



BOARD OF COUNTY COMMISSIONERS

Kevin Beckner  
Victor D. Crist  
Ken Hagan  
Al Higginbotham  
Lesley "Les" Miller, Jr.  
Sandra L. Murman  
Mark Sharpe

CHIEF ADMINISTRATIVE OFFICER  
Helene Marks

CHIEF FINANCIAL ADMINISTRATOR  
Bonnie M. Wise

DEPUTY COUNTY ADMINISTRATORS  
Lucia E. Garsys  
Sharon D. Subadan

Office of the County Administrator  
Michael S. Merrill

July 7, 2011

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. 10**

Dear Mr. Morris:

The Hillsborough County Public Utilities Department (County) is pleased to provide the analytical results from the sampling events conducted as part of the continuation of the Initial Assessment Monitoring Plan (IAMP). The IAMP was developed to address any potential impacts to groundwater from the sinkhole in Phase VI of the Southeast County Landfill (SCLF), which was discovered on December 14, 2010. This report provides the analytical results from the monthly sampling event conducted at the SCLF on June 8-9, 2011. The samples were analyzed by our contracted laboratory, Test America, Inc.

Representative samples of groundwater were collected from nine (9) on-site groundwater monitoring wells and two 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 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 range in value from 4.40 to 5.76 pH units. As previously discussed, the pH values within the surficial aquifer at the site have historically been below the acceptable range, and the observed values are consistent with the historical and background water qualities at the SCLF. The pH values observed in the four (4) upper Floridan monitoring wells and the two (2) on-site supply wells were all within the acceptable range during this sampling event, and consistent with historical data..

### **Turbidity**

Turbidity values are generally low in the monitoring wells that have been part of the permit required sampling program at the SCLF. The turbidity values in P-18S and TH-42 have been elevated since they were first sampled as part of the IAMP. However, the values have been steadily declining in these two wells over the period of record. The turbidity value in P-18S could not be reduced to below 20 NTU, so the sample was collected from TH-30. The turbidity value recorded in TH-42 was 8.87 NTU, indicating that development of this unused well over the past 10 sampling events has been effective.

### **Total Dissolved Solids (TDS)**

Surficial aquifer groundwater monitoring well, TH-58, exhibited a TDS concentration of 800 mg/l, which exceeds the SDWS of 500 mg/l. Over the period of record the TDS values have been steady and consistently observed below the SDWS. The County has initiated an expanded evaluation of the water quality in TH-58, separate from the work being conducted in continuation the IAMP. All other wells are observed with comparatively low TDS values well below the SDWS.

Mr. John Morris, P.G.

July 7, 2011

Page 3

### **Chloride**

Surficial aquifer groundwater monitoring well, TH-58, also exhibited chloride at a concentration of 290 mg/l, which exceeds the SDWS of 250 mg/l. Over the period of record the chloride values have been consistently observed below the SDWS. The impacts at TH-58 appear to be localized and the County is currently evaluating the changes in water quality at this location. The chloride values in all the other wells are well below the SDWS.

### **Arsenic**

The arsenic observed in TH-58 is 0.020 mg/l, which is above the Primary Drinking Water Standard (PDWS) of 0.01 mg/l. Arsenic has been present above the PDWS in TH-58 for several years. The County has maintained the position that the arsenic is naturally occurring within the soils surrounding the well and is likely being mobilized in the anaerobic environment below the lined landfill. However, in response to discussions with the FDEP and the observed changes in other parameters, the County has initiated an evaluation of the water quality in TH-58.

### **Iron**

Iron concentrations in four (4) surficial aquifer wells and one (1) Upper Floridan aquifer well tested were observed above the SDWS of 0.3 mg/l. The concentrations of iron ranged from below the detection limit (BDL) to 14 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 or the result of past strip mining activities.

### **Conclusions**

The water quality observed in the samples collected as part of the IAMP at the Southeast County Landfill remains consistent with the historical data set for the site. To date, the water quality observations in TH-58 are not thought to be attributable to the sinkhole. However, the County is currently evaluating the historical data set and water quality trends for this well, and is working to install an additional surficial aquifer monitoring well in the down gradient direction to evaluate the lateral extent of the impacts observed in TH-58. The proposed construction details of this well shall be submitted to the FDEP for review and approval.

Mr. John Morris, P.G.  
July 7, 2011  
Page 4

### Recommendations

The County recommends continuation of the IAMP sampling program on the approved monthly schedule, and the associated evaluation of water quality in the nine monitoring wells and two supply wells. The County will report the July laboratory findings within seven (7) days after receiving the final data package from Test America.

Enclosed for your review please find a site location map depicting the on-site wells, the water quality data summary table, a groundwater elevation data table and associated contour 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 call me at (813) 272-5977, ext. 43944.

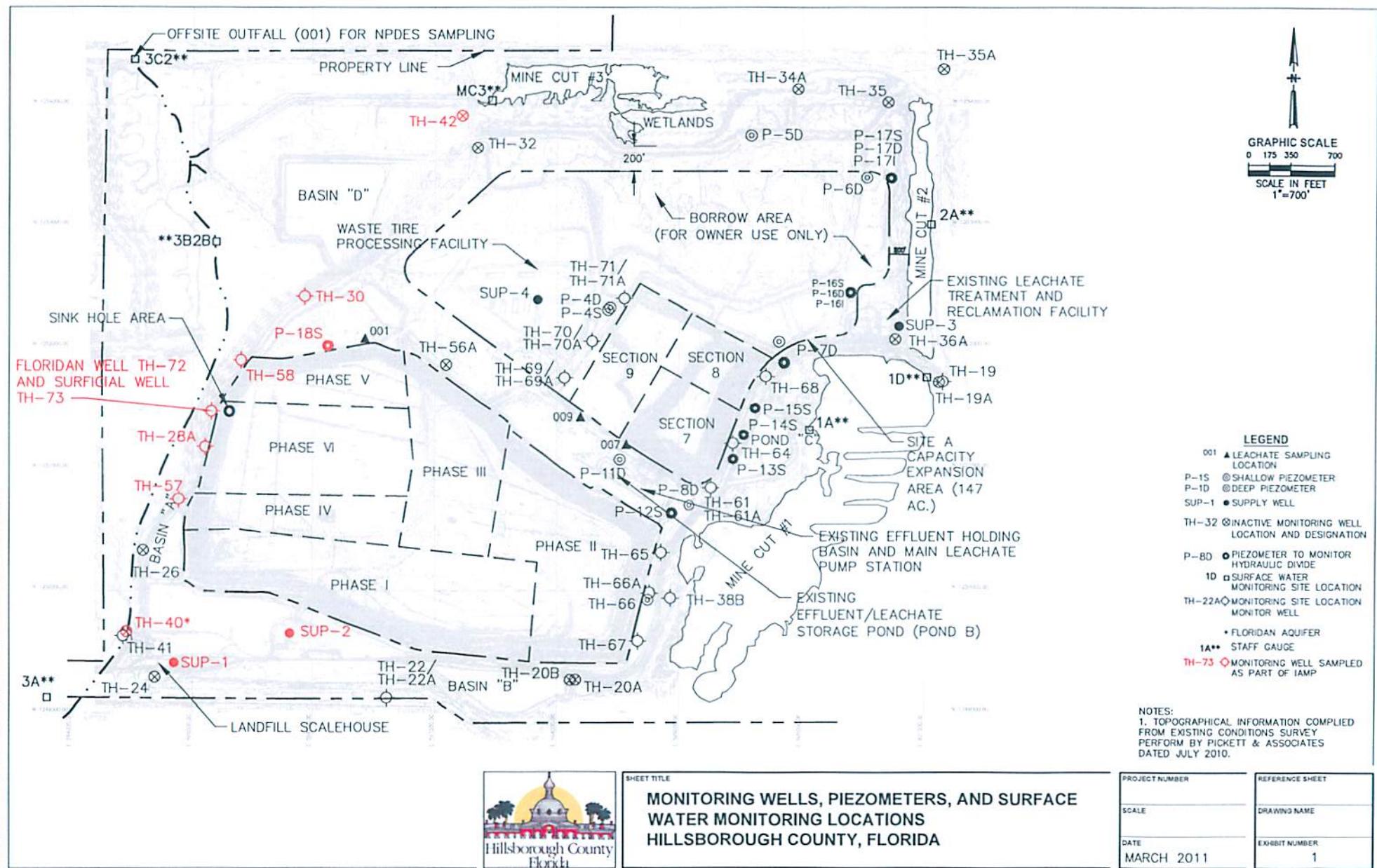
Respectfully submitted,

*David S. Adams* 7/7/2011

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



xc: Paul Vanderploog, Director, Public Utilities Department  
Patricia V. Berry, Public Utilities Department  
Pamela Greene, Public Utilities Department  
Larry Ruiz, Public Utilities Department  
Michelle Van Dyk, Public Utilities Department  
Richard Tedder, FDEP Tallahassee  
Susan Pelz, FDEP Southwest District  
Steve Morgan, FDEP, Southwest District  
Andy Schipfer, EPC  
Ernest Ely, WM  
Brian Miller, DOH  
Rich Siemering, HDR  
Joe O'Neill, Civil Design Services



**Hillsborough County Southeast Landfill**  
**Laboratory Analytical Results from Groundwater Monitoring and On-Site Supply Wells**  
**June 8-9, 2011**

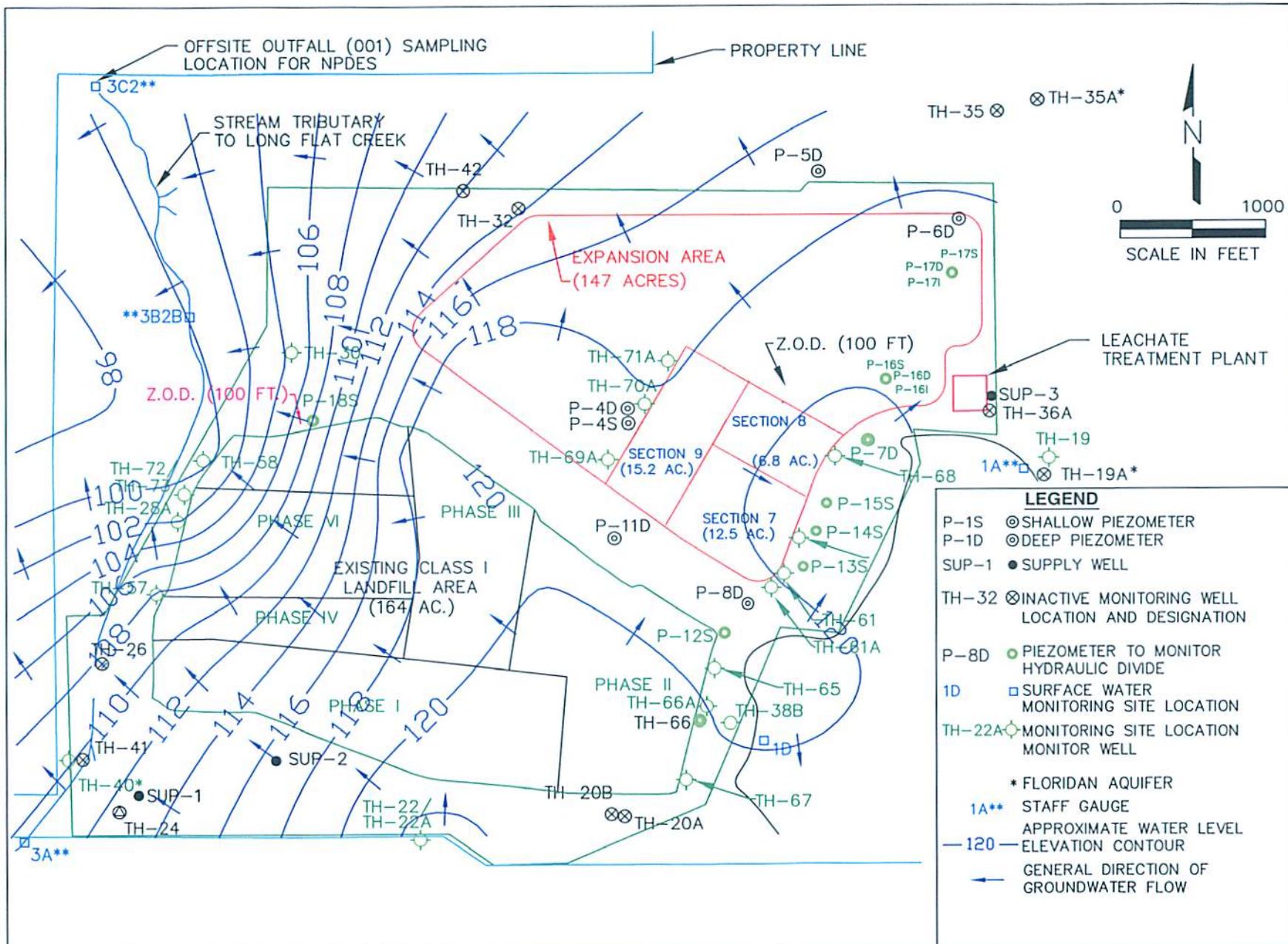
GENERAL (mg/l)	TH-19	TH-28A	TH-30	TH-40	TH-42	TH-57	TH-58	TH-72	TH-73	SUP-1	SUP-2	(MCL) STANDARD
PARAMETERS	TH-19	TH-28A	TH-30	TH-40	TH-42	TH-57	TH-58	TH-72	TH-73	SUP-1	SUP-2	F.A.C. 62-550
conductivity (umhos/cm) (field)	432	226	261	417	544	185	1210	607	391	373	381	NS
dissolved oxygen (mg/l) (field)	0.80	1.89	0.27	0.52	0.32	0.40	1.28	0.71	0.70	0.11	0.10	NS
pH (field)	7.39	5.34	4.40	7.59	7.33	5.17	5.76	7.65	5.41	7.61	7.60	(6.5 - 8.5)**
temperature (°C) (field)	23.48	26.34	23.45	23.50	23.98	25.61	26.69	23.35	25.69	24.60	24.52	NS
turbidity (NTU) (field)	0.56	9.61	3.62	0.18	8.87	3.17	10.3	4.51	14	0.35	0.43	NS
total dissolved solids (mg/l)	250	120	150	240	310	110	800	340	150	220	230	500**
chloride (mg/l)	8.4	41	64	8.4	20	39	290	32	63	9.5	11	250**
ammonia nitrogen (mg/l as N)	0.35	1.3	1.9	0.41	0.33	1.2	1.2	0.57	2.2	0.18	0.22	2.8***
Metals: (mg/l)	TH-19	TH-28A	TH-30	TH-40	TH-42	TH-57	TH-58	TH-72	TH-73	SUP-1	SUP-2	(MCL) STANDARD
arsenic	BDL	BDL	BDL	BDL	BDL	BDL	0.02	BDL	BDL	BDL	BDL	0.01*
iron	BDL	3.2	0.23	BDL	0.22	0.43	7.7	0.2	14	BDL	BDL	0.3**
sodium	14	16	20	15	15	11	63	34	27	8.4	8.6	160*
Note: Ref. Groundwater Guidance Concentrations, FDEP 2007												
MCL=MAXIMUM CONTAMINANT LEVEL												
BDL=BELOW DETECTION LIMIT												
ND=NO DATA COLLECTED												
NTU=NEPHELOMETRIC TURBIDITY UNITS												
i = reported value between the laboratory method detection limit and the laboratory practical quantitation limit												
*=DENOTES PRIMARY DRINKING WATER STANDARD												
**=DENOTES SECONDARY DRINKING WATER STANDARD												
***=DENOTES FLORIDA GUIDANCE CONCENTRATION												
5.34	EXCEEDS PRIMARY OR SECONDARY DRINKING WATER											
ug/l=MICROGRAMS PER LITER												
mg/l=MILLIGRAMS PER LITER												
NS=NO STANDARD												
( - ) indicates that the sample was not analyzed for this parameter												

## GROUNDWATER AND SURFACE WATER ELEVATIONS FOR

## SOUTHEAST LANDFILL

June 7, 2011

Measuring Point I.D.	T.O.C. Elevations (NGVD)	6/7/2011 W.L. B.T.O.C.	W.L. (NGVD)	Time
P-4D	140.78	23.07	117.71	11:23 AM
P-4S	140.95	Dry	Dry	11:22 AM
P-5D	151.94	Dry	Dry	10:42 AM
P-6D-A	148.01	28.82	119.19	10:58 AM
P-7D	138.92	18.08	120.84	10:17 AM
P-8D	138.34	19.30	119.04	9:46 AM
P-11D	138.02	18.57	119.45	9:50 AM
P-12S	134.97	15.44	119.53	9:44 AM
P-13S	140.21	20.31	119.90	9:59 AM
P-14S	138.56	18.62	119.94	10:02 AM
P-15S	139.19	19.45	119.74	10:06 AM
P-16S	143.38	16.20	127.18	10:20 AM
P-16I	144.15	25.40	118.75	10:21 AM
P-16D	143.84	25.10	118.74	10:22 AM
P-17S	137.35	16.80	120.45	10:51 AM
P-17I	137.32	18.48	118.84	10:52 AM
P-17D	137.22	18.48	118.74	10:53 AM
P-18S	129.86	19.25	110.61	11:40 AM
P-19	133.36	14.89	118.47	10:46 AM
P-20	132.38	13.96	118.42	11:02 AM
P-21	122.79	4.83	117.96	11:11 AM
P-22	128.35	10.19	118.16	11:14 AM
P-23	143.13	24.61	118.52	11:07 AM
TH-19*	130.27	113.57	18.70	10:29 AM
TH-20A	131.86	10.81	121.05	9:28 AM
TH-20B	132.57	11.76	120.81	9:27 AM
TH-22	128.82	6.19	122.63	9:20 AM
TH-22A	129.27	6.81	122.46	9:21 AM
TH-24A	128.23	6.80	121.43	9:10 AM
TH-26	125.65	Dry	Dry	12:25 PM
TH-28A	131.10	29.31	101.79	12:12 PM
TH-30	128.88	24.32	104.56	12:13 PM
TH-32	129.90	16.10	113.80	11:46 AM
TH-35	145.98	29.70	116.28	10:37 AM
TH-36A	152.70	34.45	118.25	10:24 AM
TH-38A	130.68	11.77	118.91	9:37 AM
TH-38B	131.81	12.61	119.20	9:39 AM
TH-40*	124.99	111.06	13.93	9:07 AM
TH-41*	125.00	113.45	11.55	9:06 AM
TH-42*	116.74	89.20	27.54	11:49 AM
TH-57	128.36	20.55	107.81	12:23 PM
TH-58	127.88	28.72	99.16	12:29 PM
TH-61	138.73	18.62	120.11	9:53 AM
TH-61A	139.45	19.20	120.25	9:52 AM
TH-64	139.64	18.86	120.78	10:08 AM
TH-65	135.40	15.79	119.61	9:42 AM
TH-66	130.58	10.47	120.11	9:34 AM
TH-66A	130.66	10.94	119.72	9:35 AM
TH-67	129.51	7.34	122.17	9:31 AM
TH-68	140.01	17.27	122.74	10:12 AM
TH-69A	144.97	26.60	118.37	11:28 AM
TH-70A	146.63	27.57	119.06	11:26 AM
TH-71A	146.95	27.10	119.85	11:18 AM
TH-72	130.96	119.19	11.77	12:18 PM
TH-73	131.07	32.54	98.53	12:19 PM
SW-3A	3.0'=125.53'	Dry	Dry	9:03 AM
SW-3B2B	3.0'=97.97'	Dry	Dry	12:08 PM
SW-3C2	6.0'=92.33'	Dry	Dry	12:02 PM
Mine Cut #1	4.0'=122.14'	Dry	Dry	9:55 AM
Mine Cut #2	6.0'=123.47'	0.90	118.37	10:33 AM
Mine Cut #3	4.0'=112.27'	1.40	109.67	11:51 AM
Mine Cut #4	5.0'=97.54'	1.10	93.64	11:56 AM
<b>NGVD</b> = National Geodetic Vertical Datum				
<b>T.O.C.</b> = Top of Casing				
<b>B.T.O.C.</b> = Below Top of Casing				
• = Floridan Well				
<b>ND</b> = No Data				
<b>W.L.</b> = Water Level				



# 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: 660-41703-1

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:

06/24/2011 03:06:17 PM

Nancy Robertson

Project Manager II

[nancy.robertson@testamericainc.com](mailto:nancy.robertson@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

Results relate only to the items tested and the sample(s) as received by the laboratory.  
 The test results in this report meet all 2003 NELAC requirements for accredited parameters,  
 exceptions are noted in this report. Pursuant to NELAC, 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.

## Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions/Glossary .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	9
QC Sample Results .....	22
QC Association Summary .....	28
Lab Chronicle .....	32
Certification Summary .....	36
Method Summary .....	37
Sample Summary .....	38
Chain of Custody .....	39
Receipt Checklists .....	52

## Definitions/Glossary

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

TestAmerica Job ID: 660-41703-1

### Qualifiers

#### Metals

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

#### General Chemistry

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.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

## Case Narrative

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

TestAmerica Job ID: 660-41703-1

**Job ID:** 660-41703-1

**Laboratory:** TestAmerica Tampa

**Narrative**

Job Narrative  
660-41703-1

4

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**Metals**

No analytical or quality issues were noted.

**General Chemistry**

Method 300.0: The matrix spike (MS) recovery for batch 111494 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: 660-41703-1

**Client Sample ID: Equipment Blank 41703**

**Lab Sample ID: 660-41703-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.23	I	0.50	0.20	mg/L	1	300.0		Total/NA
Ammonia as N	0.14		0.020	0.010	mg/L	1	350.1		Total/NA

**Client Sample ID: Not Blank-DUP 41703**

**Lab Sample ID: 660-41703-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	230		200	50	ug/L	1	6010B		Total Recovered
Sodium	15		0.50	0.31	mg/L	1	6010B		Total Recovered
Chloride	17		0.50	0.20	mg/L	1	300.0		Total/NA
Ammonia as N	0.35		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	320		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: TH-40 WACS #822**

**Lab Sample ID: 660-41703-3**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.59				SU	1		Field Sampling	Total/NA
Field Temperature	23.50				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.52				mg/L	1		Field Sampling	Total/NA
Specific Conductance	417				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.18				NTU	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	15		0.50	0.31	mg/L	1	6010B		Total Recovered
Chloride	8.4		0.50	0.20	mg/L	1	300.0		Total/NA
Ammonia as N	0.41		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	240		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: TH-19 WACS #821**

**Lab Sample ID: 660-41703-4**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.39				SU	1		Field Sampling	Total/NA
Field Temperature	23.48				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.80				mg/L	1		Field Sampling	Total/NA
Specific Conductance	432				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.56				NTU	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	14		0.50	0.31	mg/L	1	6010B		Total Recovered
Chloride	8.4		0.50	0.20	mg/L	1	300.0		Total/NA
Ammonia as N	0.35		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	250		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: TH-42 WACS #823**

**Lab Sample ID: 660-41703-5**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.33				SU	1		Field Sampling	Total/NA
Field Temperature	23.98				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.32				mg/L	1		Field Sampling	Total/NA
Specific Conductance	544				umhos/cm	1		Field Sampling	Total/NA
Turbidity	8.87				NTU	1		Field Sampling	Total/NA

5

## Detection Summary

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

TestAmerica Job ID: 660-41703-1

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

**Lab Sample ID: 660-41703-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	220		200	50	ug/L	1	6010B		Total Recovera
Sodium	15		0.50	0.31	mg/L	1	6010B		Total Recovera
Chloride	20		0.50	0.20	mg/L	1	300.0		Total/NA
Ammonia as N	0.33		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	310		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: TH-30 WACS #1065**

**Lab Sample ID: 660-41703-6**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	4.40				SU	1	Field Sampling		Total/NA
Field Temperature	23.45				Degrees C	1	Field Sampling		Total/NA
Oxygen, Dissolved	0.27				mg/L	1	Field Sampling		Total/NA
Specific Conductance	261				umhos/cm	1	Field Sampling		Total/NA
Turbidity	3.62				NTU	1	Field Sampling		Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	230		200	50	ug/L	1	6010B		Total Recovera
Sodium	20		0.50	0.31	mg/L	1	6010B		Total Recovera
Chloride	64		1.0	0.40	mg/L	2	300.0		Total/NA
Ammonia as N	1.9		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	150		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: TH-58 WACS #1571**

**Lab Sample ID: 660-41703-7**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	5.76				SU	1	Field Sampling		Total/NA
Field Temperature	26.69				Degrees C	1	Field Sampling		Total/NA
Oxygen, Dissolved	1.28				mg/L	1	Field Sampling		Total/NA
Specific Conductance	1210				umhos/cm	1	Field Sampling		Total/NA
Turbidity	10.30				NTU	1	Field Sampling		Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	20		10	4.0	ug/L	1	6010B		Total Recovera
Iron	7700		200	50	ug/L	1	6010B		Total Recovera
Sodium	63		0.50	0.31	mg/L	1	6010B		Total Recovera
Chloride	290		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
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	800		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: TH-72 WACS # 27753**

**Lab Sample ID: 660-41703-8**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.65				SU	1	Field Sampling		Total/NA
Field Temperature	23.35				Degrees C	1	Field Sampling		Total/NA
Oxygen, Dissolved	0.71				mg/L	1	Field Sampling		Total/NA
Specific Conductance	607				umhos/cm	1	Field Sampling		Total/NA
Turbidity	4.51				NTU	1	Field Sampling		Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	200		200	50	ug/L	1	6010B		Total Recovera
Sodium	34		0.50	0.31	mg/L	1	6010B		Total Recovera
Chloride	32		0.50	0.20	mg/L	1	300.0		Total/NA

TestAmerica Tampa

## Detection Summary

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-72 WACS # 27753 (Continued)**

**Lab Sample ID: 660-41703-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ammonia as N	0.57		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	340		5.0	5.0	mg/L	1	SM 2540C		Total/NA

5

**Client Sample ID: TH-73 WACS #27754**

**Lab Sample ID: 660-41703-9**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	5.41			SU		1	Field Sampling		Total/NA
Field Temperature	25.69			Degrees C		1	Field Sampling		Total/NA
Oxygen, Dissolved	0.70			mg/L		1	Field Sampling		Total/NA
Specific Conductance	391			umhos/cm		1	Field Sampling		Total/NA
Turbidity	14.0			NTU		1	Field Sampling		Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	14000		200	50	ug/L	1	6010B		Total Recovery
Sodium	27		0.50	0.31	mg/L	1	6010B		Total Recovery
Chloride	63		1.0	0.40	mg/L	2	300.0		Total/NA
Ammonia as N	2.2		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	150		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: TH-28A WACS# 19862**

**Lab Sample ID: 660-41735-1**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	5.34			SU		1	Field Sampling		Total/NA
Field Temperature	26.34			Degrees C		1	Field Sampling		Total/NA
Oxygen, Dissolved	1.89			mg/L		1	Field Sampling		Total/NA
Specific Conductance	226			umhos/cm		1	Field Sampling		Total/NA
Turbidity	9.61			NTU		1	Field Sampling		Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3200		200	50	ug/L	1	6010B		Total Recovery
Sodium	16		0.50	0.31	mg/L	1	6010B		Total Recovery
Chloride	41		0.50	0.20	mg/L	1	300.0		Total/NA
Ammonia as N	1.3		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	120		5.0	5.0	mg/L	1	SM 2540C		Total/NA

**Client Sample ID: SUP 1 WACS# 27755**

**Lab Sample ID: 660-41735-2**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.61			SU		1	Field Sampling		Total/NA
Field Temperature	24.60			Degrees C		1	Field Sampling		Total/NA
Oxygen, Dissolved	0.11			mg/L		1	Field Sampling		Total/NA
Specific Conductance	373			umhos/cm		1	Field Sampling		Total/NA
Turbidity	0.35			NTU		1	Field Sampling		Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.4		0.50	0.31	mg/L	1	6010B		Total Recovery
Chloride	9.5		0.50	0.20	mg/L	1	300.0		Total/NA
Ammonia as N	0.18		0.020	0.010	mg/L	1	350.1		Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	220		5.0	5.0	mg/L	1	SM 2540C		Total/NA

TestAmerica Tampa

## Detection Summary

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-57 WACS# 1570**

**Lab Sample ID: 660-41735-3**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	5.17			SU		1		Field Sampling	Total/NA
Field Temperature	25.61			Degrees C		1		Field Sampling	Total/NA
Oxygen, Dissolved	0.40			mg/L		1		Field Sampling	Total/NA
Specific Conductance	185			umhos/cm		1		Field Sampling	Total/NA
Turbidity	3.17			NTU		1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	430		200	50	ug/L	1		6010B	Total Recovera
Sodium	11		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	39		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	1.2		0.020	0.010	mg/L	1		350.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	110			5.0	5.0 mg/L	1		SM 2540C	Total/NA

**Client Sample ID: SUP 2 WACS# 27756**

**Lab Sample ID: 660-41735-4**

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.60			SU		1		Field Sampling	Total/NA
Field Temperature	24.52			Degrees C		1		Field Sampling	Total/NA
Oxygen, Dissolved	0.10			mg/L		1		Field Sampling	Total/NA
Specific Conductance	381			umhos/cm		1		Field Sampling	Total/NA
Turbidity	0.43			NTU		1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8.6		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	0.22		0.020	0.010	mg/L	1		350.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	230			5.0	5.0 mg/L	1		SM 2540C	Total/NA

5

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

Client Sample ID: Equipment Blank 41703

Date Collected: 06/08/11 09:05

Date Received: 06/08/11 14:00

Lab Sample ID: 660-41703-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L	D	06/15/11 10:38	06/16/11 09:18	1
Iron	50	U	200	50	ug/L	D	06/15/11 10:38	06/16/11 09:18	1
Sodium	0.31	U	0.50	0.31	mg/L	D	06/15/11 10:38	06/16/11 09:18	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.23	I	0.50	0.20	mg/L	D	06/20/11 15:06	1	
Ammonia as N	0.14		0.020	0.010	mg/L	D	06/16/11 19:28	1	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L	D	06/13/11 15:03	1	

6

## Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID:** Not Blank-DUP 41703

**Lab Sample ID:** 660-41703-2

Date Collected: 06/08/11 00:00

Matrix: Water

Date Received: 06/08/11 14:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 09:07	1
Iron	230		200	50	ug/L		06/15/11 10:38	06/16/11 09:07	1
Sodium	16		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:07	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		0.50	0.20	mg/L		06/20/11 15:33		1
Ammonia as N	0.35		0.020	0.010	mg/L		06/16/11 19:25		1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	320		5.0	5.0	mg/L		06/13/11 15:03		1

6

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-40 WACS #822**

**Lab Sample ID: 660-41703-3**

Date Collected: 06/08/11 09:21

Matrix: Water

Date Received: 06/08/11 14:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 09:22	1
Iron	50	U	200	50	ug/L		06/15/11 10:38	06/16/11 09:22	1
Sodium	16		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:22	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.4		0.50	0.20	mg/L		06/20/11 16:00		1
Ammonia as N	0.41		0.020	0.010	mg/L			06/16/11 19:31	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	240		5.0	5.0	mg/L		06/13/11 15:04		1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.59				SU		06/08/11 09:21		1
Field Temperature	23.50				Degrees C		06/08/11 09:21		1
Oxygen, Dissolved	0.52				mg/L		06/08/11 09:21		1
Specific Conductance	417				umhos/cm		06/08/11 09:21		1
Turbidity	0.18				NTU		06/08/11 09:21		1

6

## Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-19 WACS #821**

**Lab Sample ID: 660-41703-4**

Date Collected: 06/08/11 09:54

Matrix: Water

Date Received: 06/08/11 14:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 09:25	1
Iron	50	U	200	50	ug/L		06/15/11 10:38	06/16/11 09:25	1
Sodium	14		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:25	1

6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.4		0.50	0.20	mg/L		06/20/11 16:27		1
Ammonia as N	0.35		0.020	0.010	mg/L		06/16/11 19:30		1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	250		5.0	5.0	mg/L		06/15/11 15:45		1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.39				SU		06/08/11 09:54		1
Field Temperature	23.48				Degrees C		06/08/11 09:54		1
Oxygen, Dissolved	0.80				mg/L		06/08/11 09:54		1
Specific Conductance	432				umhos/cm		06/08/11 09:54		1
Turbidity	0.56				NTU		06/08/11 09:54		1

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-42 WACS #823**

**Lab Sample ID: 660-41703-5**

Date Collected: 06/08/11 10:41

Matrix: Water

Date Received: 06/08/11 14:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 09:34	1
Iron	220		200	50	ug/L		06/15/11 10:38	06/16/11 09:34	1
Sodium	15		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:34	1

6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		0.50	0.20	mg/L		06/20/11 16:53		1
Ammonia as N	0.33		0.020	0.010	mg/L		06/16/11 19:32		1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	310		5.0	5.0	mg/L		06/15/11 15:46		1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.33				SU		06/08/11 10:41		1
Field Temperature	23.98				Degrees C		06/08/11 10:41		1
Oxygen, Dissolved	0.32				mg/L		06/08/11 10:41		1
Specific Conductance	544				umhos/cm		06/08/11 10:41		1
Turbidity	8.87				NTU		06/08/11 10:41		1

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID:** TH-30 WACS #1065

**Lab Sample ID:** 660-41703-6

Date Collected: 06/08/11 11:06

Matrix: Water

Date Received: 06/08/11 14:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 09:37	1
Iron	230		200	50	ug/L		06/15/11 10:38	06/16/11 09:37	1
Sodium	20		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:37	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64		1.0	0.40	mg/L		06/22/11 03:26		2
Ammonia as N	1.9		0.020	0.010	mg/L		06/16/11 19:33		1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		5.0	5.0	mg/L		06/15/11 15:46		1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.40				SU		06/08/11 11:06		1
Field Temperature	23.45				Degrees C		06/08/11 11:06		1
Oxygen, Dissolved	0.27				mg/L		06/08/11 11:06		1
Specific Conductance	261				umhos/cm		06/08/11 11:06		1
Turbidity	3.62				NTU		06/08/11 11:06		1

## Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-58 WACS #1571**

Date Collected: 06/08/11 11:35

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-7**

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	20		10	4.0	ug/L		06/15/11 10:38	06/16/11 09:40	1
Iron	7700		200	50	ug/L		06/15/11 10:38	06/16/11 09:40	1
Sodium	63		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:40	1

6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		5.0	2.0	mg/L			06/21/11 11:24	10
Ammonia as N	1.2		0.020	0.010	mg/L			06/16/11 19:34	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	800		5.0	5.0	mg/L			06/15/11 15:46	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.76			SU				06/08/11 11:35	1
Field Temperature	26.69			Degrees C				06/08/11 11:35	1
Oxygen, Dissolved	1.28			mg/L				06/08/11 11:35	1
Specific Conductance	1210			umhos/cm				06/08/11 11:35	1
Turbidity	10.30			NTU				06/08/11 11:35	1

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-72 WACS # 27753**

**Lab Sample ID: 660-41703-8**

Date Collected: 06/08/11 12:42

Matrix: Water

Date Received: 06/08/11 14:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 09:43	1
Iron	200		200	50	ug/L		06/15/11 10:38	06/16/11 09:43	1
Sodium	34		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:43	1

6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32		0.50	0.20	mg/L			06/20/11 19:07	1
Ammonia as N	0.57		0.020	0.010	mg/L			06/16/11 19:36	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	340		5.0	5.0	mg/L			06/15/11 15:47	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.65				SU			06/08/11 12:42	1
Field Temperature	23.35				Degrees C			06/08/11 12:42	1
Oxygen, Dissolved	0.71				mg/L			06/08/11 12:42	1
Specific Conductance	607				umhos/cm			06/08/11 12:42	1
Turbidity	4.51				NTU			06/08/11 12:42	1

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID:** TH-73 WACS #27754

**Lab Sample ID:** 660-41703-9

Date Collected: 06/08/11 11:59

Matrix: Water

Date Received: 06/08/11 14:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 09:46	1
Iron	14000		200	50	ug/L		06/15/11 10:38	06/16/11 09:46	1
Sodium	27		0.50	0.31	mg/L		06/15/11 10:38	06/16/11 09:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63		1.0	0.40	mg/L			06/21/11 11:51	2
Ammonia as N	2.2		0.020	0.010	mg/L			06/16/11 19:37	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	150		5.0	5.0	mg/L			06/15/11 15:47	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.41				SU			06/08/11 11:59	1
Field Temperature	25.69				Degrees C			06/08/11 11:59	1
Oxygen, Dissolved	0.70				mg/L			06/08/11 11:59	1
Specific Conductance	391				umhos/cm			06/08/11 11:59	1
Turbidity	14.0				NTU			06/08/11 11:59	1

6

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-28A WACS# 19862**

**Lab Sample ID: 660-41735-1**

Date Collected: 06/09/11 09:32

Matrix: Water

Date Received: 06/09/11 13:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 09:08	06/15/11 15:22	1
Iron	3200		200	50	ug/L		06/15/11 09:08	06/15/11 15:22	1
Sodium	16		0.50	0.31	mg/L		06/15/11 09:08	06/15/11 15:22	1

6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41		0.50	0.20	mg/L			06/20/11 20:00	1
Ammonia as N	1.3		0.020	0.010	mg/L			06/22/11 15:31	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	120		5.0	5.0	mg/L			06/15/11 17:04	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.34				SU			06/09/11 09:32	1
Field Temperature	26.34				Degrees C			06/09/11 09:32	1
Oxygen, Dissolved	1.89				mg/L			06/09/11 09:32	1
Specific Conductance	226				umhos/cm			06/09/11 09:32	1
Turbidity	9.61				NTU			06/09/11 09:32	1

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: SUP 1 WACS# 27755**

**Lab Sample ID: 660-41735-2**

Date Collected: 06/09/11 11:03

Matrix: Water

Date Received: 06/09/11 13:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 09:08	06/15/11 15:25	1
Iron	50	U	200	50	ug/L		06/15/11 09:08	06/15/11 15:25	1
Sodium	8.4		0.50	0.31	mg/L		06/15/11 09:08	06/15/11 15:25	1

6

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.5		0.50	0.20	mg/L			06/20/11 20:27	1
Ammonia as N	0.18		0.020	0.010	mg/L			06/16/11 19:52	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	220		5.0	5.0	mg/L			06/15/11 17:04	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.61				SU			06/09/11 11:03	1
Field Temperature	24.60				Degrees C			06/09/11 11:03	1
Oxygen, Dissolved	0.11				mg/L			06/09/11 11:03	1
Specific Conductance	373				umhos/cm			06/09/11 11:03	1
Turbidity	0.35				NTU			06/09/11 11:03	1

## Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-57 WACS# 1570**

**Lab Sample ID: 660-41735-3**

Date Collected: 06/09/11 09:53

Matrix: Water

Date Received: 06/09/11 13:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 09:08	06/15/11 15:28	1
Iron	430		200	50	ug/L		06/15/11 09:08	06/15/11 15:28	1
Sodium	11		0.50	0.31	mg/L		06/15/11 09:08	06/15/11 15:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39		0.50	0.20	mg/L			06/20/11 20:53	1
Ammonia as N	1.2		0.020	0.010	mg/L			06/16/11 19:53	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		5.0	5.0	mg/L			06/15/11 17:05	1

**Method: Field Sampling - Field Sampling**

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.17				SU			06/09/11 09:53	1
Field Temperature	25.61				Degrees C			06/09/11 09:53	1
Oxygen, Dissolved	0.40				mg/L			06/09/11 09:53	1
Specific Conductance	185				umhos/cm			06/09/11 09:53	1
Turbidity	3.17				NTU			06/09/11 09:53	1

6

# Client Sample Results

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: SUP 2 WACS# 27756**

**Lab Sample ID: 660-41735-4**

Date Collected: 06/09/11 10:36

Matrix: Water

Date Received: 06/09/11 13:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 09:08	06/15/11 15:31	1
Iron	50	U	200	50	ug/L		06/15/11 09:08	06/15/11 15:31	1
Sodium	8.6		0.50	0.31	mg/L		06/15/11 09:08	06/15/11 15:31	1

6

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50	0.20	mg/L			06/20/11 21:20	1
Ammonia as N	0.22		0.020	0.010	mg/L			06/16/11 19:54	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	230		5.0	5.0	mg/L			06/15/11 17:05	1

## Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.60				SU			06/09/11 10:36	1
Field Temperature	24.52				Degrees C			06/09/11 10:36	1
Oxygen, Dissolved	0.10				mg/L			06/09/11 10:36	1
Specific Conductance	381				umhos/cm			06/09/11 10:36	1
Turbidity	0.43				NTU			06/09/11 10:36	1

TestAmerica Tampa

# QC Sample Results

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

TestAmerica Job ID: 660-41703-1

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 660-111297/1-A**

Matrix: Water

Analysis Batch: 111330

**Client Sample ID: Method Blank**

Prep Type: Total Recoverable

Prep Batch: 111297

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 09:08	06/15/11 14:06	1
Iron	50	U	200	50	ug/L		06/15/11 09:08	06/15/11 14:06	1
Sodium	0.31	U	0.50	0.31	mg/L		06/15/11 09:08	06/15/11 14:06	1

**Lab Sample ID: LCS 660-111297/2-A**

Matrix: Water

Analysis Batch: 111330

**Client Sample ID: Lab Control Sample**

Prep Type: Total Recoverable

Prep Batch: 111297

Analyte	Spike		Added	LCS LCS		Unit	D	% Rec	Limits
	Result	Qualifier		Result	Qualifier				
Arsenic	1000		975			ug/L		98	75 - 125
Iron	1000		1020			ug/L		102	75 - 125
Sodium	10.0		9.73			mg/L		97	75 - 125

**Lab Sample ID: 660-41783-D-1-B MS**

Matrix: Water

Analysis Batch: 111330

**Client Sample ID: Matrix Spike**

Prep Type: Total Recoverable

Prep Batch: 111297

Analyte	Sample		Spike	MS MS		Unit	D	% Rec	Limits
	Result	Qualifier		Result	Qualifier				
Arsenic	570		1000	1550		ug/L		98	75 - 125
Iron	780		1000	1800		ug/L		103	75 - 125
Sodium	6.8		10.0	16.9		mg/L		101	75 - 125

**Lab Sample ID: 660-41783-D-1-C MSD**

Matrix: Water

Analysis Batch: 111330

**Client Sample ID: Matrix Spike Duplicate**

Prep Type: Total Recoverable

Prep Batch: 111297

Analyte	Sample		Spike	MSD MSD		Unit	D	% Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Arsenic	570		1000	1540		ug/L		96	75 - 125	1	20
Iron	780		1000	1770		ug/L		99	75 - 125	2	20
Sodium	6.8		10.0	16.8		mg/L		99	75 - 125	1	20

**Lab Sample ID: MB 660-111313/1-A**

Matrix: Water

Analysis Batch: 111367

**Client Sample ID: Method Blank**

Prep Type: Total Recoverable

Prep Batch: 111313

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	4.0	U	10	4.0	ug/L		06/15/11 10:38	06/16/11 08:57	1
Iron	50	U	200	50	ug/L		06/15/11 10:38	06/16/11 08:57	1
Sodium	0.31	U	0.50	0.31	mg/L		06/15/11 10:38	06/16/11 08:57	1

**Lab Sample ID: LCS 660-111313/2-A**

Matrix: Water

Analysis Batch: 111367

**Client Sample ID: Lab Control Sample**

Prep Type: Total Recoverable

Prep Batch: 111313

Analyte	Spike		Added	LCS LCS		Unit	D	% Rec	Limits
	Result	Qualifier		Result	Qualifier				
Arsenic	1000		983			ug/L		98	75 - 125
Iron	1000		1040			ug/L		104	75 - 125
Sodium	10.0		9.83			mg/L		98	75 - 125

TestAmerica Tampa

# QC Sample Results

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

TestAmerica Job ID: 660-41703-1

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

**Lab Sample ID: 660-41703-2 MS**

Matrix: Water

Analysis Batch: 111367

**Client Sample ID: Not Blank-DUP 41703**

Prep Type: Total Recoverable

Prep Batch: 111313

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Arsenic	4.0	U	1000	991		ug/L	99	75 - 125		
Iron	230		1000	1310		ug/L	108	75 - 125		
Sodium	15		10.0	25.7		mg/L	104	75 - 125		

**Lab Sample ID: 660-41703-2 MSD**

Matrix: Water

Analysis Batch: 111367

**Client Sample ID: Not Blank-DUP 41703**

Prep Type: Total Recoverable

Prep Batch: 111313

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.		RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit
Arsenic	4.0	U	1000	990		ug/L	99	75 - 125	0	20	
Iron	230		1000	1310		ug/L	108	75 - 125	0	20	
Sodium	15		10.0	25.5		mg/L	102	75 - 125	1	20	

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 660-111494/3**

Matrix: Water

Analysis Batch: 111494

**Client Sample ID: Method Blank**

Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier							% Rec	Limits		
Chloride	0.20	U	0.50		0.20	mg/L		D	Prepared		06/20/11 10:13	1

**Lab Sample ID: LCS 660-111494/4**

Matrix: Water

Analysis Batch: 111494

**Client Sample ID: Lab Control Sample**

Prep Type: Total/NA

Analyte	Spike	Added	LCN	LCN	Unit	D	% Rec	% Rec.	
	Result		Qualifier	Limits				RPD	Limit
Chloride	10.0		9.62		mg/L	96	90 - 110		

**Lab Sample ID: 660-41704-A-1 MS**

Matrix: Water

Analysis Batch: 111494

**Client Sample ID: Matrix Spike**

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Chloride	6.6	J3	10.0	17.7	J3	mg/L	111	90 - 110		

**Lab Sample ID: 660-41704-A-1 MSD**

Matrix: Water

Analysis Batch: 111494

**Client Sample ID: Matrix Spike Duplicate**

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Chloride	6.6	J3	10.0	16.0		mg/L	94	90 - 110	10	30

**Lab Sample ID: MB 660-111547/3**

Matrix: Water

Analysis Batch: 111547

**Client Sample ID: Method Blank**

Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier							% Rec	Limits		
Chloride	0.20	U	0.50		0.20	mg/L		D	Prepared		06/21/11 10:31	1

TestAmerica Tampa

## QC Sample Results

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

TestAmerica Job ID: 660-41703-1

### Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: LCS 660-111547/4**

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

**Matrix: Water**

**Analysis Batch: 111547**

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

**Lab Sample ID: 660-41703-7 MS**

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

**Matrix: Water**

**Analysis Batch: 111547**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.
	Result	Qualifier	Added	Result	Qualifier				
Chloride	280		100	393		mg/L	102		90 - 110

**Lab Sample ID: 660-41703-7 MSD**

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

**Matrix: Water**

**Analysis Batch: 111547**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	280		100	384		mg/L		93	90 - 110	2

**Lab Sample ID: MB 660-111577/3**

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

**Matrix: Water**

**Analysis Batch: 111577**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	0.20	U	0.50	0.20	mg/L			06/21/11 22:30	1

**Lab Sample ID: LCS 660-111577/4**

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

**Matrix: Water**

**Analysis Batch: 111577**

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

**Lab Sample ID: 660-41752-B-17 MS ^10**

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

**Matrix: Water**

**Analysis Batch: 111577**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.
	Result	Qualifier	Added	Result	Qualifier				
Chloride	80		100	185		mg/L		105	90 - 110

**Lab Sample ID: 660-41752-B-17 MSD ^10**

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

**Matrix: Water**

**Analysis Batch: 111577**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	80		100	184		mg/L		105	90 - 110	0



# QC Sample Results

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

TestAmerica Job ID: 660-41703-1

## Method: 350.1 - Nitrogen, Ammonia

**Lab Sample ID:** MB 660-111398/17

**Matrix:** Water

**Analysis Batch:** 111398

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia as N	0.010	U	0.020	0.010	mg/L			06/16/11 19:22	1

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA



**Lab Sample ID:** LCS 660-111398/18

**Matrix:** Water

**Analysis Batch:** 111398

Analyte	Spike		LCS	LCS	Unit	D	% Rec.	Limits	RPD
	Added	Result							
Ammonia as N	0.500	0.544	mg/L				109	90 - 110	

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Lab Sample ID:** 660-41646-B-1 MS

**Matrix:** Water

**Analysis Batch:** 111398

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Ammonia as N	0.049		1.00	1.12		mg/L		107	90 - 110	

**Client Sample ID:** Matrix Spike

**Prep Type:** Total/NA

**Lab Sample ID:** 660-41646-B-1 MSD

**Matrix:** Water

**Analysis Batch:** 111398

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Ammonia as N	0.049		1.00	1.13		mg/L		108	90 - 110	1

**Client Sample ID:** Matrix Spike Duplicate

**Prep Type:** Total/NA

**Lab Sample ID:** 660-41703-2 MS

**Matrix:** Water

**Analysis Batch:** 111398

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Ammonia as N	0.35		1.00	1.40		mg/L		105	90 - 110	

**Client Sample ID:** Not Blank-DUP 41703

**Prep Type:** Total/NA

**Lab Sample ID:** 660-41703-2 MSD

**Matrix:** Water

**Analysis Batch:** 111398

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Ammonia as N	0.35		1.00	1.40		mg/L		105	90 - 110	0

**Client Sample ID:** Not Blank-DUP 41703

**Prep Type:** Total/NA

**Lab Sample ID:** MB 660-111607/11

**Matrix:** Water

**Analysis Batch:** 111607

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ammonia as N	0.010	U	0.020	0.010	mg/L			06/22/11 15:29	1

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Lab Sample ID:** LCS 660-111607/12

**Matrix:** Water

**Analysis Batch:** 111607

Analyte	Spike		LCS	LCS	Unit	D	% Rec.	Limits	RPD
	Added	Result							
Ammonia as N	0.500	0.506	mg/L				101	90 - 110	

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

# QC Sample Results

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

TestAmerica Job ID: 660-41703-1

## Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 660-41735-1 MS

Matrix: Water

Analysis Batch: 111607

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.
	Result	Qualifier	Added	Result	Qualifier				
Ammonia as N	1.3		1.00	2.31		mg/L		100	90 - 110

Lab Sample ID: 660-41735-1 MSD

Matrix: Water

Analysis Batch: 111607

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Ammonia as N	1.3		1.00	2.30		mg/L		99	90 - 110	0	30

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

Lab Sample ID: MB 660-111213/1

Matrix: Water

Analysis Batch: 111213

Analyte	MB	MB	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			06/13/11 14:53	1

Lab Sample ID: LCS 660-111213/2

Matrix: Water

Analysis Batch: 111213

Analyte	Spike	LCS	LCS	Unit	D	% Rec	Limits
	Added	Result	Qualifier				
Total Dissolved Solids	10000	10000		mg/L		100	80 - 120

Lab Sample ID: 660-41703-3 DU

Matrix: Water

Analysis Batch: 111213

Analyte	Sample	Sample	DU	DU	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	240		244		mg/L			06/15/11 15:44	0.8 20

Lab Sample ID: MB 660-111342/1

Matrix: Water

Analysis Batch: 111342

Analyte	MB	MB	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			06/15/11 15:44	1

Lab Sample ID: LCS 660-111342/2

Matrix: Water

Analysis Batch: 111342

Analyte	Spike	LCS	LCS	Unit	D	% Rec	Limits
	Added	Result	Qualifier				
Total Dissolved Solids	10000	9860		mg/L		99	80 - 120

## QC Sample Results

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

TestAmerica Job ID: 660-41703-1

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

**Lab Sample ID: 660-41703-4 DU**

**Matrix: Water**

**Analysis Batch: 111342**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Dissolved Solids	250		244		mg/L	D	0.8	20

**Lab Sample ID: MB 660-111345/1**

**Matrix: Water**

**Analysis Batch: 111345**

Analyte	MB	MB	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L	D	06/15/11 17:02		1

**Lab Sample ID: LCS 660-111345/2**

**Matrix: Water**

**Analysis Batch: 111345**

Analyte	Spike	LCS	LCS	Unit	D	% Rec.	Limits
	Added	Result	Qualifier				
Total Dissolved Solids	2000	1980		mg/L	D	99	80 - 120

**Lab Sample ID: 660-41735-1 DU**

**Matrix: Water**

**Analysis Batch: 111345**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Total Dissolved Solids	120		126		mg/L	D	5	20

**Client Sample ID: TH-19 WACS #821**  
**Prep Type: Total/NA**



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



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



# QC Association Summary

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

TestAmerica Job ID: 660-41703-1

## Metals

**Prep Batch: 111297**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111297/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 660-111297/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
660-41783-D-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-41783-D-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-41735-1	TH-28A WACS# 19862	Total Recoverable	Water	3005A	
660-41735-2	SUP 1 WACS# 27755	Total Recoverable	Water	3005A	
660-41735-3	TH-57 WACS# 1570	Total Recoverable	Water	3005A	
660-41735-4	SUP 2 WACS# 27756	Total Recoverable	Water	3005A	

8

**Prep Batch: 111313**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111313/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 660-111313/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
660-41703-2	Not Blank-DUP 41703	Total Recoverable	Water	3005A	
660-41703-2 MS	Not Blank-DUP 41703	Total Recoverable	Water	3005A	
660-41703-2 MSD	Not Blank-DUP 41703	Total Recoverable	Water	3005A	
660-41703-1	Equipment Blank 41703	Total Recoverable	Water	3005A	
660-41703-3	TH-40 WACS #822	Total Recoverable	Water	3005A	
660-41703-4	TH-19 WACS #821	Total Recoverable	Water	3005A	
660-41703-5	TH-42 WACS #823	Total Recoverable	Water	3005A	
660-41703-6	TH-30 WACS #1065	Total Recoverable	Water	3005A	
660-41703-7	TH-58 WACS #1571	Total Recoverable	Water	3005A	
660-41703-8	TH-72 WACS # 27753	Total Recoverable	Water	3005A	
660-41703-9	TH-73 WACS #27754	Total Recoverable	Water	3005A	

**Analysis Batch: 111330**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111297/1-A	Method Blank	Total Recoverable	Water	6010B	111297
LCS 660-111297/2-A	Lab Control Sample	Total Recoverable	Water	6010B	111297
660-41783-D-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	111297
660-41783-D-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	111297
660-41735-1	TH-28A WACS# 19862	Total Recoverable	Water	6010B	111297
660-41735-2	SUP 1 WACS# 27755	Total Recoverable	Water	6010B	111297
660-41735-3	TH-57 WACS# 1570	Total Recoverable	Water	6010B	111297
660-41735-4	SUP 2 WACS# 27756	Total Recoverable	Water	6010B	111297

**Analysis Batch: 111367**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111313/1-A	Method Blank	Total Recoverable	Water	6010B	111313
LCS 660-111313/2-A	Lab Control Sample	Total Recoverable	Water	6010B	111313
660-41703-2	Not Blank-DUP 41703	Total Recoverable	Water	6010B	111313
660-41703-2 MS	Not Blank-DUP 41703	Total Recoverable	Water	6010B	111313
660-41703-2 MSD	Not Blank-DUP 41703	Total Recoverable	Water	6010B	111313
660-41703-1	Equipment Blank 41703	Total Recoverable	Water	6010B	111313
660-41703-3	TH-40 WACS #822	Total Recoverable	Water	6010B	111313
660-41703-4	TH-19 WACS #821	Total Recoverable	Water	6010B	111313
660-41703-5	TH-42 WACS #823	Total Recoverable	Water	6010B	111313
660-41703-6	TH-30 WACS #1065	Total Recoverable	Water	6010B	111313
660-41703-7	TH-58 WACS #1571	Total Recoverable	Water	6010B	111313
660-41703-8	TH-72 WACS # 27753	Total Recoverable	Water	6010B	111313
660-41703-9	TH-73 WACS #27754	Total Recoverable	Water	6010B	111313

TestAmerica Tampa

# QC Association Summary

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

TestAmerica Job ID: 660-41703-1

## General Chemistry

### Analysis Batch: 111213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111213/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 660-111213/2	Lab Control Sample	Total/NA	Water	SM 2540C	
660-41703-1	Equipment Blank 41703	Total/NA	Water	SM 2540C	
660-41703-2	Not Blank-DUP 41703	Total/NA	Water	SM 2540C	
660-41703-3	TH-40 WACS #822	Total/NA	Water	SM 2540C	
660-41703-3 DU	TH-40 WACS #822	Total/NA	Water	SM 2540C	

### Analysis Batch: 111342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111342/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 660-111342/2	Lab Control Sample	Total/NA	Water	SM 2540C	
660-41703-4	TH-19 WACS #821	Total/NA	Water	SM 2540C	
660-41703-4 DU	TH-19 WACS #821	Total/NA	Water	SM 2540C	
660-41703-5	TH-42 WACS #823	Total/NA	Water	SM 2540C	
660-41703-6	TH-30 WACS #1065	Total/NA	Water	SM 2540C	
660-41703-7	TH-58 WACS #1571	Total/NA	Water	SM 2540C	
660-41703-8	TH-72 WACS # 27753	Total/NA	Water	SM 2540C	
660-41703-9	TH-73 WACS #27754	Total/NA	Water	SM 2540C	

### Analysis Batch: 111345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111345/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 660-111345/2	Lab Control Sample	Total/NA	Water	SM 2540C	
660-41735-1	TH-28A WACS# 19862	Total/NA	Water	SM 2540C	
660-41735-1 DU	TH-28A WACS# 19862	Total/NA	Water	SM 2540C	
660-41735-2	SUP 1 WACS# 27755	Total/NA	Water	SM 2540C	
660-41735-3	TH-57 WACS# 1570	Total/NA	Water	SM 2540C	
660-41735-4	SUP 2 WACS# 27756	Total/NA	Water	SM 2540C	

### Analysis Batch: 111398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111398/17	Method Blank	Total/NA	Water	350.1	
LCS 660-111398/18	Lab Control Sample	Total/NA	Water	350.1	
660-41703-2	Not Blank-DUP 41703	Total/NA	Water	350.1	
660-41703-2 MS	Not Blank-DUP 41703	Total/NA	Water	350.1	
660-41703-2 MSD	Not Blank-DUP 41703	Total/NA	Water	350.1	
660-41703-1	Equipment Blank 41703	Total/NA	Water	350.1	
660-41703-4	TH-19 WACS #821	Total/NA	Water	350.1	
660-41703-3	TH-40 WACS #822	Total/NA	Water	350.1	
660-41703-5	TH-42 WACS #823	Total/NA	Water	350.1	
660-41703-6	TH-30 WACS #1065	Total/NA	Water	350.1	
660-41703-7	TH-58 WACS #1571	Total/NA	Water	350.1	
660-41703-8	TH-72 WACS # 27753	Total/NA	Water	350.1	
660-41703-9	TH-73 WACS #27754	Total/NA	Water	350.1	
660-41646-B-1 MS	Matrix Spike	Total/NA	Water	350.1	
660-41646-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-41735-2	SUP 1 WACS# 27755	Total/NA	Water	350.1	
660-41735-3	TH-57 WACS# 1570	Total/NA	Water	350.1	
660-41735-4	SUP 2 WACS# 27756	Total/NA	Water	350.1	

8

## QC Association Summary

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

TestAmerica Job ID: 660-41703-1

### General Chemistry (Continued)

#### Analysis Batch: 111494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111494/3	Method Blank	Total/NA	Water	300.0	
LCS 660-111494/4	Lab Control Sample	Total/NA	Water	300.0	
660-41704-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
660-41704-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
660-41703-1	Equipment Blank 41703	Total/NA	Water	300.0	
660-41703-2	Not Blank-DUP 41703	Total/NA	Water	300.0	
660-41703-3	TH-40 WACS #822	Total/NA	Water	300.0	
660-41703-4	TH-19 WACS #821	Total/NA	Water	300.0	
660-41703-5	TH-42 WACS #823	Total/NA	Water	300.0	
660-41703-8	TH-72 WACS # 27753	Total/NA	Water	300.0	
660-41735-1	TH-28A WACS# 19862	Total/NA	Water	300.0	
660-41735-2	SUP 1 WACS# 27755	Total/NA	Water	300.0	
660-41735-3	TH-57 WACS# 1570	Total/NA	Water	300.0	
660-41735-4	SUP 2 WACS# 27756	Total/NA	Water	300.0	

8

#### Analysis Batch: 111547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111547/3	Method Blank	Total/NA	Water	300.0	
LCS 660-111547/4	Lab Control Sample	Total/NA	Water	300.0	
660-41703-7	TH-58 WACS #1571	Total/NA	Water	300.0	
660-41703-9	TH-73 WACS #27754	Total/NA	Water	300.0	
660-41703-7 MS	TH-58 WACS #1571	Total/NA	Water	300.0	
660-41703-7 MSD	TH-58 WACS #1571	Total/NA	Water	300.0	

#### Analysis Batch: 111577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111577/3	Method Blank	Total/NA	Water	300.0	
LCS 660-111577/4	Lab Control Sample	Total/NA	Water	300.0	
660-41703-6	TH-30 WACS #1065	Total/NA	Water	300.0	
660-41752-B-17 MS ^10	Matrix Spike	Total/NA	Water	300.0	
660-41752-B-17 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	

#### Analysis Batch: 111607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 660-111607/11	Method Blank	Total/NA	Water	350.1	
LCS 660-111607/12	Lab Control Sample	Total/NA	Water	350.1	
660-41735-1	TH-28A WACS# 19862	Total/NA	Water	350.1	
660-41735-1 MS	TH-28A WACS# 19862	Total/NA	Water	350.1	
660-41735-1 MSD	TH-28A WACS# 19862	Total/NA	Water	350.1	

### Field Service / Mobile Lab

#### Analysis Batch: 111305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-41703-3	TH-40 WACS #822	Total/NA	Water	Field Sampling	
660-41703-4	TH-19 WACS #821	Total/NA	Water	Field Sampling	
660-41703-5	TH-42 WACS #823	Total/NA	Water	Field Sampling	
660-41703-6	TH-30 WACS #1065	Total/NA	Water	Field Sampling	
660-41703-7	TH-58 WACS #1571	Total/NA	Water	Field Sampling	
660-41703-8	TH-72 WACS # 27753	Total/NA	Water	Field Sampling	
660-41703-9	TH-73 WACS #27754	Total/NA	Water	Field Sampling	
660-41735-1	TH-28A WACS# 19862	Total/NA	Water	Field Sampling	

TestAmerica Tampa

## QC Association Summary

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

TestAmerica Job ID: 660-41703-1

### Field Service / Mobile Lab (Continued)

#### Analysis Batch: 111305 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-41735-2	SUP 1 WACS# 27755	Total/NA	Water	Field Sampling	
660-41735-3	TH-57 WACS# 1570	Total/NA	Water	Field Sampling	
660-41735-4	SUP 2 WACS# 27756	Total/NA	Water	Field Sampling	



## Lab Chronicle

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: Equipment Blank 41703**

Date Collected: 06/08/11 09:05

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-1**

Matrix: Water

Prop Type	Batch	Batch	Dilution	Batch	Prepared			
Prop Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:18	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	111213	06/13/11 15:03	TO	TAL TAM
Total/NA	Analysis	350.1		1	111398	06/16/11 19:28	TO	TAL TAM
Total/NA	Analysis	300.0		1	111494	06/20/11 15:06	TS	TAL TAM

**Client Sample ID: Not Blank-DUP 41703**

Date Collected: 06/08/11 00:00

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-2**

Matrix: Water

Prop Type	Batch	Batch	Dilution	Batch	Prepared			
Prop Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:07	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	111213	06/13/11 15:03	TO	TAL TAM
Total/NA	Analysis	350.1		1	111398	06/16/11 19:25	TO	TAL TAM
Total/NA	Analysis	300.0		1	111494	06/20/11 15:33	TS	TAL TAM

**Client Sample ID: TH-40 WACS #822**

Date Collected: 06/08/11 09:21

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-3**

Matrix: Water

Prop Type	Batch	Batch	Dilution	Batch	Prepared			
Prop Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:22	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	111213	06/13/11 15:04	TO	TAL TAM
Total/NA	Analysis	350.1		1	111398	06/16/11 19:31	TO	TAL TAM
Total/NA	Analysis	300.0		1	111494	06/20/11 16:00	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	111305	06/08/11 09:21		TAL TAM

**Client Sample ID: TH-19 WACS #821**

Date Collected: 06/08/11 09:54

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-4**

Matrix: Water

Prop Type	Batch	Batch	Dilution	Batch	Prepared			
Prop Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:25	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	111342	06/15/11 15:45	TO	TAL TAM
Total/NA	Analysis	350.1		1	111398	06/16/11 19:30	TO	TAL TAM
Total/NA	Analysis	300.0		1	111494	06/20/11 16:27	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	111305	06/08/11 09:54		TAL TAM

TestAmerica Tampa

## Lab Chronicle

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-42 WACS #823**

Date Collected: 06/08/11 10:41

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-5**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:34	GF
Total/NA	Analysis	SM 2540C		1	111342	06/15/11 15:46	TO
Total/NA	Analysis	350.1		1	111398	06/16/11 19:32	TO
Total/NA	Analysis	300.0		1	111494	06/20/11 16:53	TS
Total/NA	Analysis	Field Sampling		1	111305	06/08/11 10:41	TAL TAM

**Client Sample ID: TH-30 WACS #1065**

Date Collected: 06/08/11 11:06

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-6**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:37	GF
Total/NA	Analysis	SM 2540C		1	111342	06/15/11 15:46	TO
Total/NA	Analysis	350.1		1	111398	06/16/11 19:33	TO
Total/NA	Analysis	300.0		2	111577	06/22/11 03:26	TS
Total/NA	Analysis	Field Sampling		1	111305	06/08/11 11:06	TAL TAM

**Client Sample ID: TH-58 WACS #1571**

Date Collected: 06/08/11 11:35

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-7**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:40	GF
Total/NA	Analysis	SM 2540C		1	111342	06/15/11 15:46	TO
Total/NA	Analysis	350.1		1	111398	06/16/11 19:34	TO
Total/NA	Analysis	300.0		10	111547	06/21/11 11:24	TS
Total/NA	Analysis	Field Sampling		1	111305	06/08/11 11:35	TAL TAM

**Client Sample ID: TH-72 WACS # 27753**

Date Collected: 06/08/11 12:42

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-8**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:43	GF
Total/NA	Analysis	SM 2540C		1	111342	06/15/11 15:47	TO
Total/NA	Analysis	350.1		1	111398	06/16/11 19:36	TO
Total/NA	Analysis	300.0		1	111494	06/20/11 19:07	TS
Total/NA	Analysis	Field Sampling		1	111305	06/08/11 12:42	TAL TAM

TestAmerica Tampa

## Lab Chronicle

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: TH-73 WACS #27754**

Date Collected: 06/08/11 11:59

Date Received: 06/08/11 14:00

**Lab Sample ID: 660-41703-9**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111313	06/15/11 10:38	GF
Total Recoverable	Analysis	6010B		1	111367	06/16/11 09:46	GF
Total/NA	Analysis	SM 2540C		1	111342	06/15/11 15:47	TO
Total/NA	Analysis	350.1		1	111398	06/16/11 19:37	TO
Total/NA	Analysis	300.0		2	111547	06/21/11 11:51	TS
Total/NA	Analysis	Field Sampling		1	111305	06/08/11 11:59	TAL TAM

**Client Sample ID: TH-28A WACS# 19862**

Date Collected: 06/09/11 09:32

Date Received: 06/09/11 13:20

**Lab Sample ID: 660-41735-1**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111297	06/15/11 09:08	GF
Total Recoverable	Analysis	6010B		1	111330	06/15/11 15:22	GF
Total/NA	Analysis	SM 2540C		1	111345	06/15/11 17:04	TO
Total/NA	Analysis	300.0		1	111494	06/20/11 20:00	TS
Total/NA	Analysis	350.1		1	111607	06/22/11 15:31	TO
Total/NA	Analysis	Field Sampling		1	111305	06/09/11 09:32	TAL TAM

**Client Sample ID: SUP 1 WACS# 27755**

Date Collected: 06/09/11 11:03

Date Received: 06/09/11 13:20

**Lab Sample ID: 660-41735-2**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111297	06/15/11 09:08	GF
Total Recoverable	Analysis	6010B		1	111330	06/15/11 15:25	GF
Total/NA	Analysis	SM 2540C		1	111345	06/15/11 17:04	TO
Total/NA	Analysis	350.1		1	111398	06/16/11 19:52	TO
Total/NA	Analysis	300.0		1	111494	06/20/11 20:27	TS
Total/NA	Analysis	Field Sampling		1	111305	06/09/11 11:03	TAL TAM

**Client Sample ID: TH-57 WACS# 1570**

Date Collected: 06/09/11 09:53

Date Received: 06/09/11 13:20

**Lab Sample ID: 660-41735-3**

Matrix: Water

Prep Type	Batch	Batch	Dilution	Batch	Prepared	Analyst	Lab
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	
Total Recoverable	Prep	3005A			111297	06/15/11 09:08	GF
Total Recoverable	Analysis	6010B		1	111330	06/15/11 15:28	GF
Total/NA	Analysis	SM 2540C		1	111345	06/15/11 17:05	TO
Total/NA	Analysis	350.1		1	111398	06/16/11 19:53	TO
Total/NA	Analysis	300.0		1	111494	06/20/11 20:53	TS
Total/NA	Analysis	Field Sampling		1	111305	06/09/11 09:53	TAL TAM

9

## Lab Chronicle

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

TestAmerica Job ID: 660-41703-1

**Client Sample ID: SUP 2 WACS# 27756**

**Lab Sample ID: 660-41735-4**

Date Collected: 06/09/11 10:36

Matrix: Water

Date Received: 06/09/11 13:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111297	06/15/11 09:08	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	111330	06/15/11 15:31	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	111345	06/15/11 17:05	TO	TAL TAM
Total/NA	Analysis	350.1		1	111398	06/16/11 19:54	TO	TAL TAM
Total/NA	Analysis	300.0		1	111494	06/20/11 21:20	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	111305	06/09/11 10:36		TAL TAM

**Laboratory References:**

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

9

## Certification Summary

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

TestAmerica Job ID: 660-41703-1

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	Kentucky	Kentucky UST	4	67
TestAmerica Tampa	USDA	USDA		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: 660-41703-1

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: 660-41703-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-41703-1	Equipment Blank 41703	Water	06/08/11 09:05	06/08/11 14:00
660-41703-2	Not Blank-DUP 41703	Water	06/08/11 00:00	06/08/11 14:00
660-41703-3	TH-40 WACS #822	Water	06/08/11 09:21	06/08/11 14:00
660-41703-4	TH-19 WACS #821	Water	06/08/11 09:54	06/08/11 14:00
660-41703-5	TH-42 WACS #823	Water	06/08/11 10:41	06/08/11 14:00
660-41703-6	TH-30 WACS #1065	Water	06/08/11 11:06	06/08/11 14:00
660-41703-7	TH-58 WACS #1571	Water	06/08/11 11:35	06/08/11 14:00
660-41703-8	TH-72 WACS # 27753	Water	06/08/11 12:42	06/08/11 14:00
660-41703-9	TH-73 WACS #27754	Water	06/08/11 11:59	06/08/11 14:00
660-41735-1	TH-28A WACS# 19862	Water	06/09/11 09:32	06/09/11 13:20
660-41735-2	SUP 1 WACS# 27755	Water	06/09/11 11:03	06/09/11 13:20
660-41735-3	TH-57 WACS# 1570	Water	06/09/11 09:53	06/09/11 13:20
660-41735-4	SUP 2 WACS# 27756	Water	06/09/11 10:36	06/09/11 13:20

12

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Mike Clegg REP. OF CONTRACT LAB.

6/3/11 9:15

ACCEPTED BY: Joe Cleghorn REP. OF SOLID WASTE DEPT. 6.7.11 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION  A.Balloon  J.Clegg

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

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

13

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED  
DATE | TIME  
6.8.11 9:05

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: Joe Cleghorn REP. OF SOLID WASTE DEPT. 6.8.11 2:00  
 ACCEPTED BY: Carol Mc Murtry REP. OF CONTRACT LAB. 6.8.11 2:00

COMMENT'S: WD # 0045

660-41703

11° CVO7 DFF

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Matt Dorn REP. OF CONTRACT LAB. 6.3.11 | 9:15

ACCEPTED BY: Tom Clapp REP. OF SOLID WASTE DEPT. 6.7.11 | 2:00

LOCATION: DUPLICATE SAMPLE MATRIX: WATER OTHER MATRIX: \_\_\_\_\_  
 PERSONAL ENGAGED IN SAMPLE COLLECTION : ✓ A. Balloon ✓ T. Clapp

FIELD PARAMETERS: N/A

SAMPLE CONTAINERS

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

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED

DATE | TIME

6.8.11 | —

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: Tom Clapp REP. OF SOLID WASTE DEPT. 6.8.11 | 2:00  
 ACCEPTED BY: Carol McNulty REP. OF CONTRACT LAB. 6.8.11 | 2:00

COMMENT'S: W0 # 0045

660-41703

110C CU01 DFP

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Matt Clayton REP. OF CONTRACT LAB. 6.8.11 9:15

ACCEPTED BY: Don Clift REP. OF SOLID WASTE DEPT. 6.7.11 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION  A.Balloon  D.Clift

WELL DIAMETER: 2.0 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 165.90 Ft.

PURGE STARTED:

6.8.11 9:08

DEPTH TO WATER: 113.84 Ft.

PURGE RATE:

1.00 GPM.

LENGTH OF WATER COL: 52.54 Ft.

DATE | TIME

VOLUME TO PURGE: 6.41 Gal.

PURGE ENDED:

6.8.11 9:21

ACT. VOL. PURGED:

13 GAL.

Drew Down: 112.32

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB	
AB JC	9:17	23.51	419	7.54	0.49	0.27	=
AB JC	9:19	23.49	414	7.58	0.50	0.18	
AB JC	9:21	23.50	417	7.57	0.52	0.18	

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	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
1	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED

DATE | TIME

6.8.11 9:21

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:

DATE | TIME

RELINQUISHED BY: Don Clift REP. OF SOLID WASTE DEPT. 6.8.11 2:00

ACCEPTED BY: Calvin Murphy REP. OF CONTRACT LAB. 6.8.11 2:00

COMMENT'S: W0 # 0045

660-41703

11°C CU07 DFF

06/24/2011

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

PRECLEANED SAMPLE CONTAINERS: \_\_\_\_\_ DATE | TIME  
 RELINQUISHED BY: Matt Goss REP. OF CONTRACT LAB. 6/3/11 | 9:15  
 ACCEPTED BY: Jim Clapp REP. OF SOLID WASTE DEPT. 6.7.11 2:00  
 LOCATION: TH-19 WACS# 821 SAMPLE MATRIX: WATER OTHER MATRIX: \_\_\_\_\_  
 PERSONAL ENGAGED IN SAMPLE COLLECTION E.A.Balloon  J.Clapp

WELL DIAMETER: 2.0 INCH: \_\_\_\_\_ DATE | TIME  
 TOTAL DEPTH OF WELL: 153.60 Ft. PURGE STARTED: 6.8.11 9:43  
 DEPTH TO WATER: 113.85 Ft. PURGE RATE: 1.00 GPM.  
 LENGTH OF WATER COL: 39.75 Ft. DATE | TIME  
 VOLUME TO PURGE: 6.36 Gal. PURGE ENDED: 6.8.11 9:54  
 ACT. VOL. PURGED: 11 GAL.

Draw Down: 113.87

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB	SC 9:50	23.44	432	7.37	0.91	0.71
AB	SC 9:52	23.48	432	7.37	0.91	0.57
AB	SC 9:54	23.48	432	7.39	0.80	0.54

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	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED  
 DATE | TIME  
6.8.11 | 9:54

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

PRESERVED SAMPLES PH < 2.0 \_\_\_\_\_ SAMPLE STORAGE: COOLER & ICE TO 4.0 C

ABOVE LISTED SAMPLES:

RELINQUISHED BY: Jim Clapp REP. OF SOLID WASTE DEPT. 6.8.11 2:00  
 ACCEPTED BY: Carol McNamee REP. OF CONTRACT LAB. 6.8.11 2:00

COMMENT'S: W0#0045

660-41703

11<sup>9</sup>C CU07 DFF  
 06/24/2011

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Matt Clegg REP. OF CONTRACT LAB.

6/3/11 | 9:15

ACCEPTED BY: Don Clift REP. OF SOLID WASTE DEPT. 6.7.11 | 2:06

LOCATION: TH-42 WACS# 823

SAMPLE MATRIX: WATER OTHER MATRIX:  

PERSONAL ENGAGED IN SAMPLE COLLECTION ✓ A.Balloon ✓ D.Clift

WELL DIAMETER: 2.0 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 164 Ft.

PURGE STARTED:

6.8.11 | 10:15

DEPTH TO WATER: 80.46 Ft.

PURGE RATE:

0.40 GPM.

LENGTH OF WATER COL: 63.54 Ft.

DATE | TIME

VOLUME TO PURGE: 13.37 Gal.

PURGE ENDED:

6.8.11 | 10:41

ACT. VOL. PURGED:

15.60 GAL.

Draw Downs: 102.72

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB 3c	10:37	24.08	544	7.32	0.38	9.16
AB 3c	10:39	23.99	544	7.33	0.35	8.70
AB 3c	10:41	23.98	544	7.33	0.32	8.87

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	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED

DATE | TIME

6.8.11 | 10:41

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic Dissolved Sodium

Dissolved Iron Dissolved Arsenic

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

ABOVE LISTED SAMPLES:

DATE | TIME

RELINQUISHED BY: Don Clift REP. OF SOLID WASTE DEPT. 6.8.11 | 12:00

ACCEPTED BY: Carla McNulty REP. OF CONTRACT LAB. 6.8.11 | 12:00

COMMENT'S: W0 # 0045

660-41703

11°C CU07 DFF  
06/24/2011

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: D. Cleto REP. OF CONTRACT LAB. 6.8.11 | 9:15

ACCEPTED BY: D. Cleto REP. OF SOLID WASTE DEPT. 6.7.11 | 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION A. Balloon  D. Cleto

WELL DIAMETER: <u>2.00</u>	INCH:	DATE   TIME
TOTAL DEPTH OF WELL: <u>46.19</u>	Ft.	<u>6.8.11   10:55</u>
DEPTH TO WATER: <u>24.35</u>	Ft.	PURGE RATE: <u>0.50</u> GPM.
LENGTH OF WATER COL: <u>21.84</u>	Ft.	DATE   TIME
VOLUME TO PURGE: <u>3.49</u>	Gal.	PURGE ENDED: <u>6.8.11   11:06</u>
		ACT. VOL. PURGED: <u>5.5</u> GAL.

Draw Down: 24.40

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	11:02	23.44	258	4.41	0.50	3.38
AB JC	11:04	23.46	260	4.32	0.34	2.73
AB JC	11:06	23.45	261	4.40	0.27	3.42

13

SAMPLE CONTAINERS

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

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED  
 DATE | TIME  
6.8.11 | 11:06

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: A. Cleto REP. OF SOLID WASTE DEPT. 6.8.11 | 2:00

ACCEPTED BY: Craig McNulty REP. OF CONTRACT LAB. 6.8.11 | 2:00

COMMENT'S: WOT # 0045

660-41703

11<sup>OC</sup> CVOT DEF

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Matt Rogers REP. OF CONTRACT LAB. 6/3/11 | 9:15

ACCEPTED BY: Don Clayton REP. OF SOLID WASTE DEPT. 6.7.11 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION  A.Balloon  A.Clark

WELL DIAMETER: 2.0 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 32.92 Ft.

PURGE STARTED:

6.8.11 11:25

DEPTH TO WATER: 28.75 Ft.

PURGE RATE:

0.10 GPM.

LENGTH OF WATER COL: 4.17 Ft.

DATE | TIME

VOLUME TO PURGE: 0.62 Gal.

PURGE ENDED:

6.8.11 11:35

ACT. VOL. PURGED:

1.00 GAL.

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB Je	11:31	24.74	1212	5.78	1.27	16.16
AB Je	11:33	24.69	1206	5.74	1.30	15.30
AB Je	11:35	24.69	1210	5.76	1.28	10.30

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	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
1	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL NO. OF SAMPLES COLLECTED:

COLLECTED

DATE | TIME

6.8.11 11:35

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: Don Clayton REP. OF SOLID WASTE DEPT. 6.8.11 2:00

ACCEPTED BY: Carol McHulley REP. OF CONTRACT LAB. 6.8.11 2:00

COMMENT'S: WO # 0045

660-41703

11°C CVOT OFF  
06/24/2011

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Mike Jones REP. OF CONTRACT LAB.

6/3/11 1915

ACCEPTED BY: Tom Clayton REP. OF SOLID WASTE DEPT. 6.7.11 12:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION E.A.Balloon T.J.Clayton

WELL DIAMETER: 2 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 190.00 Ft.

PURGE STARTED:

6.8.11 11:53

DEPTH TO WATER: 119.80 Ft.

PURGE RATE:

0.25 GPM.

LENGTH OF WATER COL: 70.20 Ft.

DATE | TIME

VOLUME TO PURGE: 11.23 Gal.

PURGE ENDED:

6.8.11 12:42

ACT. VOL. PURGED: 12.25 GAL.

*Drawn Down: 119.88*

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	12:38	23.31	607	7.47	0.73	3.34
AB JC	12:40	23.38	607	7.46	0.72	3.94
AB JC	12:42	23.35	607	7.45	0.71	4.51

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	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
1	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

Colors and Sheens

COLLECTED  
 DATE | TIME  
6.8.11 12:42

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: Tom Clayton REP. OF SOLID WASTE DEPT.  
 ACCEPTED BY: Carol McNaughty REP. OF CONTRACT LAB.

DATE | TIME

6.8.11 12:00  
6.8.11 12:00

COMMENT'S: W0# 0045

060-41703

*11°C CV07 DFF*

06/24/2011

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: John Jones REP. OF CONTRACT LAB.

6/8/11 | 9:15

ACCEPTED BY: Lin Clapp REP. OF SOLID WASTE DEPT. 6.7.11 | 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION  A. Balloon  S. O. G. H.

WELL DIAMETER: 2 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 43.40 Ft.

PURGE STARTED:

6.8.11 | 11:49

DEPTH TO WATER: 32.54 Ft.

PURGE RATE:

0.80 GPM.

LENGTH OF WATER COL: 10.82 Ft.

DATE | TIME

VOLUME TO PURGE: 1.73 Gal.

PURGE ENDED:

6.8.11 | 11:59

ACT. VOL. PURGED:

3.0 GAL.

Drain down 35.00

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB Sc	11:55	25.71	397	5.45	0.72	19.1
AB Sc	11:57	25.46	391	5.42	0.71	14.4
AB Sc	11:59	25.69	371	5.41	0.70	14.0

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	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED

Colors and Sheens

DATE | TIME

6.8.11 | 11:59

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

DATE | TIME

RELINQUISHED BY: Lin Clapp REP. OF SOLID WASTE DEPT. 6.8.11 | 2:00

ACCEPTED BY: Alan McMurtry REP. OF CONTRACT LAB. 6.8.11 | 2:00

COMMENT'S: WQ # 0045

660-41703

11°C CV07 DFF

06/24/2011

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: DJN/Cla REP. OF CONTRACT LAB. 6/3/11 | 9:15

ACCEPTED BY: DJN/Cla REP. OF SOLID WASTE DEPT. 6.7.11 | 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION G/A.Balloon G/A.Cla

WELL DIAMETER: 2.0 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 34.30 Ft.

PURGE STARTED: 6.9.11 | 9:24

DEPTH TO WATER: 29.27 Ft.

PURGE RATE: 0.20 GPM.

LENGTH OF WATER COL: 5.03 Ft.

DATE | TIME

VOLUME TO PURGE: 0.50 Gal.

PURGE ENDED: 6.9.11 | 9:32

ACT. VOL. PURGED: 1.60 GAL.

Draw Down: 29.55

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB JC	9:28	24.31	227	5.38	1.58	6.95
AG JC	9:30	24.33	227	5.27	1.70	7.71
AB JC	9:32	24.34	224	5.34	1.69	9.41

13

SAMPLE CONTAINERS

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

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED  
DATE | TIME  
6.9.11 | 9:32

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: DJN/Cla REP. OF SOLID WASTE DEPT. 6.9.11 | 1:20

ACCEPTED BY: Carey McMurtry REP. OF CONTRACT LAB. 6.9.11 | 1:20

COMMENT'S: W0 FF 0045

3.9°C 6007

660-41735

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Matt Lewis REP. OF CONTRACT LAB. 6/3/11 | 9:15

ACCEPTED BY: Don Ogle REP. OF SOLID WASTE DEPT. 6.7.11 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION  A.Balloon  D.Ogle

WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 6.9.11 TIME 10:44  
 ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	pH	DO	TURB
ABJC	10:57	24.60	373	7.41	0.12	0.26
ABJC	11:01	24.61	373	7.41	0.12	0.31
ABJC	11:03	24.60	373	7.41	0.11	0.35

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	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED

DATE | TIME

6.9.11 11:03

ANALYSIS REQUESTED:

AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic

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

ABOVE LISTED SAMPLES:

DATE | TIME

RELINQUISHED BY: Don Ogle REP. OF SOLID WASTE DEPT. 6.9.11 1:20

ACCEPTED BY: Don Ogle REP. OF CONTRACT LAB. 6.9.11 1:20

COMMENT'S: W01# 0045

660-41735

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Matt Gandy REP. OF CONTRACT LAB.

6/3/11 | 9:15

ACCEPTED BY: Don Clifton REP. OF SOLID WASTE DEPT. 6.7.11 | 2:00

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

PERSONAL ENGAGED IN SAMPLE COLLECTION  A.Balloon  D.Clifto

WELL DIAMETER: 2.0 INCH:

DATE | TIME

TOTAL DEPTH OF WELL: 26.83 Ft. PURGE STARTED: 6.9.11 9:44

DEPTH TO WATER: 20.52 Ft. PURGE RATE: 0.20 GPM.

LENGTH OF WATER COL: 6.31 Ft. DATE | TIME

VOLUME TO PURGE: 1.01 Gal. PURGE ENDED: 6.9.11 9:33

ACT. VOL. PURGED: 1.80 GAL.

*Draw Down: 21.20*

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
A B J C	9:49	25.63	171	5.12	0.43	1.13
A B J C	7:51	25.62	181	5.14	0.42	2.47
A B J C	9:53	25.61	185	5.17	0.46	3.17

13

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
1	40 ml VIAL		40 ml VIAL	
1	125 ml. PLASTIC		125 ml. PLASTIC	
1	25 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
1	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED

DATE | TIME

6.9.11 9:53

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: Don Clifton REP. OF SOLID WASTE DEPT. 6.9.11 1:20

ACCEPTED BY: Carol McMillen REP. OF CONTRACT LAB. 6.9.11 1:20

COMMENT'S: W0 # 0045

*660-41735*

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

PRECLEANED SAMPLE CONTAINERS:

DATE | TIME

RELINQUISHED BY: Mark Reiter REP. OF CONTRACT LAB.

6/3/11 | 9:15

ACCEPTED BY: John Clotte REP. OF SOLID WASTE DEPT. 6.7.11 | 2:00

LOCATION: SUP 2 WACS# 27756 SAMPLE MATRIX: WATER OTHER MATRIX: \_\_\_\_\_  
 PERSONAL ENGAGED IN SAMPLE COLLECTION A.Balloon J.Clotte

WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 6.9.11 TIME 10:17  
 ACTUAL PURGE TIME: 19 MIN:

FIELD PARAMETERS:

BY	TIME	TEMP	COND	PH	DO	TURB
AB	SC   10:32	24.60	382	7.57	0.12	0.17
AB	SC   10:34	24.53	382	7.60	0.12	0.20
AB	SC   10:34	24.52	381	7.60	0.10	0.43

SAMPLE CONTAINERS

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

4 TOTAL No. OF SAMPLES COLLECTED:

COLLECTED  
DATE | TIME  
6.9.11 | 10:36

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: John Clotte REP. OF SOLID WASTE DEPT. 6.9.11 | 1:20

ACCEPTED BY: Carroll McNeely REP. OF CONTRACT LAB. 6.9.11 | 1:20

COMMENT'S: WO # 0045

640-41735

## Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-41703-1

Login Number: 41703

List Source: TestAmerica Tampa

List Number: 1

Creator: Jones, Matt

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	11c CU07 Samples rec'd on ice direct from field
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.	N/A	

14

## Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-41703-1

Login Number: 41735

List Source: TestAmerica Tampa

List Number: 1

Creator: Hornsby, Terry

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9 degrees C CU-07
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

14