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May 22, 2012

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

RE: Southeast County Landfill
Laboratory Analytical Results
Initial Assessment Monitoring Plan
Report No. 20

Dear Mr. Morris:

The Hillsborough County Public Utilities Department (County) is pleased to provide the analytical results from the monthly sampling event conducted as part of our continuation of the Initial Assessment Monitoring Plan (IAMP). The IAMP was developed to address the potential impacts to groundwater from the sinkhole in Phase VI of the Southeast County Landfill (SCLF), which was discovered on December 14, 2010. The monthly sampling event was conducted on April 5-6, 2012, and the samples collected were analyzed by our contracted laboratory, Test America, Inc.

Representative samples were collected from eleven (11) on-site groundwater monitoring wells and two (2) on-site limited use potable supply wells. Samples for the groundwater monitoring wells and the on-site supply wells were analyzed for total dissolved solids (TDS), chloride, total ammonia, arsenic, iron, sodium, and five (5) field parameters. The following paragraphs summarize the findings from this sampling event, and the parameter specific results pertinent to the evaluation of potential water quality impacts from the sinkhole at the SCLF.

Mr. John Morris, P.G. May 22, 2012 Page 2

#### Hq

The surficial aquifer monitoring wells continue to exhibit pH values below the Secondary Drinking Water Standard (SDWS) acceptable range of 6.5 to 8.5 pH units. The pH values in the surficial range from 4.39 to 5.70 pH units. The pH values within the surficial aquifer across the SCLF have historically been observed below the acceptable range, and the observed values are consistent with the historical and background water qualities. The pH values observed in the four (4) upper Floridan groundwater monitoring wells and the two (2) on-site supply wells were all within the acceptable range, and consistent with historical data for the site.

#### **Turbidity**

Turbidity values are generally low in the monitoring wells that have been part of the permit required sampling program at the SCLF. The County attempted to obtain a representative groundwater sample from the piezometer / monitoring well P-18S during this sampling event. However, turbidity values remained elevated during the attempted sampling procedures. Therefore, as agreed, a representative groundwater sample was collected from the surficial aquifer groundwater monitoring well, TH-30.

#### **Conductivity**

The conductivity values in most of the groundwater monitoring wells sampled are relatively low and have remained consistent with historical values associated with the SCLF. Surficial aquifer groundwater monitoring well TH-58 has exhibited elevated conductivity values that exhibit an upward trend when evaluated over the past year and a half. However, these values have exhibited an apparent decreasing trend since November 2011. During this monthly sampling event, the conductivity in TH-58 was 606 uhmos/cm.

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

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

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

#### Chloride

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

Mr. John Morris, P.G. May 22, 2012 Page 3

#### Arsenic

The arsenic observed in TH-58 during this sampling event was 0.026 mg/l, which is above the Primary Drinking Water Standard (PDWS) of 0.01 mg/l. Arsenic has been present in TH-58 at almost the same concentration for over ten years. Although significant changes in water quality have recently been observed in TH-58, the arsenic values have continued to remain very stable. This observation continues to support the position that the arsenic is likely not attributable to the landfill or the sinkhole, but is likely naturally occurring within the soils surrounding the well and being mobilized in the anaerobic environment below the lined landfill.

#### <u>Iron</u>

Total iron concentrations in six (6) surficial aquifer wells were observed above the SDWS of 0.3 mg/l. The concentrations of iron ranged from below the detectable limits to 40 mg/l. As previously discussed, the elevated iron concentrations observed in the surficial aquifer wells at specific locations across the site are likely naturally occurring and/or the result of past strip mining activities.

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

#### **Total Ammonia**

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

#### **Conclusions**

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

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

Mr. John Morris, P.G. May 22, 2012 Page 4

#### Recommendations

Based on the past year of monthly IAMP sampling and the significant overall improvement in water quality observed, the County recommends the IAMP sampling program be reduced to a quarterly schedule in the near future. The sampling of these wells could be performed in conjunction with the required quarterly sampling of the site. As discussed with the FDEP, the County intends to continue the monthly IAMP sampling schedule, further evaluate the compiled data set, and prepare the justification for the reduced sampling frequency.

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

Respectfully submitted,

David S. Adams, P.G Environmental Manager

Public Utilities Department

xc: Paul Vanderploog, Director, Public Utilities Department

John Lyons, Director, Public Works Department

Patricia Berry, Public Utilities Department

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Larry Ruiz, Public Utilities Department

Beth Schinella, Public Utilities Department

Michelle Van Dyk, Public Utilities Department

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Susan Pelz, FDEP Southwest District

Steve Morgan, FDEP, Southwest District

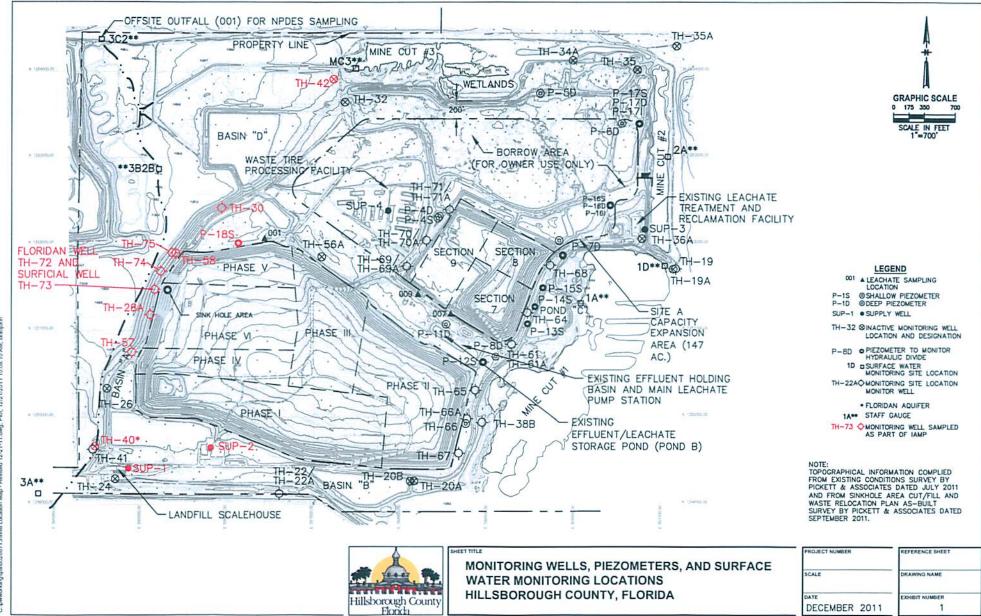
Andy Schipfer, EPC

Ernest Ely, WM Brian Miller, DOH

Rich Siemering, HDR

Joe O'Neill, Civil Design Services

G:/enviro/self/ ADRs/IAMP Report No.20.doc Final copy scanned to LFS/Southeast/Sinkhole/SCLF – IAMP Report No.20.



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## Hillsborough County Southeast Landfill Laboratory Analytical Results from Groundwater Monitoring and On-Site Supply Wells April 5-6, 2012

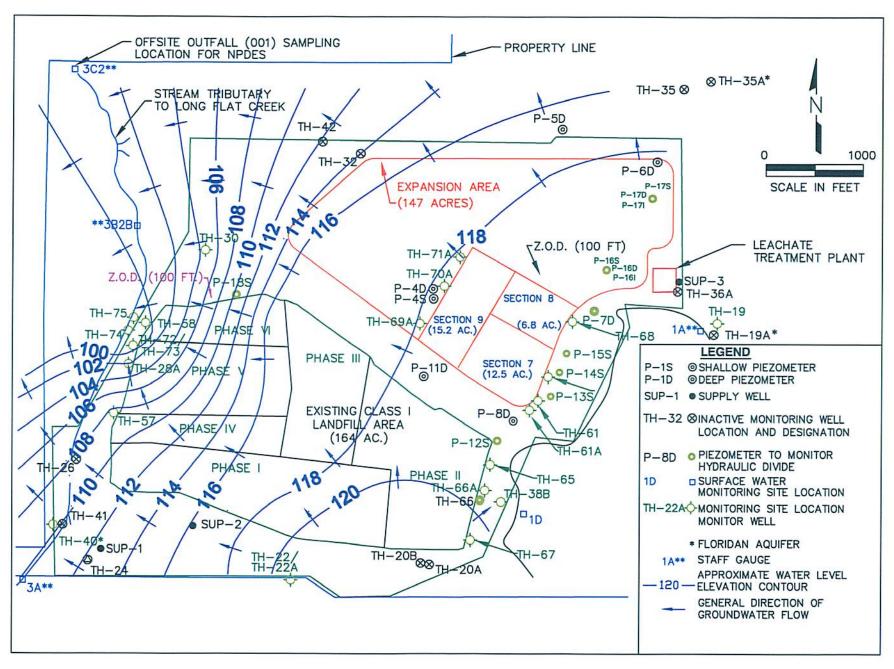
GENERAL (mg/l)			Surficia	al Aquifer	Wells				Up	per Florida	n Aquifer	Wells		(MCL) STANDARD
PARAMETERS	TH-28A	TH-30	TH-57	TH-58	TH-73	TH-74	TH-75	TH-19	TH-40	TH-42	TH-72	SUP-1	SUP-2	F.A.C. 62-550
conductivity (umhos/cm) (field)	297	407	139	606	231	592	584	423	351	536	522	363	376	NS
dissolved oxygen (mg/l) (field)	1.83	0.15	0.78	0.40	0.79	0.79	0.33	0.58	0.66	0.19	1.09	0.04	0.04	NS
pH (field)	5.30	4.39	5.16	5.70	5,06	5.13	5.37	7.00	7.37	7.00	7.08	7.37	7.50	(6.5 - 8.5)**
temperature (°C) (field)	26.27	23.67	25.79	25.63	24.94	21.74	21.76	23.44	23.43	23.78	23.18	24.53	24.94	NS
turbidity (NTU) (field)	14.4	0.0	0.46	0.0	4.39	13.7	4.94	0.0	0.86	3.98	0.65	0.0	0.0	NS
total dissolved solids (mg/l)	130	150	80	270	120	270	300	190	170	250	280	150	170	500**
chloride (mg/l)	71	110	29	81	50	120	130	8.1	8.8	17	28	9.4	11	250**
ammonia nitrogen (mg/l as N)	2.2	1.7	0.73	0.9	1.1	2.8	1.3	0.26	0.31	0.25	0.41	0.15	0.14	2.8***
		ī	1	1	1	i		,				1 1		(MCL) STANDARD
Metals: (mg/i)	TH-28A	TH-30	TH-57	TH-58	TH-73	TH-74	TH-75	TH-19	TH-40	TH-42	TH-72	SUP-1	SUP-2	F.A.C. 62-550
arsenic	0.004 น	i 0.004 u	0.004 u	0.026	0.004 u	0.004 u	0.0063 i	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.004 u	0.01*
iron	3.7	0.32	0.29	4	4.1	40	16	0.05 u	0.05 u	0.16 i	0.11 i	0.41	0.05 u	0.3**
sodium	24	. 27	10	26	20	24	26	14	17	16	29	8.3	8.3	160*
		•	"			•						·		
Note: Ref. Groundwater Guidance Co	oncentrations	s, FDEP 200	)7	1								1 1		
MCL=MAXIMUM CONTAMINANT LE				i	1							1		
BDL=BELOW DETECTION LIMIT		i												
NTU=NEPHELOMETRIC TURBIDITY	UNITS				1									
i = reported value between the labora	tory method	detection li	mit and the	laboratory	practical q	uantitation	limit							
u = parameter was analyzed but not	detected.													
*=DENOTES PRIMARY DRINKING \	<b>NATER STA</b>	NDARD			Ī									
**=DENOTES SECONDARY DRINKI			)		<u> </u>							i		
***=DENOTES FLORIDA GUIDANCE	CONCENT	RATION												
5.30	I													
ug/I=MICROGRAMS PER LITER	·													
mg/I=MILLIGRAMS PER LITER		· · · · · · · · · · · · · · · · · · ·		-	1			-						
NS=NO STANDARD					1							:		İ

#### **GROUNDWATER AND SURFACE WATER ELEVATIONS FOR**

#### SOUTHEAST LANDFILL

April 4, 2012

Measuring	T.O.C.	04/04/2012	<u> </u>	
Point	Elevations	W.L.	W.L.	Time
I.D.	(NGVD)	B.T.O.C.	(NGVD)	
P-4D	140.78	23.12	117.66	11:52 AM
P-4S	140.95	Dry	Dry	11:51 AM
P-5D	151.94	Dry	Dry	12:55 PM
P-6D-A	148.01	29.41	118.60	12:49 PM
P-7D	138.92	19.50	119.42	1:33 PM
P-8D	138.34	19.62	118.72	12:03 PM
P-11D	138.02	18.95	119.07	12:01 PM
P-12S P-13S	134.97 140.21	15.85	119.12	12:05 PM
P-148	138.56	21.15 19.55	119.06 119.01	1:44 PM 1:41 PM
P-145	139.19	20.18	119.01	1:40 PM
P-16S	143.38	16.50	126.88	12:41 PM
P-161	144.15	25.54	118.61	12:42 PM
P-16D	143.84	25.26	118.58	12:43 PM
P-17S	137.35	18.00	119.35	1:00 PM
P-17I	137.32	18.80	118.52	1:01 PM
P-17D	137.22	18.80	118.42	1:02 PM
P-18S	129.86	19.28	110.58	10:30 AM
P-19	133.36	15.90	117.46	12:52 PM
P-20	132.38	14.55	117.83	12:46 PM
P-21	122.79	5.35	117.44	12:33 PM
P-22	128.35	10.65	117.70	12:34 PM
P-23	143.13	24.98	118.15	12:38 PM
TH-19*	130.27	120.81	9.46	1:10 PM
TH-20A	131.86	11.58	120.28	12:15 PM
TH-20B	132.57	12.60	119.97	12:16 PM
TH-22	128.82	7.05	121.77	10:00 AM
TH-22A	129.27	7.65	121.62	9:59 AM
TH-24A	128.23	7.56	120.67	10:05 AM
TH-28A	131.10	29.35	101.75	11:05 AM
TH-30	128.88	24.28	104.60	11:14 AM
TH-32	129.90	15.90	114.00	11:40 AM
TH-35	145.98	29.81	116.17	1:04 PM
TH-36A	152.70	34.40	118.30	1:13 PM
TH-38A	130.68	11.88	118.80	12:18 PM
TH-38B	131.81	12.61	119.20	12:19 PM
TH-40*	124.99	118.71	6.28	10:13 AM
TH-41°	125.00 116.74	121.32	3.68	10:15 AM
TH-57	128.36	93.21 20.28	23.53 108.08	11:38 AM 10:19 AM
TH-58	127.88	28.66	99.22	11:11 AM
TH-61	138.73	19.15	119.58	1:46 PM
TH-61A	139.45	19.75	119.70	1:47 PM
TH-64	139.64	19.69	119.95	1:43 PM
TH-65	135.40	16.08	119.32	12:07 PM
TH-66	130.58	10.90	119.68	12:10 PM
TH-66A	130.66	11.36	119.30	12:09 PM
TH-67	129.51	7.50	122.01	12:12 PM
TH-68	140.01	19.77	120.24	1:35 PM
TH-69A	144.97	26.62	118.35	11:57 AM
TH-70A	146.63	ND	ND	11:54 AM
TH-71A	148.95	28.30	118.65	12:29 PM
TH-72	130.96	124.96	6.00	11:08 AM
TH-73	131.07	32.63	98.44	11:07 AM
TH-74	109.08	10.53	98.55	10:23 AM
TH-75	106.92	8.15	98.77	10:25 AM
SW-3A	3.0'=125.53'	Dry	Dry	9:54 AM
SW-3B2B	3.0'=97.97' 6.0'=92.33'	Dry	Dry	11:23 AM
SW-3C2 Mine Cut #1	4.0'=122.14'	1.00 Dry	87.33 Dry	11:28 AM
Mine Cut #2	6.0'=123.47'	1.18	118.65	1:38 PM 1:07 PM
Mine Cut #3	4.0'=112.27'	1.84	110.11	11:36 AM
Mine Cut #4	5.0'=97.54'	1.38	93.92	11:33 AM
	= National Geodet		1 33.02	
	= Top of Casing		<del></del>	
	= Below Top of Ca	asing	<u> </u>	<del> </del>
	= Floridan Well		1	
1		<u> </u>	1	1
	= Erroneous Data = Water Level	Due to Iron Bacte	ria in Well	



Southeast County Landfill

Groundwater Elevation Contour Diagram — April 4, 2012

# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

## **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc. TestAmerica Tampa 6712 Benjamin Road Suite 100 Tampa, FL 33634

Tel: (813)885-7427

TestAmerica Job ID: 660-46975-1 Client Project/Site: Southeast Landfill

For:

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

Attn: David Adams

Authorized for release by: 4/20/2012 12:57:58 PM

Nancy Robertson Project Manager II

nancy.robertson@testamericainc.com

Review your project results through

.....LINKS

Total Access

Have a Question?



Visit us at: www.testamericainc.com

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

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

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



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## **Definitions/Glossary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Qualifiers	
Metals	
Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
ı	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
General Chen	nistry
Qualifier	Qualifier Description
Ū	indicates that the compound was analyzed for but not delected.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
<b>*</b>	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

#### **Case Narrative**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Job ID: 660-46975-1

Laboratory: TestAmerica Tampa

Narrativo

Job Narrative 660-46975-1

Comments

No additional comments.

#### Receipt

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

#### Metals

No analytical or quality issues were noted.

#### **General Chemistry**

No analytical or quality issues were noted.

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## **Detection Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Client Sample ID: Blank, E									660-46975-
Analyte		Qualifier	PQL	MDL		Dil Fac	D	Method	Prep Type
Sodium	0.34	ı	0.50	0.31	mg/L	1		6010B	Total Recover
Client Sample ID: Duplica	te 46975					Lá	ab	Sample ID:	660-46975-
Analyte	Result	Quatifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	17		0.50	0.31	mg/L	1	_	6010B	Total Recover
Chloride	8.8		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.30		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	160		10	10	mg/L	1		SM 2540C	Total/NA
lient Sample ID: TH-28A	WACS#19862					La	ab	Sample ID:	660-46975-
Analyto	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3700		200	50	ug/L			6010B	Total Recove
Sodium	24		0.50	0.31	mg/L	1		6010B	Total Recove
Chloride	71		1.0	0.40	mg/L	2		300.0	Total/NA
Ammonia as N	2.2		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	130		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.30				SU	1		Field Sampling	Total/NA
Field Temperature	26.27				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.83				mg/L	1		Field Sampling	Total/NA
Specific Conductance	297				umhos/cm	1		Field Sampling	Total/NA
Turbidity	14.40				NTU	1		Field Sampling	Total/NA
Client Sample ID: TH-40 V	VACS#822					La	ab	Sample ID: (	660-46975-
Analyte		Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recove
Chloride	8.8		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.31		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	170		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.37				SU	1		Field Sampling	Total/NA
Field Temperature	23.43				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.66				mg/L	1		Field Sampling	Tctal/NA
Specific Conductance	351				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.86				NTU	1		Field Sampling	Total/NA
Client Sample ID: TH-57	VACS#1570					Li	ab	Sample ID:	660-46975-
Analyte		Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	290		200	50	ug/L	1		6010B	Total Recove
Sodium	10		0.50		mg/L	1		6010B	Total Recove
Chloride	29		0.50		mg/L	1		300.0	Total/NA
Ammonia as N	0.73		0.020	0.010	•	1		350.1	Tctal/NA
Total Dissolved Solids	80		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.16				SU	1		Field Sampling	Total/NA
Field Temperature	25.79				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.78				mg/L	1		Field Sampling	Total/NA
Specific Conductance	139				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.46				NTU	1		Field Sampling	Total/NA

### **Detection Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Analyte								Sample ID: (	
,		Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	4100		200	50	ug/L	1	_	6010B	Total Recove
Sodium	20		0.50	0.31	mg/L	1		6010B	Total Recove
Chloride	50		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	1.1		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	120		5.0	5.0	mg/L	1		SM 2540C	Total/NA
Field pH	5.06				SU	1		Field Sampling	Total/NA
Field Temperature	24.94				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.79				mg/L	1		Field Sampling	Total/NA
Specific Conductance	231				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.39				NTU	1		Field Sampling	Total/NA
lient Sample ID: TH-72 W	ACS#27753					Li	ab	Sample ID: (	660-46975
Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	110	ī	200	50	ug/L	1	-	6010B	Total Recov
Sodium	29		0.50	0.31	mg/L	1		60108	Total Recov
Chloride	28		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.41		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	280		10	10	-	1		SM 2540C	Total/NA
Field pH	7.08				SU	1		Field Sampling	Total/NA
Field Temperature	23.18				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1.09				mg/L	1		Field Sampling	Total/NA
Specific Conductance	522				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.65				NTU	1		Field Sampling	Total/NA
Analyto	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	14		0.50	0.31	mg/L	1		6010B	Total Recov
Chloride	8.1		0.50	0.20	mg/L	1		300.0	Total/NA
					_			350.1	
Ammonia as N	0.26		0.020	0.010	mg/L	1		350.1	Tctal/NA
	0.26 190		0.020 10		mg/L mg/L	1		SM 2540C	Total/NA Total/NA
Total Dissolved Solids					-				
Total Dissolved Solids Field pH	190				mg/L	1		SM 2540C	Total/NA
Total Dissolved Solids Field pH Field Temperature	190 7.00				mg/L SU	1		SM 2540C Field Sampling	Total/NA Total/NA
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved	190 7.00 23.44				mg/L SU Degrees C	1 1		SM 2540C Field Sampling Field Sampling	Total/NA Total/NA Total/NA
Ammonia as N Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity	190 7.00 23.44 0.58				mg/L SU Degrees C mg/L	1 1 1		SM 2540C Field Sampling Field Sampling Field Sampling	Total/NA Total/NA Total/NA Total/NA
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance	190 7.00 23.44 0.58 423 0.00				mg/L SU Degrees C mg/L umhos/cm	1 1 1 1 1	ab	SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling	Total/NA Total/NA Total/NA Total/NA Total/NA
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Client Sample ID: TH-42 WA	190 7.00 23.44 0.58 423 0.00 ACS#823	Qualifier	10 PQL	10	mg/L SU Degrees C mg/L umhos/cm NTU	1 1 1 1 1 1 Li		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Mothod	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Flient Sample ID: TH-42 WA Analyto	190 7.00 23.44 0.58 423 0.00 ACS#823		PQL 200	10	mg/L SU Degrees C mg/L umhos/cm NTU	1 1 1 1 1		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Lient Sample ID: TH-42 W Analyto Iron Sodium	190 7.00 23.44 0.58 423 0.00 ACS#823 Result 160		10 PQL	MDL 50	mg/L SU Degrees C mg/L umhos/cm NTU	1 1 1 1 1 1 Li		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Mothod	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Lient Sample ID: TH-42 W Analyto Iron Sodium	190 7.00 23.44 0.58 423 0.00 ACS#823		PQL 200	MDL 50 0.31	mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L	1 1 1 1 1 1 1 1 Li		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Mothod 6010B	Total/NA
Total Dissolved Solids Field pH Field Temperature Dxygen, Dissolved Specific Conductance Turbidity  Ilient Sample ID: TH-42 W Analyte Iron Sodium Chloride	190 7.00 23.44 0.58 423 0.00 ACS#823 Result 160		PQL 200 0.50	MDL 50 0.31	mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L	1 1 1 1 1 1 L.;  Dil Fac 1 1		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Mothod 6010B 6010B	Total/NA
Total Dissolved Solids Field pH Field Temperature Dxygen, Dissolved Specific Conductance Turbidity  Ilient Sample ID: TH-42 W Analyte Iron Sodium Chloride Ammonia as N	190 7.00 23.44 0.58 423 0.00  ACS#823  Result 160 16 17		PQL 200 0.50 0.50	MDL 50 0.31 0.20 0.010	mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L	1 1 1 1 1 L:		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Mothod 6010B 6010B 300.0	Total/NA Total Recov Total Recov
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Lient Sample ID: TH-42 WA Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids	190 7.00 23.44 0.58 423 0.00  ACS#823  Rosult 160 16 17 0.25		PQL 200 0.50 0.50 0.020	MDL 50 0.31 0.20 0.010	mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L	1 1 1 1 1 L:		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Mothod 6010B 6010B 300.0 350.1	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total Recov Total/NA Total/NA
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Flient Sample ID: TH-42 W  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field pH	190 7.00 23.44 0.58 423 0.00  ACS#823  Rosult 160 16 17 0.25 250		PQL 200 0.50 0.50 0.020	MDL 50 0.31 0.20 0.010	mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L mg/L	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		SM 2540C Field Sampling  Mothod 6010B 6010B 300.0 350.1 SM 2540C	Total/NA
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity	190 7.00 23.44 0.58 423 0.00  ACS#823  Result 160 16 17 0.25 250 7.00		PQL 200 0.50 0.50 0.020	MDL 50 0.31 0.20 0.010	mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L mg/L SU	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling  Sample ID: 0  Mothod 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total Recov Total Recov Total/NA Total/NA Total/NA Total/NA
Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Lient Sample ID: TH-42 W Analyte Iron Sodium Chlonde Ammonia as N Total Dissolved Solids Field Temperature	190 7.00 23.44 0.58 423 0.00  ACS#823  Result 160 16 17 0.25 250 7.00 23.78		PQL 200 0.50 0.50 0.020	MDL 50 0.31 0.20 0.010	mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L SU Degrees C	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		SM 2540C Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling  Sample ID: 0  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling Field Sampling	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total Recov Total Recov Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA

### **Detection Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

lient Sample ID: SUP 2 V									
Analyto	Result	Qualifier	PQL	MDL	Unit	DII Fac	D	Method	Prep Type
Sodium	8.3		0.50	0.31	mg/L	1		6010B	Total Recove
Chloride	11		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.14		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	170		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	7.50				SU	1		Field Sampling	Total/NA
Field Temperature	24.94				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.04				mg/L	1		Field Sampling	Total/NA
Specific Conductance	376				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.00				NTU	1		Field Sampling	Total/NA
lient Sample ID: TH-58 W	/ACS#1571					La	ab	Sample ID: 6	660-47005-
Analyte		Qualifier	PQL	MDL	Unit	Dil Fac	٥	Method	Prep Type
Arsenic	26		10	4.0	ug/L	1	-	6010B	Total Recover
Iron	4000		200	50	ug/L	1		6010B	Total Recove
Sodium	26		0.50	0.31	mg/L	1		6010B	Total Recove
Chloride	81		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	0.90		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	270		10	10	mg/L	1		SM 2540C	Tctal/NA
Field pH	5.70				SU	1		Field Sampling	Total/NA
Field Temperature	25.63				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0,40				mg/L	1		Field Sampling	Total/NA
• •	606				umhos/cm	1		Field Sampling	Total/NA
Specific Conductance Turbidity	606 0.00 VACS#27755				umhos/cm NTU	1 1 L:	ab	Field Sampling Field Sampling Sample ID: 6	Total/NA Total/NA 360-47005-
Specific Conductance Turbidity  Lient Sample ID: SUP 1 V	0.00 VACS#27755	Qualifier	PQL	MDL	NTU	1	ab D	Field Sampling	Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyto	0.00 VACS#27755	Qualifier	PQL 200	MDL 50	NTU	1 La		Field Sampling Sample ID: 6	Total/NA 660-47005- Prep Type
Specific Conductance Turbidity  lient Sample ID: SUP 1 V  Analyte  Iron	0.00 VACS#27755 Rosult	Qualifier		50	Vnit	L;		Field Sampling Sample ID: (	Total/NA  660-47005-  Prep Type  Total Recove
Specific Conductance Turbidity  Lient Sample ID: SUP 1 V  Analyte Iron Sodium	0.00 VACS#27755 Rosult 410	Qualifier	200	50 0.31	Unit ug/L	Li Dil Fac		Field Sampling  Sample ID: 6  Method  6010B	Total/NA  660-47005-  Prep Type  Total Recove
Specific Conductance Turbidity  Lient Sample ID: SUP 1 V  Analyte Iron Sodium Chloride	0.00 VACS#27755 Rosult 410 8.3	Qualifier	200 0.50	50 0.31	Unit ug/L mg/L	Li Dil Fac		Field Sampling  Sample ID: 6  Method 6010B 6010B	Total/NA  660-47005-  Prep Type  Total Recove  Total Recove
Specific Conductance Turbidity  Lient Sample ID: SUP 1 V  Analyte Iron Sodium Chloride Ammonia as N	0.00 VACS#27755 Rosult 410 8.3 9.4	Qualifier	200 0.50 0.50	0.31 0.20 0.010	Unit ug/L mg/L mg/L	Li Dil Fac 1 1 1		Sample ID: 6 Method 6010B 6010B 300.0	Total/NA  660-47005-  Prep Type Total Recove Total Recove Total/NA
Specific Conductance Turbidity  Flient Sample ID: SUP 1 V  Analyte Iron Sodium Chlonde  Ammonia as N  Total Dissolved Solids	0.00 VACS#27755 Rosult 410 8.3 9.4 0.15	Qualifier	200 0.50 0.50 0.020	0.31 0.20 0.010	Unit ug/L mg/L mg/L mg/L	Dil Fac 1 1 1 1		Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1	Total/NA  660-47005-  Prep Type Total Recove Total Recove Total/NA Total/NA
Specific Conductance Turbidity  Ilient Sample ID: SUP 1 V  Analyte Iren Sodium Chlonde Ammenia as N Total Disselved Solids Field pH	0.00 VACS#27755  Result 410 8.3 9.4 0.15	Qualifier	200 0.50 0.50 0.020	0.31 0.20 0.010	Unit ug/L mg/L mg/L mg/L mg/L	Dil Fac 1 1 1 1 1 1		Field Sampling  Sample ID: 6  Method  6010B  6010B  300.0  350.1  SM 2540C	Total/NA  Prep Type Total Recove Total Recove Total/NA Total/NA Total/NA
Specific Conductance Turbidity  Ilient Sample ID: SUP 1 V  Analyto Iron Sodium Chloride  Ammonia as N  Total Dissolved Solids Field pH  Field Temperature	0.00 VACS#27755  Result 410 8.3 9.4 0.15 150 7.37	Qualifier	200 0.50 0.50 0.020	0.31 0.20 0.010	Unit ug/L mg/L mg/L mg/L mg/L SU Degrees C	Dil Fac  1 1 1 1 1 1 1		Field Sampling  Sample ID: 6  Method  6010B  6010B  300.0  350.1  SM 2540C  Field Sampling	Total/NA  Prep Type Total Recove Total Recove Total/NA Total/NA Total/NA Total/NA
Specific Conductance Turbidity  Ilient Sample ID: SUP 1 V  Analyte Iron Sodium Chloride Ammonia as N  Total Dissolved Solids Field pH  Field Temperature Oxygen, Dissolved	0.00 VACS#27755  Result 410 8.3 9.4 0.15 150 7.37 24.53	Qualifier	200 0.50 0.50 0.020	0.31 0.20 0.010	Unit ug/L mg/L mg/L mg/L mg/L SU	1 Li		Field Sampling  Sample ID: 6  Method  6010B  6010B  300.0  350.1  SM 2540C  Field Sampling  Field Sampling  Field Sampling	Total/NA  Prep Type Total Recove Total Recove Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field PH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity	0.00 VACS#27755  Result 410 8.3 9.4 0.15 150 7.37 24.53 0.04	Qualifier	200 0.50 0.50 0.020	0.31 0.20 0.010	Unit ug/L mg/L mg/L mg/L mg/L SU Degrees C mg/L	1 Li		Field Sampling  Sample ID: 6  Method  6010B  6010B  300.0  350.1  SM 2540C  Field Sampling  Field Sampling	Total/NA  Prep Type Total Recover Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance	0.00  VACS#27755  Result 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00	Qualifier	200 0.50 0.50 0.020	0.31 0.20 0.010	Unit ug/L mg/L mg/L mg/L mg/L SU Degrees C mg/L umhos/cm	1 Li	D	Field Sampling  Sample ID: 6  Method  6010B  6010B  300.0  350.1  SM 2540C  Field Sampling  Field Sampling  Field Sampling  Field Sampling	Total/NA  Prep Type Total Recove Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field PH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Client Sample ID: TH-30 V  Analyte	0.00 VACS#27755  Rosult 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result	Qualifier	200 0.50 0.50 0.020 10	50 0.31 0.20 0.010 10	Unit ug/L mg/L mg/L mg/L sU Degrees C mg/L umhos/cm NTU	Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 Dil Fac  Dil Fac	D	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA  Prep Type Total Recove Total Recove Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte Iren Sodium Chloride Ammonia as N Total Dissolved Solids Field PH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Client Sample ID: TH-30 V  Analyte Iren	0.00  VACS#27755  Rosult 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Rosult 320		200 0.50 0.50 0.020 10	50 0.31 0.20 0.010 10	Unit ug/L mg/L mg/L mg/L sU Degrees C mg/L umhos/cm	1 Li	D ab	Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA  Prep Type Total Recove Total Recove Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte Iron Sodium Chlonde Ammonia as N Total Dissolved Solids Field PH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Client Sample ID: TH-30 V  Analyte	0.00 VACS#27755  Rosult 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result		200 0.50 0.50 0.020 10	50 0.31 0.20 0.010 10 MDL 50	Unit ug/L mg/L mg/L mg/L sU Degrees C mg/L umhos/cm NTU	Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 Dil Fac  Dil Fac	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA  Prep Type Total Recove Total Recove Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte Iron Sodium Chlonde Ammonia as N  Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Client Sample ID: TH-30 V  Analyte Iron Sodium	0.00  VACS#27755  Rosult 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Rosult 320		200 0.50 0.50 0.020 10	50 0.31 0.20 0.010 10 MDL 50 0.31	Unit ug/L mg/L mg/L mg/L sU Degrees C mg/L umhos/cm NTU Unit ug/L	Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Prep Type Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte  Iron Sodium Chlonde  Ammonia as N  Total Dissolved Solids Field pH  Field Temperature  Oxygen, Dissolved Specific Conductance Turbidity  Client Sample ID: TH-30 V  Analyte  Iron Sodium Chloride	0.00  VACS#27755  Result 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result 320 27		200 0.50 0.50 0.020 10 PQL 200 0.50	50 0.31 0.20 0.010 10 MDL 50 0.31	Unit ug/L mg/L mg/L mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L	Dil Fac  Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Prep Type Total Recover Total Recover Total Recover Total/NA Total/Recover Total Recover
Specific Conductance Turbidity  Ilient Sample ID: SUP 1 V  Analyte Iren Sodium Chlonde Ammonia as N Total Dissclved Solids Field pH Field Temperature Oxygen, Dissclved Specific Conductance Turbidity  Ilient Sample ID: TH-30 V  Analyte Iren Sodium Chloride Ammonia as N	0.00  VACS#27755  Rosult 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result 320 27 110		200 0.50 0.50 0.020 10 PQL 200 0.50 5.0	50 0.31 0.20 0.010 10 MDL 50 0.31 2.0 0.010	Unit ug/L mg/L mg/L mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L	Dil Fac  Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA  Prep Type Total Recover Total Recover Total/NA
Specific Conductance Turbidity  Ilient Sample ID: SUP 1 V  Analyte Iren Sodium Chloride Ammonia as N  Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Ilient Sample ID: TH-30 V  Analyte Iren Sodium Chloride Ammonia as N  Total Dissolved Solids	VACS#27755  Rosult 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result 320 27 110 1.7		200 0.50 0.50 0.020 10  PQL 200 0.50 5.0 0.020	50 0.31 0.20 0.010 10 MDL 50 0.31 2.0 0.010	Unit ug/L mg/L mg/L mg/L sU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L mg/L	Dil Fac  Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA  Prep Type Total Recover Total Recover Total/NA
Specific Conductance Turbidity  Ilient Sample ID: SUP 1 V  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Ilient Sample ID: TH-30 V  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field pH  Field Temperature	0.00  VACS#27755  Rosult 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result 320 27 110 1.7 150		200 0.50 0.50 0.020 10  PQL 200 0.50 5.0 0.020	50 0.31 0.20 0.010 10 MDL 50 0.31 2.0 0.010	Unit ug/L mg/L mg/L mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L mg/L mg/L	Dil Fac  Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling Field Sampl	Total/NA  Prep Type Total Recover Total Recover Total/NA
Specific Conductance Turbidity  Ilient Sample ID: SUP 1 V  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Ilient Sample ID: TH-30 V  Analyte Iron Sodium Chloride Ammonia as N Total Dissolved Solids Field pH Field Temperature	0.00  VACS#27755  Result 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result 320 27 110 1.7 150 4.39		200 0.50 0.50 0.020 10  PQL 200 0.50 5.0 0.020	50 0.31 0.20 0.010 10 MDL 50 0.31 2.0 0.010	Unit ug/L mg/L mg/L mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L mg/L SU	Dil Fac  Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA  Prep Type Total Recove Total/NA
Specific Conductance Turbidity  Client Sample ID: SUP 1 V  Analyte Iron Sodium Chlonde Ammonia as N  Total Dissolved Solids Field PH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity  Client Sample ID: TH-30 V  Analyte Iron	0.00  VACS#27755  Result 410 8.3 9.4 0.15 150 7.37 24.53 0.04 363 0.00  VACS#1065  Result 320 27 110 1.7 150 4.39 23.67		200 0.50 0.50 0.020 10  PQL 200 0.50 5.0 0.020	50 0.31 0.20 0.010 10 MDL 50 0.31 2.0 0.010	Unit ug/L mg/L mg/L mg/L SU Degrees C mg/L umhos/cm NTU  Unit ug/L mg/L mg/L mg/L SU Degrees C	Dil Fac  Dil Fac  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D ab	Field Sampling  Sample ID: 6  Method 6010B 6010B 300.0 350.1 SM 2540C Field Sampling	Total/NA  Prep Type Total Recove Total/NA

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

TestAmerica Job ID: 660-46975-1

Client Sample ID: Blank, Equipment 46975 Date Collected: 04/04/12 10:37

Lab Sample ID: 660-46975-1

Matrix: Water

Date Received: 04/05/12 14:20

– Method: 6010B - Metals (ICP) - Tota	al Recoverab	le							
Analyto	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		04/09/12 11:54	04/10/12 08:50	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:50	1
Sodium	0.34	Ī	0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:50	1



	General Chemistry  Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	0.20	Ū	0,50	0,20	mg/L			04/18/12 11:56	1
ı	Ammonia as N	0.010	ប	0,020	0.010	mg/L			04/06/12 15:23	1
	Total Dissolved Solids	5,0	U	5.0	5.0	mg/L			04/10/12 14:58	1

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

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

Date Collected: 04/05/12 00:00 Matrix: Water

Date Received: 04/05/12 14:20

Analyte	Result	Qualifier	PQL	MDL	Unit	Đ	Prepared	Analyzed	Dil Fac
Arsenic	4.0	<del></del>	10	4.0	ug/L		04/09/12 11:54	04/10/12 08:37	1
iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:37	1
Sodium	17		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:37	1
Seneral Chemistry									
Analyte	Rosult	Qualifler	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.8		0,50	0,20	mg/L			04/18/12 12:11	1
Ammonia as N	0.30		0.020	0.010	mg/L			04/06/12 15:19	1
Total Dissolved Solids	160		10	10	mg/L			04/10/12 14:58	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

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

Date Collected: 04/05/12 12:14 Date Received: 04/05/12 14:20								Matrix	c: Water
Method: 6010B - Metals (ICP) -	Total Recoverat	ole							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		04/09/12 11:54	04/10/12 08:54	1
Iron	3700		200	50	ug/L		04/09/12 11:54	04/10/12 08:54	1
Sodium	24		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:54	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71		1.0	0.40	mg/L	_		04/18/12 17:04	2
Ammonia as N	2.2		0.020	0.010	mg/L			04/06/12 15:24	1
Total Dissolved Solids	130		10	10	mg/L			04/10/12 14:59	1
Method: Field Sampling - Field	l Sampling								
Analyte	Rosult	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dit Fac
Field pH	5.30			• • • • • • • • • • • • • • • • • • • •	SU			04/05/12 12:14	1
Field Temperature	26.27				Degrees C			04/05/12 12:14	1
Oxygen, Dissolved	1.83				mg/L			04/05/12 12:14	1
Specific Conductance	297				umhos/cm			04/05/12 12:14	1
Turbidity	14.40				NTU			04/05/12 12:14	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-40 WACS#822 Lab Sample ID: 660-46975-4 Date Collected: 04/05/12 09:41 Matrix: Water

Date Received: 04/05/12 14:20										
Method: 6010B - Metals (ICP) -	Total Recoverat	ole								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Arsenic	4.0	Ū	10	4.0	ug/L		04/09/12 11:54	04/10/12 08:57	1	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:57	1	
Sodium	17		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:57	1	٠
General Chemistry										
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	8.8		0.50	0.20	mg/L			04/18/12 13:44	1	
Ammonia as N	0.31		0.020	0.010	mg/L			04/06/12 15:25	1	
Total Dissolved Solids	170		10	10	mg/L			04/10/12 15:00	1	
Method: Field Sampling - Field	Sampling									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Field pH	7.37				SU			04/05/12 09:41	1	
Field Temperature	23.43				Degrees C			04/05/12 09:41	1	
Oxygen, Dissolved	0.66				mg/L			04/05/12 09:41	1	
Specific Conductance	351				umhos/cm			04/05/12 09:41	1	
Turbidity	0.86				NTU			04/05/12 09:41	1	



Client: Hillsborough County Public Utilities Dep

Client Sample ID: TH-57 WACS#1570

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Lab Sample ID: 660-46975-5

Matrix: Water

Date Collected: 04/05/12 10:12 Date Received: 04/05/12 14:20					Matrix	c: Water			
Method: 6010B - Metals (ICP)	Total Recoverab	ole							
Analyto	Rosult	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	4.0	<del>U</del>	10	4.0	ng/L		04/09/12 11:54	04/10/12 09:07	-
Iron	290		200	50	ug/L		04/09/12 11:54	04/10/12 09:07	
Sodium	10		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:07	•
General Chemistry									
Analyte	Rosult	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	29		0.50	0.20	mg/L			04/18/12 13:59	
Ammonia as N	0.73		0.020	0.010	mg/L			04/06/12 15:27	•
Total Dissolved Solids	80		5.0	5.0	mg/L			04/10/12 15:00	•
- Method: Field Sampling - Field	d Sampling								
Analyto	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Field pH	5.16				SU			04/05/12 10:12	
Field Temperature	25.79				Degrees C			04/05/12 10:12	
Oxygen, Dissolved	0.78				mg/L			04/05/12 10:12	
Specific Conductance	139				umhos/cm			04/05/12 10:12	
Turbidity	0.46				NTU			04/05/12 10:12	



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Lab Sample ID: 660-46975-6

Matrix: Water

Client Sample ID: TH-73 WACS#27754 Date Collected: 04/05/12 11:31

Date Received: 04/05/12 14:20

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		04/09/12 11:54	04/10/12 09:11	1
ron	4100		200	50	ug/L		04/09/12 11:54	04/10/12 09:11	1
Sodium	20		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:11	1
General Chemistry									
Analyte	Resuit	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50		5.0	2.0	mg/L			04/18/12 14:15	10
Ammonia as N	1.1		0.020	0.010	mg/L			04/06/12 15:28	1
Total Dissolved Solids	120		5.0	5.0	mg/L			04/10/12 15:01	1
Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.06				SU			04/05/12 11:31	1
Field Temperature	24.94				Degrees C			04/05/12 11:31	1
Oxygen, Dissolved	0.79				mg/L			04/05/12 11:31	1
Specific Conductance	231				umhos/cm			04/05/12 11:31	1
Turbidity	4.39				NTU			04/05/12 11:31	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-72 WACS#27753

Lab Sample ID: 660-46975-7

Date Collected: 04/05/12 11:55

Matrix: Water

Date Received: 04/05/12 14:20									
- Method: 6010B - Metals (ICP) - 7	Total Recoverat	ole							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		04/09/12 11:54	04/10/12 09:14	1
Iron	110	1	200	50	ug/L		04/09/12 11:54	04/10/12 09:14	1
Sodium	29		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:14	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		0.50	0.20	mg/L			04/18/12 14:30	1
Ammonia as N	0.41		0.020	0.010	mg/L			04/06/12 15:29	1
Total Dissolved Solids	280		10	10	mg/L			04/10/12 15:01	1
- Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	Ð	Prepared	. Analyzed	Dil Fac
Field pH	7.08				SU			04/05/12 11:55	1
Field Temperature	23.18				Degrees C			04/05/12 11:55	1
Oxygen, Dissolved	1.09				mg/L			04/05/12 11:55	1
Specific Conductance	522				umhos/cm			04/05/12 11:55	1
Turbidity	0.65				NTU			04/05/12 11:55	1



Client: Hillsborough County Public Utilities Dep

Client Sample ID: TH-19 WACS#821

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Lab Sample ID: 660-47005-1

Matrix: Water

Date Collected: 04/06/12 10:22

Method: 6010B - Metals (ICP)	- Total Recoverat	le							
Analyte		Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U .	10	4.0	ug/L		04/10/12 07:22	04/10/12 12:57	1
Iron	50	U	200	50	ug/L		04/10/12 07:22	04/10/12 12:57	1
Sodium	14		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 12:57	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.1		0.50	0.20	mg/L			04/16/12 18:19	1
Ammonia as N	0.26		0.020	0.010	mg/L			04/17/12 21:57	1
Total Dissolved Solids	190		10	10	mg/L			04/11/12 14:59	1
Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.00				SU			04/06/12 10:22	1
Field Temperature	23.44				Degrees C			04/06/12 10:22	1
Oxygen, Dissolved	0.58				mg/L			04/06/12 10:22	1
Specific Conductance	423				umhos/cm			04/06/12 10:22	1
Turbidity	0.00				NTU			04/06/12 10:22	4



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Lab Sample ID: 660-47005-2 Client Sample ID: TH-42 WACS#823 Date Collected: 04/06/12 10:57 Matrix: Water

Date Received: 04/06/12 14:26									
- Method: 6010B - Metals (ICP)	- Total Recoveral	ole							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		04/10/12 07:22	04/10/12 13:10	1
Iron	160	1	200	50	ug/L		04/10/12 07:22	04/10/12 13:10	1
Sodium	16		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:10	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17	·	0.50	0.20	mg/L			04/16/12 18:34	1
Ammonia as N	0.25		0.020	0.010	mg/L			04/17/12 21:58	1
Total Dissolved Solids	250		10	10	mg/L			04/11/12 14:56	1
 Method: Field Sampling - Fiel	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.00				SU			04/06/12 10:57	1
Field Temperature	23.78				Degrees C			04/06/12 10:57	1
Oxygen, Dissolved	0.19				mg/L			04/06/12 10:57	1
Specific Conductance	536				umhos/cm			04/06/12 10:57	1
Turbidity	3.98				NTU			04/06/12 10:57	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Client Sample ID: SUP 2 WACS#27756

Lab Sample ID: 660-47005-3

Date Collected: 04/06/12 11:54

Matrix: Water

Date Received: 04/06/12 14:26									
Method: 6010B - Metals (ICP)	- Total Recoverab	ole							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U .	10	4.0	ug/L		04/10/12 07:22	04/10/12 13:13	
Iron	50	U	200	50	ug/L		04/10/12 07:22	04/10/12 13:13	•
Sodium	8.3		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:13	1
- General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		0.50	0.20	mg/L			04/16/12 18:49	1
Ammonia as N	0.14		0.020	0.010	mg/L			04/17/12 21:59	1
Total Dissolved Solids	170		10	10	mg/L			04/11/12 14:57	1
- Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.50				SU			04/06/12 11:54	1
Field Temperature	24.94				Degrees C			04/06/12 11:54	1
Oxygen, Dissolved	0.04				mg/L			04/06/12 11:54	1
Specific Conductance	376				umhos/cm			04/06/12 11:54	1
Turbidity	0.00				NTU			04/06/12 11:54	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Client Sample ID: TH-58 WACS#1571

Lab Sample ID: 660-47005-4

Date Collected: 04/06/12 09:46

Matrix: Water

Date Received: 04/06/12 14:26									
Method: 6010B - Metals (ICP) -	Total Recoverat	le							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	26		10	4.0	ug/L		04/10/12 07:22	04/10/12 13:16	1
Iron	4000		200	50	ug/L		04/10/12 07:22	04/10/12 13:16	1
Sodium	26		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:16	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81		5.0	2.0	mg/L			04/17/12 22:34	10
Ammonia as N	0.90		0.020	0.010	mg/L			04/17/12 22:00	1
Total Dissolved Solids	270		10	10	mg/L			04/11/12 14:57	1
Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.70				SU			04/06/12 09:46	1
Field Temperature	25.63				Degrees C			04/06/12 09:46	1
Oxygen, Dissolved	0.40				mg/L			04/06/12 09:46	1
Specific Conductance	606				umhos/cm			04/06/12 09:46	1
Turbidity	0.00				NTU			04/06/12 09:46	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

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

Date Collected: 04/06/12 12:22 Matrix: Water

Date Received: 04/06/12 14:26

Analyte	Result	Qualifier	PQL	MDL	Unit	Đ	Prepared	Analyzed	Dil Fac
Arsenic	4.0	<u>u</u> -	10	4.0	ug/L		04/10/12 07:22	04/10/12 13:27	1
Iron	410		200	50	ug/L		04/10/12 07:22	04/10/12 13:27	1
Sodium	8.3		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:27	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MOL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.4		0.50	0.20	mg/L			04/16/12 19:20	1
Ammonia as N	0.15		0.020	0.010	mg/L			04/17/12 22:02	1
Total Dissolved Solids	150		10	10	mg/L			04/11/12 14:58	1
Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.37				SU			04/06/12 12:22	1
Field Temperature	24.53				Degrees C			04/06/12 12:22	1
Oxygen, Dissolved	0.04				mg/L			04/06/12 12:22	1
Specific Conductance	363				umhos/cm			04/06/12 12:22	1
Turbidity	0.00				NTU			04/06/12 12:22	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

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

Date Collected: 04/06/12 10:15

Matrix: Water

Method: 6010B - Metals (ICP)	· Total Recoverab	ole							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	4.0	U -	10	4.0	ug/L		04/10/12 07:22	04/10/12 13:30	
Iron	320		200	50	ug/L		04/10/12 07:22	04/10/12 13:30	
Sodium	27		0.50	0.31	mg/L		04/10/12 07:22	04/10/12 13:30	
- General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	110		5.0	2.0	mg/L			04/17/12 22:49	1
Ammonia as N	1.7		0.020	0.010	mg/L			04/17/12 22:03	
Total Dissolved Solids	150		10	10	mg/L			04/11/12 14:58	
Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dit Fac
Field pH	4.39				SU			04/06/12 10:15	
Field Temperature	23.67				Degrees C			04/06/12 10:15	
Oxygen, Dissolved	0.15				mg/L			04/06/12 10:15	
Specific Conductance	407				umhos/cm			04/06/12 10:15	
Turbidity	0.00				NTU			04/06/12 10:15	



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-123111/1-A

Matrix: Water

Analysis Batch: 123151

Client Sample ID: Method Blank Prep Type: Total Recoverable

Prep Batch: 123111

	MB	MB							
Analyte	Result	Qualifier	PQL	MDL	Unit	0	Prepared	Analyzed	Dil Fac
Arsenic	4,0	U	10	4.0	ug/L		04/09/12 11:54	04/10/12 08:27	1
Iron	50	U	200	50	ug/L		04/09/12 11:54	04/10/12 08:27	1
Sodium	0.31	U	0.50	0.31	mg/L		04/09/12 11:54	04/10/12 08:27	1



Lab Sample ID: LCS 660-123111/2-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable

Analysis Batch: 123151 Prep Batch: 123111

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

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

Matrix: Water

Analysis Batch: 123151

Prep Type: Total Recoverable Prep Batch: 123111

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

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

Matrix: Water

Analysis Batch: 123151

Prep Type: Total Recoverable

Prep Batch: 123111 Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Unit 1000 Arsenic 4.0 Ü 1040 104 75 - 125 20 ug/L 1000 50 U 1040 104 75 - 125 Iron ug/L 20 Sodium 17 10.0 26.5 mg/L 100 75 - 125 20

Lab Sample ID: MB 660-123140/1-A Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 123151

Prep Type: Total Recoverable Prep Batch: 123140

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

Lab Sample ID: LCS 660-123140/2-A Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable

l	Analysis Batch: 123151							Ргер	Batch: 12	3140
1		Spike	LCS	LCS				%Rec.		
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
-	Arsenic	1000	1070		ug/L		107	75 - 125		
ì	Iron	1000	1000		ug/L		100	75 - 125		
Ĺ	Sodium	10.0	9.90		mg/L		99	75 - 125		

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

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

Lab Sample ID: 660-47005-1 MS Client Sample ID: TH-19 WACS#821 Matrix: Water Prep Type: Total Recoverable Analysis Batch: 123151 **Prep Batch: 123140** 

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

Lab Sample ID: 660-47005-1 MSD Client Sample ID: TH-19 WACS#821 Matrix: Water Prep Type: Total Recoverable Analysis Batch: 123151 Prep Batch: 123140 Sample Sample Spike MSD MSD %Rec. RPD Result Qualifier Added Result Qualifier Limits Unit D %Rec RPD Limit

Analyte Arsenic 4.0 U 1000 1080 ug/L 108 75 - 125 20 Iron 50 U 1000 1000 100 75 - 125 ug/L 20 Sodium 14 10.0 24.4 mg/L 106 75 - 125 20

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 660-123379/3 Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA

Analysis Batch: 123379

Analyte Result Qualifier PQL MDL Unit Prepared Analyzed Dil Fac Chloride 0.20 U 0.50 0.20 mg/L 04/16/12 13:41

Lab Sample ID: LCS 660-123379/4 Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA Analysis Batch: 123379

Spike LCS LCS %Rec. Analyte Added Result Qualifier Limits Unit %Rec Chloride 10.0 9.75 mg/L 97 90 - 110

MR MR

Lab Sample ID: 660-46949-D-10 MS ^50 Client Sample ID: Matrix Spike Matrix: Water Prep Type: Total/NA

Analysis Batch: 123379

Spike Sample Sample MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit Limits Chloride 71 500 538 mg/L 93

Lab Sample ID: 660-46949-D-10 MSD ^50 Client Sample ID: Matrix Spike Duplicate Matrix: Water Prep Type: Total/NA Analysis Batch: 123379 Sample Sample Spike MSD MSD %Rec.

RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit Chloride 500 551 mg/L 96 90 - 110 2.46

Lab Sample ID: MB 660-123428/3 Client Sample ID: Method Blank Matrix: Water Prep Type: Total/NA

Analysis Batch: 123428

мв мв Analyte Result Qualifier PQL MDL Unit D Prepared Analyzed Dil Fac Chloride 0.20 Ü 0.50 04/17/12 22:03 0.20 mg/L



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Lab Sample ID: LCS 660-123428/4							Client	Sample	ID: Lab Co		•
Matrix: Water									Ргер і	ype: To	tal/NA
Analysis Batch: 123428			Spike	LCS	LCS				%Rec.		
Analyte			Added		Qualifier	Unit	D	%Rec	Limits		
Chloride			10.0	10,3		mg/L	<del>-</del>	103	90 - 110		
						_					
Lab Sample ID: 660-47005-4 MS							Clien	t Sample	e ID: TH-58	WACS	S#1571
Matrix: Water									Prep T	ype: To	tal/NA
Analysis Batch: 123428											
	Sample	•	Spike	··· =	MS				%Rec.		
Analyte		Qualifier	Added		Qualifier	Unit	<u>D</u>	%Rec	Limits		
Chloride	81		100	179		mg/L		98	90 - 110		
Lab Sample ID: 660-47005-4 MSD							Clien	t Samul	e ID: TH-58	WACS	2#4674
Matrix: Water							Cileii	r sampi		ype: To	
Analysis Batch: 123428									Lieb i	ype. 10	, Laii II.
Allalysis Datoli. 120420	Sample	Sample	Spike	MSD	MSD				%Rec.		RPC
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Chloride	81		100	189		mg/L		108	90 - 110	5.33	30
Lab Sample ID: MB 660-123465/3								Client S	Sample ID:		
\$8_A_! 18/_A											
Matrix: Water									Prep T	ype: 10	otanne
									Prep T	уре: 10	otaline
Analysis Batch: 123465	D.	MB MB		201	herou stada				·	• •	
Analysis Batch: 123465 <sub>Analyte</sub>	R	esult Qualifier		PQL	MDL Unit		D P	repared	Analyz	ed	Dil Fac
Analysis Batch: 123465 <sup>Analyte</sup>	R			PQL 0.50	MDL Unit 0.20 mg/L		<u>D</u> P	repared	·	ed	Dil Fac
Analysis Batch: 123465  Analyte Chloride	R	esult Qualifier							Analyz 04/18/12	ed 09:06	Dil Fac
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4	R	esult Qualifier	_						Analyz 04/18/12	ed 09:06 ontrol S	Dil Fac
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4 Matrix: Water	R	esult Qualifier							Analyz 04/18/12	ed 09:06	Dil Fac
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water	R	esult Qualifier	Spike	0.50					Analyz 04/18/12	ed 09:06 ontrol S	Dil Fac
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water  Analysis Batch: 123465	R	esult Qualifier	Spike Added	0.50 LCS	0.20 mg/L	Unit			Analyz 04/18/12 e ID: Lab Co Prep T	ed 09:06 ontrol S	Dil Fac
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water  Analysis Batch: 123465	R	esult Qualifier	•	0.50 LCS	0.20 mg/L  LCS  Qualifier	Unit mg/L	Client	: Sample	Analyz 04/18/12 PID: Lab Co Prep T %Rec.	ed 09:06 ontrol S	Dil Fac
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride	R	esult Qualifier	Added	0.50 LCS Result	0.20 mg/L  LCS  Qualifier		Client	%Rec	Analyz 04/18/12 e ID: Lab Co Prep T %Rec. Limits 90 - 110	ed 09:06 ontrol S ype: To	Dil Fa
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS	R	esult Qualifier	Added	0.50 LCS Result	0.20 mg/L  LCS  Qualifier		Client	%Rec	Analyz 04/18/12 e ID: Lab Co Prep T %Rec. Limits 90 - 110 ble ID: TH-4	ontrol Sype: To	Dil Fac Sample otal/NA
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water	R	esult Qualifier	Added	0.50 LCS Result	0.20 mg/L  LCS  Qualifier		Client	%Rec	Analyz 04/18/12 e ID: Lab Co Prep T %Rec. Limits 90 - 110 ble ID: TH-4	ed 09:06 ontrol S ype: To	Dil Fac Sample otal/NA
Analysis Batch: 123465  Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water Analysis Batch: 123465		esult Qualifier 0.20 U	Added 10.0	0.50  LCS Result	0.20 mg/L LCS Qualifier		Client	%Rec	Analyz 04/18/12  DE Lab Co Prep T  %Rec. Limits 90 - 110  Die ID: TH-4 Prep T	ontrol Sype: To	Dil Fac Sample otal/NA
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water Analysis Batch: 123465	Sample	esult Qualifier	Added	C.50  LCS  Result  10.2	0.20 mg/L  LCS  Qualifier		Client	%Rec	Analyz 04/18/12 e ID: Lab Co Prep T %Rec. Limits 90 - 110 ble ID: TH-4	ontrol Sype: To	Dil Fac
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water Analysis Batch: 123465	Sample	Qualifier 0.20  U	Added 10.0	C.50  LCS  Result  10.2	0.20 mg/L  LCS  Qualifier  MS  Qualifier	mg/L	Client	%Rec 102	Analyz 04/18/12 e ID: Lab Co Prep T %Rec. Limits 90 - 110 ble ID: TH-4 Prep T	ontrol Sype: To	Dil Fac Sample otal/NA
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Chloride	Sample Result	Qualifier 0.20  U	Added 10.0 Spike Added	0.50  LCS Result 10.2	0.20 mg/L  LCS  Qualifier  MS  Qualifier	mg/L Unit	Client  Clie	%Rec 102 nt Sample	Analyz 04/18/12  Prep T  %Rec. Limits 90 - 110  Prep T  %Rec. Limits 90 - 110	ontrol S ype: To WAC	Dil Fa
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MSD	Sample Result	Qualifier 0.20  U	Added 10.0 Spike Added	0.50  LCS Result 10.2	0.20 mg/L  LCS  Qualifier  MS  Qualifier	mg/L Unit	Client  Clie	%Rec 102 nt Sample	Analyz 04/18/12  DE Lab Co Prep T  %Rec. Limits 90 - 110  DIE ID: TH-4 Prep T  %Rec. Limits 90 - 110	ontrol S ype: To WAC ype: To	Dil Fa
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MSD  Matrix: Water	Sample Result	Qualifier 0.20  U	Added 10.0 Spike Added	0.50  LCS Result 10.2	0.20 mg/L  LCS  Qualifier  MS  Qualifier	mg/L Unit	Client  Clie	%Rec 102 nt Sample	Analyz 04/18/12  DE Lab Co Prep T  %Rec. Limits 90 - 110  DIE ID: TH-4 Prep T  %Rec. Limits 90 - 110	ontrol S ype: To WAC	Dil Fa
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MSD  Matrix: Water	Sample Result 8.8	Sample Qualifier	Added 10.0 Spike Added 10.0	LCS Result 10.2  MS Result	0.20 mg/L  LCS  Qualifier  MS  Qualifier	mg/L Unit	Client  Clie	%Rec 102 nt Sample	Analyz 04/18/12 e ID: Lab Co Prep T %Rec. Limits 90 - 110 Prep T %Rec. Limits 90 - 110 ple ID: TH-4 Prep T Onle ID: TH-4 Prep T	ontrol S ype: To WAC ype: To	Dil Fac Sample otal/NA CS#822 otal/NA
Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: LCS 660-123465/4  Matrix: Water Analysis Batch: 123465  Analyte Chloride  Lab Sample ID: 660-46975-4 MS  Matrix: Water	Sample Result 8.8	Qualifier 0.20  U	Added 10.0 Spike Added	LCS Result 10.2  MS Result	0.20 mg/L  LCS  Qualifier  MS  Qualifier	mg/L Unit	Client  Clie	%Rec 102 nt Sample	Analyz 04/18/12  DE Lab Co Prep T  %Rec. Limits 90 - 110  DIE ID: TH-4 Prep T  %Rec. Limits 90 - 110	ontrol S ype: To WAC ype: To	Dil Fac Sample Stal/NA CS#822 Stal/NA



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Lab Sample ID: MB 660-123071/3												Client S	ample ID: i		
Matrix: Water													Prep i	ype: To	otal/NA
Analysis Batch: 123071		мв	мв												
Analyte	R		Qualifier		PQL		MDL	Unit		D	Pi	repared	Analyz	ed	Dil Fac
Ammonia as N	C	.010	U		0.020		0,010	mg/L		. – –		<u> </u>	04/06/12		1
Lab Sample ID: LCS 660-123071/4										Clie	ent	Sample	ID: Lab Co	ontrol S	Sample
Matrix: Water													Prep T	ype: To	otal/NA
Analysis Batch: 123071															
				Spike			LCS						%Rec.		
Analyte				Added		Result	Qual	lifier	Unit		D	%Rec	Limits		
Ammonia as N				0.500		0.503			mg/L			101	90 - 110		
Lab Sample ID: 660-46975-2 MS											CI	lient Sar	nple ID: Du	ıplicate	46975
Matrix: Water														ype: To	
Analysis Batch: 123071															
	Sample	Sam	ple	Spike		MS	MS						%Rec.		
Analyte	Result	Qua	lifier	Added		Result	Qual	lifier	Unit		D	%Rec	Limits		
Ammonia as N	0.30			1.00		1.25			mg/L			95	90 - 110		
Lab Sample ID: 660-46975-2 MSD Matrix: Water											CI	lient Sar	nple ID: Du	iplicate ype: To	
Analysis Batch: 123071													Ligh	ype. ic	JIANINA
Analysis Daton. 120071	Sample	Sam	ple	Spike		MSD	MSD	)					%Rec.		RPD
Analyte	Result		•	Added		Result			Unit		٥	%Rec	Limits	RPD	Limit
Ammonia as N	0.30			1.00		1.26			mg/L		_	96	90 - 110	1	30
												Cliant C	amala (D.	<b>11</b> -11	. 011
Lab Sample ID: MB 660-123416/3												Client S	ample ID:		
Matrix: Water													Prep I	ype: To	otal/NA
Analysis Batch: 123416		MB	мв												
Analyte	ь		Qualifier		PQL		MDI	Unit		D		repared	Annlyn	rad	Dil Fac
Ammonia as N		.010			0.020			mg/L		· <u>-</u> -	-	raparau	Analyz 04/17/12		UII Fac
<del>-</del> "	`		Ü		0,020	`	0.010	mg/c							•
Lab Sample ID: LCS 660-123416/4										Clie	ent	Sample	ID: Lab C		-
Matrix: Water													Prep T	ype: To	otal/NA
Analysis Batch: 123416				Callea		1.00	1.00						W D		
Analyte				Spike Added		Result	LCS		Hais		_	W B	%Rec.		
Ammonia as N				0.500		0.525		IIIIer	Unit mg/L		D	%Rec 105	90 - 110		
Lab Sample ID: 660-46991-C-19 MS	•											Client	Sample ID		-
Matrix: Water													Prep T	ype: To	otal/NA
Analysis Batch: 123416		F	مام	C-:h-									44.5		
Analyte	Sample Result		•	Spike			MS	Uffan	Hala		_	4/ D	%Rec.		
Ammonia as N	0.037	Qua		Added 1,00		Result 1.09	Qua	ntier	Unit mg/L		D —	%Rec 105	90 - 110		
ab Camala ID: 660 46004 0 40 840	_									<b>.</b>					
Lab Sample ID: 660-46991-C-19 MS	U									Client	Si	ample ID	: Matrix Si		-
Matrix: Water Analysis Batch: 123416													Prep T	ype: To	otai/NA
Analysis Batch. 125416	Sample	Sam	nle	Cnika		Meu	Men	١					%Pac		200
Analyte	Sample Result			Spike Added		MSD Result	MSD		Unit		D	%Rec	%Rec. Limits	RPD	RPC Limit



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Lab Sample ID: MB 660-123163/1 Matrix: Water											(	Client S	ample ID: Me Prep Type		
Analysis Batch: 123163															
		MB													
Analyte	R		Qualifier		PQL		MDL			D _	Pr	epared	Analyzed		Dil Fac
Total Dissolved Solids		5.0	U		5.0		5.0	mg/L					04/10/12 14:5	66	
Lab Sample ID: LCS 660-123163/2										Cli	ent	Sample	ID: Lab Cont	rol S	ample
Matrix: Water												·	Prep Type		-
Analysis Batch: 123163															
				Spike		LCS	LCS		•				%Rec.		
Analyte				Added		Result	Qual	lifler	Unit		D	%Rec	Limits		
Total Dissolved Solids				10000		9900			mg/L			99	80 - 120		
Lab Sample ID: 660-46975-2 DU Matrix: Water											CI	ient Sar	nple ID: Dupli		
Analysis Batch: 123163													Prep Typ	s. 10	Lawne
Analysis batch. 125105	Sample	Sam	cie			עם	DU								RP
Analyte	Result		•			Result		lifier	Unit		D			RPD	Limi
Total Dissolved Sclids	160		<del> </del>	·····	-	160			mg/L	•	-			2	20
Lab Sample ID: MB 660-123220/1												Cliant S	ample ID: Me	thad	Plant
Matrix: Water												Oneric o	Prep Typ		
Analysis Batch: 123220													riep lyp	5. IV	LOUINA
, 5.15		МВ	MB												
Analyte	R	esult	Qualifier		PQL		MDL	Unit		D	Pr	epared	Analyzed		Dil Fac
Total Dissolved Solids		5.0	Ū		5.0		5.0	mg/L					04/11/12 14:4	7	
Lab Sample ID: LCS 660-123220/2										Cli	ent	Sample	ID: Lab Cont	rol S	amnla
Matrix: Water													Prep Typ		-
Analysis Batch: 123220													, ,		
•				Spike		LCS	LCS						%Rec.		
Analyte				Added		Result	Qual	lifier	Unit		D	%Rec	Limits		
Total Dissolved Solids				10000		9910			mg/L		-	99	80 - 120		
Lab Sample ID: 660-46991-E-10 DU												Clia	ent Sample ID	: Dur	olicate
Matrix: Water												-310	Prep Typ	-	
Analysis Batch: 123220														•	
•	Sample	Sam	ple			DU	DU								RPE
Analyte	Result	Qual	ifier			Result	Qual	lifier	Unit		D			RPD	Limi
Total Dissolved Solids	330		<del></del>			348			mg/L						20



## **QC Association Summary**

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

letals					
rep Batch: 123111					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-1	Blank, Equipment 46975	Total Recoverable	Water	3005A	
660-46975-2	Duplicate 46975	Total Recoverable	Water	3005A	
660-46975-2 MS	Duplicate 46975	Total Recoverable	Water	3005A	
660-46975-2 MSD	Duplicate 46975	Total Recoverable	Water	3005A	
660-46975-3	TH-28A WACS#19862	Total Recoverable	Water	3005A	
660-46975-4	TH-40 WACS#822	Total Recoverable	Water	3005A	
660-46975-5	TH-57 WACS#1570	Total Recoverable	Water	3005A	
660-46975-6	TH-73 WACS#27754	Total Recoverable	Water	3005A	
660-46975-7	TH-72 WACS#27753	Total Recoverable	Water	3005A	
LCS 660-123111/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-123111/1-A	Method Blank	Total Recoverable	Water	3005A	
rep Batch: 123140					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47005-1	TH-19 WACS#821	Total Recoverable	Water	3005A	
660-47005-1 MS	TH-19 WACS#821	Total Recoverable	Water	3005A	
660-47005-1 MSD	TH-19 WACS#821	Total Recoverable	Water	3005A	
660-47005-2	TH-42 WACS#823	Total Recoverable	Water	3005A	
660-47005-3	SUP 2 WACS#27756	Total Recoverable	Water	3005A	
660-47005-4	TH-58 WACS#1571	Total Recoverable	Water	3005A	
660-47005-5	SUP 1 WACS#27755	Total Recoverable	Water	3005A	
660-47005-6	TH-30 WACS#1065	Total Recoverable	Water	3005A	
LCS 660-123140/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-123140/1-A	Method Blank	Total Recoverable	Water	3005A	
nalysis Batch: 12315	1				
Lab Sample ID			44.4.1.		
	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-1	Client Sample ID Blank, Equipment 46975	Prep Type Total Recoverable	Water	Method 6010B	
					123111
660-46975-2	Blank, Equipment 46975	Total Recoverable	Water	6010B	123111 123111
660-46975-2 660-46975-2 MS	Blank, Equipment 46975 Duplicate 46975	Total Recoverable Total Recoverable	Water Water	6010B 6010B	123111 123111 123111
660-46975-2 660-46975-2 MS 660-46975-2 MSD	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975	Total Recoverable Total Recoverable Total Recoverable	Water Water Water	6010B 6010B 6010B	123111 123111 123111 123111
660-46975-2 660-46975-2 MS 660-46975-2 MSD 660-46975-3	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975	Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water	6010B 6010B 6010B 6010B	123111 123111 123111 123111
660-46975-2 660-46975-2 MS 660-46975-2 MSD 660-46975-3 660-46975-4	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111
660-46975-2 660-46975-2 MS 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-5	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111
660-46975-2 860-46975-2 MS 860-46975-2 MSD 660-46975-3 860-46975-4 660-46975-5	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111
660-46975-2 660-46975-2 MS 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-6 660-46975-6	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570 TH-73 WACS#27754	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111
560-46975-2 560-46975-2 MS 560-46975-2 MSD 560-46975-3 560-46975-4 560-46975-5 560-46975-7 560-47005-1	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570 TH-73 WACS#27754 TH-72 WACS#27753	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111 123111
660-46975-2 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-5 660-46975-6 660-46975-7 660-47005-1	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570 TH-73 WACS#27754 TH-72 WACS#27753 TH-19 WACS#821	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111 123111 123111
660-46975-2 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-5 660-46975-6 660-46975-7 660-47005-1 660-47005-1 MSD	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570 TH-73 WACS#27754 TH-72 WACS#27753 TH-19 WACS#821 TH-19 WACS#821	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111 123111 123140 123140
560-46975-2 560-46975-2 MSD 560-46975-3 560-46975-4 560-46975-6 560-46975-6 560-46975-7 560-47005-1 560-47005-1 MSD 560-47005-2	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570 TH-73 WACS#27754 TH-72 WACS#27753 TH-19 WACS#821 TH-19 WACS#821 TH-19 WACS#821	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111 123111 123140 123140
660-46975-2 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-5 660-46975-6 660-46975-7 660-47005-1 660-47005-1 MSD 660-47005-2 660-47005-2	Blank, Equipment 46975  Duplicate 46975  Duplicate 46975  Duplicate 46975  TH-28A WACS#19862  TH-40 WACS#822  TH-57 WACS#1570  TH-73 WACS#27754  TH-72 WACS#27753  TH-19 WACS#821  TH-19 WACS#821  TH-19 WACS#821  TH-19 WACS#821  TH-42 WACS#823	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111 123111 123140 123140 123140
660-46975-2 660-46975-2 MSD 660-46975-3 660-46975-3 660-46975-5 660-46975-6 660-46975-7 660-47005-1 660-47005-1 MSD 660-47005-2 660-47005-3 660-47005-3	Blank, Equipment 46975  Duplicate 46975  Duplicate 46975  Duplicate 46975  TH-28A WACS#19862  TH-40 WACS#822  TH-57 WACS#1570  TH-73 WACS#27754  TH-72 WACS#27753  TH-19 WACS#821  TH-19 WACS#821  TH-19 WACS#821  TH-42 WACS#821  TH-42 WACS#823  SUP 2 WACS#27756  TH-58 WACS#1571	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	12311' 12311' 12311' 12311' 12311' 12311' 12311' 12311' 12314' 12314( 12
660-46975-2 660-46975-2 MSD 660-46975-3 660-46975-3 660-46975-5 660-46975-6 660-46975-7 660-47005-1 660-47005-1 MSD 660-47005-2 660-47005-3 660-47005-4 660-47005-4	Blank, Equipment 46975  Duplicate 46975  Duplicate 46975  Duplicate 46975  TH-28A WACS#19862  TH-40 WACS#822  TH-57 WACS#1570  TH-73 WACS#27754  TH-72 WACS#27753  TH-19 WACS#821  TH-19 WACS#821  TH-19 WACS#821  TH-42 WACS#821  TH-42 WACS#821  TH-42 WACS#875  TH-58 WACS#8755  TH-58 WACS#1571  SUP 1 WACS#27755	Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable Total Recoverable	Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111 123111 123140 123140 123140 123140
660-46975-2 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-5 660-46975-6 660-46975-7 660-47005-1 660-47005-1 MSD 660-47005-2 660-47005-3 660-47005-4 660-47005-5 660-47005-5	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570 TH-73 WACS#27754 TH-72 WACS#27753 TH-19 WACS#821 TH-19 WACS#821 TH-19 WACS#821 TH-42 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065	Total Recoverable Total Recoverable	Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	123111 123111 123111 123111 123111 123111 123111 123140 123140 123140 123140 123140
660-46975-2 660-46975-2 MS 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-5 660-46975-6 660-46975-7 660-47005-1 660-47005-3 660-47005-3 660-47005-4 660-47005-5 660-47005-6 LCS 660-123111/2-A	Blank, Equipment 46975  Duplicate 46975  Duplicate 46975  Duplicate 46975  TH-28A WACS#19862  TH-40 WACS#822  TH-57 WACS#1570  TH-73 WACS#27754  TH-72 WACS#27753  TH-19 WACS#821  TH-19 WACS#821  TH-19 WACS#821  TH-19 WACS#821  TH-42 WACS#823  SUP 2 WACS#27756  TH-58 WACS#1571  SUP 1 WACS#27755  TH-30 WACS#1065  Lab Control Sample	Total Recoverable Total Recoverable	Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	12311' 12311' 12311' 12311' 12311' 12311' 12311' 12311' 12314' 12314( 12
660-46975-1 660-46975-2 660-46975-2 MS 660-46975-2 MSD 660-46975-3 660-46975-4 660-46975-5 660-46975-7 660-47005-1 MSD 660-47005-1 MSD 660-47005-3 660-47005-3 660-47005-4 660-47005-5 660-47005-6 LCS 660-123111/2-A LCS 660-123111/1-A	Blank, Equipment 46975 Duplicate 46975 Duplicate 46975 Duplicate 46975 TH-28A WACS#19862 TH-40 WACS#822 TH-57 WACS#1570 TH-73 WACS#27754 TH-72 WACS#27753 TH-19 WACS#821 TH-19 WACS#821 TH-19 WACS#821 TH-42 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065	Total Recoverable Total Recoverable	Water Water	6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B 6010B	Prep Batch 123111 123111 123111 123111 123111 123111 123111 123111 123140 123140 123140 123140 123140 123140 123140 123140 123140 123140

## **QC Association Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

nalysis Batch: 123071					
ab Sample ID	Client Sample iD	Prep Type	Matrix	Method	Prep Bat
60-46975-1	Blank, Equipment 46975	Total/NA	Water	350,1	
60-46975-2	Duplicate 46975	Total/NA	Water	350.1	
60-46975-2 MS	Duplicate 46975	Total/NA	Water	350.1	
60-46975-2 MSD	Duplicate 46975	Total/NA	Water	350.1	
60-46975-3	TH-28A WACS#19862	Total/NA	Water	350,1	
60-46975-4	TH-40 WACS#822	Total/NA	Water	350.1	
60-46975-5	TH-57 WACS#1570	Total/NA	Water	350.1	
60-46975-6	TH-73 WACS#27754	Total/NA	Water	350.1	
60-46975-7	TH-72 WACS#27753	Total/NA	Water	350.1	
CS 660-123071/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-123071/3	Method Blank	Total/NA	Water	350.1	
nalysis Batch: 123163					
ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Ba
60-46975-1	Blank, Equipment 46975	Total/NA	Water	SM 2540C	
60-46975-2	Duplicate 46975	Total/NA	Water	SM 2540C	
60-46975-2 DU	Duplicate 46975	Total/NA	Water	SM 2540C	
60-46975-3	TH-28A WACS#19862	Total/NA	Water	SM 2540C	
60-46975-4	TH-40 WACS#822	Total/NA	Water	SM 2540C	
60-46975-5	TH-57 WACS#1570	Total/NA	Water	SM 2540C	
60-46975-6	TH-73 WACS#27754	Total/NA	Water	SM 2540C	
60-46975-7	TH-72 WACS#27753	Total/NA	Water	SM 2540C	
CS 660-123163/2	Lab Control Sample	Total/NA	Water	SM 2540C	
AB 660-123163/1	Method Blank	Total/NA	Water	SM 2540C	
nalysis Batch: 123220 .ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Ba
60-46991-E-10 DU	Duplicate	Total/NA	Water	SM 2540C	
60-47005-1	TH-19 WACS#821	Total/NA	Water	SM 2540C	
60-47005-2					
	1H-42 VVACS#823	Tctal/NA	Water		
60-47005-3	TH-42 WACS#823 SUP 2 WACS#27756	Total/NA	Water	SM 2540C	
	SUP 2 WACS#27756	Total/NA	Water	SM 2540C SM 2540C	
60-47005-4	SUP 2 WACS#27756 TH-58 WACS#1571	Total/NA Total/NA	Water Water	SM 2540C SM 2540C SM 2540C	
60-47005-4 60-47005-5	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755	Total/NA Total/NA Total/NA	Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C	
60-47005-4 60-47005-5 60-47005-6	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065	Total/NA Total/NA Total/NA Total/NA	Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C	
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample	Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C	
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 AB 660-123220/1	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065	Total/NA Total/NA Total/NA Total/NA	Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C	
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 IB 660-123220/1 nalysis Batch: 123379	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank	Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C	
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 1B 660-123220/1 nalysis Batch: 123379 ab Sample ID	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank Client Sample ID	Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type	Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 IB 660-123220/1 allysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type Total/NA	Water Water Water Water Water Water  Water  Water  Water  Matrix  Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 IB 660-123220/1 allysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50 60-46949-D-10 MSD ^50	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA	Water Water Water Water Water Water Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C Method 300.0	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 1B 660-123220/1 allysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50 60-46949-D-10 MSD ^50 60-47005-1	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA	Water Water Water Water Water Water Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C  Method 300.0 300.0	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 1B 660-123220/1 nalysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50 60-46949-D-10 MSD ^50 60-47005-1 60-47005-2	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821 TH-42 WACS#823	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water Water Water  Water  Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C  Method 300.0 300.0 300.0	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 IB 660-123220/1 Isalysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50 60-47005-1 60-47005-2 60-47005-3	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water Water  Matrix Water Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C  Method 300.0 300.0 300.0 300.0	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 IB 660-123220/1 Inalysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50 60-47005-1 60-47005-2 60-47005-3 60-47005-5	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756 SUP 1 WACS#27755	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water Water  Matrix Water Water Water Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C  Method 300.0 300.0 300.0 300.0 300.0	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 AB 660-123220/1 nalysis Batch: 123379 ab Sample ID 60-46949-D-10 MSD ^50 60-47005-1 60-47005-2 60-47005-3 60-47005-5 CS 660-123379/4	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756 SUP 1 WACS#27755 Lab Control Sample	Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water Water  Matrix Water Water Water Water Water Water Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C  Method 300.0 300.0 300.0 300.0 300.0 300.0 300.0	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 AB 660-123220/1 Allysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50 60-47005-1 60-47005-2 60-47005-3 60-47005-5 CS 660-123379/4 IB 660-123379/3	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756 SUP 1 WACS#27755	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water Water  Matrix Water Water Water Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C  Method 300.0 300.0 300.0 300.0 300.0	Prep Ba
60-47005-4 60-47005-5 60-47005-6 CS 660-123220/2 IB 660-123220/1 Inalysis Batch: 123379 ab Sample ID 60-46949-D-10 MS ^50 60-46949-D-10 MSD ^50 60-47005-1 60-47005-2 60-47005-5 CS 660-123379/4 IB 660-123379/3 Inalysis Batch: 123416	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756 SUP 1 WACS#27755 Lab Control Sample Method Blank	Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C 300.0 300.0 300.0 300.0 300.0 300.0 300.0 300.0	
60-47005-3 60-47005-4 60-47005-5 60-47005-6 .CS 660-123220/2 AB 660-123220/1 nalysis Batch: 123379 .ab Sample ID 60-46949-D-10 MS ^50 60-47005-1 60-47005-2 60-47005-3 60-47005-5 .CS 660-123379/4 AB 660-123379/3 nalysis Batch: 123416 .ab Sample ID	SUP 2 WACS#27756 TH-58 WACS#1571 SUP 1 WACS#27755 TH-30 WACS#1065 Lab Control Sample Method Blank  Client Sample ID  Matrix Spike Matrix Spike Duplicate TH-19 WACS#821 TH-42 WACS#823 SUP 2 WACS#27756 SUP 1 WACS#27755 Lab Control Sample	Total/NA Total/NA Total/NA Total/NA Total/NA  Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA	Water Water Water Water Water Water  Matrix Water Water Water Water Water Water Water Water Water Water Water Water	SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C SM 2540C  Method 300.0 300.0 300.0 300.0 300.0 300.0 300.0	Prep Ba

## **QC Association Summary**

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

nalysis Batch: 1234	16 (Continued)				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Drop Bate
660-47005-1	TH-19 WACS#821	Total/NA	Water	350.1	Prep Batc
660-47005-2	TH-42 WACS#823	Total/NA	Water	350.1	
660-47005-3	SUP 2 WACS#27756	Total/NA	Water	350,1	
660-47005-4	TH-58 WACS#1571	Total/NA	Water	350.1	
660-47005-5	SUP 1 WACS#27755	Total/NA	Water	350,1	
660-47005-6	TH-30 WACS#1065	Total/NA	Water	350,1	
LCS 660-123416/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-123416/3	Method Blank	Total/NA	Water	350.1	
nalysis Batch: 12342	28				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
560-47005-4	TH-58 WACS#1571	Total/NA	Water	300.0	- rop batt
660-47005-4 MS	TH-58 WACS#1571	Total/NA	Water	300.0	
660-47005-4 MSD	TH-58 WACS#1571	Total/NA	Water	300.0	
660-47005-6	TH-30 WACS#1065	Total/NA	Water	300.0	
LCS 660-123428/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123428/3	Method Blank	Total/NA	Water	300.0	
nalysis Batch: 12346		(Old)(V)	vva.c.	500.0	
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Dana Bat
360-46975-1	Blank, Equipment 46975	Total/NA	Water	300.0	Prep Bate
660-46975-2	Duplicate 46975	Total/NA	Water	300.0	
60-46975-3	TH-28A WACS#19862	Total/NA	Water	300.0	
660-46975-4	TH-40 WACS#822	Total/NA	Water	300.0	
360-46975-4 MS	TH-40 WACS#822	Total/NA	Water	300.0	
360-46975-4 MSD	TH-40 WACS#822	Total/NA	Water	300.0	
660-46975-5	TH-57 WACS#1570	Total/NA	Water	300.0	
560-46975-6	TH-73 WACS#27754	Total/NA	Water	300.0	
660-46975-7	TH-72 WACS#27753	Total/NA	Water	300.0	
LCS 660-123465/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123465/3	Method Blank	Total/NA	Water	300.0	
ield Service / Mo	bile Lab				
nalysis Batch: 12309					
Lab Sample ID 660-46975-3	Client Sample ID TH-28A WACS#19862	Prep Type Total/MA	Matrix	Method	Prep Bato
660-46975-4	TH-40 WACS#822	Total/NA	Water	Field Sampling	
660-46975-5	TH-57 WACS#1570	Total/NA	Water	Field Sampling	
660-46975-6		Total/NA	Water	Field Sampling	
660-46975-7	TH-73 WACS#27754 TH-72 WACS#27753	Total/NA	Water	Field Sampling	
		Total/NA	Water	Field Sampling	
nalysis Batch: 12314 Lab Sample ID	Client Sample ID	Deep Torre	B# ndmi	BB-Ab-s-d	
560-47005-1	TH-19 WACS#821	Prep Type Total/NA	Matrix Water	Method Field Sampling	Prep Bate
660-47005-2	TH-42 WACS#823	Total/NA	Water	Field Sampling	
660-47005-3	SUP 2 WACS#27756	Total/NA	Water	Field Sampling	
560-47005-4	TH-58 WACS#1571	Total/NA	Water	Field Sampling	
660-47005-5	SUP 1 WACS#27755	Total/NA	Water	Field Sampling	
	· · · · · · · · · · · · · · · · · ·	IOGNIA	TVG(C)		

#### Lab Chronicle

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

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

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

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

Client Sample ID: Duplicate 46975

Date Collected: 04/05/12 00:00

Date Received: 04/05/12 14:20

Lab Sample ID: 660-46975-2

Matrix: Water

	Batch	Batch			Dilution	Batch	Prepared		
Prep Type	Type	Method		Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A				123111	04/09/12 11:54	GF	TAL TAM
Total Recoverable	Analysis	60108			1	123151	04/10/12 08:37	GF	TAL TAM
Total/NA	Analysis	350.1	•		1	123071	04/06/12 15:19	то	TAL TAM
Total/NA	Analysis	SM 2540C			1	123163	04/10/12 14:58	то	TAL TAM
Total/NA	Analysis	300.0			1	123465	04/18/12 12:11	TS	TAL TAM

Client Sample ID: TH-28A WACS#19862

Date Collected: 04/05/12 12:14

Date Received: 04/05/12 14:20

Lab Sample ID: 660-46975-3

Matrix: Water

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

Client Sample ID: TH-40 WACS#822

Date Collected: 04/05/12 09:41

Date Received: 04/05/12 14:20

Lab Sample ID: 660-46975-4

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

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Client Sample ID: TH-57 WACS#1570

Date Collected: 04/05/12 10:12 Date Received: 04/05/12 14:20 Lab Sample ID: 660-46975-5

Matrix: Water

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

Client Sample ID: TH-73 WACS#27754

Date Collected: 04/05/12 11:31

Date Received: 04/05/12 14:20

Lab Sample ID: 660-46975-6

Matrix: Water

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

Client Sample ID: TH-72 WACS#27753

Date Collected: 04/05/12 11:55

Date Received: 04/05/12 14:20

Lab Sample ID: 660-46975-7

Matrix: Water

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

Client Sample ID: TH-19 WACS#821

Date Collected: 04/06/12 10:22

Date Received: 04/06/12 14:26

Lab Sample	ID: 660-47005-1	
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	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 12:57	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:59	то	TAL TAM
Total/NA	Analysis	300.0		1	123379	04/16/12 18:19	TS	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 21:57	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 10:22		TAL TAM

Lab Sample ID: 660-47005-2

Matrix: Water

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

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

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

Client Sample ID: SUP 2 WACS#27756

Date Collected: 04/06/12 11:54

Date Received: 04/06/12 14:26

Lab Sample ID: 660-47005-3

Matrix: Water

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

Client Sample ID: TH-58 WACS#1571

Date Collected: 04/06/12 09:46

Date Received: 04/06/12 14:26

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

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

Client Sample ID: SUP 1 WACS#27755

Date Collected: 04/06/12 12:22

Date Received: 04/06/12 14:26

Lab Sample ID: 660-	47005-5
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_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A		·	123140	04/10/12 07:22	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	123151	04/10/12 13:27	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	123220	04/11/12 14:58	то	TAL TAM
Total/NA	Analysis	300.0		1	123379	04/16/12 19:20	TS	TAL TAM
Total/NA	Analysis	350.1		1	123416	04/17/12 22:02	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	123143	04/06/12 12:22		TAL TAM

## Lab Chronicle

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Lab Sample ID: 660-47005-6

Matrix: Water

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

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

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

Laboratory References:

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



# **Certification Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

				manus di contrat de la participa de de des des de la participa
Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Tampa	Alabama	State Program	4	40610
TestAmerica Tampa	Florida	NELAC	4	E84282
TestAmerica Tampa	Georgia	State Program	4	905
TestAmerica Tampa	USDA	Federal		P330-11-00177

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

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### **Method Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46975-1

Method	Method Description	Protocol	Laboratory	
6010B	Metals (ICP)	\$W846	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

M

# Sample Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

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



# 660-41975

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

PRE	CLEANED SAMPLE CONTAINERS	<u>:</u>	4	DATE   TIME			
REL	RELINQUISHED BY: Carl Mchulty REP. OF CONTRACT LAB. 3/26/12/1000  ACCEPTED BY: REP. OF SOLID WASTE DEPT. 3.29/2/2:00						
ACC	EPTED BY: Am Clyt	Σ	REP. OF SOLID WASTE DEP	T. 3.2912   2:00			
	ATION: BLANK, EQUIPMENT SONAL ENGAGED IN SAMPLE CO						
		022301		<u> </u>			
	<u> </u>	TIELD P	ARAMETERS: N/A				
		• •	•				
	•	SAMPL	E CONTAINERS				
QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED			
	40 ml VIAL		40 ml VIAL	<del> </del>			
7	125 ml. PLASTIC		125 ml. PLASTIC				
	125 ml GLASS		125 ml GLASS				
	250 ml. PLASTIC	2_	250 ml. PLASTIC				
	250 ml. GLASS		250 ml. GLASS				
1	500 ml. PLASTIC		500 ml. PLASTIC				
	500 ml. GLASS		500 ml. GLASS				
	LITER PLASTIC		LITER PLASTIC				
	LITER GLASS		LITER GLASS				
	BACTERIAL		BACTERIAL				
	TOTAL No. OF SAMPLES	COLLE	CTED:	COLLECTED DATE   TIME 4.4.12   10:37			
	:	ANALYS:	IS REQUESTED:				
A	MMONIA-NITROGEN CHLORIDE	SODIUM	TDS Iron Arsenic				
PRE	SERVED SAMPLES PH < 2.0 _		_ SAMPLE STORAGE: _COOLER	& ICE TO 4.0 c			
ABO REL ACC	VE LISTED SAMPLES: INQUISHED BY: EPTED BY:	1	REP. OF SOLID WASTE DEP REP. OF CONTRACT LAB.	DATE   TIME 4.5.12   2:20 4.5.12   2:20			
COM	MENT'S: WOH 0058		3.5° C	4-07			

# E

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

		TO DOSTICATE SAMET	
PRECLEANED SAMPLE CONTAINERS:	-		DATE   TIME
RELINQUISHED BY: Caul M	Mult	L W REP. OF CONTRACT LAB.	3/26/12/ 100
ACCEPTED BY:	- Ms.	REP. OF SOLID WASTE DEP	T. 3.29.12 2:00
LOCATION: DUPLICATE		SAMPLE MATRIX: WATER OTH	ЕР МЪФРТУ•
PERSONAL ENGAGED IN SAMPLE CO	ייייים או דר יייים או דר	TON A STA BOLLOW STATE	er Fairix.
PERSONAL ENGAGED IN SAMPLE CO	THECT	ION : LVA.Balloon LV 3 (	الم المرات
' <del>'</del>	TELD F	ARAMETERS: N/A	
	+1110 +	THERIDIDIO, N/II	
	SAMPI	E CONTAINERS	•
QTY CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
40 ml VIAL		40 ml VIAL	
/ 125 ml. PLASTIC	<del> </del>	125 ml. PLASTIC	
125 ml GLASS	<del> </del>	125 ml GLASS	
250 ml. PLASTIC	2	250 ml. PLASTIC	
250 ml. GLASS		250 ml. GLASS	
500 ml. PLASTIC	ļ	500 ml. PLASTIC	
500 ml. GLASS LITER PLASTIC		500 ml. GLASS LITER PLASTIC	
LITER GLASS		LITER PLASTIC LITER GLASS	
BACTERIAL		BACTERIAL	
•			
一件 TOTAL No. OF SAMPLES	COLLE	CTED:	
			COLLECTED
			DATE   TIME
			4.5.12 -
_		T	
<u> </u>	MALIS.	IS REQUESTED:	
AMMONIA-NITROGEN CHLORIDE SO	MUID	TDS Iron Arsenic	
PRESERVED SAMPLES PH < 2.0		SAMPLE STORAGE: COOLER	& ICE TO 4.0 c
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:	1	REP. OF SOLID WASTE DEP REP. OF CONTRACT LAB.	DATE   TIME 4, 5, 121 2:20 4, 5, 121 2:20
COMMENT'S: WO # 0058			

# 13

## SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRE	CLEANED S	AMPI							DATE   TIM	
REL	INQUISHED	BY:	Caro	l McI	wlti	REP. OF	CONTRACT	r LAB.	3/26/14/0	<u>n</u>
ACC	RELINQUISHED BY: (and Me Multy REP. OF CONTRACT LAB. 3/21/124 /500)  ACCEPTED BY: And Clayte REP. OF SOLID WASTE DEPT. 3.29.1212:00									
									HER MATRIX:	_
WELL DIAMETER: 2.0 INCH: TOTAL DEPTH OF WELL: 34.30 Ft. PURGE STARTED: DEPTH TO WATER: 29.30 Ft. PURGE RATE:  LENGTH OF WATER COL: 5.00 Ft.  VOLUME TO PURGE: 0.80 Gal. PURGE ENDED: ACT. VOL. PURGED: DATE   TIME   DATE   TIME										
							<del></del>	<u>,</u>		
	BY		TIME		MP	COND 304	PH	DO	TURB	
	<u> </u>	10	12:10	26	25	301	5.44	1.86	9.74 =   7.14	
	7 R	1 2		24.		297	5.37	1:83	1440	
	17.12					LE CONTAI				
QTY	CONTA	INER	DESCRIPTIO	N	QTY	CONTAINER DESCRIPTION PRESE			PRESERVED	
			l VIAL				40 ml VIAL			
1			PLASTIC				5 ml. PLAST			
•			l GLASS				25 ml GLAS			
	23	0 ml.	PLASTIC GLASS		2	∠51	0 ml. PLAST 50 ml. GLAS	10		
7			PLASTIC				ml. PLAST			
	5	00 ml	GLASS				00 ml. GLAS			
			PLASTIC				ITER PLASTI			
			GLASS ERIAL				LITER GLASS BACTERIAL			
	<u> </u>	DACI	EKIAL				BACTERIAL			
	4 TOTAL No. OF SAMPLES COLLECTED:  COLLECTED DATE   TIME 4.5.1214									
ΔM	MONTA-NTT	ፑርርፑ	IN CHLORT	_		TDS Iron				
	envii TW_II T	2001	THE CHICKL	<u> </u>	7 T OBT	TOS TEON	<u>wradiirc</u>			
PRE	PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c									
REL	ABOVE LISTED SAMPLES:  RELINQUISHED BY:  ACCEPTED BY:  REP. OF SOLID WASTE DEPT. 4 5, 121 2:20  REP. OF CONTRACT LAB.  7.5, 121 2:20									
COM	MENT`S:	w 6	# 005	- <del>8</del>						<del>-</del>

PRE	CLEANED SAMPI	LE CONTAI	NERS:				DATE	TIME	
REL	RELINQUISHED BY: Carl McMulty REP. OF CONTRACT LAB. 3/26/12/1000								
ACC	ACCEPTED BY: Lin Classe REP. OF SOLID WASTE DEPT. 3.2912.2:00								
LOC PER	ATION: TH-40 SONAL ENGAGE	WACS# 82	2 .	SAMPLE I	MATRIX: W <b>Á.Balloon</b>	ATER OTH	HER MATRIX	<b>:</b>	
TOT DEP LEN	WELL DIAMETER: 2.0 INCH:  TOTAL DEPTH OF WELL: 165.90 Ft. PURGE STARTED: 4.5.12 9:30  DEPTH TO WATER: 1/7.95 Ft. PURGE RATE: 7.00 GPM.  LENGTH OF WATER COL: 47.95 Ft.  VOLUME TO PURGE: 7.07 Gal. PURGE ENDED: 4.5.12 9:40  ACT. VOL. PURGED: 1/7.99								
			FIEL	D PARAMEI	ERS:				
	ВУ	TIME	TEMP	COND	PH	DO	TURB		
	AB Le		23.44	343	7.31	86.0	10.96 =		
	AB Se		23,43	349	7.34	0.45	10.84		
	412 7 6	1 7:41	1 23.43	33(	! /.3/	0.64	10.84		
			SAMP	LE CONTAI	NERS				
QTY	CONTAINER	DESCRIPTIO	YTQ N	CONTA	INER DESCRI	PTION	PRESERVED	7	
	40 m	1 VIAL			40 ml VIAL			1	
1		. PLASTIC			5 ml. PLAST				
		l GLASS			125 ml GLASS				
		. PLASTIC			0 ml. PLAST 50 ml. GLAS			-	
,		. PLASTIC			0 ml. PLAST			-	
		1. GLASS			00 ml. GLAS				
		PLASTIC			ITER PLASTI			_	
	1	R GLASS TERIAL	<del></del>		LITER GLASS BACTERIAL			-	
	<u> bac</u>	IERIAH		<u> </u>	DACIENTAL			_	
******	TOTAL No. OF SAMPLES COLLECTED:  COLLECTED DATE   TIME 4, 5.12  9:4								
			ANALYS	SIS REQUE	STED:				
AM	AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic								
PRE	PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c								
REL	ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY: REP. OF SOLID WASTE DEPT. REP. OF CONTRACT LAB.  DATE   TIME REP. OF CONTRACT LAB.								
COM	MENT'S:	# 005	8						
	<del></del>	<u></u>							

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ι	Ì	į	4	í
_			7	7

PRECLEANED SAMPLE CONTAINERS:	· · · · · · //				DATE   TI	МE
RELINQUISHED BY: Chapter  ACCEPTED BY: A: Chapter	Mul	TREP. C	F CONTRAC	T LAB.	3/26/12/ 10	00
ACCEPTED BY: A .: Clayto		REP. C	F SOLID W	ASTE DEPT	. 3.29 12 21	06
LOCATION: TH-57 WACS# 1570 PERSONAL ENGAGED IN SAMPLE COL	LECTI	SAMPLE ON <u>Dr</u>	MATRIX: W. <b>A.Balloon</b>	ATER OTH	ER MATRIX:	_
WELL DIAMETER: 2.0 INCH: TOTAL DEPTH OF WELL: 26.83 DEPTH TO WATER: 20.29 LENGTH OF WATER COL: 4,54 VOLUME TO PURGE: 1,05	Ft. Ft. Gal.		PURGE STA PURGE RAT PURGE END ACT. VOL. Draw Down	E: ED: PURGED:	DATE   TIMI 4.5.12   70.0 6.20 GPM DATE   TIMI 4.5.12   70.17 1.80 GAL 20.44	23 <u>i</u> 2
<u> </u>	TIELD	PARAME	rers:			
BY   TIME   TEM	P	COND	PH	l DO	TURB	
AB 10 10108 25:		130	3.27	0.45	6.79 =	
AB SE 10:10   25.7		135	5.20	0.74	0.49	
AB 10:12   25.7	79	/39	1 5,14	1 2.18	10.70	
· .	SAMPLI	E CONTA	INERS			
QTY CONTAINER DESCRIPTION	QTY	<del></del>	AINER DESCR	IPTION	PRESERVED	
40 ml VIAL			40 ml VIA	<u>L</u>		
125 ml. PLASTIC			.25 ml. PLAS			
125 ml GLASS 250 ml. PLASTIC	2	ļ,	125 ml GLA:			
250 ml. PLASTIC	2		250 ml. GLA			
/ 500 ml. PLASTIC	<del>                                     </del>		00 ml. PLAS			
500 ml. GLASS			500 ml. GLA	<u> </u>		
LITER PLASTIC	<del> </del>		LITER PLAST			
LITER GLASS BACTERIAL	<del> </del>		BACTERIAL			
		<u>!</u>		· · · · · · · · · · · · · · · · · · ·		
		TED: S REQUI	STED:		COLLECTE DATE   TI	ME
AMMONIA-NITROGEN CHLORIDE SOD	IUM I	DS Iron	Arsenic			
PRESERVED SAMPLES PH < 2.0		SAMPLE	STORAGE:	COOLER	& ICE TO 4.0	<u> </u>
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:	1		OF SOLID W OF CONTRAC		DATE   TI . 4. 5. /2  2: 4. 5. /2  2:	20
COMMENT'S: WO # 0058	<del>.</del>					

PRECLEANED SAMPLE CONTAINERS:	^				DATE   TIME
RELINQUISHED BY: Carl Mc	Jult	REP. O	F CONTRACT	r LAB.	3/26/12/ 1000
ACCEPTED BY: L: Claston		REP. O	F SOLID WA	ASTE DEPT	. 3.29,121 2:00
LOCATION: TH-73 WACS#27754 PERSONAL ENGAGED IN SAMPLE COL	LECTI	SAMPLE ON <u>P</u>	MATRIX: WZ A.Balloon	ATER OTH	er matrix:
WELL DIAMETER: 2 INCH: TOTAL DEPTH OF WELL: 43.40 DEPTH TO WATER: 32.59 LENGTH OF WATER COL: 10.61 VOLUME TO PURGE: 1.73	Ft.		PURGE STAI PURGE RATI PURGE ENDI ACT. VOL. Draw-Down	ED: PURGED:	DATE   TIME  - \$ . 12   /11 9  - 0 . 20 GPM.  - DATE   TIME  - \$ . 12   1/ 1 3    - 2 . 4 P GAL.  - 35.0 2
<u>.</u>	FIELD	PARAMET			
BY   TIME   TEM AB 1C   11:27   24.9 AB 1C   11:29   24.9 AB 1C   11:31   24.7	5	234 233 231	5.06 5.06 5.06	DO 0.75 0.80	3.80 =
		E CONTAI			1 7.5/
QTY CONTAINER DESCRIPTION	QTY	CONT	AINER DESCR	iption	PRESERVED
40 ml VIAL			40 ml VIAI		
125 ml. PLASTIC		1	25 ml. PLAS		
125 ml GLASS 250 ml. PLASTIC	2		125 ml GLAS 50 ml. PLAS		<del></del>
250 ml. GLASS			250 ml. GLA		
500 ml. PLASTIC		5	OC ml. PLAS	TIC	
500 ml. GLASS LITER PLASTIC			500 ml. GLA		
LITER PLASTIC LITER GLASS	<del> </del>		LITER PLAST LITER GLAS		
BACTERIAL			BACTERIAL		
TOTAL No. OF SAMPLES C		TED:	STED :		COLLECTED DATE   TIME 7.5:12 11:3/
AMMONIA-NITROGEN CHLORIDE S	ODIUM	TDS Ir	on Arseni	<u>e</u>	
PRESERVED SAMPLES PH < 2.0		SAMPLE	STORAGE:	COOLER	& ICE TO 4.0 c
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:	1	REP. O	F SOLID WAR	ASTE DEPT I LAB.	DATE   TIME 4. 5. 12 2:20 4. 5. 12 2:20
COMMENT'S: WO# 0058	_		· · · · · · · · · · · · · · · · · · ·		

. ......

PRECLEANED SAMPLE CONTAINERS: DATE   TIME
RELINQUISHED BY: Carel McMelty REP. OF CONTRACT LAB. 3/26/12/100
RELINQUISHED BY: Carel McMulty REP. OF CONTRACT LAB. 3/26/12/100  ACCEPTED BY: A: Class. REP. OF SOLID WASTE DEPT. 3.29.12/2:00
LOCATION: TH-72 WACS# 27753 SAMPLE MATRIX: WATER OTHER MATRIX:  PERSONAL ENGAGED IN SAMPLE COLLECTION (A.Balloon & A.Balloon & A.Balloon)
WELL DIAMETER: 2 INCH:  TOTAL DEPTH OF WELL: 190.00 Ft. PURGE STARTED: 45,12 //:25  DEPTH TO WATER: 124.99 Ft. PURGE RATE: 0.40 GPM.  LENGTH OF WATER COL: 65.01 Ft.  VOLUME TO PURGE: 10.40 Gal. PURGE ENDED: 4.5.12 //:55  ACT. VOL. PURGED: 124.99
FIELD PARAMETERS:
BY TIME THE GOND THE DO TORB
AB 10 11:51   522   7.05   23.16   1.19   0.47 =
AB 16 11:53   522   7.06   23.17   1:14   0.76 AB 16 11:55   522   7.08   23.18   1.09   0.45
AB 10 11:55   522   7.08   23.18   1.09   8.45
SAMPLE CONTAINERS
QTY CONTAINER DESCRIPTION QTY CONTAINER DESCRIPTION PRESERVED
40 ml VIAL 40 ml VIAL
125 ml. PLASTIC 125 ml. PLASTIC
125 ml GLASS 125 ml GLASS
250 ml. PLASTIC 250 ml. PLASTIC 250 ml. GLASS 250 ml. GLASS
250 ml. GLASS   250 ml. GLASS
500 ml. GLASS 500 ml. GLASS
LITER PLASTIC LITER PLASTIC
LITER GLASS LITER GLASS BACTERIAL BACTERIAL
BACIENTAL BACIENTAL
4 TOTAL No. OF SAMPLES COLLECTED:  Colors and Sheens DATE   TIME
45,12/11:55
ANALYSIS REQUESTED:
AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY: REP. OF SOLID WASTE DEPT. 4.5.12 2:20 REP. OF CONTRACT LAB. 4.5.12 2:20
COMMENT'S: WO # 0058

# 660-47005

## SOUTHEAST LANDFILL WELL MONITORING PROGRAM

PRE	CLEANED SAMPI				* .		DATE	
REL	RELINQUISHED BY: Cus McWelty REP. OF CONTRACT LAB. 3/26/124 /500  ACCEPTED BY: A: Classer REP. OF SOLID WASTE DEPT. 3.29.12   2.00							
ACC	EPTED BY:	ا سلير لمسر	Clark	REP. (	OF SOLID W	ASTE DEP	r. 3.29.121	2.00
LOC PER	ATION: TH-19 SONAL ENGAGE		0					
TOT DEP LEN	L DIAMETER: 2 AL DEPTH OF W TH TO WATER: GTH OF WATER UME TO PURGE:	VELL: 15 /2 COL: 37	3.60 Ft. 1.30 Ft. 1.24 Ft. Gal		PURGE END ACT. VOL. Draw Down	ED: PURGED:	4.6.121 / /.oc DATE   1 4.6.121 /	GPM.
	BY	TIME	TEMP	COND	. bH	l DO	TURB	
	AB SC	10:18	23.41	422	6.92	0.54	0.00 =	
	ABJC	10:22	23.44	423 423	7.00	0.58	0.00	
	<u> </u>	7-,20				10.00	10.0	
			SAMP:	LE CONTA	INERS			_
QTY	CONTAINER	DESCRIPTION	YTQ MC	CONT	AINER DESCRI	EPTION	PRESERVED	]
	40 m	l VIAL		<u> </u>	40 ml VIAL			1
		PLASTIC			25 ml. PLAST			]
		l GLASS PLASTIC	- 2		125 ml GLAS 50 ml. PLAST			}
		GLASS	<u></u>		250 ml. GLAS			+
	500 ml.	PLASTIC	1	5	00 ml. PLAST	ric		<u> </u>
		. GLASS	1		500 ml. GLAS			]
		PLASTIC CLASS		-	LITER PLASTI LITER GLASS	-		1
		ERIAL	<del>- ;</del>	<del>- </del>	BACTERIAL		•	†
	# TOTAL No. OF SAMPLES COLLECTED:  COLLECTED DATE   TIME 4. G, 12 10:22							
			ANALYS	SIS REQUI	ESTED:			
AM	MONIA-NITROGE	EN CHLORI	DE SODIUM	TDS Iron	Arsenic			
PRE	SERVED SAMPLE	ES PH < 2	2.0	SAMPLI	E STORAGE:	COOLER	& ICE TO	.0 c
REL	VE LISTED SAN INQUISHED BY: EPTED BY:		reptime	REP. (	OF SOLID W OF CONTRAC	ASTE DEP' T LAB.	DATE   4.6.12 4.6.12	TIME 2:24 2:26
СОМ	MENT`S: <u>ს</u> ი	井 00.	5.8-					

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET

PRECLEAN	ED SAMPI	E CONTAIN	NERS:					DATE   '	TIME
RELINQUI	SHED BY:	(hish	Mich	ulty	REP.	OF CONTRACT	r LAB.	7/21/21/ 3.29,121	m
ACCEPTED	BY:	-4.i. C	late		REP.	OF SOLID W	ASTE DEPI	. 3,29,124	2:00
			8					WARDTY.	
LOCATION	: TH-42	WACS# 823	3	7 DOM	SAMPLE	MATRIX: WA	ATER OTI	IER MATRIX:	
PERSONAL	ENGAGE	IN SAMPI	LE COL	LECT	TON TH	A.Balloon	E A CIA	3**	
WELL DIA	METER: 2	2.0 INCH:						DATE   T	IME
		VELL: 164	4.00	_Ft.		PURGE STA	RTED:	4.6.12 10	:50
DEPTH TO	WATER:	વૃ	3.55	Ft.		PURGE RATE	E:		PM.
		COL:	0.45	_ Ft.		DUDGE END	en D.	DATE   T	
VOLUME T	O PURGE:		1.27	Gal	•	PURGE END:			ATu:
						Draw Down		1/2.50	<del></del>
								11-1-1	<del></del>
				FIELI	PARAMI	ETERS:			
	ву	TIME	TEN	<b>√D</b>  -	—cond-	- PH	<b>ДО</b>	-ITURB	
Z	18 75		23.7		534	7.00	0.20	4.47 =	
	B 16		23.7		534	7.00	0.20	14.02	
-	13 16		23.7	78	234	7.00	0.19	1 3.98	
_				•		*	•	•	
			•	SAMPI	LE CONT		• .		
QTY	CONTAINER	DESCRIPTION	N	QTY	CON	TAINER DESCRI	PTION	PRESERVED	
		1 VIAL				40 ml VIAL			
1		PLASTIC 1 GLASS				125 ml. PLAST 125 ml GLAS			
		. PLASTIC		2.		250 ml. PLAST			
<del></del>	250 m	L. GLASS			1	250 ml. GLAS	SS		
1:		PLASTIC				500 ml. PLAST			
<u> </u>		L. GLASS PLASTIC	<del></del>	<del></del>		500 ml. GLAS LITER PLASTI			
<del></del>		R GLASS		-		LITER GLASS		-	
	BAC	TERTAL		:		BACTERIAL			
	TOTAL N	o. Of SAM	PLES (	COLLE	CTED:			COLLEC	TIME
			78.1	ATR T WC	IS REQU	incurr.		4.6.121	0:57
			M	NALIZ	TO KECK	JESTED:			
AMMONIA	-NITROG	EN CHLORI	DE SO	DIUM	TDS Ire	n Arsenic	Biooctvo	d Section	
013301	ed-Jron	Dissolve	ومتنا	OHĖO	•				
PRESERVE	ED SAMPL	ES PH < 2	<u>ن</u> ٥.	•	_ SAMPI	LE STORAGE:	COOLER	& ICE TO 4	.0 с
ABOVE LI RELINQUI ACCEPTEI	SHED BY		Clay	- The	REP.	OF SOLID W	ASTE DEP	DATE   T. 4. 6.12   4. 6.12	

COMMENT'S: WO # 0058

PREC	LEANED SAMPLE CONTAINE	RS:					DATE   '	
RELI	NQUISHED BY:	Med	wit	L YREP. OF	CONTRACT	r LAB.	3/2//21	\643
ACCE	PTED BY: _A. CLA	a//~_		REP. OF	SOLID W	ASTE DEPT	· 3.29	2.00
PERS	TION: SUP 2 WACS# 2775 ONAL ENGAGED IN SAMPLE	6 COLI	ECTI	SAMPLE N	A.Balloon	ATER OTH	ER MATRIX:	
	VOLUME TO PURGE: 15 AL PURGE TIME: 19			PURGE S	STARTED: 1	DATE 4.6	./2 TIME //	<u>: 3</u> 5
		F	IELD	PARAMET	ERS:		•	•
	BY   TIME	TEME	· I	COND	PH	l DO	TURB	
	AB 32 11'50	24.8	3	3-75	7.42	0.04	0.00	
	AB 32111:52	24.9	<del></del>	379	7.46	0.04	6.00	
	AB 1411:54	24.9		374	7.50	0.04	0.00	
	<u> </u>							
QTY	CONTAINER DESCRIPTION		OTY	CONTAI	NERS AINER DESCR	TPTION	PRESERVED	1
211	40 ml VIAL		A	00112	40 ml VIAI			1
<del></del>	125 ml. PLASTIC			13	25 ml. PLAS	TIC		1
_	125 ml GLASS				125 ml GLAS			7
	250 ml. PLASTIC		2		0 ml. PLAS			]
	250 ml. GLASS				250 ml. GLA			_
	500 ml. PLASTIC				00 ml, PLAS			
	500 ml. GLASS				500 ml. GLA			4
	LITER PLASTIC LITER GLASS				LITER PLAST LITER GLAS			-
	BACTERIAL				BACTERIAL		ļ. <del></del>	┪
中 TOTAL No. OF SAMPLES COLLECTED:  COLLECTED DATE   TIME サーダ・12   113 5 サ								
		ANZ	ALYSI	S REQUE	STED:			
AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic								
PRES	SERVED SAMPLES PH < 2.0	· _		SAMPLE	STORAGE:	COOLER	& ICE TO 4	.0 c
RELI	VE LISTED SAMPLES: INQUISHED BY: EPTED BY:	t ile	hult	REP. O	F SOLID W F CONTRAC	ASTE DEPI T LAB.	1. 4.6 . 12	
COM	MENT'S: 60 4 00 58		:				•.	

			and the second				
PRECLEANED SAMPLE CONTAI	NERS:				DATE   T	IME	
RELINQUISHED BY:	I Me Mult	REP. O	F CONTRACT	LAB.	3/26/12/10	824	
ACCEPTED BY:	lastar	REP. O	F SOLID WA	ASTE DEPT	. 3.29, 121 2	!!00	
LOCATION: TH-58 WACS# 15	71	SAMPLE	MATRIX: W	ATER OTH	ER MATRIX:		
LOCATION: 18-30 WACS# 15	TO COLLECT	TON DE	A.Balloon	PJ Clas	+ <u>~</u> =		
PERSONAL ENGAGED IN SAME	TE COFFECT	TON THE	n. Darroon		3		
WELL DIAMETER: 2.0 INCH:  TOTAL DEPTH OF WELL: 32.92 Ft. PURGE STARTED: 4.6.1219:28  DEPTH TO WATER: 28.65 Ft. PURGE RATE: DATE   TIME  LENGTH OF WATER COL: 4.27 Ft.  VOLUME TO PURGE: 0.68 Gal. PURGE ENDED: ACT. VOL. PURGED: 1.60 GAL.  Draw Down: 29.13							
FIELD PARAMETERS:							
	<u> </u>	D LINGHILD			4		
BY   TIME	TEMP	COND	PH_	DO_	TURB		
AB 16 9:42	25.62	631	5.74	0.47	0.00=		
AB 10 19:44	25.44	Ce 13	15.73	0.43	0.06		
AA 16 9.40	75.63	606	5.70	10.40	10.00		

SAMPLE	CONTAINERS
--------	------------

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL	-   -	40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	250 ml. PLASTIC	2	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
<del>- ' -                                 </del>	500 ml. GLASS		500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4_	TOTAL	No.	OF	SAMPLES	COLLECTED:

COLLECTED
DATE | TIME
4. 6.12 9:46

# ANALYSIS REQUESTED:

AMMONIA-NITROGEN	CHLORIDE SODIUM T	OS Iron Arsenic	
PRESERVED SAMPLES	PH < 2.0	SAMPLE STORAGE:	COCLER & ICE TO 4.0 c
ABOVE LISTED SAMPI RELINQUISHED BY: ACCEPTED BY:	Carl Mchalty	REP. OF SOLID WAREP. OF CONTRACT	DATE   TIME STE DEPT. 4.6.121 2129 LAB. 4.6.12 2:29
COMMENT'S: Wo F	10058		4.9°C 0407

PRECLEANED SAMP	LE CONTAIN	ERS:					1	IME
RELINQUISHED BY	: Carol	Meh	ulty	REP. OF	CONTRACT	LAB.	3/26/12 1	14
ACCEPTED BY:	di Cl	ats_				*	3.29,12   2	
LOCATION: SUP 1	WACS# 277	55_	;	SAMPLE MA	ATRIX: W7	ATER OTH	ER MATRIX:_	
PERSONAL ENGAGE	D IN SAMPI	E COLI	ECTI	on ZA	.Balloon	E' J Clas	ten 🗆	<del></del>
WELL VOLUME TO ACTUAL PURGE TI	PURGE: 15 ME: 79	MIN:		PURGE ST	TARTED: I	DATE <u>4. 6.</u>	12 TIME 12,	<u>:03</u>
		F	IELD	PARAMETE	RS:			
BY	I TIME	TEM	<u> </u>	COND	PH.	DÓ	TURB	
AB JC	12:18	24.5	7	363	7.35	0.04	0.00 =	
	12:20	24.5	2	343	7:34	0.04	0.00	
AB 12	17:22	24.5	3	363	7.3.7	0.04	10.00	
•		9	AMPL	E CONTAIN	ERS			_
QTY CONTAINS	R DESCRIPTI		QTY		INER DESCR	RIPTION	PRESERVED	]
<b>—</b>	ml VIAL				40 ml VIA			4
125 1	nl. PLASTIC			12	5 ml. PLAS	STIC	<del> </del>	-
	ml GLASS			125 ml GLASS 250 ml. PLASTIC				1
250 r	nl. PLASTIC ml. GLASS		2.	23	50 ml. GLA	ASS		]
	nl. PLASTIC		<del></del>	50	O ml. PLAS	TIC		4
500	ml. GLASS			5	00 ml. GL/	ASS		┥
	ER PLASTIC				ITER PLAST			-{
I	TER GLASS		ļ		BACTERIA			1
B	ACTERIAL		<u>i</u> _	<u> </u>	DACIBRITA			-
4 TOTAL No. OF SAMPLES COLLECTED:  COLLECTED  DATE   TIME  4.6. 2  12:32								
ANALYSIS REQUESTED:								
DORTIN-AINOMMA	EN CHLORII	E SOD	T MU					
PRESERVED SAME	PLES PH < 3	<u>ء</u> 2.0		_ SAMPLE	STORAGE	: COOLER	& ICE TO	
ABOVE LISTED S RELINQUISHED E ACCEPTED BY:		Classe withe	Mull	REP. O	F SOLID T	WASTE DEE CT LAB.	DATE   4.6./2  4.6./2	
COMMENT`S: كور	N 0058							

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SOUTHEAST LA	NDFILL	MELL WON	ITORING L								
and the second s					DATE   TIME						
PRECLEANED SAMPLE CONTAINERS:	in Ob	05	COMMONCO	T.AR	3/26/12/100						
RELINQUISHED BY: Laid MC	mery_	REP. OF	CONTRACT	TWD.	3 29 12 1 2:00						
RELINQUISHED BY: Care Willy REP. OF CONTRACT LAB. 3/26/21/100  ACCEPTED BY: A: Class REP. OF SOLID WASTE DEPT. 3.29.12/2:00  SAMPLE MATRIX: WATER OTHER MATRIX:											
LOCATION: TH-30 WACS# 1065 SAMPLE MATRIX: WATER OTHER MATRIX:  PERSONAL ENGAGED IN SAMPLE COLLECTION FA. Balloon F 3 Clayton											
PERSONAL ENGAGED IN SAMPLE C	OLLECTI	ON IN A	Balloon	<u> </u>	•						
WELL DIAMETER: 2.00 INCH: TOTAL DEPTH OF WELL: 46.19 Ft. DEPTH TO WATER: 27.29 Ft.  PURGE STARTED: 46.01 9:57  PURGE RATE: DATE   TIME											
LENGTH OF WATER COLL ZI. TO	Ft. Gal	-	URGE ENDE	D:	4.6 .12 10:15						
VOLUME TO PURGE: 3.50	Gai	·	CT. VOL.	PURGED:	4.50 GAL.						
		E	raw Down:		24.39						
			ene.								
	FIELL	PARAMET	EKS:								
	remp	COND	PH	DO	TURB						
8	3.67	402	4.35	0.16	0.00=						
	3.67	405	4.37	0.16	0.00						
	347	407	4.39	0.15	10.00						
AD Jeile		LE CONTAI	MEDS								
		LE CONTAI	INER DESCRI	PTION	PRESERVED						
QTY CONTAINER DESCRIPTION	QTY	CONTA	40 ml VIAL								
4C ml VIAL		125 ml. PLASTIC									
125 ml. PLASTIC		1	125 ml GLAS	ASS							
125 ml GLASS		25	O ml. PLAST	ric							
250 ml. PLASTIC 250 ml. GLASS		<del></del>	50 ml. GLAS	35							
500 ml. PLASTIC		50	00 ml. PLAS	FIC							
500 ml. GLASS			OO ml. GLA	IC							
LITER PLASTIC		<del></del>	LITER GLAS	S							
LITER GLASS BACTERIAL	<del></del>	1	BACTERIAL								
TOTAL No. OF SAMPLI					COLLECTED DATE   TIME 4.6.12 10:15						
	ANALY	SIS REQU	ESTED:								
AMMONIA-NITROGEN CHLO	RIDE SC	DIUM TDS	Iron Ars	enic							
PRESERVED SAMPLES PH < 2.0	****	SAMPL	E STORAGE	: COOLE	R & ICE TO 4.0 c						
LUEDBUARD CHAIL HOS 212					DATE   TIME						
ABOVE LISTED SAMPLES: RELINQUISHED BY: A: CL ACCEPTED BY:	glim	REP.	OF SOLID OF CONTRA	WASTE DE ACT LAB.	PT. 4.6.12 2:24 4.6.12 2:26						
COMMENT'S: WO # 0056	<i>-</i>										
Has oder											
_FI = 000 4					CUPET						

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

# Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46975-1

Login Number: 46975

List Source: TestAmerica Tampa

List Number: 1 Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.5 deg C Cu-07
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	



## Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46975-1

Login Number: 47005

List Source: TestAmerica Tampa

List Number: 1 Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	4.9 deg C Cu-07
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled,	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	



# **TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

# **ANALYTICAL REPORT**

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

TestAmerica Job ID: 660-46976-1 Client Project/Site: Southeast Landfill

For:

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

Attn: David Adams

Authorized for release by: 4/20/2012 1:00:53 PM

Nancy Robertson Project Manager II

nancy.robertson@testamericainc.com

..... LINKS .....

Review your project results through

Total Access

Have a Question?



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

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

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



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## **Definitions/Glossary**

Client: Hillsborough County Public Utilities Dep

Toxicity Equivalent Factor (Dioxin)
Toxicity Equivalent Quotient (Dioxin)

Project/Site: Southeast Landfill

TEF

TEQ

TestAmerica Job ID: 660-46976-1

#### Qualifiers Metals Qualifier **Qualifier Description** Ū Indicates that the compound was analyzed for but not detected. The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. **General Chemistry** Qualifier **Qualifier Description** JЗ Estimated value, value may not be accurate. Spike recovery or RPD outside of criteria. Indicates that the compound was analyzed for but not detected. Glossary Abbreviation These commonly used abbreviations may or may not be present in this report. Listed under the "D" column to designate that the result is reported on a dry weight basis %R Percent Recovery CNF Contains no Free Liquid DL, RA, RE, IN Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample **EDL Estimated Detection Limit** United States Environmental Protection Agency **EPA** MDL **Method Detection Limit** ML Minimum Level (Dioxin) ND Not detected at the reporting limit (or MDL or EDL if shown) PQL **Practical Quantitation Limit** QC **Quality Control** RL Reporting Limit RPD Relative Percent Difference, a measure of the relative difference between two points

#### **Case Narrative**

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Landfill TestAmerica Job ID: 660-46976-1

Job ID: 660-46976-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-46976-1

#### Comments

No additional comments.

#### Receipt

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

#### Metals

No analytical or quality issues were noted.

#### **General Chemistry**

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

No other analytical or quality issues were noted.



### **Detection Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Oxygen, Dissolved

Turbidity

Specific Conductance

TestAmerica Job ID: 660-46976-1

Field Sampling

Field Sampling

Field Sampling

1

Tota!/NA

Total/NA

Total/NA

Client Sample ID: TH-74	WACS #28307		Sample ID:	: 660-46976-1					
– Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	40000		200	50	ug/L	1	_	6010B	Total Recovera
Sodium	24		0.50	0.31	mg/L	1		6010B	Total Recovera
Chloride	120		5.0	2.0	mg/L	10		300.0	Total/NA
Ammonia as N	2.8		0.020	0.010	mg/L	1		350.1	Total/NA
Total Dissolved Solids	270		10	10	mg/L	1		SM 2540C	Total/NA
Field pH	5.13				SU	1		Field Sampling	Total/NA
Field Temperature	21.74				Degrees C	1		Field Sampling	Total/NA

mg/L

NTU

umhos/cm

0.79

592

13,70

#### Client Sample ID: TH-75 WACS #28308 Lab Sample ID: 660-46976-2 Analyte Result Qualifier PQL MDL Unit Dil Fac D Method Prep Type Arsenic 6.3 Ī 10 4.0 ug/L. 1 6010B Total Recovera Iron 16000 200 50 ug/L 6010B Total Recovera Sodium 26 0.50 0.31 mg/L 1 6010B Total Recovera Chloride 130 5.0 2.0 mg/L 300.0 Total/NA 10 Ammonia as N 0.010 mg/L 1.3 0.020 350.1 Total/NA **Total Disselved Solids** 300 SM 2540C 10 10 mg/L Total/NA Field pH 5.37 SU Field Sampling Total/NA Field Temperature 21.76 Degrees C Field Sampling Total/NA Oxygen, Dissolved 0.33 mg/L Field Sampling Total/NA Specific Conductance 584 umhos/cm Field Sampling Total/NA Turbidity 4.94 NTU Field Sampling Total/NA

# **Client Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46976-1

Client Sample ID: TH-74 WACS #28307

Lab Sample ID: 660-46976-1 Matrix: Water

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

Analyto	Result	Qualifier	PQL	MDL	Unit	D	Propared	Analyzed	Dil Fac
Arsenic	4.0	<u>u</u>	10	4.0	ug/L		04/09/12 11:54	04/10/12 09:18	1
Iron	40000		200	50	ug/L		04/09/12 11:54	04/10/12 09:18	1
Sodium	24		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:18	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120	<del></del>	5.0	2.0	mg/L			04/18/12 10:54	10
Ammonia as N	2.8		0.020	0.010	mg/L			04/06/12 15:30	1
Total Dissolved Solids	270		10	10	mg/L			04/10/12 15:02	1
Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.13				SU			04/05/12 10:37	1
Field Temperature	21.74				Degrees C			04/05/12 10:37	1
Oxygen, Dissolved	0.79				mg/L			04/05/12 10:37	1
Specific Conductance	592				umhos/cm			04/05/12 10:37	1
Turbidity	13.70				NTU			04/05/12 10:37	



# **Client Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46976-1

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

Date Collected: 04/05/12 11:01

Method: 6010B - Metals (ICP)	- Total Recoverab	le							
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Proparod	Analyzed	Dil Fac
Arsenic	6.3	i	10	4.0	ug/L		04/09/12 11:54	04/10/12 09:21	1
Iron	16000		200	50	ug/L		04/09/12 11:54	04/10/12 09:21	1
Sodium	26		0.50	0.31	mg/L		04/09/12 11:54	04/10/12 09:21	1
General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		5.0	2.0	mg/L			04/18/12 11:10	10
Ammonia as N	1.3		0.020	0.010	mg/L			04/06/12 15:50	1
Total Dissolved Solids	300		10	10	mg/L			04/10/12 15:02	1
Method: Field Sampling - Field	d Sampling								
Analyte	Rosult	Qualifier	PQL	MDL	Unit	۵	Prepared	Analyzed	Dil Fac
Field pH	5.37				SU			04/05/12 11:01	1
Field Temperature	21.76				Degrees C			04/05/12 11:01	1
Oxygen, Dissolved	0.33				mg/L			04/05/12 11:01	1
Specific Conductance	584				umhos/cm			04/05/12 11:01	1
Turbidity	4,94				NTU			04/05/12 11:01	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46976-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 660-123111/1-A

Matrix: Water

Analysis Batch: 123151

Client Sample ID: Method Blank Prep Type: Total Recoverable

Prep Batch: 123111

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



Lab Sample ID: LCS 660-123111/2-A

M

Lab Sample ID. LCS 900-12311112-A			Chent Sample ID: Lab Control Sample
Matrix: Water			Prep Type: Total Recoverable
Analysis Batch: 123151			Prep Batch: 123111
	Spike	LCS LCS	%Rec.

	Spire	LUJ	LUJ				MINUE.	
Analyte	Added	Rosult	Qualifier	Unit	D	%Rec	Limits	
Arsenic	1000	1040		ug/L	_	104	75 - 125	 
Iron	1000	1020		ug/L		102	75 <sub>-</sub> 125	
Sodium	10.0	9.78		mg/L		98	75 - 125	

Lab Sample ID: 660-46975-B-2-B MS

Matrix: Water

Analysis Batch: 123151

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

Client Comple ID: Lab Control Comple

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

Lab Sample ID: 660-46975-B-2-C MSD

Matrix: Water

Analysis Batch: 122151

Client Sample	ID:	Matrix	Spike	Duplicate

Prep Type: Total Recoverable Dans Databa 400444

Alialysis Datch: 123151									Prepi	saton: 1	23777
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyto	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	4.0	U	1000	1040		ug/L		104	75 - 125	0	20
Iron	50	U	1000	1040		ug/L		104	75 - 125	1	20
Sodium	17		10.0	26.5		mg/L		100	75 - 125	0	20



Lab Sample ID: MB 660-123428/3

Matrix: Water

Analysis Batch: 123428

Client	Sample	ID: Me	thod	Blank

Prep Type: Total/NA

MB MB Analyto Result Qualifier PQL MDL Unit Prepared Analyzed Dil Fac Chloride 0.20 Ū 0.50 0.20 mg/L 04/17/12 22:03

Lab Sample ID: LCS 660-123428/4

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

**Matrix: Water** Analysis Batch: 123428

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

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Lab Sample ID: 660-47005-A-4 MS	^10											Client	Sample ID		-
Matrix: Water													Prep T	ype: To	otal/NA
Analysis Batch: 123428	Camala	C	1.	0-11			***						44.5		
Anabas	Sample			Spike			MS	n			_	***	%Roc.		
Analyte Chloride	Result 81	Qualit		Added		179	Qualif	tor	Unit mg/L		D 	%Rec	90 - 110		
	01			100		173			IIIg/E			30	30 - 110		
Lab Sample ID: 660-47005-A-4 MSE Matrix: Water	O ^10									Client	Sa	mple IC	: Matrix S <sub>I</sub> Prep T	oike Du ype: To	
Analysis Batch: 123428	_		_												
	Sample	•		Spike			MSD				_		%Rec.		RPD
Analyte	Result	Qualif	<u> </u>	Added			Qualif	ier	Unit		D 	%Rec	Limits	RPD	Limi
Chloride	81			100		189			mg/L			108	90 - 110	5,33	30
Lab Sample ID: MB 660-123465/3 Matrix: Water Analysis Batch: 123465												Client S	ample ID: Prep T	Method ype: To	
Allalysis Datell. 123403		MB (	мв												
Analyto	R	esult (	Qualifier		PQL		MDL I	Unit		Ð	Pi	repared	Analyz	ed	Dil Fac
Chloride		0.20	Ū		0.50		0.20	mg/L				<u></u>	04/18/12		1
Lab Sample ID: LCS 660-123465/4										Clie	ent	Sample	ID: Lab C	ontrol S	Sample
Matrix: Water													Prep T	ype: To	otal/NA
Analysis Batch: 123465															
				Spike			LCS	_			_		%Rec.		
Analyto				Added			Qualif	ler	Unit		D 	%Rec	Limits		
Chloride				10.0		10.2			mg/L			102	90 - 110		
Lab Sample ID: 660-46976-2 MS										Clies	nt S	Samnle	D: TH-75	WACS:	#28308
Matrix: Water										0		Jampio		ype: To	
Analysis Batch: 123465													11061	, pc. 10	, was 110
, 5.5 54.6 120.105	Sample	Sampl	le	Spike		MS	MS						%Rec.		
Analyto	Result	Qualif	lier	Added		Result	Qualif	ier	Unit		D	%Rec	Limits		
Chloride	130			100		236			mg/L		_	104	90.110		
Lab Sample ID: 660-46976-2 MSD										Clie	nt S	Sample	D: TH-75		
Matrix: Water													Prep T	ype: To	otal/NA
Analysis Batch: 123465															
A 4	Sample	-		Spike			MSD	_			_		%Rec.		RPC
Analyto	Result	Qualit		Added			Qualif	ler	Unit		D	%Rec	Limits	RPD	Limit
Chloride	130			100		236			mg/L			104	90 - 110	0.000	30
lethod: 350.1 - Nitrogen, Amr	nonia														
Lab Sample ID: MB 660-123071/3 Matrix: Water												Client S	ample ID: Prep T	Method	
													•	••	
Analysis Batch: 123071															
Analysis Batch: 123071		мв	MB Qualifier		PQL		MDL (								



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Lab Sample ID: LCS 660-123071/4										Cli	ent	Sample	ID: Lab Co		-
Matrix: Water													Prep T	ype: To	tal/N/
Analysis Batch: 123071													A4 17		
Australo				Spike			LCS	£?	11-14		_	wa	%Rec.		
Analyte Ammonia as N				0,500		Rosult 0.503	Quali	1187	Unit mg/L		<u>D</u>	%Rec 101	90 - 110	<del></del>	
									•			-			
Lab Sample ID: 660-46965-A-3 MS												Client	Sample ID		-
Matrix: Water													Prep T	ype: To	tal/N
Analysis Batch: 123071	Sample	C		C-:!		***	MS						%Rec.		
Analyta	Result	•		Spike Added		Result		ein-	Unit		D	e/ Don	%Rec.		
Analyte Ammonia as N	0.024			1.00		0.917		HUT	mg/L		_	%Roc 89	90 - 110		
		••				0.0						••			
Lab Sample ID: 660-46965-A-3 MSD	)									Clien	t Sa	ample IC	): Matrix Sp	-	
Matrix: Water													Prep T	ype: To	tal/N
Analysis Batch: 123071		_	_												
	Sample			Spiko			MSD	_					%Rec.		RF
Analyte	Rosult		fier 	Added		Rosult	Quali	fior	Unit		D	%Rec	Limits	RPD	Lin
Ammonia as N	0.024	13		1.00		1.03			mg/L			101	90 - 110	12	
Lab Sample ID: 660-46975-C-2 MS												Client	Sample ID	: Matrix	Spil
Matrix: Water														ype: To	
Analysis Batch: 123071													•	••	
•	Sample	Samp	le	Spike		MS	MS						%Rec.		
Analyte	Result	Quali	fier	Added		Result	Quali	fier	Unit		D	%Rec	Limits		
Ammonia as N	0.30			1.00		1.25			mg/L			95	90 - 110		
Lab Sample ID: 660-46975-C-2 MSD	1									Clien	t S:	amnle IC	): Matrix S <sub>l</sub>	nika Dur	dica
Matrix: Water	,									Cilei	. 3	ampie ic	-	ype: To	
Analysis Batch: 123071													riepi	ype. 10	LEDIT
Analysis Daton. 120071	Sample	Samo	ile	Spike		MSD	MSD						%Rec.		RF
Analyto	Rosult	-		Added		Rosult		ifier	Unit		D	%Rec	Limits	RPD	Lin
Ammonia as N	0.30			1.00		1.26			mg/L		_	96	90 - 110	1	
														-	
lethod: SM 2540C - Solids, To	tal Dis	sol	red (TD:	S)				<u>-</u>							
Lab Sample ID: MB 660-123163/1												Client S	Sample ID:	Method	Blar
Matrix: Water													•	ype: To	
Analysis Batch: 123163													•	••	
·		MB	MB												
Analyte	R	osult	Qualifier		PQL		MDL	Unit		D	P	repared	Analyz	ed	Dil F
Total Dissolved Solids		5.0	Ū		5.0		5.0	mg/L					04/10/12	14:56	
Lab Sample ID: LCS 660-123163/2										CI	ient	Samole	D: Lab C	ontrol S	amn
Matrix: Water										VI		· oumpie		ype: To	-
Analysis Batch: 123163													. ieh i	, pe. 10	va # IN
,				Spike		LCS	LCS						%Rec.		
Analyte				Added		Rosult	Quali	ifior	Unit		D	%Rec	Limits		



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Lab Sample ID: 660-46975-A-2 DU Matrix: Water Analysis Batch: 123163							Client Sample Prep T	ID: Dur ype: To	
ayoto Batom 120100	Sample	Sample	DU	DU					RPD
Analyte	Result	Qualifier	Result	Qualifier	Unit	D		RPD	Limit
Total Dissolved Solids	160		 160		mg/L			2	20



TestAmerica Job ID: 660-46976-1

# **QC Association Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Matala
Metals

– Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
660-46975-B-2-B MS	Matrix Spike	Total Recoverable	Water	3005A	- <del></del>
660-46975-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
660-46976-1	TH-74 WACS #28307	Total Recoverable	Water	3005A	
660-46976-2	TH-75 WACS #28308	Total Recoverable	Water	3005A	
LCS 660-123111/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-123111/1-A	Method Blank	Total Recoverable	Water	3005A	
Analysis Batch: 123151					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-B-2-B MS	Matrix Spike	Total Recoverable	Water	6010B	12311
660-46975-B-2-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	12311
660-46976-1	TH-74 WACS #28307	Total Recoverable	Water	6010B	12311
660-46976-2	TH-75 WACS #28308	Total Recoverable	Water	6010B	12311
LCS 660-123111/2-A	Lab Control Sample	Total Recoverable	Water	6010B	123111
MB 660-123111/1-A	Method Blank	Total Recoverable	Water	6010B	123111
General Chemistry					
Analysis Batch: 123071			, ,		
– Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46965-A-3 MS	Matrix Spike	Total/NA	Water	350.1	
660-46965-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	350.1	
660-46975-C-2 MS	Matrix Spike	Total/NA	Water	350,1	
660-46975-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	350,1	
660-46976-1	TH-74 WACS #28307	Total/NA	Water	350,1	
660-46976-2	TH-75 WACS #28308	Total/NA	Water	350.1	
LCS 660-123071/4	Lab Control Sample	Total/NA	Water	350.1	
MB 660-123071/3	Method Blank	Total/NA	Water	350.1	
Analysis Batch: 123163					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46975-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	
660-46976-1	TH-74 WACS #28307	Tctal/NA	Water	SM 2540C	
660-46976-2	TH-75 WACS #28308	Total/NA	Water	SM 2540C	
LCS 660-123163/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-123163/1	Method Blank	Total/NA	Water	SM 2540C	
Analysis Batch: 123428					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batci
660-47005-A-4 MS ^10	Matrix Spike	Total/NA	Water	300.0	-
660-47005-A-4 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 660-123428/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-123428/3 	Method Blank	Total/NA	Water	300.0	
Analysis Batch: 123465					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
660-46976-1	TH-74 WACS #28307	Total/NA	Water	300,0	
660-46976-2	TH-75 WACS #28308	Total/NA	Water	300,0	
	TH-75 WACS #28308	Total/NA	Water	300,0	
660-46976-2 MS	111-75 WACS #20300	, oran or		•	
660-46976-2 MS 660-46976-2 MSD	TH-75 WACS #28308	Total/NA	Water	300.0	

## **QC Association Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Field Service / M	obile Lab	ennellederfreihlicht (sp. 1747) (in 1748) 4 = N.C. (A. schola and deleterine an		
Analysis Batch: 123	094			
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Bate
660-46976-1	TH-74 WACS #28307	Total/NA	Water	Field Sampling
000-40370-1		7 - 1 - 1 - 1		



# Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

Client Sample ID: TH-74 WACS #28307

Date Collected: 04/05/12 10:37

Lab Sample ID: 660-46976-1 Matrix: Water Date Received: 04/05/12 14:20

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

Lab Chronicle

Client Sample ID: TH-75 WACS #28308

Date Collected: 04/05/12 11:01

Date Received: 04/05/12 14:20

Lab Sample ID: 660-46976-2 Matrix: Water

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

#### Laboratory References:

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

# **Certification Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46976-1

5-VF- 16- 49-VH- 511-0-VH511-0-VH511-0-VH				
Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Tampa	Alabama	State Program	4	40610
TestAmerica Tampa	Florida	NELAC	4	E84282
TestAmerica Tampa	Georgia	State Program	4	905
TestAmerica Tampa	USDA	Federal		P330-11-00177

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



## **Method Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Landfill

TestAmerica Job ID: 660-46976-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL TAM
300.0	Anions, Ion Chromatography	MCAWW	TAL TAM
350.1	Nitrogen, Ammonia	MCAWW	TAL TAM
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
Field Sampling	Field Sampling	EPA	TAL TAM

#### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater".

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

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

# **Sample Summary**

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

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



# 660-46976

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

PRECLEANED SAMPLE CONTAINERS:	^				DATE   TIME		
RELINQUISHED BY: Carol McM	wlty	REP.	OF CONTRAC	T LAB.	3/26/14 /100		
RELINQUISHED BY: Carol McM ACCEPTED BY: A= Clat		REP.	OF SOLID W	ASTE DEPT	. 412 2:00		
LOCATION: TH-74 WACS# 28307 SAMPLE MATRIX: WATER OTHER MATRIX: PERSONAL ENGAGED IN SAMPLE COLLECTION WA.Balloon W.A. Clayfor							
WELL DIAMETER: 2 INCH: TOTAL DEPTH OF WELL: 17.00 DEPTH TO WATER: /0.51 LENGTH OF WATER COL: 6.49 VOLUME TO PURGE: /.64	Ft. Ft. Gal.		PURGE END	ED: PURGED:	DATE   TIME 4.5.12 10:24 0.15 GPM. DATE   TIME 4.5.12 10:37 1.65 GAL.		
<u> </u>	FIELD	PARAME	TERS:				
BY   TIME   TEM	₽	COND	PH	, DO	TURB		
AB 10 10.33   21.7		593		1.04	G.84 =		
AB JC 10.35 21.7		593	15.10	0.77	11.50		
AB Jel 10.37 1 21.	74	592	5.13	0.79	1 13.70		
s	SAMPL	E CONTA	AINERS				
QTY CONTAINER DESCRIPTION	OTY		TAINER DESCR	TPTTON	PRESERVED		
40 ml VIAL	211		40 ml VIA		2.003.1125		
125 ml. PLASTIC	}	<u> </u>	125 ml. PLAS				
125 ml GLASS		125 ml GLASS					
250 ml. PLASTIC	2		250 ml. PLAS				
250 ml. GLASS		ļ	250 ml. GLA				
500 ml. PLASTIC 500 ml. GLASS	<u> </u>	ļ	500 ml. PLAS 500 ml. GLA				
LITER PLASTIC	<del> </del>	<del> </del>	LITER PLAST				
LITER GLASS		LITER GLASS					
BACTERIAL			BACTERIAL	ı			
TOTAL No. OF SAMPLES COLLECTED:  Colors and Sheens  ANALYSIS REQUESTED:  COLLECTED DATE   TIME 4,512   10:37							
AMMONIA-NITROGEN CHLORIDE SODI	UM TI	S Iron	Arsenic				
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c							
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:		REP.	OF SOLID W OF CONTRAC	ASTE DEPI T LAB.	DATE   TIME 1. 4. 5. 12   2:20 4.5. /2 2:20		
COMMENT'S: WOHO656							

# Æ

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

PRECL	EANED SAMPI	LE CONTAIN	NERS:	4			DATE   TIME
RELIN	QUISHED BY:	: <u>(and</u>	2 mm	LUREP. O	F CONTRAC	T LAB.	3/26/12/1/000
ACCEP:	RELINQUISHED BY: Lie Cut REP. OF CONTRACT LAB. 3/26/12/1/1000  ACCEPTED BY: Lie Cut REP. OF SOLID WASTE DEPT. 3.25,12   2:00						
LOCAT:	LOCATION: TH-75 WACS# 28308 SAMPLE MATRIX: WATER OTHER MATRIX: PERSONAL ENGAGED IN SAMPLE COLLECTION PA.Balloon S. C						
WELL DIAMETER: 2 INCH:  TOTAL DEPTH OF WELL: 17.00 Ft. PURGE STARTED: 4.5.12! /0:46  DEPTH TO WATER: 8.14 Ft. PURGE RATE: DATE   TIME  LENGTH OF WATER COL: 8.64 Ft.  VOLUME TO PURGE: /.41 Gal. PURGE ENDED: /.95 GAL.  Draw Down: 8.42							
<u>.</u> ·			FIEL	D PARAMET	ERS:		•
	ВУ	TIME	TEMP	COND	PH	l DO	TURB
	ABK	10:57	21.74	584	5.35	0.34	4.42 =
	AB 16		21.75	585	5.34	0.31	1 4 <u>87</u> 1 4 94
	AB JC	11:01	1 21.74	1 584	1 3 5 /	1 6.33	1 4. 7-T
			SAME	LE CONTA	NERS	. •	
QTY	CONTAINER	R DESCRIPTION	ON QT	Y CONT	AINER DESCR	RIPTION	PRESERVED
<del></del>	40	ml VIAL			40 ml VIA	I,	
	125 ml	. PLASTIC			25 ml. PLAS		
		ml GLASS		125 ml GLASS			
		. PLASTIC		250 ml. PLASTIC 250 ml. GLASS			
<del></del>		L. PLASTIC			00 ml. PLAS		
		nl. GLASS		500 ml. GLASS			
		R PLASTIC			LITER PLASTIC		
		ER GLASS CTERIAL			LITER GLAS		
	BAC	TERIAL			BACTERIAL		
4	TOTAL N	o. OF SAM	PLES COLL	ECTED:			
							COLLECTED
Color	s and Shee	ns	<del></del>				DATE   TIME
			3313 T W	CTC DWALL	cmer.		4.5.12 11:01
			WHATI	SIS REQUE	PIED:		•
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:  ACCEPTED BY:  REP. OF SOLID WASTE DEPT.  REP. OF CONTRACT LAB.  PATE ! TIME  REP. OF CONTRACT LAB.							
COMME	COMMENT'S: WO # 0058						

## Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-46976-1

Login Number: 46976

List Source: TestAmerica Tampa

List Number: 1

Creator: McNulty, Carol

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or lampered with.	True	
Samples were received on ice.	True	3.5 deg C Cu-07
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels,	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

