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October 13, 2011

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

RE: Southeast County Landfill
Laboratory Analytical Results
Initial Assessment Monitoring Plan
Report No. 13

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 the continuation of the Initial Assessment Monitoring Plan (IAMP). The IAMP was developed to address any potential impacts to groundwater from the sinkhole in Phase VI of the Southeast County Landfill (SCLF), which was discovered on December 14, 2010. The monthly sampling event was conducted on September 8-9, 2011, and the samples collected were analyzed by our contracted laboratory, Test America, Inc.

Representative samples of groundwater were collected from nine (9) on-site groundwater monitoring wells and two (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.

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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.

#### pΗ

The surficial aquifer monitoring wells continue to exhibit pH values below the Secondary Drinking Water Standard (SDWS) acceptable range of 6.5 to 8.5 pH units. The pH values range in value from 4.44 to 5.70 pH units. The pH values within the surficial aquifer at the SCLF have historically been 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 monitoring wells and the two (2) on-site supply wells were all within the acceptable range, and continue to be 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 turbidity value in P-18S could not be reduced to below 20 NTU, therefore, a groundwater sample was again collected from TH-30. As previously discussed, the soils encountered during the installation of P-18S were primarily clays and clayey sands, which are known to exhibit turbid groundwater conditions. The turbidity value recorded in TH-42 was 18.2 NTU, indicating that the development of this previously unused monitoring well has been effective.

#### Conductivity

The conductivity values are relatively low and have remained consistent with historical values associated with the SCLF, except for TH-58. This well has exhibited elevated conductivity values over the past year, and it appears that an upward trend began in November of 2010. However, the values have shown dramatic swings upward and downward since. The conductivity value observed in September was 1239 uhmos/cm, which is a significant decrease from the 2167 uhmos/com in August. The conductivity values in this well will continue to be evaluated.

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

Surficial aquifer groundwater monitoring well, TH-58, exhibited a TDS concentration of 1,200 mg/l, which is lower then the previous month's result of 1,700 mg/l. However, this value continues to exceed the SDWS of 500 mg/l. Over the period of record, TDS values began to trend upward during the June sampling event, but the decrease in value this month may be indicative of water quality changes associated with the fluids introduced into the surficial aquifer during the sinkhole grouting activities.

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#### Chloride

Surficial aquifer groundwater monitoring well, TH-58, exhibited chloride at a concentration of 570 mg/l, which is lower then the previous month's result of 660 mg/l. However, this value continues to exceed the SDWS of 250 mg/l. Over the period of record, chloride values began to trend upward during the June sampling event, but the decrease in value this month may be indicative of changes in that trend. The chloride values in all the other wells are well below the SDWS.

#### **Arsenic**

The arsenic observed in TH-58 is 0.026 mg/l, which is above the Primary Drinking Water Standard (PDWS) of 0.01 mg/l. Arsenic has been present above the PDWS in TH-58 for several years, and the concentration has remained consistent while other parameters have exhibited changes. The County has maintained the position that the arsenic is naturally occurring within the soils surrounding the well and is likely being mobilized in the anaerobic environment below the lined landfill. Although changes in water quality have been observed in TH-58 over the past six months, the arsenic values have remained very stable. This observation supports the position that the arsenic is not attributable to the landfill or the sinkhole.

#### Iron

Iron concentrations in four (4) surficial aquifer wells and one upper Floridan well were observed above the SDWS of 0.3 mg/l. The concentrations of iron ranged from below the detection limit (BDL) to 8.5 mg/l. As previously discussed, the elevated iron concentrations observed in the surficial aquifer wells at specific locations across the site are likely naturally occurring and/or the result of past strip mining activities. The iron value observed in TH-42 at 0.37 mg/l may be naturally occurring in the weathered limestone and clay strata, and partially attributable to the potential turbidity associated bias from the 18.2 NTU value observed.

#### Conclusions

Water quality observed in the groundwater samples collected as part of this sampling event remains consistent with the historical data set for the site, with the exception of the changes observed in the surficial aquifer monitoring well TH-58. The water quality in this well, and specifically the values for conductitivity, total dissolved solids and chloride, indicate impacts from the sinkhole and/or the grouting activities. The County will continue to look for changes in water quality at all the wells sampled, but a focused evaluation of water quality in TH-58 will continue. The observed impacts remain in close proximity to the sinkhole within the surficial aquifer and are not present within the deeper upper Floridan aquifer.

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#### Recommendations

The County recommends continuation of the IAMP sampling program on the approved monthly schedule, and associated evaluation of water quality in the nine monitoring wells and two on-site supply wells. The County will continue to provide the IAMP reports within the specified time frames, and evaluate all available data as part of the ongoing assessment activities.

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

Respectfully submitted,

David S. Adams, P.G Environmental Manager

Public Utilities Department

xc: Paul Vanderploog, Director, Public Utilities Department

Patricia Berry, Public Utilities Department Pamela Greene, Public Utilities Department

Larry Ruiz, Public Utilities Department

Beth Schinella, Public Utilities Department

Michelle Van Dyk, Public Utilities Department

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Steve Morgan, FDEP, Southwest District

Andy Schipfer, EPC

Ernest Ely, WM

Brian Miller, DOH

Rich Siemering, HDR

Joe O'Neill, Civil Design Services

Florida

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

conductivity (umhos/cm) (field) dissolved oxygen (mg/l) (field)  pH (field) 7.35 temperature (°C) (field) 23.47 2 turbidity (NTU) (field) 6.6 total dissolved solids (mg/l) 7.9 v ammonia nitrogen (mg/l as N)  Metals: (mg/l)  TH-19 Therefore Theref	202 0.49 <b>5.24</b> 26.63 4 140 46 1.5	TH-30 251 0.21 4.44 23.41 4.7 130 66 v 1.7 TH-30 BDL 0.24 23	TH-40 370 1.04 7.59 23.60 0.7 190 7.4 v 0.45 TH-40 BDL BDL	TH-42 499 0.22 7.36 23.97 18.1 280 17 v 0.28 TH-42 BDL 0.37	TH-57 183 0.27 5.08 26.55 2.5 110 42 v 1.1  TH-57 BDL	TH-58 1239 0.90 5.70 26.18 3.6 1200 570 0.75  TH-58 0.026	TH-72 536 1.11 7.29 23.20 0.6 340 34 0.41 TH-72 BDL	TH-73 259 0.49 5.24 25.41 28.1 170 62 1.9 TH-73 BDL	SUP-1 323 0.10 7.52 24.46 0.5 220 9.3 0.19 SUP-1 BDL	SUP-2 347 0.28 7.56 26.71 1.6 230 12 0.21 SUP-2 BDL	F.A.C. 62-550  NS  NS  (6.5 - 8.5)**  NS  NS  500**  250**  2.8***  (MCL) STANDARD  F.A.C. 62-550  0.01*
dissolved oxygen (mg/l) (field)  pH (field)  temperature (°C) (field)  total dissolved solids (mg/l)  chloride (mg/l)  ammonia nitrogen (mg/l as N)  Metals: (mg/l)  arsenic  iron  sodium  Note: Ref. Groundwater Guidance Concentrations, FEMCL=MAXIMUM CONTAMINANT LEVEL  BDL=BELOW DETECTION LIMIT  ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  = reported value between the laboratory method determine the content of t	0.49 5.24 26.63 4 140 46 1.5 H-28A BDL 3.4	0.21 4.44 23.41 4.7 130 66 v 1.7 TH-30 BDL 0.24	1.04 7.59 23.60 0.7 190 7.4 v 0.45	0.22 7.36 23.97 18.1 280 17 v 0.28 TH-42 BDL	0.27 5.08 26.55 2.5 110 42 v 1.1 TH-57 BDL	0.90 5.70 26.18 3.6 1200 570 0.75 TH-58 0.026	1.11 7.29 23.20 0.6 340 34 0.41 TH-72 BDL	0.49 <b>5.24</b> 25.41 28.1 170 62 1.9	0.10 7.52 24.46 0.5 220 9.3 0.19	0.28 7.56 26.71 1.6 230 12 0.21	NS (6.5 - 8.5)** NS NS 500** 250** 2.8*** (MCL) STANDARD F.A.C. 62-550
pH (field)  temperature (°C) (field)  turbidity (NTU) (field)  total dissolved solids (mg/l)  chloride (mg/l)  ammonia nitrogen (mg/l as N)  Metals: (mg/l)  arsenic  iron  sodium  Note: Ref. Groundwater Guidance Concentrations, FE MCL=MAXIMUM CONTAMINANT LEVEL  BDL=BELOW DETECTION LIMIT  ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  i= reported value between the laboratory method determine the content of the con	5.24 26.63 4 140 46 1.5 H-28A BDL 3.4	4.44 23.41 4.7 130 66 v 1.7 TH-30 BDL 0.24	7.59 23.60 0.7 190 7.4 v 0.45	7.36 23.97 18.1 280 17 v 0.28 TH-42 BDL	5.08 26.55 2.5 110 42 v 1.1 TH-57 BDL	5.70 26.18 3.6 1200 570 0.75 TH-58 0.026	7.29 23.20 0.6 340 34 0.41 TH-72 BDL	5.24 25.41 28.1 170 62 1.9	7.52 24.46 0.5 220 9.3 0.19	7.56 26.71 1.6 230 12 0.21	(6.5 - 8.5)**  NS  NS  500**  250**  2.8***  (MCL) STANDARD  F.A.C. 62-550
temperature (°C) (field)  turbidity (NTU) (field)  dotal dissolved solids (mg/l)  chloride (mg/l)  ammonia nitrogen (mg/l as N)  Metals: (mg/l)  arsenic  fron  sodium  Note: Ref. Groundwater Guidance Concentrations, FE MCL=MAXIMUM CONTAMINANT LEVEL  BDL=BELOW DETECTION LIMIT  ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  = reported value between the laboratory method determine the concentration of the concentration	26.63 4 140 46 1.5 H-28A BDL 3.4	23.41 4.7 130 66 v 1.7 TH-30 BDL 0.24	23.60 0.7 190 7.4 v 0.45 TH-40 BDL	23.97 18.1 280 17 v 0.28 TH-42 BDL	26.55 2.5 110 42 v 1.1 TH-57 BDL	26.18 3.6 1200 570 0.75 TH-58 0.026	23.20 0.6 340 34 0.41 TH-72 BDL	25.41 28.1 170 62 1.9	24.46 0.5 220 9.3 0.19	26.71 1.6 230 12 0.21	NS NS 500** 250** 2.8*** (MCL) STANDARD F.A.C. 62-550
turbidity (NTU) (field)  total dissolved solids (mg/l)  chloride (mg/l)  ammonia nitrogen (mg/l as N)  Metals: (mg/l)  arsenic  Iron  BDL  Iron  BOL  Iron  BOL  ISO  Note: Ref. Groundwater Guidance Concentrations, FD  MCL=MAXIMUM CONTAMINANT LEVEL  BDL=BELOW DETECTION LIMIT  ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  = reported value between the laboratory method determine the content of the co	4 140 46 1.5 H-28A BDL 3.4	4.7 130 66 v 1.7 TH-30 BDL 0.24	0.7 190 7.4 v 0.45 TH-40 BDL	18.1 280 17 v 0.28 TH-42 BDL	2.5 110 42 v 1.1 TH-57 BDL	3.6 1200 570 0.75 TH-58 0.026	0.6 340 34 0.41 TH-72 BDL	28.1 170 62 1.9 TH-73	0.5 220 9.3 0.19	1.6 230 12 0.21	NS 500** 250** 2.8*** (MCL) STANDARD F.A.C. 62-550
total dissolved solids (mg/l)  chloride (mg/l)  ammonia nitrogen (mg/l as N)  Metals: (mg/l)  arsenic  fron  sodium  Note: Ref. Groundwater Guidance Concentrations, FE MCL=MAXIMUM CONTAMINANT LEVEL  BDL=BELOW DETECTION LIMIT ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  = reported value between the laboratory method determine the control of the control	140 46 1.5 H-28A BDL 3.4	130 66 v 1.7 TH-30 BDL 0.24	190 7.4 v 0.45 TH-40 BDL	280 17 v 0.28 TH-42 BDL	110 42 v 1.1 TH-57 BDL	1200 570 0.75 TH-58 0.026	340 34 0.41 TH-72 BDL	170 62 1.9 TH-73	220 9.3 0.19	230 12 0.21 SUP-2	500** 250** 2.8***  (MCL) STANDARD F.A.C. 62-550
chloride (mg/l) 7.9 v ammonia nitrogen (mg/l as N) 0.35  Metals: (mg/l) TH-19 The series BDL Interpretation	46 1.5 H-28A BDL 3.4	66 v 1.7 TH-30 BDL 0.24	7.4 v 0.45 TH-40 BDL	17 v 0.28 TH-42 BDL	42 v 1.1 TH-57 BDL	570 0.75 TH-58 0.026	34 0.41 TH-72 BDL	62 1.9 TH-73	9.3 0.19 SUP-1	12 0.21 SUP-2	250** 2.8*** (MCL) STANDARD F.A.C. 62-550
Metals: (mg/l)  Arsenic  Fron  BOL  Mote: Ref. Groundwater Guidance Concentrations, FOMCL=MAXIMUM CONTAMINANT LEVEL  BDL=BELOW DETECTION LIMIT  ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  = reported value between the laboratory method determine the contaminant of th	1.5 H-28A BDL 3.4	1.7 TH-30 BDL 0.24	0.45 TH-40 BDL	0.28 TH-42 BDL	1.1 TH-57 BDL	0.75 TH-58 0.026	0.41 TH-72 BDL	1.9 TH-73	0.19 SUP-1	0.21 SUP-2	2.8*** (MCL) STANDARD F.A.C. 62-550
Metals: (mg/l)  arsenic  BDL  Iron  BOL  Sodium  15  Note: Ref. Groundwater Guidance Concentrations, FD  MCL=MAXIMUM CONTAMINANT LEVEL  BDL=BELOW DETECTION LIMIT  ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  = reported value between the laboratory method determine the strength of the stren	H-28A BDL 3.4	TH-30 BDL 0.24	TH-40 BDL	TH-42 BDL	TH-57 BDL	TH-58 0.026	TH-72 BDL	TH-73	SUP-1	SUP-2	(MCL) STANDARD F.A.C. 62-550
Arsenic  Iron  BOL  BOL  BOL  ISO  Note: Ref. Groundwater Guidance Concentrations, FOUNCE MAXIMUM CONTAMINANT LEVEL  BOL=BELOW DETECTION LIMIT  ND=NO DATA COLLECTED  NTU=NEPHELOMETRIC TURBIDITY UNITS  I = reported value between the laboratory method determine the strength of the streng	3.4	BDL 0.24	BDL	BDL	BDL	0.026	BDL				F.A.C. 62-550
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iron sodium  Note: Ref. Groundwater Guidance Concentrations, FD MCL=MAXIMUM CONTAMINANT LEVEL BDL=BELOW DETECTION LIMIT ND=NO DATA COLLECTED NTU=NEPHELOMETRIC TURBIDITY UNITS i = reported value between the laboratory method determine the content of the content	3.4	0.24						BDL	BDL	BDL	0.01*
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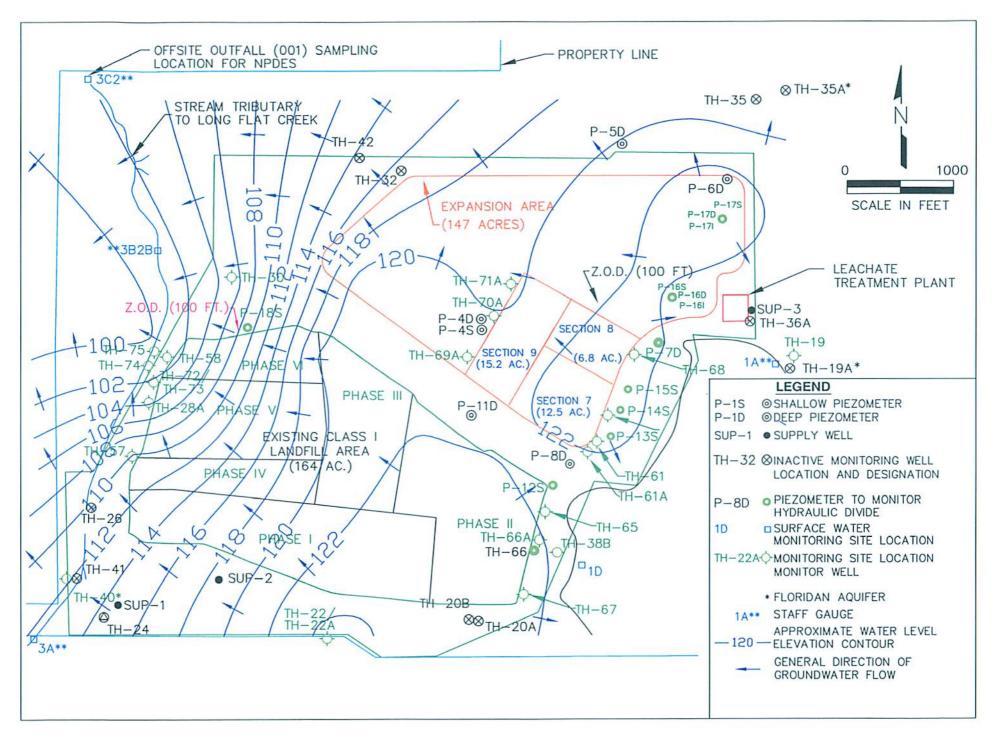
Prepared by: Mike Townsel QA/QC'D by: Cindy Pelley Final QA/QC by: David Adams

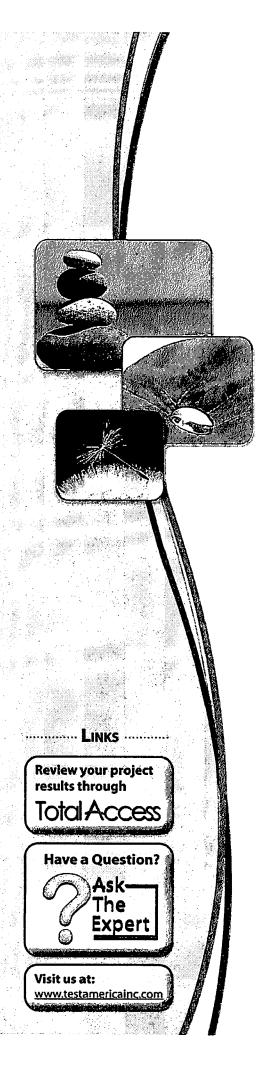
#### **GROUNDWATER AND SURFACE WATER ELEVATIONS FOR**

#### SOUTHEAST LANDFILL

September 7, 2011

Point I.D. P-4D P-4S P-5D P-6D-A P-7D P-8D P-11D P-12S P-13S P-14S P-15S P-16S P-16I	Elevations (NGVD) 140.78 140.95 151.94 148.01 138.92 138.34 138.02 134.97 140.21 138.56 139.19 143.38	W.L. B.T.O.C. 21.40 Dry Dry 24.41 16.39 17.30 16.55 13.26 17.35 15.54	W.L. (NGVD) 119.38 Dry Dry 123.60 122.53 121.04 121.47 121.71 122.86 123.02	10:39 AM 10:38 AM 11:34 AM 11:21 AM 11:49 AM 12:05 PM 10:58 AM 12:07 PM 11:57 AM
P-4D P-4S P-5D P-6D-A P-7D P-8D P-11D P-12S P-13S P-14S P-15S P-16S P-16I	140.78 140.95 151.94 148.01 138.92 138.34 138.02 134.97 140.21 138.56 139.19 143.38	21.40 Dry Dry 24.41 16.39 17.30 16.55 13.26 17.35	119.38 Dry Dry 123.60 122.53 121.04 121.47 121.71 122.86	10:38 AM 11:34 AM 11:21 AM 11:49 AM 12:05 PM 10:58 AM 12:07 PM
P-4S P-5D P-6D-A P-7D P-8D P-11D P-12S P-13S P-14S P-15S P-16S P-16I	140.95 151.94 148.01 138.92 138.34 138.02 134.97 140.21 138.56 139.19 143.38	Dry Dry 24.41 16.39 17.30 16.55 13.26 17.35	Dry Dry 123.60 122.53 121.04 121.47 121.71 122.86	10:38 AM 11:34 AM 11:21 AM 11:49 AM 12:05 PM 10:58 AM 12:07 PM
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P-6D-A P-7D P-8D P-11D P-12S P-13S P-14S P-15S P-16S P-16I	148.01 138.92 138.34 138.02 134.97 140.21 138.56 139.19 143.38	24.41 16.39 17.30 16.55 13.26 17.35 15.54	123.60 122.53 121.04 121.47 121.71 122.86	11:21 AM 11:49 AM 12:05 PM 10:58 AM 12:07 PM
P-7D P-8D P-11D P-12S P-13S P-14S P-15S P-16S P-16I	138.92 138.34 138.02 134.97 140.21 138.56 139.19 143.38	16.39 17.30 16.55 13.26 17.35 15.54	122.53 121.04 121.47 121.71 122.86	11:49 AM 12:05 PM 10:58 AM 12:07 PM
P-8D P-11D P-12S P-13S P-14S P-15S P-16S P-16I	138.34 138.02 134.97 140.21 138.56 139.19 143.38	17.30 16.55 13.26 17.35 15.54	121.04 121.47 121.71 122.86	12:05 PM 10:58 AM 12:07 PM
P-11D P-12S P-13S P-14S P-15S P-16S P-16I	138.02 134.97 140.21 138.56 139.19 143.38	16.55 13.26 17.35 15.54	121.47 121.71 122.86	10:58 AM 12:07 PM
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P-14S P-15S P-16S P-16I	138.56 139.19 143.38	17.35 15.54	122.86	
P-15S P-16S P-16I	139.19 143.38		123 02	1 1 1.37 MM
P-16S P-16I	143.38	16.44	,	11:54 AM
P-161			122.75	11:53 AM
	144 15	15.78	127.60	10:58 AM
		23.05	121.10	10:57 AM
P-16D P-17S	143.84	22.76	121.08	10:56 AM
P-171	137.35	12.16	125.19	11:30 AM
P-17D	137.32 137.22	14.78 14.95	122.54 122.27	11:29 AM 11:28 AM
P-18S	129.86	18.03	111.83	10:25 AM
P-19	133.36	10.02	123.34	11:24 AM
P-20	132.38	10.85	121.53	11:16 AM
P-21	122.79	1.59	121.20	10:48 AM
P-22	128.35	7.19	121.16	10:50 AM
P-23	143.13	22.06	121.07	10:44 AM
TH-19*	130.27	93.66	36.61	11:44 AM
TH-20A	131.86	8.97	122.89	12:19 PM
TH-20B	132.57	9.84	122.73	12:20 PM
TH-22 TH-22A	128.82	4.17	124.65	9:25 AM
TH-24A	129.27 128.23	4.80 3.55	124.47	9:24 AM
TH-26	125.65	3.55 Dry	124.68 Dry	9:17 AM 9:41 AM
TH-28A	131.10	27.66	103,44	9:46 AM
TH-30	128.88	23.80	105.08	9:55 AM
TH-32	129.90	13.44	116,46	10:19 AM
TH-35	145.98	27.50	118.48	11:38 AM
TH-36A	152.70	32.49	120.21	11:46 AM
TH-38A	130.68	9.86	120.82	12:11 PM
TH-38B	131.81	10.55	121.26	12:12 PM
TH-40*	124.99	90.15	34.84	9:33 AM
TH-41° TH-42°	125.00	92.50	32.50	9:31 AM
TH-57	116.74 128.36	72.14 18.60	44.60 109.76	10:16 AM
TH-58	127.88	27.42	100.46	9:44 AM 9:53 AM
TH-61	138.73	16.30	122.43	11:58 AM
TH-61A	139.45	16.65	122.80	11:59 AM
TH-64	139.64	15.92	123.72	11:55 AM
TH-65	135.40	13.81	121.59	12:09 PM
TH-66	130.58	8.26	122.32	12:15 PM
TH-66A	130.66	8.70	121.96	12:14 PM
TH-67	129.51	4.95	124.56	12:16 PM
TH-68	140.01	15.40	124.61	11:51 AM
TH-69A TH-70A	144.97 146.63	25.06	119.91	10:33 AM
TH-71A	146.95	26.41 25.34	120.22 121.61	10:35 AM 10:41 AM
TH-72	130.96	97.99	32.97	9:50 AM
TH-73	131.07	30.66	100.41	9:49 AM
SW-3A	3.0'=125.53'	0.52	123.04	9:15 AM
SW-3B2B	3.0'=97.97'	1.75	96.72	10:00 AM
SW-3C2	6.0'=92.33'	1.55	87.88	10:04 AM
Mine Cut #1	4.0'=122.14'	2.40	120.54	12:01 PM
Mine Cut #2 Mine Cut #3	6.0'=123.47'	2.85	120.32	11:42 AM
Mine Cut #3	4.0'=112.27' 5.0'=97.54'	2.02 1.55	110.29 94.09	10:13 AM 10:11 AM
		ic Vertical Datum	34.08	1 10.11 AM
	Top of Casing	Turusai Datu(ii		<del> </del>
	Below Top of Ca	sing		·
	Floridan Well	· · · · · · · · · · · · · · · · · · ·		
	No Data			
W.L. =	Water Level			





# <u>TestAmerica</u>

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: 660-43398-1

Client Project/Site: Southeast Monitoring Wells

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: 09/28/2011 01:33:17 PM

Nancy Robertson Project Manager II

nancy.robertson@testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC 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.

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09/28/2011



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## **Definitions/Glossary**

Client: Hillsborough County Public Utilities Dep

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 660-43398-1

## Project/Site: Southeast Monitoring Wells

TEF

TEQ



Qualifiers	
Metals	
Qualifier	Qualifier Description
Ū	Indicates that the compound was analyzed for but not detected.
1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
General Chem	nistry
Qualifier	Qualifier Description
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
L	Off-scale high. Actual value is known to be greater than the value given.
V	Indicates the analyte was detected in both the sample and the associated method blank.
U	Indicates that the compound was analyzed for but not detected.
1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
<u> </u>	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Cilution, 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
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 Monitoring Wells TestAmerica Job ID: 660-43398-1

Job ID: 660-43398-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-43398-1



All samples were received in good condition within temperature requirements.

#### Metals

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for Iron associated with batch 114951 were outside control limits with the parent sample greater than 4 times the spike level. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

#### **General Chemistry**

Method 300.0: The method blank for batch 115153 had an estimated result at the MDL for chloride. The associated samples are flagged with V.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 114991 were outside control limits for chloride and reported over the calibration curve. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 115282 were outside control limits for chloride. The associated laboratory control sample (LCS) recovery met acceptance criteria. The sample is flagged with J3.

Method 300.0: The matrix spike (MS) recovery for batch 115199 was outside control limits for chloride. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.



Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

Oxygen, Dissolved

TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-58 V								Sample ID:	
Analyte	Result	Qualifier	NONE	NONE		Dil Fac	D	Method	Prep Type
Field pH	5.70				SU	1	_	Field Sampling	Total/NA
Field Temperature	26.18				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.90				mg/L	1		Field Sampling	Total/NA
Specific Conductance	1239				umhos/cm	1		Field Sampling	Total/NA
Turbidity	3.6				NTU	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL		Dil Fac	D	Method	Prep Type
Arsenic	26		10	4.0	ug/L	1		6010B	Total Recover
Iron	8100		200	50	ug/L	1		6010B	Total Recover
Sodium	120		0.50		mg/L	1		6010B	Total Recover
Chloride	570	J3	10		mg/L	20		300.0	Total/NA
Ammonia as N	0.75		0.020	0.010	mg/L	1		350.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	1200		50	50	mg/L	1		SM 2540C	Total/NA
Client Sample ID: TH-30 V	VACS #1065					La	ab	Sample ID:	660-43398-2
- Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	4.44				SU	1	_	Field Sampling	Total/NA
Field Temperature	23.41				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.21				mg/L	1		Field Sampling	Total/NA
Specific Conductance	251				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.7				NTU	1		Field Sampling	Total/NA
Analyte	Result	Qualifler	RL	MDL	Unit	Oil Fac	D	Method	Prep Type
Iron	240		200	50	ug/L	1	_	6010B	Total Recover
Sodium	23		0.50	0.31	mg/L	1		6010B	Total Recover
Chloride	66	V	1.0	0.40	mg/L	2		300.0	Total/NA
Ammonia as N	1.7		0.020	0.010	mg/L	1		350.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	130		10	10	mg/L	1	_	SM 2540C	Total/NA
Client Sample ID: TH-42 V	VACS #823					La	ab	Sample ID:	660-43398-3
- Analyte	Resuit	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.36				SU	1	_	Field Sampling	Total/NA
Field Temperature	23.97				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.22				mg/L	1		Field Sampling	Total/NA
Specific Conductance	499				umhos/cm	1		Field Sampling	Total/NA
Turbidity	18.1				NTU	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	370		200	50	ug/L	1	_	6010B	Total Recover
Sodium	17		0.50	0.31	mg/L	1		6010B	Total Recover
Chloride	17	V	0.50	0.20	mg/L	1		300,0	Total/NA
Ammonia as N	0.28		0.020	0.010	mg/L	1		350.1	Total/NA
Analyte .	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	280		10	10	mg/L	1	_	SM 2540C	Total/NA
Client Sample ID: TH-40 V	VACS #822					La	ab	Sample ID:	660-43398-
- Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.59				SU	1	-	Field Sampling	Total/NA
Field Temperature	23.60				Degrees C	1		Field Sampling	Total/NA
Oxygen Dissolved	1 04				mail			Field Sameline	Total/MA

Total/NA

Field Sampling

mg/L

1.04

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

ACS #822 (Co	······································			· · · · · · · · · · · · · · · · · · ·			<b></b>	660-43398-
Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
370				umhos/cm	1	_	Field Sampling	Total/NA
0.7				NTU	1		Field Sampling	Total/NA
Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
17		0.50			1	_		Total Recove
7.4	v			-	•			Total/NA
0.45	·	0.020		-	1		350.1	Total/NA
Result	Qualifier	RL	RL	Unit	Dil Fac	В	Method	Prep Type
190		10			1	Ξ	SM 2540C	Total/NA
ACS #1570					Li	ab	Sample ID: (	660-43398
Requit	Qualifier	NONE	NONE	linit	Dil Eac	<b>n</b>	Mathod	Boon Tuno
						=		Prep Type Total/NA
				-	,			Total/NA
				_			. •	Total/NA
					·-			Total/NA
2.5				NTU	1		Field Sampling	Total/NA
	Qualifier	RL			Dil Fac	<u>D</u>	Method	Prep Type
510		200	50	ug/L	1		6010B	Total Recove
14		0.50	0.31	mg/L	1		6010B	Total Recove
42	V	0.50	0.20	mg/L	1		300.0	Total/NA
1,1		0.020	0.010	mg/L	1		350.1	Total/NA
Result	Qualifler	RL	RL	Unit	Dil Fac	D	Method	Prep Type
110		5.0	5.0	mg/L	1	_	SM 2540C	Total/NA
ACS #821					La	ab	Sample ID: (	660-43398-
Basile	0	NONE	NONE			_		
	Quaimer		NONE			Ü		Prep Type
					-			Total/NA
				-				Total/NA
				-				Total/NA
								Total/NA
0,6				NTU	1		Field Sampling	Total/NA
	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
15		0.50	0.31	mg/L	1		6010B	Total Recove
	V	0.50	0.20	mg/L	1		300.0	Total/NA
0.35		0.020	0.010	mg/L	1		350.1	Total/NA
Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
220		10	10	mg/L	1	_	SM 2540C	Total/NA
3		7.004			Li	ıb	Sample ID: (	560-43398-
Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
15		0.50			1	-	6010B	Total Recove
7.9	V	0.50	0.20	mg/L	1		300.0	Total/NA
0.31		0.020		-	1		350.1	Total/NA
Result	Qualifier	RL	RL	Unit	Dil Fac	P	Method	Prep Type
				mg/L		_		
	Result   370   0.7     Result   17   7.4   0.45   Result   190   ACS #1570   Result   5.08   26.55   0.27   183   2.5   Result   510   14   42   1.1   Result   110   ACS #821   Result   7.35   23.47   0.80   397   0.6   Result   15   7.9   0.35   Result   220   Result   23.47   0.35   Result   220   Result   220   Result   220   Result   23.47   0.31   Result   23.47   0.31   Result   23.47   0.35   Result   23.47   0.35	Result   Qualifier   370   0.7     Result   Qualifier   17   7.4   V   0.45   Result   Qualifier   190	Result   Qualifier   NONE   370   0.7	Result   Qualifier   NONE   NONE   370   0.7	Result   Qualifier   NONE   NONE   Unit   Umhos/cm   NTU	Result   Qualifier   NONE   NONE   Unit   Unit	Result   Qualifier   NONE   NONE   Unit   Unit	Result   Qualifier   NONE   NONE   Unit   Unit   Unit   Unit   Unit   Field Sampling

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

Analyte	Pasult	Qualifier	RL	MDL	Unit	Dil Fac	n	Method	Prep Type
Ammonia as N	0.15		0.020	0.010		1	-	350.1	Total/NA
lient Sample ID: TH-28A WA	CS# 19862					La	ab	Sample ID: (	660-43427-
Analyto	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	5.24				SU	1		Field Sampling	Total/NA
Field Temperature	26.63				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.49				mg/L	1		Field Sampling	Total/NA
Specific Conductance	202				umhos/cm	1		Field Sampling	Total/NA
Turbidity	4.0				NTU	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	3400		200	50	ug/L	1		6010B	Total Recover
Sodium	19		0.50	0.31	mg/L	1		6010B	Total Recover
Chloride	46		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	1.5		0.020	0.010	mg/L	1		350.1	Total/NA
Analyto	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	140		5.0	5.0	mg/L	1	Ξ	SM 2540C	Total/NA
Client Sample ID: TH-72 WAG	S# 27753					La	ab	Sample ID: (	660-43427-2
Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.29			<del></del>	SU	1		Field Sampling	Total/NA
Field Temperature	23.20				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	1,11				mg/L	1		Field Sampling	Total/NA
Specific Conductance	536				umhos/cm	1		Field Sampling	Total/NA
Turbidity	0.6				NTU	1		Field Sampling	Total/NA
Analyte	Rosult	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	180	ī	200	50	ug/L	1	_	6010B	Total Recover
Sodium	36		0.50	0.31	mg/L	1		6010B	Total Recover
Chloride	34		0.50	0.20	mg/L	1		300.0	Total/NA
Ammonia as N	0.41		0.020	0.010	mg/L	1		350,1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	340		10	10		1	-	SM 2540C	Total/NA
Client Sample ID: SUP 2 WAC	S# 27756					La	ab	Sample ID:	660-43427-
Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.56				SU	1		Field Sampling	Total/NA
Field Temperature	26.71				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.28				mg/L	1		Field Sampling	Total/NA
Specific Conductance	347				umhos/cm	1		Field Sampling	Total/NA
Turbidity	1.6				NTU	1		Field Sampling	Total/NA
Analyte		Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Sodium	10		0.50	0.31	mg/L	1	_	60108	Total Recover
Chloride	12		0.50	0.20	-	1		300.0	Total/NA
Ammonia as N	0.21		0.020	0.010	mg/L	1		350.1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	230		5.0		mg/L	1		SM 2540C	Total/NA

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

	NACS# 27754 (	Continued	<u>)                                    </u>			La	ıb	Sample ID: (	660-43427-4
Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	5.24				SU	1	_	Field Sampling	Total/NA
Field Temperature	25.41				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	0.49				mg/L	1		Field Sampling	Total/NA
Specific Conductance	259				umhos/cm	1		Field Sampling	Total/NA
Turbidity	28.1				NTU	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	8500		200	50	ug/L	1	-	6010B	Total Recover
Sodium	27		0.50	0.31	mg/L	1		6010B	Total Recovers
Chloride	62		1.0	0.40	mg/L	2		300.0	Total/NA
Ammonia as N	1.9		0.020	0.010	mg/L	1		350,1	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
							_		T 1/0/14
Total Dissolved Solids  Client Sample ID: SUP 1 V	170 VACS# 27755		5.0	5.0	mg/L	1 La	ab	SM 2540C Sample ID:	Total/NA 660-43427-5
Client Sample ID: SUP 1 V	NACS# 27755	Qualifier				La		Sample ID: (	660-43427-
Client Sample ID: SUP 1 V	VACS# 27755 Result	Qualifier	NONE	NONE	Unit	La Dil Fac		Sample ID:	660-43427-5 Prep Type
Client Sample ID: SUP 1 V Analyte Field pH	NACS# 27755  Result 7.52	Qualifier			Unit SU	La		Sample ID: ( Method Field Sampling	660-43427-5 Prep Type Total/NA
Client Sample ID: SUP 1 V	VACS# 27755 Result	Qualifier			Unit	La Dil Fac		Sample ID:	660 <b>-4</b> 3427-5
Client Sample ID: SUP 1 V  Analyte Field pH Field Temperature	Result 7.52 24.46	Qualifier			Unit SU Degrees C	Dil Fac		Sample ID: ( Method Field Sampling Field Sampling	660-43427-5 - Prep Type Total/NA Total/NA
Client Sample ID: SUP 1 V  Analyte Field pH Field Temperature Oxygen, Dissolved	Result 7.52 24.46 0.10	Qualifier			Unit SU Degrees C mg/L	Dil Fac		Sample ID: ( Method Field Sampling Field Sampling Field Sampling	Prep Type Total/NA Total/NA Total/NA
Analyte Field pH Field Temperature Oxygen, Dissolved Specific Conductance	Result 7.52 24.46 0.10 323				Unit SU Degrees C mg/L umhos/cm	Dil Fac	D	Sample ID: ( Method Field Sampling Field Sampling Field Sampling Field Sampling	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA
Analyte Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity	Result 7.52 24.46 0.10 323 0.5		NONE	NONE	Unit SU Degrees C mg/L umhos/cm NTU	Dil Fac 1 1 1 1 1	D	Method Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type
Analyte Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity Analyte Sodium	Result 7.52 24.46 0.10 323 0.5 Result		NONE	NONE	Unit SU Degrees C mg/L umhos/cm NTU Unit mg/L	Dil Fac	D	Method Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Method	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type
Analyte Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity Analyte Sodium	Result 7.52 24.46 0.10 323 0.5 Result 9.0		NONE  RL 0.50	MDL	Unit SU Degrees C mg/L umhos/cm NTU Unit mg/L mg/L	Dil Fac  1 1 1 1 1 Dil Fac	D	Method Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Method 6010B	Prep Type Total/NA
Analyte Field pH Field Temperature Oxygen, Dissolved Specific Conductance Turbidity Analyte Sodium Chloride	Result 7.52 24.46 0.10 323 0.5 Result 9.0	Qualifier	RL 0.50 0.50	MDL 0.31 0.20	Unit SU Degrees C mg/L umhos/cm NTU Unit mg/L mg/L	Dil Fac  1 1 1 1 1 Dil Fac	D	Method Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Field Sampling Method 6010B 300.0	Prep Type Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Total/NA Prep Type Total Recover.

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Matrix: Water

Client Sample ID: TH-58 WACS #1571 Lab Sample ID: 660-43398-1

Date Collected: 09/08/11 11:33 Date Received: 09/08/11 13:38

Analyte	Rosult	Quatifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	26		10	4.0	ug/L		09/15/11 07:53	09/16/11 08:52	1
tron	8100		200	50	ug/L		09/15/11 07:53	09/16/11 08:52	1
Sodium	120		0.50	0.31	mg/L		09/15/11 07:53	09/16/11 08:52	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dii Fac
Chloride	570	J3	10	4.0	mg/L			09/20/11 10:40	20
Ammonia as N	0.75		0.020	0.010	mg/L			09/19/11 15:46	1
Analyte	Result	Qualifier	RL	RL	Unit	Đ	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		50	50	mg/L			09/14/11 15:41	1
Method: Field Sampling - Field	l Sampling								
Analyto	Result	Qualifier	NONE	NONE	Unit	Ð	Prepared	Analyzed	Dil Fac
Field pH	5.70				SU			09/08/11 11:33	1
Field Temperature	26.18				Degrees C			09/08/11 11:33	1
Oxygen, Dissolved	0.90				mg/L			09/08/11 11:33	1
Specific Conductance	1239				umhos/cm			09/08/11 11:33	1
Turbidity	3.6				NTU			09/08/11 11:33	



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-30 WACS #1065

Lab Sample ID: 660-43398-2

Date Collected: 09/08/11 11:16 Date Received: 09/08/11 13:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzod	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/15/11 07:53	09/16/11 09:04	-
Iron	240		200	50	ug/L		09/15/11 07:53	09/16/11 09:04	
Sodium	23		0.50	0.31	mg/L		09/15/11 07:53	09/16/11 09:04	
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	66	V	1.0	0.40	mg/L			09/16/11 20:11	
Ammonia as N	1.7		0.020	0.010	mg/L			09/19/11 15:50	
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzod	Dil Fa
Total Dissolved Solids	130		10	10	mg/L			09/14/11 15:41	
- Method: Field Sampling - Field Sampl	ling								
Analyte	Result	Qualifier	NONE	NONE	Unit	Ð	Prepared	Analyzod	Dil Fac
Field pH	4.44				SU			09/08/11 11:16	
Field Temperature	23.41				Degrees C			09/08/11 11:16	
Oxygen, Dissolved	0.21				mg/L			09/08/11 11:16	
Specific Conductance	251				umhos/cm			09/08/11 11:16	
Turbidity	4.7				NTU			09/08/11 11:16	



Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-42 WACS #823

Lab Sample ID: 660-43398-3

Date Collected: 09/08/11 10:34 Date Received: 09/08/11 13:38

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		09/15/11 07:53	09/16/11 09:07	1
Iron	370		200	50	ug/L		09/15/11 07:53	09/16/11 09:07	1
Sodium	17		0.50	0.31	mg/L		09/15/11 07:53	09/16/11 09:07	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Propared	Analyzod	Dil Fac
Chloride	17	٧	0.50	0.20	mg/L			09/16/11 16:53	1
Ammonia as N	0.28		0.020	0.010	mg/L			09/19/11 15:51	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	280		10	10	mg/L			09/14/11 15:42	1
Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.36				SU			09/08/11 10:34	1
Field Temperature	23.97				Degrees C			09/08/11 10:34	1
Oxygen, Dissolved	0.22				mg/L			09/08/11 10:34	1
Specific Conductance	499				umhos/cm			09/08/11 10:34	1
Turbidity	18,1				NTU			09/08/11 10:34	1

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-40 WACS #822

Date Collected: 09/08/11 09:10 Date Received: 09/08/11 13:38 Lab Sample ID: 660-43398-4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		09/15/11 07:53	09/16/11 09:11	1
Iron	50	U	200	50	ug/L		09/15/11 07:53	09/16/11 09:11	1
Sodium	17		0.50	0.31	mg/L		09/15/11 07:53	09/16/11 09:11	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.4	V	0.50	0.20	mg/L			09/16/11 17:09	1
Ammonia as N	0.45		0.020	0.010	mg/L			09/19/11 15:52	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	190		10	10	mg/L			09/14/11 15:42	1
Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.59				SU			09/08/11 09:10	1
Field Temperature	23.60				Degrees C			09/08/11 09:10	1
Oxygen, Dissolved	1.04				mg/L			09/08/11 09:10	1
Specific Conductance	370				umhos/cm			09/08/11 09:10	1
Turbidity	0.7				NTU			09/08/11 09:10	_



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-57 WACS #1570

Date Collected: 09/08/11 11:52 Date Received: 09/08/11 13:38

Lab Sample ID: 660-43398-5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/15/11 07:53	09/16/11 09:21	1
Iron	510		200	50	ug/L		09/15/11 07:53	09/16/11 09:21	1
Sodium	14		0.50	0.31	mg/L		09/15/11 07:53	09/16/11 09:21	•
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	. D	Prepared	Analyzed	Dil Fac
Chloride	42	V	0.50	0.20	mg/L			09/16/11 17:26	1
Ammonia as N	1.1		0.020	0.010	mg/L			09/19/11 15:53	•
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	110		5.0	5.0	mg/L			09/14/11 15:43	1
- Method: Field Sampling - Field	d Sampling								
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.08				SU			09/08/11 11:52	
Field Temperature	26.55				Degrees C			09/08/11 11:52	1
Oxygen, Dissolved	0.27				mg/L			09/08/11 11:52	1
Specific Conductance	183				umhos/cm			09/08/11 11:52	1
Turbidity	2,5				NTU			09/08/11 11:52	



Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-19 WACS #821

Date Collected: 09/08/11 09:46 Date Received: 09/08/11 13:38 Lab Sample ID: 660-43398-6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		09/15/11 07:53	09/16/11 09:24	1
1ren	50	U	200	50	ug/L		09/15/11 07:53	09/16/11 09:24	1
Sodium	15		0.50	0.31	mg/L		09/15/11 07:53	09/16/11 09:24	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.9	V	0.50	0.20	mg/L			09/16/11 17:42	1
Ammonia as N	0.35		0.020	0.010	mg/L			09/19/11 15:54	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	220		10	10	mg/L			09/14/11 15:43	1
- Method: Field Sampling - Field S	Sampling								
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.35				SU			09/08/11 09:46	1
Field Temperature	23.47				Degrees C			09/08/11 09:46	1
Oxygen, Dissolved	0.80				mg/L			09/08/11 09:46	1
Specific Conductance	397				umhos/cm			09/08/11 09:46	1
Turbidity	0.6				NTU			09/08/11 09:46	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Lab Sample ID: 660-43398-7

Matrix: Water

Client Sample ID: Duplicate Date Collected: 09/08/11 00:00

Date Received: 09/08/11 13:38

Method: 6010B - Metals (ICP)	- Total Recoverat	JI C							
Analyte	Result	Qualifier	RL.	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4,0	U -	10	4.0	ug/L		09/15/11 07:53	09/16/11 09:28	1
Iron	50	U	200	50	ug/L		09/15/11 07:53	09/16/11 09:28	1
Sodium	15		0.50	0.31	mg/L		09/15/11 07:53	09/16/11 09:28	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.9	V	0.50	0.20	mg/L			09/16/11 17:59	1
Ammonia as N	0.31		0.020	0.010	mg/L			09/19/11 15:56	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	220		10	10	mg/L			09/14/11 15:44	



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Client Sample ID: Blank, Equipment

Date Collected: 09/08/11 08:50 Date Received: 09/08/11 13:38 Lab Sample ID: 660-43398-8

Analyto	Result	Qualifier	RL	MDL	Unit	D	Propared	Analyzod	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		09/15/11 07:53	09/16/11 09:31	1
Iron	50	U	200	50	ug/L		09/15/11 07:53	09/16/11 09:31	1
Sodium	0,31	U	0,50	0.31	mg/L		09/15/11 07:53	09/16/11 09:31	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzod	Oil Fac
Chloride	0.20	Ū	0.50	0.20	mg/L			09/19/11 11:38	1
Ammonia as N	0.15		0.020	0.010	mg/L			09/19/11 15:57	1
Analyte	Result	Qualifier	RL	RL	Unit	Ð	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	5.0	<del>ij                                     </del>	5.0	5.0	ma/L			09/14/11 15:45	



Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-28A WACS# 19862

Lab Sample ID: 660-43427-1

Date Collected: 09/09/11 10:14 Date Received: 09/09/11 12:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ū	10	4.0	ug/L		09/13/11 09:30	09/14/11 13:19	1
Iron	3400		200	50	ug/L		09/13/11 09:30	09/14/11 13:19	1
Sodium	19		0.50	0.31	mg/L		09/13/11 09:30	09/14/11 13:19	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzod	Dil Fac
Chloride	46		0.50	0.20	mg/L			09/14/11 17:56	1
Ammonia as N	1.6		0.020	0.010	mg/L			09/19/11 15:58	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Propared	Analyzed	Dil Fac
Total Dissolved Solids	140		5.0	5.0	mg/L			09/15/11 16:11	1
Method: Field Sampling - Field	d Sampling								
Analyte	Rosult	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Oil Fac
Field pH	5.24				SU			09/09/11 10:14	
Field Temperature	26.63				Degrees C			09/09/11 10:14	1
Oxygen, Dissolved	0.49				mg/L			09/09/11 10:14	1
Specific Conductance	202				umhos/cm			09/09/11 10:14	1
Turbidity	4.0				NTU			09/09/11 10:14	



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-72 WACS# 27753

Lab Sample ID: 660-43427-2

Matrix: Water

Date Collected: 09/09/11 09:51 Date Received: 09/09/11 12:55

Analyte         Result         Qualifier         RL         MDL Unit         D         Propared         Ana           Arsenic         4.0         U         10         4.0         ug/L         09/13/11 09:30         09/14/1	yzed Dil Fac
Arsenic 4.0 U 10 4.0 ug/L 09/13/11 09:30 09/14/1	
	1 13:22 1
Iron 180 I 200 50 ug/L 09/13/11 09:30 09/14/1	1 13:22 1
Sodium 36 0.50 0.31 mg/L 09/13/11 09:30 09/14/1	1 13:22 1
General Chemistry	
Analyte Result Qualifier RL MDL Unit D Prepared Ana	yzed Dil Fac
Chloride 34 0.50 0.20 mg/L 09/14/1	1 18:12 1
Ammonia as N 0.41 0.020 0.010 mg/L 09/19/1	1 15:59 1
Analyte Result Qualifier RL RL Unit D Prepared Ana	yzed Dil Fac
Total Dissolved Solids 340 10 mg/L 09/15/1	1 16:12 1
Method: Field Sampling - Field Sampling	
Analyto Result Qualifier NONE NONE Unit D Prepared Anal	zed Dil Fac
Field pH 7.29 SU 09/09/1	1 09:51 1
Field Temperature 23.20 Degrees C 09/09/1	1 09:51 1
Oxygen, Dissolved         1.11         mg/L         09/09/1	1 09:51 1
Specific Conductance 536 umhos/cm 09/09/1	1 09:51 1
<b>Turbidity</b> 0.6 NTU 09/09/1	1 09:51 1



Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Client Sample ID: SUP 2 WACS# 27756

Lab Sample ID: 660-43427-3

Date Collected: 09/09/11 10:46 Date Received: 09/09/11 12:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	Ü	10	4.0	ug/L		09/13/11 09:30	09/14/11 13:26	1
tron	50	U	200	50	ug/L		09/13/11 09:30	09/14/11 13:26	1
Sodium	10		0.50	0.31	mg/L		09/13/11 09:30	09/14/11 13:26	1
General Chemistry									
Analyte	Rosult	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		0.50	0.20	mg/L			09/14/11 18:29	1
Ammonia as N	0.21		0.020	0.010	mg/L			09/19/11 16:03	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	230		5.0	5.0	mg/L			09/15/11 16:13	1
Method: Field Sampling - Field	d Sampling								
Analyto	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.56				SU			09/09/11 10:46	1
Field Temperature	26.71				Degrees C			09/09/11 10:46	1
Oxygen, Dissolved	0.28				mg/L			09/09/11 10:46	1
Specific Conductance	347				umhos/cm			09/09/11 10:46	1
Turbidity	1.6				NTU			09/09/11 10:46	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Lab Sample ID: 660-43427-4

Matrix: Water

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

Date Collected: 09/09/11 09:32 Date Received: 09/09/11 12:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/13/11 09:30	09/14/11 13:36	1
Iron	8500		200	50	ug/L		09/13/11 09:30	09/14/11 13:36	1
Sodium	27		0.50	0.31	mg/L		09/13/11 09:30	09/14/11 13:36	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzod	Dil Fac
Chloride	62		1.0	0.40	mg/L			09/15/11 10:44	2
Ammonia as N	1.9		0.020	0.010	mg/L			09/19/11 16:07	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	170		5.0	5.0	mg/L			09/15/11 16:13	1
- Method: Field Sampling - Field Samplin	g								
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.24				SU			09/09/11 09:32	1
Field Temperature	25.41				Degrees C			09/09/11 09:32	1
Oxygen, Dissolved	0.49				mg/L			09/09/11 09:32	1
Specific Conductance	259				umhos/cm			09/09/11 09:32	1
Turbidity	28.1				NTU			09/09/11 09:32	1



Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells TestAmerica Job ID: 660-43398-1

Client Sample ID: SUP 1 WACS# 27755

Lab Sample ID: 660-43427-5

Date Collected: 09/09/11 11:14 Date Received: 09/09/11 12:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	<del>U</del>	10	4.0	ug/L		09/13/11 09:30	09/14/11 13:39	1
Iron	50	U	200	50	ug/L		09/13/11 09:30	09/14/11 13:39	1
Sodium	9.0		0.50	0.31	mg/L		09/13/11 09:30	09/14/11 13:39	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.3		0.50	0.20	mg/L			09/14/11 19:02	1
Ammonia as N	0.19		0.020	0.010	mg/L			09/19/11 16:08	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	220		5.0	5.0	mg/L			09/15/11 16:14	1
- Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.52				SU			09/09/11 11:14	1
Field Temperature	24.46				Degrees C			09/09/11 11:14	1
Oxygen, Dissolved	0.10				mg/L			09/09/11 11:14	1
Specific Conductance	323				umhos/cm			09/09/11 11:14	1
Turbidity	0.5				NTU			09/09/11 11:14	1



Client Sample ID: Lab Control Sample

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Client Sample ID: Matrix Spike Duplicate

Prep Batch: 114889

Client: Hillsborough County Public Utilities Dep

	_	•	
Project/Site:	Southeast	Monitoring W	ells

Method: 6010B - Meta	is (ICP)
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Lab Sample ID: MB 660-114889/1-A

Matrix: Water

Analysis Batch: 114951

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 114889

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.0	U	10	4.0	ug/L		09/13/11 09:30	09/14/11 12:16	1
Iron	50	U	200	50	ug/L		09/13/11 09:30	09/14/11 12:16	1
Sodium	0.31	U	0.50	0.31	mg/L		09/13/11 09:30	09/14/11 12:16	1

Lab Sample ID: LCS 660-114889/2-A

Matrix: Water Prep Type: Total Recoverable Analysis Batch: 114951 **Prep Batch: 114889** LCS LCS Snika % Rec.

	Shive	240					/g 110C.		
Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits		
Arsenic	1000	1040		ug/L	_	104	75 - 125		
fron	1000	1100		ug/L		110	75 - 125		
Sodium	10.0	10.8		mg/L		108	75 - 125		
	Arsenic Iron	Analyte Added Arsenic 1000 Iron 1000	Analyte         Added         Result           Arsenic         1000         1040           Iron         1000         1100	Analyte         Added         Result Qualifier           Arsenic         1000         1040           Iron         1000         1100	Analyte         Added         Result Qualifier         Unit           Arsenic         1000         1040         ug/L           Iron         1000         1100         ug/L	Analyte         Added         Result Qualifier         Unit Unit Unit Unit Unit Unit Unit Unit	Analyte         Added         Result qualifier         Unit         D         % Rec           Arsenic         1000         1040         ug/L         104           Iron         1000         1100         ug/L         110	Analyte         Added         Result Qualifier         Unit Unit Unit Unit Unit Unit Unit Unit	Analyte         Added         Result 1000         Qualifier 1010         Unit 1000         D % Rec 1000         Limits 1000           Iron         1000         1100         ug/L         110         75 - 125

Lab Sample ID: 660-43448-A-11-B MS

Matrix: Water Analysis Batch: 114951

мв мв

	Sample	Sample	Spike	MS	MS				% Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	
Arsenic	48		1000	1090		ug/L		104	75 - 125	
Iron	15000	J3	1000	18200	J3	ug/L		315	75 - 125	
Sodium	23		10.0	33.3		mg/L		108	75 - 125	

Lab Sample ID: 660-43448-A-11-C MSD

Matrix: Water								Prep 1	ype: Total	Recov	erable
Analysis Batch: 114951									Prep E	Batch: 1	14889
	Sample	Sample	Spike	MSD	MSD				% Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits	RPD	Limit
Arsenic	48		1000	1090		ug/L	_	104	75 - 125		20
Iron	15000	J3	1000	17900	J3	ug/L		280	75 - 125	2	20
Sodium	23		10.0	33.2		mg/L		106	75 - 125	0	· 20

Lab Sample ID: MB 660-114989/1-A

Matrix: Water

Analysis Batch: 115066

Client Sample ID: Method Blank Prep Type: Total Recoverable Prep Batch: 114989

ug/L

mg/L

ļ	Analyte	Result	Qualifier	RL	MDL	Unit	Ð	Prepared	Analyzed	Dil Fac
ļ	Arsenic	4.0	U	10	4.0	ug/L	_	09/15/11 07:53	09/16/11 08:42	1
į	Iron	50	U	200	50	ug/L		09/15/11 07:53	09/16/11 08:42	1
į	Sodium	0.31	U	0.50	0.31	mg/L		09/15/11 07:53	09/16/11 08:42	1

Iron

Sodium

ł	Lab Sample ID: LCS 660-114989/2-A				Cite	nt 2	sample i	D: Lab Co	ontroi Sample
Ì	Matrix: Water						Prep T	ype: Total	Recoverable
İ	Analysis Batch: 115066							Prep E	Batch: 114989
i		Spike	LCS	LCS				% Rec.	
İ	Analyte	Added	Result	Qualifier	Unit	D	% Rec	Limits	
ļ	Arsenic	1000	1060		ug/L	_	106	75 - 125	

1090

10.7



75 - 125

75 - 125

109

107

1000

10.0

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

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

Lab Sample ID: 660-43398-1 MS								Clie	nt S	•	D: TH-58 '		
Matrix: Water										Prep 13	pe: Total		
Analysis Batch: 115066											•	atch: 1	14989
	Sample	•	Spike		MS				_		% Rec.		
Analyte	Result	Qualifier	Added		Result	Qualifier	Unit		<u>D</u> .	% Rec	75 - 125		
Arsenic	26		1000		1120		ug/L			109			
ron	8100		1000		9210		ug/L			115	75 . 125		
Sodium	120		10.0		136		mg/L			116	75 - 125		
ab Sample ID: 660-43398-1 MSD								Clie	nt S	•	ID: TH-58		
Matrix: Water										Prep Ty	/pe: Total		
Analysis Batch: 115066											•	atch: 1	
	Sample	Sample	Spike		MSD	MSD					% Rec.		RPC
Analyte	Result	Qualifier	Added	,	Rosult	Qualifier	Unit		D	% Roc	Limits	RPD	Limit
Arsenic	26		1000		1110		ug/L			109	75 . 125	1	20
ron	8100		1000		9170		ug/L			111	75 - 125	0	20
Sodium	120		10.0		135		mg/L			103	75 - 125	1	20
ethod: 300.0 - Anions, Ion Cl	romat	ography					<del>.</del>						
Lab Sample ID: MB 660-114991/3						-			C	lient Sa	mple ID: I	Method	Blani
Matrix: Water											Prep Ty	pe: To	tal/N/
Analysis Batch: 114991											•		
Thur, or Daton Trivo													
		мв ма											
\nalvte	R			RL	M	IDL Unit		D	Pre	pared	Analyz	ed	Dif Fac
	R	esult Qualifier		RL 0.50		IDL Unit	<del></del>	<u> </u>	Pre	pared	Analyz		Dil Fac
	R	esult Qualifier					<del></del>	<u>D</u> _	Pre	pared			Dil Fac
Chloride	R	esult Qualifier										11:38	
Chloride Lab Sample ID: LCS 660-114991/4	R	esult Qualifier									09/14/11 1	11:38	ample
Chloride Lab Sample ID: LCS 660-114991/4 Matrix: Water	R	esult Qualifier									09/14/11 1	i1:38 ontrol S	ample
Chloride Lab Sample ID: LCS 660-114991/4 Matrix: Water	R	esult Qualifier	Spike		0						09/14/11 1	i1:38 ontrol S	ample
Chloride Lab Sample ID: LCS 660-114991/4 Matrix: Water Analysis Batch: 114991	R	esult Qualifier	Spike Added		0	.20 mg/L	Unit				09/14/11 1 ID: Lab Co Prep Ty	i1:38 ontrol S	ample
Chloride Lab Sample ID: LCS 660-114991/4 Matrix: Water Analysis Batch: 114991 Analyte	R	esult Qualifier	•		LCS	.20 mg/L LCS Qualifier	Unit mg/L		nt S	Sample 1	09/14/11 1 ID: Lab Co Prep Ty % Rec.	i1:38 ontrol S	ample
Chloride Lab Sample ID: LCS 660-114991/4 Matrix: Water Analysis Batch: 114991 Analyte Chloride	R	esult Qualifier	Added		LCS Rosult	.20 mg/L LCS Qualifier			nt S	% Rec	09/14/11 1 ID: Lab Co Prep Ty % Rec. Limits	ntrol S ype: To	ampletal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MS	R	esult Qualifier	Added		LCS Rosult	.20 mg/L LCS Qualifier			nt S	% Rec	09/14/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110	ntrol S ype: To	ampletal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water	R	esult Qualifier	Added		LCS Rosult	.20 mg/L LCS Qualifier			nt S	% Rec	09/14/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110	ntrol Sype: To	ampletal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water		esult Qualifier 0.20 U	Added 10.0		LCS Rosult	.20 mg/L LCS Qualifier			nt S	% Rec	09/14/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110	ntrol Sype: To	ampletal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991	Sample	esult Qualifier 0.20 U	Added 10.0		LCS Rosult 9.69	LCS Qualifier	mg/L		nt \$	% Rec 97	09/14/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110 Sample ID Prep T	ntrol Sype: To	ampletal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991	Sample	esult Qualifier 0.20 U  Sample	Added 10.0		LCS Rosult 9.69	LCS Qualifier  MS Qualifier			nt S	% Rec	09/14/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110 Sample ID Prep T	ntrol Sype: To	ampletal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride	Sample Result	esult Qualifier 0.20 U  Sample	Added 10.0 Spike Added		LCS Rosult 9.69 MS	LCS Qualifier  MS Qualifier	mg/L Unit mg/L	Clie	nt S	% Rec 97 Client \$	09/14/11 1 ID: Lab Co Prep Ty  % Rec. Limits 90 - 110  Sample ID Prep T  % Rec. Limits 90 - 110	ontrol S ype: To 	ample tal/NA Spike
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS	Sample Result	esult Qualifier 0.20 U  Sample	Added 10.0 Spike Added		LCS Rosult 9.69 MS	LCS Qualifier  MS Qualifier	mg/L Unit mg/L	Clie	nt S	% Rec 97 Client \$	09/14/11 1 ID: Lab Co Prep Ty  % Rec. Limits 90 - 110  Sample ID Prep T  % Rec. Limits 90 - 110  Matrix Sp	ontrol S ype: To  : Matrix ype: To	ample tal/N/ Spike stal/N/
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water	Sample Result	esult Qualifier 0.20 U  Sample	Added 10.0 Spike Added		LCS Rosult 9.69 MS	LCS Qualifier  MS Qualifier	mg/L Unit mg/L	Clie	nt S	% Rec 97 Client \$	09/14/11 1 ID: Lab Co Prep Ty  % Rec. Limits 90 - 110  Sample ID Prep T  % Rec. Limits 90 - 110  Matrix Sp	ontrol S ype: To 	ample tal/NA Spike stal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analyte Chloride	Sample Result 67	Sample	Added 10.0 Spike Added 10.0		LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier MS Qualifier L J3	mg/L Unit mg/L	Clie	nt S	% Rec 97 Client \$	09/14/11 1 ID: Lab Co Prep T % Rec. Limits 90 - 110 Sample ID Prep T % Rec. Limits 90 - 110 Matrix Sp	ontrol S ype: To  : Matrix ype: To	ample tal/NA Spike stal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water  Analysis Batch: 114991	Sample Result 67 D	Sample Qualifier  Sample Qualifier	Spike Added 10.0 Spike		LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier  MS Qualifier  L J3	mg/L Unit mg/L	Clie	nt S	% Rec 97 Client \$	09/14/11 1 ID: Lab Co Prep Ty  % Rec. Limits 90 - 110 Prep T  % Rec. Limits 90 - 110  Matrix Sp Prep T	ontrol S ype: To  : Matrix ype: To  bike Du	ample tal/NA Spike stal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water  Analysis Batch: 114991  Analyte  Analysis Batch: 114991	Sample Result 67 D	Sample Qualifier  Sample Qualifier	Added 10.0 Spike Added 10.0	0.50	LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier MS Qualifier L J3	mg/L Unit mg/L	Clie	nt S	% Rec 97 Client \$	09/14/11 1 ID: Lab Co Prep T % Rec. Limits 90 - 110 Sample ID Prep T % Rec. Limits 90 - 110 Matrix Sp	ontrol S ype: To  : Matrix ype: To	ample tal/NA Spike stal/NA plicate tal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water  Analysis Batch: 114991  Analysis Batch: 114991  Analyte  Chloride	Sample Result 67 D Sample Result	Sample Qualifier  Sample Qualifier	Added 10.0 Spike Added 10.0 Spike	0.50	LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier  MS Qualifier  L J3	Unit mg/L	Clie	D D Sai	% Rec 97 Client \$  % Rec 51 mple ID:	09/14/11 1 ID: Lab Co Prep T % Rec. Limits 90 - 110 Sample ID Prep T % Rec. Limits 90 - 110 Matrix Sp Prep T % Rec. Limits	ontrol S ype: To  : Matrix ype: To  pike Du ype: To	ample spike Spike stal/N/
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water  Analysis Batch: 114991  Analyte  Chloride  Lab Sample ID: MB 660-115064/3	Sample Result 67 D Sample Result	Sample Qualifier  Sample Qualifier	Added 10.0 Spike Added 10.0 Spike	0.50	LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier  MS Qualifier  L J3	Unit mg/L	Clie	D D Sai	% Rec 97 Client \$  % Rec 51 mple ID:	09/14/11 1 ID: Lab Co Prep T  % Rec. Limits 90 - 110  Sample ID Prep T  % Rec. Limits 90 - 110  Matrix Sp Prep T  % Rec. Limits 90 - 110	ontrol Sype: To  : Matrix ype: To  bike Du ype: To  RPD 0	ample tal/NA Spike Spike tal/NA Plicate tal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: MB 660-115064/3  Matrix: Water	Sample Result 67 D Sample Result	Sample Qualifier  Sample Qualifier	Added 10.0 Spike Added 10.0 Spike	0.50	LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier  MS Qualifier  L J3	Unit mg/L	Clie	D D Sai	% Rec 97 Client \$  % Rec 51 mple ID:	09/14/11 1 ID: Lab Co Prep T  % Rec. Limits 90 - 110  Sample ID Prep T  % Rec. Limits 90 - 110  Matrix Sp Prep T  % Rec. Limits 90 - 110	ontrol S ype: To  : Matrix ype: To  pike Du ype: To	ample tal/NA Spike Spike tal/NA Plicate tal/NA
Chloride  Lab Sample ID: LCS 660-114991/4  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MS  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: 660-43394-A-2 MSI  Matrix: Water Analysis Batch: 114991  Analyte Chloride  Lab Sample ID: MB 660-115064/3  Matrix: Water	Sample Result 67 D Sample Result	Sample Qualifier Sample Qualifier Qualifier	Added 10.0 Spike Added 10.0 Spike	0.50	LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier  MS Qualifier  L J3	Unit mg/L	Clie	D D Sai	% Rec 97 Client \$  % Rec 51 mple ID:	09/14/11 1 ID: Lab Co Prep T  % Rec. Limits 90 - 110  Sample ID Prep T  % Rec. Limits 90 - 110  Matrix Sp Prep T  % Rec. Limits 90 - 110	ontrol Sype: To  : Matrix ype: To  bike Du ype: To  RPD 0	ample tal/NA Spike stal/NA plicate stal/NA RPI Lim 3
Lab Sample ID: 660-43394-A-2 MS Matrix: Water Analysis Batch: 114991 Analyte Chloride	Sample Result 67 D Sample Result 67	Sample Qualifier  Sample Qualifier	Spike Added 10.0  Spike Added 10.0	0.50	LCS Rosult 9.69 MS Rosult 72.5	LCS Qualifier  MS Qualifier  L J3	Unit mg/L	Clie	nt S	% Rec 97 Client \$  % Rec 51 mple ID:	09/14/11 1 ID: Lab Co Prep Ty Rec. Limits 90 - 110 Sample ID Prep T Rec. Limits 90 - 110 Matrix Sp Prep T Rec. Limits 90 - 110	ontrol S ype: To  : Matrix ype: To  oike Du ype: To  RPD 0 Method ype: To	Spike Spike Spike Stal/NA Plicate Stal/NA RPC Limi 30

## **QC Sample Results**

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

ab Sample ID: LCS 660-115064/4							Client S	Sample i	D: Lab Cor	itrol Sa	mple
latrix: Water								•	Prep Ty		
nalysis Batch: 115064											
			Spike	LCS	LCS				% Rec.		
nalyte			Added	Result	Qualifier	Unit	D	% Rec	Limits		
hloride			10.0	9.77		mg/L		98	90 - 110		
								Client S	ample ID: I	Matrix (	Snik.
ab Sample ID: 660-43394-A-5 MS	<b>~10</b>							Cilent	Prep Ty		
flatrix: Water									i top ty	p¢. •00	<b>2014</b>
analysis Batch: 115064	Sample	Sample	Spike	MS	MS				% Rec.		
nalyte	•	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits		
Chloride	68		100	178		mg/L	=	109	90_110		
							_			_	
ab Sample ID: 660-43394-A-5 MSD	ጋ ^10					CI	ient Sa	mple ID:	Matrix Spi		
Matrix: Water									Prep Ty	pe: Tot	al/N
Analysis Batch: 115064				*** =	****						
	Sample	-	Spike		MSD		_		% Rec.		RI
Analyte		Qualifier	Added	Result	Qualifier	Unit		% Rec	Limits	RPD	_Lin
Chloride	68		100	177		mg/L		109	90 - 110	0	
ah Campia ID. MD 660 446452/2							ı	Client Sa	ımple ID: M	lethod l	Rlai
ab Sample ID: MB 660-115153/3							`		Prep Ty		
Matrix: Water										<b>p</b> 0. 10.	
Analysis Batch: 115153		мв мв									
Analyte		esult Qualifier		RL M	ADL Unit	ı	) Pr	epared	Analyze	d	Dil F
Chloride		0.272			).20 mg/L				09/16/11 1		
Lab Sample ID: LCS 660-115153/4 Matrix: Water Analysis Batch: 115153							Olletti	Sample	ID: Lab Co Prep Ty		
			Spike		LCS		_		% Rec.		
Analyte			Added		Qualifier	Unit	<u> </u>	% Rec	Limits		
Chloride			10.0	9.77		mg/L		98	90 - 110		
Lab Sample ID: 660-43398-4 MS Matrix: Water Analysis Batch: 115153							Clie	nt Sampl	le ID: TH-40 Prep Ty		
miaiyala batoli. 119133	Sample	Sample	Spike	MS	MS				% Rec.		
Analyte	•	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	Limits		
Chloride	7.4		10.0	17.7		mg/L		103	90 - 110		
Lab Sample ID: 660-43398-4 MSD Matrix: Water Analysis Batch: 115153							Clie	nt Sampi	le ID: TH-40 Prep Ty		
nimiyala batoli. (10100	Sample	Sample	Spike	MSD	MSD				% Rec.		R
		Qualifier	Added		t Qualifier	Unit	D	% Rec	Limits	RPD	Li
Analyte			10.0	17.9		mg/L		105	90 - 110	1	
	7.4	V									
Chloride Lab Sample ID: MB 660-115199/3 Matrix: Water		V						Client S	ample ID: N Prep Ty		
Chloride Lab Sample ID: MB 660-115199/3 Matrix: Water								Client S			
Analyte Chloride  Lab Sample ID: MB 660-115199/3  Matrix: Water  Analysis Batch: 115199	7.4	V  MB MB Result Qualifier		RL I	MDL Unit			Client S		/pe: To	



## **QC Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

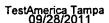
ethod: 300.0 - Anions, Ion Ch											
_ab Sample ID: LCS 660-115199/4							Client	Sample	D: Lab Co	ntrol S	ample
Matrix: Water									Prep Ty	pe: To	tal/NA
Analysis Batch: 115199											
•			Spike	LCS	LCS				% Rec.		
Analyte			Added	Result	Qualifier	Unit			Limits		
Chloride			10.0	10.0		mg/L		100	90 - 110		
_ab Sample ID: 660-43408-F-2 MS	10							Client S	Sample ID:		
Matrix: Water									Prep Ty	pe: To	ta!/N/
Analysis Batch: 115199											
	Sample	•	Spike		MS		_		% Rec.		
Analyte		Qualifier	Added		Qualifier	Unit			Limits		
Chloride	45	J3	100	156	J3	mg/L		111	90 - 110		
_ab Sample ID: 660-43408-F-2 MSD Matrix: Water	^10					(	Client S	ample ID:	Matrix Sp Prep Ty		
										рс с	
Analysis Batch: 115199	Sample	Sample	Spike	MSD	MSD				% Rec.		RPI
Analyto	•	Qualifier	Added		Qualifier	Unit		% Rec	Limits	RPD	Lim
Chloride	45		100	138	Quantor.	mg/L	.=	93	90 - 110	12	3
						_					
										-	Plan
Lab Sample ID: MB 660-115282/3								Client Sa	ample ID: N		
Lab Sample ID: MB 660-115282/3 Matrix: Water								Client Sa	Prep Ty		
•								Client S	-		
Matrix: Water Analysis Batch: 115282		мв мв			<b>10.</b>				Prep Ty	pe: To	tal/N/
Matrix: Water Analysis Batch: 115282 <sup>Analyte</sup>		esult Qualifier	-		ADL Unit		D F	repared	Prep Ty	pe: To	tal/N/
Matrix: Water Analysis Batch: 115282 <sup>Analyte</sup>		==	-		ADL Unit 0.20 mg/L		<u>D</u>		Prep Ty	pe: To	tal/N/
Matrix: Water Analysis Batch: 115282 Analyte Chloride		esult Qualifier	<del></del> ,					repared	Analyzo 09/20/11 1	rpe: To	tal/N/
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4		esult Qualifier						repared	Analyzo 09/20/11 1	rpe: To	Dil Fa
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water		esult Qualifier						repared	Analyzo 09/20/11 1	rpe: To	Dil Fa
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water		esult Qualifier		0.50				repared	Analyzo 09/20/11 1	rpe: To	Dil Fa
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4  Matrix: Water Analysis Batch: 115282		esult Qualifier	Spike	0.50 (	0.20 mg/L	Unit		repared Sample	Analyzo 09/20/11 1 ID: Lab Co Prep Ty	rpe: To	Dil Fa
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4  Matrix: Water Analysis Batch: 115282		esult Qualifier		0.50 (	LCS Qualifior	Unit mg/L	Clien	repared Sample	Analyzo 09/20/11 1 ID: Lab Co Prep Ty % Rec.	rpe: To	Dil Fa
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4  Matrix: Water Analysis Batch: 115282  Analyte Chloride		esult Qualifier	Spike Added	0.50 ( LCS Result	LCS Qualifior		Clien	Sample  Weec  106	Analyzo 09/20/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110	rpe: To	Dil Fa
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS		esult Qualifier	Spike Added	0.50 ( LCS Result	LCS Qualifior		Clien	Sample  Weec  106	Analyzo 09/20/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110	rpe: To	Dil Fa ampli tal/N
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water		esult Qualifier	Spike Added	0.50 ( LCS Result	LCS Qualifior		Clien	Sample  Weec  106	Analyzo 09/20/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110	rpe: To	Dil Fa ampli tal/N
Matrix: Water		esult Qualifier 0.20 U	Spike Added 10.0	LCS Result 10.6	LCS Qualifior		Clien	Sample  Weec  106	Analyzo  O9/20/11 1  ID: Lab Co Prep Ty  Rec. Limits  90 - 110  Prep Ty	rpe: To	Dil Fa ampli tal/N
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water Analysis Batch: 115282	Sample	O.20 U	Spike Added 10.0	LCS Result 10.6	LCS Qualifier	mg/L	Clien	Sample  Nample  Nample  Nample	Analyza  O9/20/11 1  ID: Lab Co Prep Ty  Rec. Limits  90 - 110  Prep Ty  Rec. Rec. Rec.	rpe: To	Dil Fa ample tal/N/
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water Analysis Batch: 115282	Sample Result	esult Qualifier 0.20 U	Spike Added 10.0 Spike Added	LCS Result 10.6 MS Result	LCS Qualifier  MS	mg/L Unit	Clien	**Sample  **Rec 106  at Sample	Analyzo 09/20/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110 Prep Ty % Rec. Limits	rpe: To	Dil Fa ampli tal/N
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water Analysis Batch: 115282	Sample	esult Qualifier 0.20 U	Spike Added 10.0	LCS Result 10.6 MS Result	LCS Qualifier	mg/L	Clien	Sample  Nample  Nample  Nample	Analyza  O9/20/11 1  ID: Lab Co Prep Ty  Rec. Limits  90 - 110  Prep Ty  Rec. Rec. Rec.	rpe: To	Dil Fa ampli tal/N
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MSD	Sample Result	esult Qualifier 0.20 U	Spike Added 10.0 Spike Added	0.50 C LCS Result 10.6 MS Result	LCS Qualifier  MS	mg/L Unit	Clien	**Sample  **Rec 106  at Sample  **Rec 77	Analyze 09/20/11 1  ID: Lab Co Prep Ty % Rec. Limits 90 - 110 % Rec. Limits 90 - 110 % Rec. Limits 90 - 110	wacs	Dil Falloni Fa
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MSD Matrix: Water	Sample Result	esult Qualifier 0.20 U	Spike Added 10.0 Spike Added	0.50 C LCS Result 10.6 MS Result	LCS Qualifier  MS	mg/L Unit	Clien	**Sample  **Rec 106  at Sample  **Rec 77	Analyzo  09/20/11 1  ID: Lab Co Prep Ty  Rec. Limits  90 - 110  Rec. Limits  90 - 110	wacs	Dii Fa ampl atal/N/ #157 tal/N/
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MSD Matrix: Water Analyte Chloride	Sample Result 570	Sample Qualifier J3	Spike Added 10.0  Spike Added 200	LCS Result 10.6 MS Result 722	LCS Qualifier  MS	mg/L Unit	Clien	**Sample  **Rec 106  at Sample  **Rec 77	Analyze 09/20/11 1 ID: Lab Co Prep Ty % Rec. Limits 90 - 110 % Rec. Limits 90 - 110 % Rec. Limits 90 - 110	wacs	Dii Fa ampli ampli tal/N/ #157 otal/N/
Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: LCS 660-115282/4 Matrix: Water Analysis Batch: 115282  Analyte Chloride  Lab Sample ID: 660-43398-1 MS Matrix: Water	Sample Result 570 Sample	esult Qualifier 0.20 U	Spike Added 10.0 Spike Added	LCS Result 10.6 MS Result 722	LCS Qualifier MS Qualifier	mg/L Unit	Clien	**Sample  **Rec 106  at Sample  **Rec 77	Analyze 09/20/11 1  ID: Lab Co Prep Ty % Rec. Limits 90 - 110 % Rec. Limits 90 - 110 % Rec. Limits 90 - 110	wacs	Dil Farample tal/NA #157



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

ethod: 350.1 - Nitrogen, Amm	onia		-				<u> </u>							
ab Sample ID: MB 660-115203/11										C	lient Sar	mple ID: M		
Matrix: Water												Ргер Тур	pe: lot	alina
Analysis Batch: 115203														
		МВ	мв											
Analyte	Re	suit	Qualifier		RL		L Unit		<u>D</u>	Prep	pared	Analyzed		Dil Fac
Ammonia as N	0.	010	Ū	0.	020	0.0	10 mg/L					09/19/11 15	:43	1
Lab Sample ID: LCS 660-115203/12									Clier	nt S	ample II	D: Lab Cor	ntrol Sa	ample
Matrix: Water											•	Prep Ty		
Analysis Batch: 115203														
analysis baton. 110200				Spiko		LCS	LCS					% Rec.		
Analyte				Added		Result	Qualifier	Unit		D	% Rec	Limits		
Ammonia as N				0,500		0.518		mg/L		_	104	90 - 110		
									Clia	ne e	Samola	ID: TH-58 \	NACS	<b>#157</b> 1
ab Sample ID: 660-43398-1 MS									Cile	111.	Sample	Prep Ty		
Matrix: Water												riep iy	p <del>e</del> . 10	LED 117
Analysis Batch: 115203			_1_	Calles		MS	MS					% Rec.		
	Sample			Spike				linis		D	% Rec	Limits		
Analyte	Result	Qual	ifier	Added	-		Qualifier	Unit mg/L			92	90 - 110		
Ammonia as N	0.75			1.00		1.67		mg/L			32	30 - 110		
ab Sample ID: 660-43398-1 MSD									Clie	nt	Sample	ID: TH-58 \	WACS	#157
Matrix: Water												Prep Ty	pe: To	tal/N/
Analysis Batch: 115203														
•	Sample	Sam	ple	Spike		MSD	MSD					% Rec.		RP
Analyte	Result	Qual	lifier	Added		Result	Qualifier	Unit		D	% Rec	Limits	RPD	Lim
Ammonia as N	0.75			1.00		1.68		mg/L		_	93	90 - 110	1	3
									Clion	+ 6	ample II	): SUP 2 W	/A (^ S#	2775
Lab Sample ID: 660-43427-3 MS									Citeri	il J	ample it	Prep Ty		
Matrix: Water												rich i	pc. 10	(40)11/
Analysis Batch: 115203	Cample	6	nla	Spike		MS	MS					% Roc.		
Amaluta	Sample		•	Added			Qualifier	Unit		D	% Rec	Limits		
Analyte Ammonia as N	Result 0,21	Qua		1.00		1.14	Qualifier	mg/L		=	93	90 - 110		
Nimbing 45 IV	0.21			1.00		••••								
Lab Sample ID: 660-43427-3 MSD									Clien	nt S	ample II	D: SUP 2 W	VACS#	2775
Matrix: Water												Prep Ty	pe: To	tal/N
Analysis Batch: 115203														
	Sample	Sam	ple	Spike		MSD	MSD					% Rec.		RP
Analyte	Result	Qua	lifier	Added		Result	Qualifier	Unit		D	% Rec	Limits	RPD	Lim
Ammonia as N	0.21			1.00		1.14		mg/L		_	93	90 - 110	0	3
lethod: SM 2540C - Solids, To	otal Dis	ssol	ved (TD	S)			··· · · · ·							
· · · · · · · · · · · · · · · · · · ·				<u></u>										
Lab Sample ID: MB 660-114975/1										•	Client Sa	ample ID: N		
Matrix: Water												Prep Ty	/pe: To	otal/N
Analysis Batch: 114975														
		MB	MB											
Analyte	R	osult	Qualifier		RL		RL Unit		D	Pre	pared	Analyze	₽d	Dil Fa



#### **QC Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued) Client Sample ID: Lab Control Sample Lab Sample ID: LCS 660-114975/2 Prep Type: Total/NA Matrix: Water Analysis Batch: 114975 LCS LCS % Rec. Spike Limits Added Result Qualifier Unit % Rec Analyte 80.120 100 mg/L **Total Dissolved Solids** 10000 9990 Client Sample ID: Duplicate Lab Sample ID: 660-43394-A-5 DU Prep Type: Total/NA Matrix: Water Analysis Batch: 114975 DU DU **RPD** Sample Sample Limit Result Qualifier Unit Result Qualifier mg/L 413 430 **Total Dissolved Solids** Client Sample ID: Method Blank Lab Sample ID: MB 660-115034/1 Prep Type: Total/NA Matrix: Water Analysis Batch: 115034 мв мв Dil Fac **RL** Unit RL Analyzed Analyte Result Qualifier Prepared 09/15/11 16:10 5.0 5.0 mg/L **Total Dissolved Solids** Client Sample ID: Lab Control Sample Lab Sample ID: LCS 660-115034/2 Prep Type: Total/NA Matrix: Water Analysis Batch: 115034 Spike LCS LCS % Rec. Analyte Added Result Qualifier Unit % Rec Limits 10000 9970 mg/L 100 80 - 120 Total Dissolved Solids Client Sample ID: TH-28A WACS# 19862 Lab Sample ID: 660-43427-1 DU Prep Type: Total/NA Matrix: Water Analysis Batch: 115034 DU DU RPD Sample Sample Analyte Limit Rosult Qualifier 20 **Total Dissolved Solids** 140 138 mg/L



Metals					· · · · · · · · · · · · · · · · · · ·
Prep Batch: 114889					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43427-1	TH-28A WACS# 19862	Total Recoverable	Water	3005A	
660-43427-2	TH-72 WACS# 27753	Total Recoverable	Water	3005A	
660-43427-3	SUP 2 WACS# 27756	Total Recoverable	Water	3005A	
660-43427-4	TH-73 WACS# 27754	Total Recoverable	Water	3005A	
660-43427-5	SUP 1 WACS# 27755	Total Recoverable	Water	3005A	
660-43448-A-11-B MS	Matrix Spike	Total Recoverable	Water	3005A	
660-43448-A-11-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
LCS 660-114889/2-A	Lab Control Sample	Tctal Recoverable	Water	3005A	
MB 660-114889/1-A	Method Blank	Total Recoverable	Water	3005A	
Analysis Batch: 114951					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43427-1	TH-28A WACS# 19862	Total Recoverable	Water	6010B	114889
660-43427-2	TH-72 WACS# 27753	Total Recoverable	Water	6010B	114889
660-43427-3	SUP 2 WACS# 27756	Total Recoverable	Water	6010B	114889
660-43427-4	TH-73 WACS# 27754	Total Recoverable	Water	6010B	114889
660-43427-5	SUP 1 WACS# 27755	Total Recoverable	Water	6010B	114889
660-43448-A-11-B MS	Matrix Spike	Total Recoverable	Water	60108	114889
660-43448-A-11-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	114889
LCS 660-114889/2-A	Lab Control Sample	Total Recoverable	Water	6010B	114889
MB 660-114889/1-A	Method Blank	Total Recoverable	Water	6010B	114889
Prep Batch: 114989					
Lab Samplo ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43398-1	TH-58 WACS #1571	Total Recoverable	Water	3005A	
660-43398-1 MS	TH-58 WACS #1571	Total Recoverable	Water	3005A	
660-43398-1 MSD	TH-58 WACS #1571	Total Recoverable	Water	3005A	
660-43398-2	TH-30 WACS #1065	Total Recoverable	Water	3005A	
660-43398-3	TH-42 WACS #823	Total Recoverable	Water	3005A	
660-43398-4	TH-40 WACS #822	Total Recoverable	Water	3005A	
660-43398-5	TH-57 WACS #1570	Total Recoverable	Water	3005A	
660-43398-6	TH-19 WACS #821	Total Recoverable	Water	3005A	
660-43398-7	Duplicate	Total Recoverable	Water	3005A	
660-43398-8	Blank, Equipment	Total Recoverable	Water	3005A	
LCS 660-114989/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 660-114989/1-A	Method Blank	Total Recoverable	Water	3005A	
Analysis Batch: 115066	<b>3</b>				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43398-1	TH-58 WACS #1571	Total Recoverable	Water	6010B	114989
660-43398-1 MS	TH-58 WACS #1571	Total Recoverable	Water	6010B	114989
660-43398-1 MSD	TH-58 WACS #1571	Total Recoverable	Water	6010B	114989
660-43398-2	TH-30 WACS #1065	Total Recoverable	Water	6010B	114989
660-43398-3	TH-42 WACS #823	Tctal Recoverable	Water	6010B	114989
660-43398-4	TH-40 WACS #822	Total Recoverable	Water	6010B	114989
660-43398-5	TH-57 WACS #1570	Total Recoverable	Water	6010B	114989
660-43398-6	TH-19 WACS #821	Total Recoverable	Water	6010B	114989
660-43398-7	Duplicate	Total Recoverable	Water	6010B	114989
660-43398-8	Blank, Equipment	Total Recoverable	Water	6010B	114989
		: 3: : : : : : : : : : : : : : : : : :		· <del></del>	
LCS 660-114989/2-A	Lab Control Sample	Total Recoverable	Water	6010B	114989

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

General Chemistry				,	
Analysis Batch: 114975					
Lab Samplo ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43394-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	
660-43398-1	TH-58 WACS #1571	Total/NA	Water	SM 2540C	
660-43398-2	TH-30 WACS #1065	Total/NA	Water	SM 2540C	
660-43398-3	TH-42 WACS #823	Total/NA	Water	SM 2540C	
660-43398-4	TH-40 WACS #822	Total/NA	Water	SM 2540C	
660-43398-5	TH-57 WACS #1570	Total/NA	Water	SM 2540C	
660-43398-6	TH-19 WACS #821	Tctal/NA	Water	SM 2540C	
660-43398-7	Duplicate	Total/NA	Water	SM 2540C	
660-43398-8	Blank, Equipment	Total/NA	Water	SM 2540C	
LCS 660-114975/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-114975/1	Method Blank	Total/NA	Water	SM 2540C	
Analysis Batch: 114991					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43394-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
660-43394-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
660-43427-1	TH-28A WACS# 19862	Total/NA	Water	300.0	
660-43427-2	TH-72 WACS# 27753	Total/NA	Water	300.0	
660-43427-3	SUP 2 WACS# 27756	Total/NA	Water	300.0	
660-43427-5	SUP 1 WACS# 27755	Total/NA	Water	300.0	
LCS 660-114991/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-114991/3	Method Blank	Total/NA	Water	300.0	
Analysis Batch: 115034					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43427-1	TH-28A WACS# 19862	Total/NA	Water	SM 2540C	
660-43427-1 DU	TH-28A WACS# 19862	Total/NA	Water	SM 2540C	
660-43427-2	TH-72 WACS# 27753	Total/NA	Water	SM 2540C	
660-43427-3	SUP 2 WACS# 27756	Total/NA	Water	SM 2540C	
660-43427-4	TH-73 WACS# 27754	Total/NA	Water	SM 2540C	
660-43427-5	SUP 1 WACS# 27755	Total/NA	Water	SM 2540C	
LCS 660-115034/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-115034/1	Method Blank	Total/NA	Water	SM 2540C	
Analysis Batch: 115064	ļ				
Lab Samplo ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43394-A-5 MS ^10	Matrix Spike	Total/NA	Water	300.0	
660-43394-A-5 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	
660-43427-4	TH-73 WACS# 27754	Total/NA	Water	300.0	
LCS 660-115064/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-115064/3	Method Blank	Total/NA	Water	300.0	
Analysis Batch: 115153					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-43398-2	TH-30 WACS #1065	Tctal/NA	Water	300.0	
660-43398-3	TH-42 WACS #823	Total/NA	Water	300.0	
660-43398-4	TH-40 WACS #822	Total/NA	Water	300.0	
660-43398-4 MS	TH-40 WACS #822	Total/NA	Water	300.0	
660-43398-4 MSD	TH-40 WACS #822	Total/NA	Water	300.0	
660-43398-5	TH-57 WACS #1570	Total/NA	Water	300.0	
660-43398-6	TH-19 WACS #821	Total/NA	Water	300.0	
660-43398-7	Duplicate	Total/NA	Water	300,0	

TH-57 WACS #1570

TH-19 WACS #821

TH-28A WACS# 19862

660-43398-5

660-43398-6

660-43427-1

General Chemistry	(Continued)				
Analysis Batch: 115153	(Continued)				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
LCS 660-115153/4	Lab Control Sample	Tctal/NA	Water	300.0	
MB 660-115153/3	Method Blank	Total/NA	Water	300.0	
- Analysis Batch: 115199					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
660-43398-8	Blank, Equipment	Total/NA	Water	300.0	
660-43408-F-2 MS ^10	Matrix Spike	Total/NA	Water	300.0	
660-43408-F-2 MSD ^10	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 660-115199/4	Lab Control Sample	Tctal/NA	Water	300.0	
MB 660-115199/3	Method Blank	Total/NA	Water	300.0	
Analysis Batch: 115203	•				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
660-43398-1	TH-58 WACS #1571	Total/NA	Water	350.1	
660-43398-1 MS	TH-58 WACS #1571	Total/NA	Water	350.1	
660-43398-1 MSD	TH-58 WACS #1571	Total/NA	Water	350.1	
660-43398-2	TH-30 WACS #1065	Total/NA	Water	350.1	
660-43398-3	TH-42 WACS #823	Total/NA	Water	350.1	
660-43398-4	TH-40 WACS #822	Total/NA	Water	350.1	
660-43398-5	TH-57 WACS #1570	Total/NA	Water	350.1	
660-43398-6	TH-19 WACS #821	Total/NA	Water	350.1	
660-43398-7	Duplicate	Total/NA	Water	350.1	
660-43398-8	Blank, Equipment	Total/NA	Water	350.1	
660-43427-1	TH-28A WACS# 19862	Total/NA	Water	350,1	
660-43427-2	TH-72 WACS# 27753	Total/NA	Water	350,1	
660-43427-3	SUP 2 WACS# 27756	Total/NA	Water	350.1	
660-43427-3 MS	SUP 2 WACS# 27756	Total/NA	Water	350.1	
660-43427-3 MSD	SUP 2 WACS# 27756	Total/NA	Water	350.1	
		Total/NA	Water	350.1	
660-43427-4	TH-73 WACS# 27754				
660-43427-5	SUP 1 WACS# 27755	Total/NA	Water	350.1	
LCS 660-115203/12	Lab Control Sample	Total/NA	Water	350.1	
MB 660-115203/11	Method Blank	Total/NA	Water	350.1	
Analysis Batch: 11528:	2				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bate
660-43398-1	TH-58 WACS #1571	Total/NA	Water	300.0	
660-43398-1 MS	TH-58 WACS #1571	Total/NA	Water	300.0	
660-43398-1 MSD	TH-58 WACS #1571	Tctal/NA	Water	300.0	
LCS 660-115282/4	Lab Control Sample	Total/NA	Water	300.0	
MB 660-115282/3	Method Blank	Total/NA	Water	300.0	
Field Service / Mob	ile Lab				
Analysis Batch: 11495	7				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Bat
660-43398-1	TH-58 WACS #1571	Total/NA	Water	Field Sampling	
660-43398-2	TH-30 WACS #1065	Total/NA	Water	Field Sampling	
660-43398-3	TH-42 WACS #823	Total/NA	Water	Field Sampling	
660-43398-4	TH-40 WACS #822	Total/NA	Water	Field Sampling	

Field Sampling

Field Sampling

Field Sampling

Total/NA

Tctal/NA

Total/NA

Water

Water

Water

### **QC Association Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

#### Field Service / Mobile Lab (Continued)

Analysis Batch: 114957 (Continued)

L	ab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
6	60-43427-2	TH-72 WACS# 27753	Total/NA	Water	Field Sampling	
6	60-43427-3	SUP 2 WACS# 27756	Total/NA	Water	Field Sampling	
6	60-43427-4	TH-73 WACS# 27754	Total/NA	Water	Field Sampling	
6	60-43427-5	SUP 1 WACS# 27755	Total/NA	Water	Field Sampling	



Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

Client Sample ID: TH-58 WACS #1571

Date Collected: 09/08/11 11:33 Date Received: 09/08/11 13:38

Lab Sample ID: 660-43398-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prop Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	115066	09/16/11 08:52	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	114975	09/14/11 15:41	то	TAL TAM
Total/NA	Analysis	350.1		1	115203	09/19/11 15:46	то	TAL TAM
Total/NA	Analysis	300.0		20	115282	09/20/11 10:40	TS	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/08/11 11:33		TAL TAM

Lab Chronicle

Client Sample ID: TH-30 WACS #1065

Date Collected: 09/08/11 11:16

Date Received: 09/08/11 13:38

Lab Sample ID: 660-43398-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prop Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	115066	09/16/11 09:04	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	114975	09/14/11 15:41	то	TAL TAM
Total/NA	Analysis	300.0		2	115153	09/16/11 20:11	TS	TAL TAM
Total/NA	Analysis	350.1		1	115203	09/19/11 15:50	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/08/11 11:16		TAL TAM

Client Sample ID: TH-42 WACS #823

Date Collected: 09/08/11 10:34

Date Received: 09/08/11 13:38

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	115066	09/16/11 09:07	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	114975	09/14/11 15:42	TO	TAL TAM
Total/NA	Analysis	300.0		1	115153	09/16/11 16:53	TS	TAL TAM
Total/NA	Analysis	350.1		1	115203	09/19/11 15:51	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/08/11 10:34		TAL TAM

Client Sample ID: TH-40 WACS #822

Date Collected: 09/08/11 09:10

Date Received: 09/08/11 13:38

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	115066	09/16/11 09:11	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	114975	09/14/11 15:42	TO	TAL TAM
Total/NA	Analysis	300.0		1	115153	09/16/11 17:09	TS	TAL TAM
Tctal/NA	Analysis	350.1		1	115203	09/19/11 15:52	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/08/11 09:10		TAL TAM

Client: Hillsborough County Public Utilities Dep

Project/Site: Southeast Monitoring Wells

Client Sample ID: TH-57 WACS #1570

Date Collected: 09/08/11 11:52 Date Received: 09/08/11 13:38 Lab Sample ID: 660-43398-5

Matrix: Water

Batch	Batch		Dilution	Batch	Prepared		
Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM
Analysis	6010B		1	115066	09/16/11 09:21	GF	TAL TAM
Analysis	SM 2540C		1	114975	09/14/11 15:43	то	TAL TAM
Analysis	300.0		1	115153	09/16/11 17:26	TS	TAL TAM
Analysis	350.1		1	115203	09/19/11 15:53	то	TAL TAM
Analysis	Field Sampling		1	114957	09/08/11 11:52		TAL TAM
	Type Prep Analysis Analysis Analysis Analysis	Type Method Prep 3005A Analysis 6010B Analysis SM 2540C Analysis 300.0 Analysis 350.1	Type Method Run Prep 3005A Analysis 6010B Analysis SM 2540C Analysis 300.0 Analysis 350.1	Type         Method         Run         Factor           Prep         3005A         1           Analysis         6010B         1           Analysis         SM 2540C         1           Analysis         300.0         1           Analysis         350.1         1	Type         Method         Run         Factor         Number           Prep         3005A         114989           Analysis         6010B         1         115066           Analysis         SM 2540C         1         114975           Analysis         300.0         1         115153           Analysis         350.1         1         115203	Type         Method         Run         Factor         Number         Or Analyzed           Prep         3005A         114989         09/15/11 07:53           Analysis         6010B         1         115066         09/16/11 09:21           Analysis         SM 2540C         1         114975         09/14/11 15:43           Analysis         300.0         1         115153         09/16/11 17:26           Analysis         350.1         1         115203         09/19/11 15:53	Type         Method         Run         Factor         Number         Or Analyzed         Analyst           Prep         3005A         114989         09/15/11 07:53         GF           Analysis         6010B         1         115066         09/16/11 09:21         GF           Analysis         SM 2540C         1         114975         09/14/11 15:43         TO           Analysis         300.0         1         115153         09/16/11 17:26         TS           Analysis         350.1         1         115203         09/19/11 15:53         TO

Client Sample ID: TH-19 WACS #821

Date Collected: 09/08/11 09:46

Date Received: 09/08/11 13:38

Lab Sample ID: 660-43398-6

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prop Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	115066	09/16/11 09:24	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	114975	09/14/11 15:43	то	TAL TAM
Total/NA	Analysis	300.0		1	115153	09/16/11 17:42	TS	TAL TAM
Total/NA	Analysis	350.1		1	115203	09/19/11 15:54	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/08/11 09:46		TAL TAM

Client Sample ID: Duplicate

Date Collected: 09/08/11 00:00

Date Received: 09/08/11 13:38

Lab Sample ID: 660-43398-7

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	115066	09/16/11 09:28	GF	TAL TAM
Total/NA	Analysis	SM 2540C		1	114975	09/14/11 15:44	то	TAL TAM
Total/NA	Analysis	300.0		1	115153	09/16/11 17:59	TS	TAL TAM
Total/NA	Analysis	350.1		1	115203	09/19/11 15:56	то	TAL TAM

Client Sample ID: Blank, Equipment

Date Collected: 09/08/11 08:50

Date Received: 09/08/11 13:38

Lab Sample ID: 660-43398-8

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab	
Total Recoverable	Prep	3005A			114989	09/15/11 07:53	GF	TAL TAM	
Total Recoverable	Analysis	6010B		1	115066	09/16/11 09:31	GF	TAL TAM	
Total/NA	Analysis	SM 2540C		1	114975	09/14/11 15:45	то	TAL TAM	
Total/NA	Analysis	300.0		1	115199	09/19/11 11:38	TS	TAL TAM	
Total/NA	Analysis	350.1		1	115203	09/19/11 15:57	то	TAL TAM	

#### Lab Chronicle

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells TestAmerica Job ID: 660-43398-1

Client Sample ID: TH-28A WACS# 19862

Date Collected: 09/09/11 10:14

Date Received: 09/09/11 12:55

Lab Sample ID: 660-43427-1

Matrix: Water

1	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114889	09/13/11 09:30	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	114951	09/14/11 13:19	KW	TAL TAM
Total/NA	Analysis	300.0		1	114991	09/14/11 17:56	TS	TAL TAM
Total/NA	Analysis	SM 2540C		1	115034	09/15/11 16:11	то	TAL TAM
Total/NA	Analysis	350.1		1	115203	09/19/11 15:58	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/09/11 10:14		TAL TAM

Client Sample ID: TH-72 WACS# 27753

Date Collected: 09/09/11 09:51

Date Received: 09/09/11 12:55

Lab Sample ID: 660-43427-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114889	09/13/11 09:30	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	114951	09/14/11 13:22	KW	TAL TAM
Total/NA	Analysis	300.0		1	114991	09/14/11 18:12	TS	TAL TAM
Total/NA	Analysis	SM 2540C		1	115034	09/15/11 16:12	TO	TAL TAM
Tctal/NA	Analysis	350.1		1	115203	09/19/11 15:59	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/09/11 09:51		TAL TAM

Client Sample ID: SUP 2 WACS# 27756

Date Collected: 09/09/11 10:46

Date Received: 09/09/11 12:55

Lab Sample ID: 660-43427-3

Matrix: Water

	Batch	Batch		Dilution	Batch	Propared		
Prep Type	Type	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114889	09/13/11 09:30	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	114951	09/14/11 13:26	KW	TAL TAM
Total/NA	Analysis	300.0		1	114991	09/14/11 18:29	TS	TAL TAM
Total/NA	Analysis	SM 2540C		1	115034	09/15/11 16:13	то	TAL TAM
Total/NA	Analysis	350.1		1	115203	09/19/11 16:03	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/09/11 10:46		TAL TAM

Client Sample ID: TH-73 WACS# 27754

Date Collected: 09/09/11 09:32 Date Received: 09/09/11 12:55 Lab Sample ID: 660-43427-4

Matrix: Water

	Batch	Batch		Dilution	Batch	Propared		
Prop Type	Туре	Method	Run	Factor	Number	Or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			114889	09/13/11 09:30	GF	TAL TAM
Total Recoverable	Analysis	6010B		1	114951	09/14/11 13:36	KW	TAL TAM
Total/NA	Analysis	SM 2540C		1	115034	09/15/11 16:13	то	TAL TAM
Total/NA	Analysis	300.0		2	115064	09/15/11 10:44	TS	TAL TAM
Tctal/NA	Analysis	350.1		1	115203	09/19/11 16:07	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	114957	09/09/11 09:32		TAL TAM

#### Lab Chronicle

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells TestAmerica Job ID: 660-43398-1

Client Sample ID: SUP 1 WACS# 27755

Analysis

Analysis

350.1

Field Sampling

Lab Sample ID: 660-43427-5

Date Collected: 09/09/11 11:14 Date Received: 09/09/11 12:55 Matrix: Water

TAL TAM

TAL TAM

Prep Type Total Recoverable	Batch Type Prep	Batch Method 3005A	Run	Dilution Factor	Batch Number 114889	Propared Or Analyzed 09/13/11 09:30	Analyst GF	Lab TAL TAM
Total Recoverable	Analysis	6010B		1	114951	09/14/11 13:39	ĸw	TAL TAM
Total/NA Total/NA	Analysis Analysis	300.0 SM 2540C		1 1	114991 115034	09/14/11 19:02 09/15/11 16:14	TS TO	TAL TAM TAL TAM

1

115203

114957

09/19/11 16:08

09/09/11 11:14

то

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Laboratory References:

Tctal/NA

Total/NA

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 Monitoring Wells TestAmerica Job ID: 660-43398-1

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

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



### **Method Summary**

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells TestAmerica Job ID: 660-43398-1

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	Sclids, 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

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## Sample Summary

Client: Hillsborough County Public Utilities Dep Project/Site: Southeast Monitoring Wells

TestAmerica Job ID: 660-43398-1

Lab Şample ID	Client Sample ID	Matrix	Collected	Received
660-43398-1	TH-58 WACS #1571	Water	09/08/11 11:33	09/08/11 13:38
660-43398-2	TH-30 WACS #1065	Water	09/08/11 11:16	09/08/11 13:38
660-43398-3	TH-42 WACS #823	Water	09/08/11 10:34	09/08/11 13:38
660-43398-4	TH-40 WACS #822	Water	09/08/11 09:10	09/08/11 13:38
660-43398-5	TH-57 WACS #1570	Water	09/08/11 11:52	09/08/11 13:38
660-43398-6	TH-19 WACS #821	Water	09/08/11 09:46	09/08/11 13:38
660-43398-7	Duplicate	Water	09/08/11 00:00	09/08/11 13:38
660-43398-8	Blank, Equipment	Water	09/08/11 08:50	09/08/11 13:38
660-43427-1	TH-28A WACS# 19862	Water	09/09/11 10:14	09/09/11 12:55
660-43427-2	TH-72 WACS# 27753	Water	09/09/11 09:51	09/09/11 12:55
660-43427-3	SUP 2 WACS# 27756	Water	09/09/11 10:46	09/09/11 12:55
660-43427-4	TH-73 WACS# 27754	Water	09/09/11 09:32	09/09/11 12:55
660-43427-5	SUP 1 WACS# 27755	Water	09/09/11 11:14	09/09/11 12:55



# 660-43427

PREC	LEANED SAMPLE	CONTAIN	IERS:					DATE   TIME
RELI	NQUISHED BY: _				REP. (	OF CONTRACT	I LAB.	
ACCE	PTED BY:	Az.			REP. C	OF SOLID W	ASTE DEPI	. 4-2-11 1:00
LOCA	TION: TH-28A V	WACS# 19	862		SAMPLE	MATRIX: W	ATER OTH	IER MATRIX:
PERS	ONAL ENGAGED	IN SAMPI	E COL	LECT1	ON 🗹	A.Balloon	1.Cley	<b>f∼</b> □
TOTA DEPT LENG	DIAMETER: 2.0 L DEPTH OF WEI H TO WATER: TH OF WATER CO ME TO PURGE:	LL: 34. 27. OL: 4.	<del>04</del>	Gal.		PURGE STAIPURGE RATIPURGE ENDIACT. VOL.	E: ED: PURGED:	0.20 GPM. DATE   TIME 9-9-11  (0:/4
			E	TELD	PARAME	TERS:		
	BY	TIME	TEM	P	COND		l DO	TURB
	AB JC	0:10	24,5	14	206		0.49	6.8 =
	AB JCI	10:12	20.	132	203	1 5.22	0.49	4.3
	BB 1C /		24.6		202	1 5.24	0.49	14.0
					E CONTA			
OTY	CONTAINER D	RSCRIPTION OF THE PROPERTY OF		QTY	T	TAINER DESCR	IPTION	PRESERVED
2	40 ml		-	*		40 ml VIAI		
1		PLASTIC			<del> </del>	125 ml. PLAS		<del> </del>
	125 ml			<del> </del>		125 ml GLAS	<del>                                     </del>	
	250 ml.			2		250 ml. PLAS		
	250 ml.					250 ml. GLA		
	500 ml.			<del>                                     </del>		500 ml. PLAS	TTC	<b></b>
<del></del>	500 ml.			<del></del>		500 ml. GLA		
	LITER P			<u> </u>		LITER PLAST		
	LITER				<del> </del>	LITER GLAS		
	BACTE				<del> </del>	BACTERIAL		<del></del>
	_				·	DACIBRIAD		
	f TOTAL No.	OF SAMI	PLES C	OLLE	CTED :			COLLECTED DATE   TIME
			AN	ALYS	IS REQUI	ested :		
AMM	ONIA-NITROGEN	CHLORII	DE SOD	IUM 1	DS Iro	Arsenic		
PRES	ERVED SAMPLES	PH < 2	. 0		SAMPL	E STORAGE:	COOLER	& ICE TO 4.0 c
ABOV RELI ACCE	E LISTED SAMPINQUISHED BY:	LES:  Ai C	lan 2 Mc H	nlty	REP. (	OF SOLID W. OF CONTRAC	ASTE DEPI T LAB.	DATE   TIME 9-9-11/2:55 9-9-11/2:55
СОММ	ENT`S:		_				4.70	c c407
1420	H 0049						<del> </del>	
	7, 00 T	•						

PREC	LEANED SAMPI	E CONTAIL	NERS:					DATE   TIME
RELI	NQUISHED BY:				REP. O	F CONTRAC	T LAB.	
ACCE	PTED BY:	1			REP. O	F SOLID W	ASTE DEPT	. 9-2-11 1:00
LOCA	TION: TH-72	WACS# 27	753		SAMPLE	MATRIX: W	ATER OTH	ER MATRIX:
	ONAL ENGAGED							
WELL TOTA DEPT LENG	DIAMETER: 2 L DEPTH OF V H TO WATER: TH OF WATER ME TO PURGE:	INCH: VELL: 19	0.00 7.81 2.19 1.75	Ft. Ft. Ft. Gal.	·	PURGE STA PURGE RAT PURGE ENE ACT. VOL. Draw Down	ARTED: 'E: DED: PURGED:	DATE   TIME 9.3-111 9:21 0.55 GPM. DATE   TIME 9-9-111 9:51 16.5 GAL. 97.85
	вч	TIME	TEM		COND	PH	1 DO	TURB
	AB JC	947	1 23,		535	17,28	11.12	1 12 8 =
	AB JC	9:49	33.		537	1 7,30	11.10	10,6
	AB 16	9:51	23,		506	17,29	1 1.11	10.10
	-	•		_	E CONTA:	INEDS	• ,	-
QTY	CONTAINER	DESCRIPTION		OTY		AINER DESC	RIPTION	PRESERVED
*		ml VIAL	•			40 ml VIA		
		. PLASTIC		<del> </del>	1	25 ml. PLA		
		ml GLASS		<del> </del>	-	125 ml GLA		
$\overline{}$		. PLASTIC		2	2	50 ml. PLA		
<u> </u>		nl. GLASS				250 ml. GL		
		. PLASTIC			3	00 ml. PLA		
		nl. GLASS				500 ml. GL		
		R PLASTIC				LITER PLAS		
		R GLASS		ļ	ļ	LITER GLA		
L	BAC	CTERIAL			<u> </u>	BACTERIA:	Li .	
Colo	TOTAL No	o. OF SAM			CTED:	STED:		COLLECTED DATE   TIME 9-7-11   9:51
2	MMONIA-NITRO	CEN CHIO					ia	
<u> </u>	THION THE INT THE	CETO	VIDE 9	ODIO	1 103 11	Ou Wraelli	<u></u>	
PRES	ERVED SAMPLI	ES PH < 2	٠٥		SAMPLE	STORAGE:	COOLER	& ICE TO 4.0 c
RELI	E LISTED SAM NQUISHED BY: PTED BY:		Inth	ulty	REP. C	F SOLID V	WASTE DEPT CT LAB.	DATE   TIME - 9-9-11/2:55 9-9-11/12/55
COMM	ENT`S:							<del></del>
ا حا	世 0049							

## 13

PRECLEANED SAMPLE CONTAINERS: DATE   TIME
RELINQUISHED BY: REP. OF CONTRACT LAB.
ACCEPTED BY: REP. OF SOLID WASTE DEPT. 9-2-41:00
LOCATION: SUP 2 WACS# 27756 SAMPLE MATRIX: WATER OTHER MATRIX:  PERSONAL ENGAGED IN SAMPLE COLLECTION A.Balloon F.J. C.
WELL VOLUME TO PURGE: 15 MIN: PURGE STARTED: DATE 9-9-11 TIME 10:27 ACTUAL PURGE TIME: 19 MIN:
FIELD PARAMETERS:
BY   TIME   TEMP   COND   PH   DO   TURB
43 16 10:42 24.49 348 7.54 0.30 1.2 =
AB JC 10:44   24.71   349   7.55   0.36   1.3
AB 12 10:46 24.71 347 7.54 0.28 1.6
SAMPLE CONTAINERS
QTY CONTAINER DESCRIPTION QTY CONTAINER DESCRIPTION PRESERVED
40 ml VIAL 40 ml VIAL
125 ml. PLASTIC 125 ml. PLASTIC
l 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. PLASTIC
500 ml. GLASS 500 ml. GLASS
LITER PLASTIC LITER PLASTIC
LITER GLASS LITER GLASS
, BACTERIAL BACTERIAL
TOTAL No. OF SAMPLES COLLECTED:  COLLECTED  DATE   TIME  9- 7-11   / 0:46  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. REP. OF CONTRACT LAB.  DATE   TIME PROPERTY NOTES   12:55   12
COMMENT'S:
WO# 0049

09/28/2011

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

PRECLEANED SAMPLE CONTAINERS:					DATE   TIME	
RELINQUISHED BY:		REP. OI	CONTRACT	r LAB.		
ACCEPTED BY:  REP. OF SOLID WASTE DEPT. 9-2-1/1/:00						
LOCATION: TH-73 WACS#27754	•	SAMPLE N	MATRIX: W	ATER OTH	ER MATRIX:	
PERSONAL ENGAGED IN SAMPLE CO	LLECTI	ON D	A.Balloon	BJ. Clay	<u> </u>	
WELL DIAMETER: 2 INCH: TOTAL DEPTH OF WELL: 43.40 DEPTH TO WATER: 30.65 LENGTH OF WATER COL: 12.75 VOLUME TO PURGE: 2.04	Ft. Ft. Ft. Gal.	1 1 2	PURGE STAI PURGE RATI PURGE ENDI ACT. VOL. Draw Down	RTED: 5	DATE   TIME 7-9-11   9:12 0.50 GPM. DATE   TIME 9-9-11   9:32 10 GAL. 33.00 7:72	
	FIELD	PARAMET	ERS:			
BY   TIME   TE	MP	COND	PH	l DO	TURB	
AB 14 9:28 125.	39	257	5.24	0.50	26.1 =	
AB 16 9:30 125.	40	258	5.23	10.48	27.9	
48 14 19:32 125	41	259	5.24	0.49	1 28.1	
	~3.mz	a commat	MBD0			
OTY CONTAINER DESCRIPTION	QTY	E CONTAI	AINER DESCR	TOTTON	PRESERVED	
QTY CONTAINER DESCRIPTION 40 ml VIAL	- QII	CONT	40 ml VIAI			
125 ml. PLASTIC		1	25 ml. PLAS			
125 ml GLASS			125 ml GLAS			
250 ml. PLASTIC	2-		50 ml. PLAS			
250 ml. GLASS			250 ml. GLA	SS		
500 ml. PLASTIC			00 ml. PLAS			
500 ml. GLASS			500 ml. GLA			
LITER PLASTIC	<b>-∤</b>	1	LITER PLAST LITER GLAS			
LITER GLASS BACTERIAL			BACTERIAL		·	
BACTERIAL		L	BACIBATAD			
TOTAL No. OF SAMPLES COLLECTED:  Colors and Sheens  ANALYSIS REQUESTED:  AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic						
PRESERVED SAMPLES PH < 2.0		SAMPLE	STORAGE:	COOLER		
ABOVE LISTED SAMPLES: RELINQUISHED BY:	inly	REP. O	F SOLID W F CONTRAC	ASTE DEPT T LAB.	DATE   TIME 9-9-11 /2:55 9-7-11 /2:55	
COMMENT`S:						
wo # 0049						

Page 42 of 53

PRECLEANED SAMPLE CONTAINERS:					DATE   TIME	
RELINQUISHED BY:		REP. OF	CONTRACT	r LAB.		
ACCEPTED BY: 13		REP. OF	SOLID W	ASTE DEP	r. 9-2-11/1100	
LOCATION: SUP 1 WACS# 27755 PERSONAL ENGAGED IN SAMPLE COL	LOCATION: SUP 1 WACS# 27755 SAMPLE MATRIX: WATER OTHER MATRIX:  PERSONAL ENGAGED IN SAMPLE COLLECTION A.Balloon 2.00					
WELL VOLUME TO PURGE: 15 MIN ACTUAL PURGE TIME: 17 MIN	•	PURGE S	STARTED: I	DATE <u>9-</u>	1-11 TIME /0:55	
<u> I</u>	FIELD	PARAMET	ERS:			
BY   TIME   TEM		COND	PH	l DO	TURB	
AB 12 11:16 24.4		323	7.40	U. ( \$	10.3 =	
40 16 11:12 24.4		323	7.47	0. (1	10.5	
AB 10/11:14 124.4	+4	323	7.52	0.15	10.5	
·	SAMPL	E CONTAI	NERS			
QTY CONTAINER DESCRIPTION	QTY	CONTA	AINER DESCR	IPTION	PRESERVED	
40 ml VIAL			40 ml VIAI	٠		
125 ml. PLASTIC			25 ml. PLAS			
125 ml GLASS		125 ml GLASS				
250 ml. PLASTIC	2	250 ml. PLASTIC 250 ml. GLASS			ļ	
250 ml. GLASS 500 ml. PLASTIC	<b></b>	500 ml. PLASTIC				
500 ml. GLASS	<del> </del>		00 ml. GLA			
LITER PLASTIC			ITER PLAST			
LITER GLASS			LITER GLAS			
BACTERIAL			BACTERIAL			
TOTAL No. OF SAMPLES COLLECTED:  COLLECTED  DATE   TIME  9.9-\\\\/:/4						
AMMONIA-NITROGEN CHLORIDE SODI		S Trop	<del></del>			
AMMONIA-NIIROGEN CHIORIDE SODI	<u>.om</u> <u>11</u>	75 TTOW 5	Tenirc			
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c						
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:	RELINQUISHED BY: A Clate REP. OF SOLID WASTE DEPT. 9-9-111/2155					
COMMENT'S:						

RELINQUISHED BY:  REP. OF CONTRACT LAB.  ACCEPTED BY:  REP. OF SOLID WASTE DEPT. 9-2." 1:0  REP. OF SOLID WASTE DEPT. 9-2." 1:0  REP. OF SOLID WASTE DEPT. 9-2." 1:0  BELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER MATRIX:  WELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER MATRIX:  WELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER MATRIX:  WELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER MATRIX:  WELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER MATRIX:  WELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER MATRIX:  WELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER MATRIX:  WELL DIAMETER: 2.0 IN SAMPLE COLLECTION PA.Balloon V.O. OTHER IN SAMPLE COLLECTION PA.B. V.O. PURGE:  DATE   TIME	** · —		-				
REP. OF SOLID WASTE DEPT. 9-2-11 12 OCCUMENT'S:  REP. OF SOLID WASTE DEPT. 9-2-11 12 OCCUMENT SITURE  REP. OF CONTRACT LAB. 9-2-11 12	PRECLEANED SAMPLE CONTAINERS:					DATE	TIME
DOCATION: TH-58 WACS# 1571  PERSONAL ENGAGED IN SAMPLE COLLECTION  WELL DIAMETER: 2.0 INCH:  TOTAL DEPTH OF WELL: 32.92  PEL PURGE STARTED: 0.20 GPM.  DEPTH TO WATER: 2.44  PEL PURGE RATE: 0.20 GPM.  LENGTH OF WATER COL: 5.44  PEL PURGE RATE: 0.20 GPM.  DATE   TIME	RELINQUISHED BY:		REP. OF	CONTRAC'	r LAB.	1	
WELL DIAMETER: 2.0 INCH: TOTAL DEPTH OF WELL: 32.92 Ft. PURGE STARTED: 9-5-11 []:25 DEPTH TO WATER: 22.44 Ft. PURGE RATE: 0.20 G9M. LENGTH OF WATER COL: 5.44 Ft. PURGE RATE: 0.20 G9M. LENGTH OF WATER COL: 5.44 Ft. PURGE RATE: 0.20 G9M. LENGTH OF WATER COL: 5.44 Ft. PURGE RATE: 0.20 G9M. LENGTH OF WATER COL: 5.44 Ft. PURGE ENDED: ACT. VOL. PURGED: 7.6 GAL. Draw Down: 7.6 GAL. ACT. VOL. PURGED: 7.6	ACCEPTED BY: Ba		REP. OF	SOLID W	ASTE DEPT	. 9-2-11	1:00
TOTAL DEPTH OF WELL: 32.92 Ft. PURGE STARTED: 7-5-11 []: 25 DEPTH TO WATER COL: 27.44 Ft. PURGE RATE: 0.20 GPM. LENGTH OF WATER COL: 5.44 Ft. PURGE RATE: DATE ITIME VOLUME TO PURGE: 0.87 Gal. PURGE ENDED: ACT. VOL. PURGED: J.C. GAL. Draw Down: 7.60 GPM.  FIELD PARAMETERS:  BY TIME TEMP COND   PH   DO   TURB AB AC   11: 37   24:17   /234   5.74   0.70   5.9 = AB AC   11: 33   24:18   125:19   124:0   5.72   0.67   4.1    AB AC   11: 33   24:18   123:3   5.70   0.90   3.0    SAMPLE CONTAINERS  CTY CONTAINER DESCRIPTION QTY CONTAINER DESCRIPTION PRESERVED  40 ml VIAL	LOCATION: TH-58 WACS# 1571 PERSONAL ENGAGED IN SAMPLE COL	LECTI	SAMPLE MA	TRIX: WI Balloon	ATER OTH	ER MATRIX:	
BY   TIME   TEMP   COND   PH   DO   TURE	TOTAL DEPTH OF WELL: 32.92  DEPTH TO WATER: 27.44  LENGTH OF WATER COL: 5.44  VOLUME TO PURGE: 0.87	Ft. Gal.	PU AC Dr	RGE ENDI T. VOL. aw Down	ED: PURGED:	9-8-11   17 0.20 G DATE   T 9-8-11   18 1.4 G	: 25 PM. IME I: 33 AL.
AB 1C	<u> </u>	TELD	PARAMETER	<u> </u>			
AB 10		P	COND	PH	DO DO	TURB	
SAMPLE CONTAINERS  OTY CONTAINER DESCRIPTION OTY CONTAINER DESCRIPTION PRESERVED  40 ml VIAL 40 ml VIAL 40 ml VIAL 125 ml PLASTIC 125 ml PLAS	AB 30 111:29   24.1	7	1234	5.74	0.90	5.9 =	
SAMPLE CONTAINERS  OTY CONTAINER DESCRIPTION QTY CONTAINER DESCRIPTION PRESERVED  40 ml VIAL 40 m. VIAL 1 25 ml PLASTIC 125 ml PLASTIC 125 ml PLASTIC 125 ml PLASTIC 125 ml PLASTIC 2 250 ml PLASTIC 250 ml PLASTIC 500 ml PLASTIC 250 ml PLASTIC 500 ml PLASTIC 250 ml PLASTIC 125 ml PLASTIC 250 ml PLASTIC 125 ml PLASTIC 250 ml PLASTIC 125 ml PLASTIC 250 ml PLASTIC 1500 ml PLASTIC 250 ml PLASTIC 1500 ml PLASTIC 250 ml PLASTIC 1500 ml PLASTIC 250 ml PLASTIC 1500 ml PLASTIC 250 ml PLASTIC 1500 ml PLASTIC 1778 PLASTIC 250 ml PLASTIC 1778 PLA	AB JC 111:31 124.1	9	1246	5.72	0.69	1 4.1	
SAMPLE CONTAINERS  OTY CONTAINER DESCRIPTION OTY CONTAINER DESCRIPTION PRESERVED  40 ml VIAL 40 ml VIAL 40 ml VIAL 125 ml PLASTIC 125 ml PLASTIC 125 ml PLASTIC 125 ml PLASTIC 125 ml GLASS 125 ml GLASS 125 ml GLASS 125 ml GLASS 125 ml GLASS 125 ml GLASS 1250 ml PLASTIC 1	ABJE 111:33 124.1	ابي	1237	5.70	0.90		
QTY CONTAINER DESCRIPTION QTY CONTAINER DESCRIPTION PRESERVED  40 ml VIAL	5	SAMPLI	E CONTAINE	ERS	•		
125 ml. PLASTIC   125 ml. PLASTIC   125 ml GLASS   125 ml GLASS   125 ml GLASS   250 ml. PLASTIC   250 ml. PLASTIC   250 ml. GLASS   250 ml.					IPTION	PRESERVED	
125 ml GLASS   125 ml GLASS   250 ml. PLASTIC   250 ml. PLASTIC   250 ml. GLASS   250 ml. GL	40 ml VIAL		4	O ml VIAI	<u> </u>		i
250 ml. PLASTIC 250 ml. GLASS	125 ml. PLASTIC						1
250 ml. GLASS 250 ml. GLASS 500 ml. PLASTIC 500 ml. PLASTIC 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 600 ml. GLAS	125 ml GLASS						7
AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic  PRESERVED SAMPLES CLEATED  ABOVE LISTED SAMPLES:  RELINQUISHED BY:  AMALYSIS REP. OF SOLID WASTE DEPT.  REP. OF CONTRACT LAB.  500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 500 ml. GLASS 600 ml. GLAST 600 ml. GLASS 600 ml. GLAST 600 ml		2					]
SOO ml. GLASS   SOO ml. GLASS   LITER PLASTIC		<u> </u>					4
LITER PLASSIC  LITER GLASS  BACTERIAL  TOTAL No. OF SAMPLES COLLECTED:  COLLECTED  DATE   TIME  1-8-11   171:33  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: RELINQUISHED BY: ACCEPTED BY:  CAMALIMA MALLY  REP. OF SOLID WASTE DEPT. PATE   TIME  REP. OF CONTRACT LAB.  COMMENT'S:  2.7 C (1-07)		<del> </del>	500	mr. PLAS	99		-{
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:  COLLECTED DATE   TIME 1-5-1/1/1/33  ANALYSIS REQUESTED:  SAMPLE STORAGE: COOLER & ICE TO 4.0 c  REP. OF SOLID WASTE DEPT.  REP. OF CONTRACT LAB.  PRESERVED SAMPLES:  REP. OF CONTRACT LAB.  COMMENT'S:  COMMENT'S:  COMMENT'S:  COMMENT'S:  COLLECTED DATE   TIME 1 TIM	LITER PLASFIC		LI	TER PLAST	TC.		
BACTERIAL  TOTAL No. OF SAMPLES COLLECTED:  COLLECTED DATE   TIME 1-5-11   17:33  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:  COMMENT'S:  COMMENT'S:  ACCOMMENT'S:  COMMENT'S:  COLLECTED DATE   TIME REP. OF SOLID WASTE DEPT. REP. OF CONTRACT LAB.  COMMENT'S:  COMMENT'S:  COMMENT'S:  COMMENT'S:  COLLECTED DATE   TIME REP. OF CONTRACT LAB.  COMMENT'S:  COMMENT'S:  COMMENT'S:  COMMENT'S:  COLLECTED DATE   TIME REP. OF CONTRACT LAB.  COMMENT'S:  COMMENT'S:  COMMENT'S:  COMMENT'S:  COLLECTED DATE   TIME REP. OF CONTRACT LAB.			· L]	TER GLAS	S	•	┪
COLLECTED DATE   TIME 1-6-1/17/:33  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: Linch Class REP. OF SOLID WASTE DEPT. 1-1/1/2/38  ACCEPTED BY: CALL MANNEY REP. OF CONTRACT LAB.  COMMENT'S: 2.7 ( 1-07)	BACTERIAL						┪
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c  ABOVE LISTED SAMPLES: RELINQUISHED BY:  CALL MANUAL REP. OF SOLID WASTE DEPT. REP. OF CONTRACT LAB.  2.7 C (J-07)  CCMMENT'S:  2.7 C (J-07)	TOTAL NO. OF BARFIES C.	•	•	ED :		DATE	TIME
ABOVE LISTED SAMPLES: RELINQUISHED BY:  CALL MANUAL REP. OF SOLID WASTE DEPT. REP. OF CONTRACT LAB.  COMMENT'S:  2.7c(J-07)	AMMONIA-NITROGEN CHLORIDE SOD	IUM T	DS Iron A	rsenic			
RELINQUISHED BY:  ACCEPTED BY:  CALL MAN HARLY  REP. OF SOLID WASTE DEPT. 9-8-11 / 38  REP. OF CONTRACT LAB.  9-8-11 / 38  COMMENT'S:  2.7 C (1-07)	PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c						
	RELINQUISHED BY: 1 Clet	<u>lty</u>	REP. OF	SOLID WA	ASTE DEPT	· 9-P-111	TIME 238
DO # 0049	COMMENT'S: 2.7 c (1-07						
	WU # 0049						

PRECLEANED SAMPLE CONTAINERS:					DATE	TIME
RELINQUISHED BY:		REP. O	F CONTRACT	Γ LAB.		
ACCEPTED BY:		REP. O	F SOLID WA	ASTE DEPT	9-2-11 1	1100
LOCATION: TH-30 WACS# 1065 PERSONAL ENGAGED IN SAMPLE COLI	ECTIO	SAMPLE ON <u></u>	MATRIX: W A.Balloon	ATER OTH	ER MATRIX:	
WELL DIAMETER: 2.00 INCH: TOTAL DEPTH OF WELL: 46.19 DEPTH TO WATER: 23.77 LENGTH OF WATER COL: 22.40 VOLUME TO PURGE: 3.58	Ft. Ft. Ft. Gal.		PURGE END	ED: PURGED:	DATE   T 9-8-11   // 0.30 G DATE   T 9-8-11   // 4.5 G 24.01	PM. IME IME AL.
<u>F</u>	'IELD	PARAME!	TERS:			
BY   TIME   TEM	P	COND	PH	Į DO	TURB	
AB 30 11:12 23.4		247		0.33	4.2 =   4.7	
AB 30 11:14 23.4		250		0.27	14.7	
AB Je 11:14   23.4	<u> </u>	251	4.44	0.2	14.1	
S	AMPT.E	CONTA	INERS	•		
QTY CONTAINER DESCRIPTION	QTY		AINER DESCR		PRESERVED	7
40 ml VIAL			40 ml VIA			7
125 ml. PLASTIC	•	•1	25 ml. PLAS			
125 ml GLASS 250 ml. PLASTIC			125 ml GLAS	SS	-	4
250 ml. PLASTIC 250 ml. GLASS	5		250 ml. PLAS			-
500 ml. PLASTIC		5	00 ml. PLAS			-
500 ml. GLASS			500 ml. GLA			
LITER PLASTIC LITER GLASS			LITER PLAST			4
BACTERIAL			BACTERIAL			┪
TOTAL No. OF SAMPLES COLLECTED:  COLLECTED DATE   TIME 9-8-W   //:/6						
AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic						
ENTROPIE MILITOGEN CHLORIDE	PODI	OM IDS	TTOIL WISE	<u> </u>	•	
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c						
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:  COMMENT'S: H2S odv 2.	nulty	REP. C	OF SOLID W OF CONTRAC	ASTE DEPT T LAB.	DATE   9-8-11   9-8-11	TIME /'38
COMMENT'S: H25 odur 2.	2c C	U-07				

PRECLEAR	NED SAMPI	LE CONTAIN	ERS:						DATE	TIME
RELINQU	ISHED BY				REP. (	F CONT	RAC!	r LAB.		
ACCEPTE	D BY:	<u>Az</u>			_ REP. (	F SOLI	D W	ASTE DEPT	.9-2-11 11	1:00
LOCATION PERSONAL	N: TH-42 L ENGAGEI	WACS# 823 IN SAMPI	E COL	LECTI	SAMPLE	MATRIX 'A.Ball	: <u>W</u>	ATER OTH ☑ 1. Class	ER MATRIX:	
WELL DIA TOTAL DI DEPTH TO LENGTH (	AMETER: 2 EPTH OF V	2.0 INCH: WELL: 164 7: COL: 91	1 2,03 ,97	Ft. Ft. Ft. Gal.		PURGE PURGE PURGE ACT. V	STAI RATI ENDI	RTED: E: ED:	DATE   T 9-8-11 /0 0.60 G DATE   T	PM. IME :34
			. <u>H</u>	TETD	PARAME			, ,		
_	BY	TIME	TEM		COND	PH		I DO	TURB	
		10:30	23.		4.99	7.3		0.20	1 208 =	
	AB Je		23. 23.	97	499	7.3		0.21	20.2	
-	HO J.	; / J , 5 **					<u> </u>	10.22	<u>  18.1</u>	
QTY	CONTAINE	R DESCRIPTION		QTY	E CONTA	TAINER D	ESCR	IPTION	PRESERVED	7
	40	ml VIAL		<del>                                     </del>	+	40 ml	VIA	L		1
		. PLASTIC			125 ml. PLASTIC					-
		ml GLASS			125 ml GLASS					1
		L. PLASTIC		2		250 ml.				
		nl. GLASS		· · · ·	<u> </u>	250 ml.				4
		L. PLASTIC			<del>- </del>	500 ml. 500 ml.				4
<del> </del>		R PLASTIC				LITER P				=
		ER GLASS				LITER	GLAS	S	· • · · · · · · · · · · · · · · · · · ·	1
	BAG	CTERIAL				BACTE	RIAL			]
TOTAL No. OF SAMPLES COLLECTED:  COLLECTED  DATE   TIME  9-8-11   0:34										
AMMONI	A-NITROG	EN CHLORII	DE SOD	IUM S	IDS Iro	<u>Arser</u>	iic :	Dissolved	Sodium	
Dissolved Iron Dissolved Arsenic										
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c										
	ISTED SA ISHED BY D BY:	: Air (	Loto Loto	Multi	REP.	OF SOLI	D W	ASTE DEPT T LAB.	DATE   9-8-11  9-8-11	TIME //38
	COMMENT'S: 2.20 (V-07									

PRECLEANED SAMPLE CONTAINERS:					DATE   TIME
RELINQUISHED BY:		REP.	OF CONTRACT	LAB.	
ACCEPTED BY:		REP.	OF SOLID WA	ASTE DEPT	.9-2.11 1:00
LOCATION: TH-40 WACS# 822 PERSONAL ENGAGED IN SAMPLE CO	LLECT	SAMPLE	MATRIX: WA <b>1 A.Balloon</b>	TER OTH	ER MATRIX:
WELL DIAMETER: 2.0 INCH: TOTAL DEPTH OF WELL: 165.90 DEPTH TO WATER: 70.05 LENGTH OF WATER COL: 75.65 VOLUME TO PURGE: 12.74	Ft.		PURGE STAF PURGE RATE PURGE ENDE ACT. VOL. Draw Down:	ED: PURGED:	
	FIELD	PARAM	ETERS:		
AB 10 9:06 23 AB 10 9:08 23	.44   3.44   3.40	372 370 370	7.60	1.06 1.08 1.04	TURB = 0.7
QTY CONTAINER DESCRIPTION	SAMPL	E CONT	AINERS NTAINER DESCR	TPTTON	PRESERVED
40 ml VIAL	211		40 ml VIAL	FREDERVED	
125 ml. PLASTIC			125 ml. PLAS'		
125 ml GLASS			125 ml GLAS		
250 ml. PLASTIC 250 ml. GLASS	2	<u>-</u>	250 ml. PLAS' 250 ml. GLA		
500 ml. PLASTIC		<del> </del>	500 ml. PLAS		
500 ml. GLASS			500 ml. GLA	SS	
LITER PLASTIC		_	LITER PLAST		
LITER GLASS BACTERIAL		_ <del> </del>	LITER GLAS		
	COLLE		DACIBRIAD		<del></del>
TOTAL No. OF SAMPLES COLLECTED:  COLLECTED  DATE   TIME  9-8-119:10  ANALYSIS REQUESTED:					
<b>-</b>			*		
AMMONIA-NITROGEN CHLORIDE SODIUM TDS Iron Arsenic  PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c					
TRESERVED SAMPLES PM < 2.0 _		SAMP.	ue Siorage:	COOLER	α 10E 10 4.0 C
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:  COMMENT'S:  2.7c (V-07)	wlty		OF SOLID W		DATE   TIME 9-8-11 /:38 1-8-11/:38
100 th 0049					

		SOUTHEAS	T LANDFII	LL WELL MO	DNITORING	PROGRAM		
PRECLE	EANED SAMPI	LE CONTAI	NERS:				DATE	TIME
RELINÇ	QUISHED BY			REP. C	F CONTRAC	T LAB.	1	
ACCEPT	TED BY:	A	300	REP. C	F SOLID W	ASTE DEPT	.9.2-111	1:00
LOCATI	ON: TH-57	WACS# 15	<u>70</u>	SAMPLE	MATRIX: W	ATER OTH	ER MATRIX:	
PERSON	NAL ENGAGE	D IN SAMP	LE COLLEC	TION D	A.Balloon	W J. C/q.	<del> -</del>	
TOTAL DEPTH LENGTH	DIAMETER: 2 DEPTH OF TO WATER: H OF WATER TO PURGE	WELL: 26.  19.	59 Ft 24 Ft	· i.	PURGE STA PURGE RAT PURGE END ACT. VOL. Draw Down	E: ED: PURGED:	9-8-11   11 0.25 G DATE   T 9-8-11   1:	PM. IME 52
			FIE	DD PARAME	rers:			
	BY	TIME	TEMP	COND	PH	I DO	TURB	
	AB 15		24.58		5.05		<del>4</del> , <del>4</del> =	
	AB JC	11:52	124.55	174	15.08	0.29	1 2.5	
	<u></u>	111.50	1 24.33	1/02	13.08	0.2	1 6. 7	
			SAMI	PLE CONTA	INERS			
QTY	CONTAINE	R DESCRIPTI	TQ NO	Y CONT	AINER DESCR	IPTION	PRESERVED	7
	40	ml VIAL			40 ml VIA	<u> </u>		1
1		l. PLASTIC			.25 ml. PLAS			1
		ml GLASS			125 ml GLA			]
		l. PLASTIC		<u> </u>	250 ml. PLASTIC 250 ml. GLASS			
1		1. PLASTIC			000 ml. PLAS			-
		nl. GLASS			500 ml. GLA	SS	·····	=
		RPLASTIC			LITER PLAST			
		ER GLASS CTERIAL			LITER GLAS			4
L	DIN	CIBRIAD			BACIERIAL	<i>i</i>	İ	_
<u> </u>	TOTAL No. OF SAMPLES COLLECTED:  COLLECTED DATE   TIME							
AMMON	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:  CLAST REP. OF SOLID WASTE DEPT. 9-9-11/38 REP. OF CONTRACT LAB. 9-8-11/38								
COMMEN	NT`S:	2.2	c Cu	11				
	+ 0049							

#### 13

PREC	LEANED SAMP	LE CONTAI	NERS:					DATE   TIME
RELI	NQUISHED BY	:		RE	P. C	F CONTRACT	r LAB.	
ACCE	PTED BY:	_A3	<u>u</u>	RE	P. C	F SOLID WA	ASTE DEPT	1.8-2-11 11:00
LOCA	TION: TH-19	WACS# 82	1	SAM	IPLE	MATRIX: WZ	ATER OT:	HER MATRIX:
	ONAL ENGAGE							
	DIAMETER:							DATE   TIME
	L DEPTH OF THE TO WATER:		3.60 E 3. <b>5</b> 4 E			PURGE STATE		9-8-11   9:33
	TH OF WATER					PURGE RAI:	<b>1</b>	J.O. GPM. DATE   TIME
VOLU	ME TO PURGE			Gal.	1	PURGE END	ED:	9.8-11 9:46
				•		ACT. VOL.		13 GAL.
						Draw Down:	:	94.12
			ET.	ELD PAI	ישאאס	rede.		
			<u>F 1.</u>	EDD EVI	MHE	ERD.		
	BY	TIME	TEMP		OND		l DO	
	AB Je	9:42	23.44	37	4	7.32	0.82	0.8 =
	AB 12	9.44	23.4-4	39		1 7.35	0.81	0.5
	AB 12	9;49	23.4	7   39	! [	17.35	0.80	1 6. 6
			SA	MPLE CO	ATMC	INERS		
QTY	CONTAINE	R DESCRIPTI	ON (	QTY	CONT	AINER DESCR	IPTION	PRESERVED
		ml VIAL				40 ml VIAI		<del>                                     </del>
		l. PLASTIC			1	25 ml. PLAS		
		ml GLASS		2	<del></del> ,	125 ml GLAS		<b>_</b>
-		nl. GLASS				250 ml. GLA		
1	500 m3	l. PLASTIC				00 ml. PLAS	TIC	<del> </del>
		nl. GLASS				500 ml. GLA		
		R PLASTIC ER GLASS				LITER PLAST LITER GLAS		
		CTERIAL				BACTERIAL		
	<u>-</u> -		- <del></del>	<b>_</b>				<u>-L </u>
4	TOTAL N	o. OF SAM	PLES COI	LECTED	):			
								COLLECTED
								DATE   TIME
								9-8-11 9:46
			ANAI	YSIS R	EQUE	STED:		
AMM	ONIA-NITROGI	EN CHLORI	DE SODIU	M TDS	Iron	Arsenic		
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c								
ABOV	E LISTED SAM	MPLES						DATE   TIME
	NQUISHED BY		ata	RE	P. C	F SOLID W	ASTE DEPT	C STAIL 1120
ACCE	PTED BY:	41	il min	A Fr RE	P. C	F SOLID WAR	LAB.	9-8-11/30
					_		<del>-</del>	1-4-11/-48
COMM	ENT`S:	2.2c Cu	1-07				<b></b>	
100	# 6049							
<u> </u>	~ V~-[							

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			-

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

PREC	LEANED SAMPLE CONTAINERS:	MET	T2 DOLTICATE SAMPLE	DATE   TIME
RELI	NQUISHED BY:		REP. OF CONTRACT LAB.	1
	PTED BY: Bu		REP. OF SOLID WASTE DEPI	
LOCA	TION: DUPLICATE ONAL ENGAGED IN SAMPLE COL	S LECTI	AMPLE MATRIX: WATER OTHE ON : A.Balloon E.J.C.	er matrix:
	<u>FI</u>	ELD PA	ARAMETERS: N/A	
	:	SAMPLI	E 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	
	500 ml. GLASS	1	500 ml. GLASS	
	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	
_4	TOTAL No. OF SAMPLES C	OLLEC	TED :	COLLECTED DATE   TIME
2204	<del></del>		S REQUESTED:	
AMM	ONIA-NITROGEN CHLORIDE SOD	IUM T	DS Iron Arsenic	
PRES	ERVED SAMPLES PH < 2.0		SAMPLE STORAGE: COOLER	& ICE TO 4.0 c
ABOV RELI ACCE	E LISTED SAMPLES: NQUISHED BY: PTED BY:	pulty	REP. OF SOLID WASTE DEPT REP. OF CONTRACT LAB.	DATE TIME 7-3-11/1/8 9-8-11/138

WOH 00 49

COMMENT'S: 2.2 C CV-07

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

PRECLEANED SAMPLE CONTAINERS:			DATE   TIME		
RELINQUISHED BY:	R	EP. OF CONTRACT LAB.	1		
ACCEPTED BY:	R	EP. OF SOLID WASTE DEP	r.9-2-11 1:00		
LOCATION: BLANK, EQUIPMENT	SA	MPLE MATRIX: WATER OTH	HER MATRIX:		
PERSONAL ENGAGED IN SAMPLE CO.	LLECTION	A.Balloon & A. Cla	stmo		
<u>F1</u>	ELD PAR	AMETERS: N/A			
	SAMPLE (	CONTAINERS			
QTY CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED		
40 ml VIAL		40 ml VIAL			
125 ml. PLASTIC		125 ml. PLASTIC			
· 125 ml GLASS		125 ml GLASS			
250 ml. PLASTIC	2	250 ml. PLASTIC			
250 ml. GLASS 500 ml. PLASTIC	<del></del>	250 ml. GLASS			
		500 ml. PLASTIC			
500 ml. GLASS		500 ml. GLASS			
LITER PLASTIC	1	LITER PLASTIC			
LITER GLASS BACTERIAL		LITER GLASS			
DACIERIAL		BACTERIAL	<u> </u>		
TOTAL No. OF SAMPLES	C <del>ollect</del> e	<del>ID :</del>	COLLECTED DATE   TIME 9-8-11 8:50		
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:			DATE I TIME		
COMMENT'S: 2.76 CV-07					
30 F 00 49					

#### Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-43398-1

Login Number: 43398

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	
Cooler Temperature is acceptable.	True	2.2c CU-07
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

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### Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-43398-1

Login Number: 43427

List Number: 1

List Source: TestAmerica Tampa

Creator: McNulty, Carol

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

