC	10:47	25.24	312	5.23	1.01	4.60
AB JC	10:49	25.24	312	5.22	1.05	3.30

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.9.12 | 10:49

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron ArsenicPRESERVED SAMPLES PH < 2.0 ☒SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Air Clayton REP. OF SOLID WASTE DEPT. 3.9.12 | 2:15ACCEPTED BY: Charles Nulty REP. OF CONTRACT LAB. 3.9.12 | 2:15COMMENT'S: WO# 00577.5c CV-07Dff

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: J. Clayton REP. OF SOLID WASTE DEPT. 3.9.12 | 1:35

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: 28.50 Ft.

LENGTH OF WATER COL: 4.42 Ft.

VOLUME TO PURGE: 0.70 Gal.

PURGE STARTED: 3.9.12 10:12

PURGE RATE: 0.15 GPM.

PURGE ENDED: 3.9.12 10:21

ACT. VOL. PURGED: 1.35 GAL.

Draw Down: 28.57

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB J. Clayton	10:17	24.98	997	5.95	2.11	4.50 =
AB J. Clayton	10:19	25.09	991	5.92	2.10	4.90
AB J. Clayton	10:21	25.10	992	5.94	2.01	3.60

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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
3.9.12 | 10:21

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

RELINQUISHED BY: J. Clayton REP. OF SOLID WASTE DEPT. 3.9.12 | 2:15

ACCEPTED BY: Carol McMillan REP. OF CONTRACT LAB. 3.9.12 | 2:15

COMMENT'S: WO # 0057

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

PRECLEANED SAMPLE CONTAINERS: _____ DATE | TIME _____

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: *S. Clayton* REP. OF SOLID WASTE DEPT. 3.9.12 | 1:35

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☒ A. Balloon & S. Clayton ☐ _____

WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 3.9.12 TIME 11:59

ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	12:14	24.57	342	7.28	6.03	0.00 =
AB JC	12:16	24.58	340	7.27	6.03	0.00
AB JC	12:18	24.53	342	7.34	6.05	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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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
3.9.12 | 12:18

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES: _____ DATE | TIME _____

RELINQUISHED BY: *S. Clayton* REP. OF SOLID WASTE DEPT. 3.9.12 | 2:15

ACCEPTED BY: *Carol McMillan* REP. OF CONTRACT LAB. 3.9.12 | 2:15

COMMENT'S: WD # 0057 7.5c CV-D7 Dff

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35

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: 120.80 Ft.

LENGTH OF WATER COL: 69.20 Ft.

VOLUME TO PURGE: 11.07 Gal.

PURGE STARTED: 3.9.12 | 10:44

PURGE RATE: 0.33 GPM.

PURGE ENDED: 3.9.12 | 11:21

ACT. VOL. PURGED: 12.21 GAL.

Draw Down: 120.88

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:17	23.25	575	7.16	0.28	0.80 =
AB JC	11:19	23.24	575	7.16	0.29	0.70
AB JC	11:21	23.23	575	7.15	0.27	0.50

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.9.12 | 11:21

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.9.12 | 2:15

ACCEPTED BY: Carol McNeilly REP. OF CONTRACT LAB. 3.9.12 | 2:15

COMMENT'S: WO # 0057

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: A. Clayton REP. OF SOLID WASTE DEPT. 3.6.12 1:35

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

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

WELL DIAMETER: <u>2.00</u> INCH:			<u>DATE TIME</u>
TOTAL DEPTH OF WELL: <u>46.19</u> Ft.		PURGE STARTED:	<u>3.8.12 9:40</u>
DEPTH TO WATER: <u>25.19</u> Ft.		PURGE RATE:	<u>0.20 GPM.</u>
LENGTH OF WATER COL: <u>22.00</u> Ft.		<u>DATE TIME</u>	
VOLUME TO PURGE: <u>3.52</u> Gal.		PURGE ENDED:	<u>3.8.12 10:01</u>
		ACT. VOL. PURGED:	<u>4.20 GAL.</u>
		Draw Down:	<u>8.99 24.22</u>

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
ABJC	9:57	23.78	372	4.58	0.22	0.90 =
ABJC	9:59	23.79	374	4.58	0.22	1.40
ABJC	10:01	23.79	375	4.58	0.21	1.00

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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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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
3.8.12 10:01

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES: _____ DATE | TIME
RELINQUISHED BY: A. Clayton REP. OF SOLID WASTE DEPT. 3.8.12 2:15
ACCEPTED BY: Carol M. Maltby REP. OF CONTRACT LAB. 3.8.12 2:15

COMMENT'S: wo # 0057 H₂S odor

SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.6.12 | 1:35

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: 29.11 Ft.

LENGTH OF WATER COL: 5.19 Ft.

VOLUME TO PURGE: 0.83 Gal.

PURGE STARTED:

PURGE RATE:

PURGE ENDED:

ACT. VOL. PURGED:

Draw Down:

DATE | TIME

3.9.12 | 11:30

0.10 GPM.

DATE | TIME

3.9.12 | 11:48

1.20 GAL.

29.42

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:44	26.41	301	5.27	0.93	4.36 =
AB JC	11:46	26.41	300	5.25	0.83	4.40
AB JC	11:48	26.34	299	5.24	0.79	5.10

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.9.12 | 11:48

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Jim Clayton REP. OF SOLID WASTE DEPT. 3.9.12 | 2:15

ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 3.9.12 | 2:15

COMMENT'S: 100 # 0057

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46516-1

Login Number: 46516

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	4.7 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.	True	
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: 660-46516-1

Login Number: 46526

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	7.5 deg C Cu-07 recd direct from field
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: 660-46517-1

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:

3/23/2012 2:35:50 PM

Nancy Robertson

Project Manager II

nancy.robertson@testamericainc.com

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

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

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Definitions/Glossary

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

TestAmerica Job ID: 660-46517-1



Qualifiers

Metals

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

General Chemistry

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☆	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 660-46517-1

Job ID: 660-46517-1

Laboratory: TestAmerica Tampa

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Narrative

Job Narrative
660-46517-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

Metals

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 122030 were outside control limits for sodium with parent sample 4 times greater than spike added. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

General Chemistry

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 122377 was outside control limits for chloride. 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: 660-46517-1

Client Sample ID: TH-74 WACS# 28307

Lab Sample ID: 660-46517-1

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	38000		200	50	ug/L	1		6010B	Total Recovera
Sodium	22		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	120		2.5	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	2.3		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	210		25	25	mg/L	1		SM 2540C	Total/NA
Field pH	5.24				SU	1		Field Sampling	Total/NA
Field Temperature	21.57				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.53				mg/L	1		Field Sampling	Total/NA
Specific Conductance	618				umhos/cm	1		Field Sampling	Total/NA
Turbidity	8.7				NTU	1		Field Sampling	Total/NA

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Client Sample ID: TH-75 WACS# 28308

Lab Sample ID: 660-46517-2

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.9	I	10	4.0	ug/L	1		6010B	Total Recovera
Iron	13000		200	50	ug/L	1		6010B	Total Recovera
Sodium	22		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	79		2.5	1.0	mg/L	5		300.0	Total/NA
Ammonia as N	0.96		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	220		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.39				SU	1		Field Sampling	Total/NA
Field Temperature	21.50				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.26				mg/L	1		Field Sampling	Total/NA
Specific Conductance	495				umhos/cm	1		Field Sampling	Total/NA
Turbidity	19.6				NTU	1		Field Sampling	Total/NA

Client Sample Results

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

TestAmerica Job ID: 660-46517-1

Client Sample ID: TH-74 WACS# 28307

Lab Sample ID: 660-46517-1

Date Collected: 03/08/12 10:10

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 07:09	03/14/12 08:41	1
Iron	38000		200	50	ug/L		03/13/12 07:09	03/14/12 08:41	1
Sodium	22		0.50	0.31	mg/L		03/13/12 07:09	03/14/12 08:41	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		2.5	1.0	mg/L			03/20/12 20:11	5
Ammonia as N	2.3		0.020	0.010	mg/L			03/15/12 21:36	1
Total Dissolved Solids	210		25	25	mg/L			03/14/12 10:35	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.24				SU			03/08/12 10:10	1
Field Temperature	21.57				Degrees C			03/08/12 10:10	1
Oxygen, Dissolved	0.53				mg/L			03/08/12 10:10	1
Specific Conductance	618				umhos/cm			03/08/12 10:10	1
Turbidity	8.7				NTU			03/08/12 10:10	1

Client Sample Results

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

TestAmerica Job ID: 660-46517-1

Client Sample ID: TH-75 WACS# 28308

Lab Sample ID: 660-46517-2

Date Collected: 03/08/12 10:34

Matrix: Water

Date Received: 03/08/12 14:17

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

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.9	I	10	4.0	ug/L		03/13/12 07:09	03/14/12 08:45	1
Iron	13000		200	50	ug/L		03/13/12 07:09	03/14/12 08:45	1
Sodium	22		0.50	0.31	mg/L		03/13/12 07:09	03/14/12 08:45	1



General Chemistry

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79		2.5	1.0	mg/L			03/20/12 20:28	5
Ammonia as N	0.96		0.020	0.010	mg/L			03/15/12 21:38	1
Total Dissolved Solids	220		10	10	mg/L			03/14/12 10:36	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.39				SU			03/08/12 10:34	1
Field Temperature	21.50				Degrees C			03/08/12 10:34	1
Oxygen, Dissolved	0.26				mg/L			03/08/12 10:34	1
Specific Conductance	495				umhos/cm			03/08/12 10:34	1
Turbidity	19.6				NTU			03/08/12 10:34	1

QC Sample Results

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

TestAmerica Job ID: 660-46517-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-122030/1-A
Matrix: Water
Analysis Batch: 122108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 122030

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		03/13/12 07:09	03/14/12 07:51	1
Iron	50	U	200	50	ug/L		03/13/12 07:09	03/14/12 07:51	1
Sodium	0.31	U	0.50	0.31	mg/L		03/13/12 07:09	03/14/12 07:51	1

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Lab Sample ID: LCS 660-122030/2-A
Matrix: Water
Analysis Batch: 122108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 122030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1000	1060		ug/L		106	75 - 125
Iron	1000	1060		ug/L		106	75 - 125
Sodium	10.0	10.5		mg/L		105	75 - 125

Lab Sample ID: 660-46498-A-1-C MS
Matrix: Water
Analysis Batch: 122108

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 122030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	8.1	I	1000	1070		ug/L		106	75 - 125
Iron	1300		1000	2290		ug/L		102	75 - 125
Sodium	290	J3	10.0	298	J3	mg/L		37	75 - 125

Lab Sample ID: 660-46498-A-1-D MSD
Matrix: Water
Analysis Batch: 122108

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 122030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	8.1	I	1000	1080		ug/L		108	75 - 125	2	20
Iron	1300		1000	2330		ug/L		105	75 - 125	1	20
Sodium	290	J3	10.0	299	J3	mg/L		47	75 - 125	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-122377/3
Matrix: Water
Analysis Batch: 122377

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			03/20/12 18:32	1

Lab Sample ID: LCS 660-122377/4
Matrix: Water
Analysis Batch: 122377

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

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

QC Sample Results

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

TestAmerica Job ID: 660-46517-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 660-46508-G-1 MS ^10

Matrix: Water

Analysis Batch: 122377

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	130	J3	100	248	J3	mg/L		114	90 - 110

Lab Sample ID: 660-46508-G-1 MSD ^10

Matrix: Water

Analysis Batch: 122377

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	130	J3	100	245	J3	mg/L		111	90 - 110	1	30

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 660-122197/3

Matrix: Water

Analysis Batch: 122197

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			03/15/12 21:27	1

Lab Sample ID: LCS 660-122197/4

Matrix: Water

Analysis Batch: 122197

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	0.516		mg/L		103	90 - 110

Lab Sample ID: 660-46508-A-7 MS

Matrix: Water

Analysis Batch: 122197

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia as N	0.010	U	1.00	0.996		mg/L		100	90 - 110

Lab Sample ID: 660-46508-A-7 MSD

Matrix: Water

Analysis Batch: 122197

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ammonia as N	0.010	U	1.00	1.00		mg/L		100	90 - 110	0	30

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

Lab Sample ID: MB 660-122107/1

Matrix: Water

Analysis Batch: 122107

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/14/12 10:28	1

QC Sample Results

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

TestAmerica Job ID: 660-46517-1

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

Lab Sample ID: LCS 660-122107/2

Matrix: Water

Analysis Batch: 122107

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	9840		mg/L		98	80 - 120

Lab Sample ID: 660-46516-A-2 DU

Matrix: Water

Analysis Batch: 122107

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	190		176		mg/L		7	20

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QC Association Summary

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

TestAmerica Job ID: 660-46517-1

Metals

Prep Batch: 122030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46498-A-1-C MS	Matrix Spike	Total Recoverable	Water	3005A	
660-46498-A-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-46517-1	TH-74 WACS# 28307	Total Recoverable	Water	3005A	
660-46517-2	TH-75 WACS# 28308	Total Recoverable	Water	3005A	
LCS 660-122030/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-122030/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 122108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46498-A-1-C MS	Matrix Spike	Total Recoverable	Water	6010B	122030
660-46498-A-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	122030
660-46517-1	TH-74 WACS# 28307	Total Recoverable	Water	6010B	122030
660-46517-2	TH-75 WACS# 28308	Total Recoverable	Water	6010B	122030
LCS 660-122030/2-A	Lab Control Sample	Total Recoverable	Water	6010B	122030
MB 660-122030/1-A	Method Blank	Total Recoverable	Water	6010B	122030

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General Chemistry

Analysis Batch: 122107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46516-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	
660-46517-1	TH-74 WACS# 28307	Total/NA	Water	SM 2540C	
660-46517-2	TH-75 WACS# 28308	Total/NA	Water	SM 2540C	
LCS 660-122107/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-122107/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 122197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46508-A-7 MS	Matrix Spike	Total/NA	Water	350.1	
660-46508-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-46517-1	TH-74 WACS# 28307	Total/NA	Water	350.1	
660-46517-2	TH-75 WACS# 28308	Total/NA	Water	350.1	
LCS 660-122197/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-122197/3	Method Blank	Total/NA	Water	350.1	

Analysis Batch: 122377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46508-G-1 MS ^10	Matrix Spike	Total/NA	Water	300.0	
660-46508-G-1 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	
660-46517-1	TH-74 WACS# 28307	Total/NA	Water	300.0	
660-46517-2	TH-75 WACS# 28308	Total/NA	Water	300.0	
LCS 660-122377/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-122377/3	Method Blank	Total/NA	Water	300.0	

Field Service / Mobile Lab

Analysis Batch: 121987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46517-1	TH-74 WACS# 28307	Total/NA	Water	Field Sampling	
660-46517-2	TH-75 WACS# 28308	Total/NA	Water	Field Sampling	

Lab Chronicle

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

TestAmerica Job ID: 660-46517-1

Client Sample ID: TH-74 WACS# 28307

Lab Sample ID: 660-46517-1

Date Collected: 03/08/12 10:10

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122030	03/13/12 07:09	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122108	03/14/12 08:41	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:35	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:36	TO	TAL TAM
Total/NA	Analysis	300.0		5	122377	03/20/12 20:11	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/08/12 10:10		TAL TAM

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Client Sample ID: TH-75 WACS# 28308

Lab Sample ID: 660-46517-2

Date Collected: 03/08/12 10:34

Matrix: Water

Date Received: 03/08/12 14:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			122030	03/13/12 07:09	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	122108	03/14/12 08:45	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	122107	03/14/12 10:36	TO	TAL TAM
Total/NA	Analysis	350.1		1	122197	03/15/12 21:38	TO	TAL TAM
Total/NA	Analysis	300.0		5	122377	03/20/12 20:28	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	121987	03/08/12 10:34		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: 660-46517-1

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.

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Method Summary

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

TestAmerica Job ID: 660-46517-1

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: 660-46517-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-46517-1	TH-74 WACS# 28307	Water	03/08/12 10:10	03/08/12 14:17
660-46517-2	TH-75 WACS# 28308	Water	03/08/12 10:34	03/08/12 14:17

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660-46517

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____

REP. OF CONTRACT LAB. _____

ACCEPTED BY: Jim ClaytonREP. OF SOLID WASTE DEPT. 3.6.12 | 1:35LOCATION: TH-74 WACS# 28307SAMPLE MATRIX: WATER OTHER MATRIX: _____

PERSONAL ENGAGED IN SAMPLE COLLECTION

☒ A. Balloon ☒ Clayton ☐WELL DIAMETER: 2 INCH:TOTAL DEPTH OF WELL: 17.00 Ft.DEPTH TO WATER: 10.35 Ft.LENGTH OF WATER COL: 6.65 Ft.VOLUME TO PURGE: 1.06 Gal.

PURGE STARTED:

DATE | TIME

3.8.12 | 10:01

PURGE RATE:

0.20 GPM.

DATE | TIME

PURGE ENDED:

3.8.12 | 10:10

ACT. VOL. PURGED:

1.80 GAL.

Draw Down:

11.09FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:06	21.64	617	5.34	0.66	18.6 =
AB JC	10:08	21.62	618	5.29	0.57	11.0
AB JC	10:10	21.57	618	5.24	0.53	8.7

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.8.12 | 10:10ANALYSIS REQUESTED:AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron ArsenicPRESERVED SAMPLES PH < 2.0 ☒SAMPLE STORAGE: COOLER & ICE TO 4.0 c

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Jim ClaytonREP. OF SOLID WASTE DEPT. 3.8.12 2:17ACCEPTED BY: Caroline MullyREP. OF CONTRACT LAB. 3.8.12 2:17COMMENT'S: W0 # 00574.7c cu07

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: _____ REP. OF CONTRACT LAB. _____

ACCEPTED BY: Lin Clayton REP. OF SOLID WASTE DEPT. 3.8.12 1:35

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

PERSONAL ENGAGED IN SAMPLE COLLECTION ☒ A. Balloon ☒ Lin Clayton ☐ _____

WELL DIAMETER: 2 INCH:

TOTAL DEPTH OF WELL: 17.00 Ft.

DEPTH TO WATER: 8.10 Ft.

LENGTH OF WATER COL: 8.90 Ft.

VOLUME TO PURGE: 1.42 Gal.

PURGE STARTED: 3.8.12 10:23 DATE | TIME

PURGE RATE: 2.0 GPM.

PURGE ENDED: 3.8.12 10:34 DATE | TIME

ACT. VOL. PURGED: 2.20 GAL.

Draw Down: 8.73

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	10:30	21.51	508	5.41	0.31	22.7 =
AB JC	10:32	21.51	502	5.40	0.29	20.8
AB JC	10:34	21.50	495	5.39	0.24	19.4

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	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC	1	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

3.8.12 10:34

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Lin Clayton REP. OF SOLID WASTE DEPT. 3.8.12 2:17 DATE | TIME

ACCEPTED BY: Carla McMillan REP. OF CONTRACT LAB. 3.8.12 2:17

COMMENT'S: W.O.# 0057

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46517-1

Login Number: 46517

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	4.7 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.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

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