Dept. of Environmenta

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SEP 04 2008

SW PAUL DELL

Southwest District



ANALYTICAL DATA REPORT MAY 2008

SOUTHEAST COUNTY LANDFILL SITE HILLSBOROUGH COUNTY, FLORIDA

Hillsborough County
Solid Waste Management Department
Management & Environmental Services Section
P.O. Box 1110
Tampa, Florida 33601

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September 2, 2008

MMY 2008 SAMPUNG EVENT



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September 2, 2008

Mr. John Morris, P.G.
Department of Environmental Protection
Southwest District-Solid Waste Section
13051 Telecom Parkway
Temple Terrace, FL 33637

Re: Southeast County Landfill

Permit Nos. 35435-006-SO, 35435-007-SO

Analytical Data Report - May 2008

Dear Mr. Morris:

In accordance with the above-referenced permits, the Hillsborough County Solid Waste Management Department (SWMD) is pleased to provide the May 2008 analytical data report (ADR) for the water quality monitoring conducted at the Southeast County Landfill (SCLF). The SWMD conducted three separate sampling events to address the permit required sampling activities. Sampling events were conducted on March 27, March 31, and May 19-22, 2008 by the SWMD Field Sampling Team.

Three new surficial aquifer detection wells were installed on March 18-19, 2008 as required under Southeast County Permit No. 35435-011-SC/01 for Section 9, Part E — Water Quality Monitoring Requirements, Specific Condition No. 3. These groundwater monitoring wells were designated as TH-69, TH-70, and TH-71, and the SWMD attempted to collect samples on March 27, 2008. However, it was observed that there was insufficient groundwater in TH-70 and TH-71 to collect representative samples utilizing our dedicated sampling equipment. A sample was collected from TH-69 on that date; however, the screen intervals for these three wells appeared to be too high for the seasonal groundwater elevations along the north side of Section 9.

After reviewing site conditions and speaking directly with you, as the appropriate representative of the Florida Department of Environmental Protection (FDEP), the SWMD and our engineering consultant, Jones Edmunds, proposed to install three deeper replacement wells with more appropriate screen intervals in order to obtain representative groundwater samples in the future. These wells were installed on May 15, 2008, and designated as TH-69A, TH-70A, and TH-71A.

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Upon their installation, these three new wells have been observed to perform very well, and they will be sound down gradient detection monitoring wells for the future sampling events. The groundwater elevations observed support the position that the screen intervals are appropriately placed. There are differences in the elevations from the wells adjacent to one another, and a significant difference in the elevations observed in TH-71 and TH-71A compared to the other wells. Based on these observations, the groundwater elevation contour diagram was prepared without utilizing the data from these wells. The SWMD will continue to evaluate the groundwater elevations in this area before drawing any conclusions regarding these apparent differences in elevation.

The water quality observations and their overall impact to the future groundwater monitoring activities at the SCLF are discussed in parameter specific details herein.

FIELD PARAMETERS

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The surficial aquifer detection and background water quality monitoring wells continue to exhibit pH values below the SDWS acceptable range of 6.5 to 8.5 pH units. The pH values across the site range in value from 4.21 to 6.40 pH units. The pH at the site has historically been observed to be below the acceptable range.

The 1983 Ardaman and Associates, Inc. report titled Hydrogeologic Investigation, Southeast County Landfill, reported pH values ranging from 4.4 to 6.7 pH units in six wells on site. This data was collected prior to construction of the landfill, and supports the position that the pH values observed are consistent with the background water quality for the site. No unusual conditions or changes in the pH values within any of the detection or background monitoring wells or surface water sites were observed during this sampling event.

Turbidity

Turbidity values in the groundwater at the site remain consistent with the historical data set. The range of values observed in the surficial aquifer were 0.6 to 243 nephelometric turbidity units (NTU). It should be noted that recent earth work and construction activities have been occurring at the site, and may have influenced turbidity values near these specific areas. In accordance with the April 3, 2003 Approval of Corrective Action Plan letter from the Florida Department of Environmental Protection (FDEP), the SWMD has recorded turbidity data at the three sampling points along the tributary to Long Flat Creek after each significant rainfall event. Over the period of record from March 2008 to May 2008, turbidity measurements were observed below the compliance level of 29 NTU above the background (upstream) value. However, during this compliance sampling event, surface water locations Mine Cut #1 and Surface Site 3A exhibited turbidity levels of 364 and 60.2 NTU, respectively. Surface site 3A is the upstream location in the tributary to Long Flat Creek, and represents water quality entering the SCLF property. The downstream discharge Surface Site 3C2 was observed at 2.5 NTU indicating that the turbidity was significantly reduced between the upstream point and the discharge point.

GENERAL PARAMETERS

Radium 226

The Weeks' private supply well exhibited concentrations of radium 226 at 12.1 picocuries per liter (pCi/l), which is above the Primary Drinking Water Standard (PDWS) of 5 pCi/l. This supply well periodically exhibits radium 226 above the PDWS. No unusual conditions or changes in radium 226 values were observed during this sampling event, and the home owner has been appropriately notified of this condition. The detection of this radiological parameter in the Weeks' private supply well is not readily attributable to the landfill operations, and as previously discussed, is likely attributable to the past strip mining activities in the area.

Dissolved Oxygen

Dissolved oxygen was observed below the surface water standard of > than or = to 5 mg/l in two of the four surface water sampling locations. Surface water sampling locations Surface Site 3A and Surface Site 3B2B exhibited concentrations of 3.66 mg/l and 4.11 mg/l. Again, the surface water sampling site 3A is the upstream location in the tributary to Long Flat Creek and is representative of water quality entering the SCLF site. The dissolved oxygen concentration observed at the discharge point 3C2 was 5.6 mg/l, which indicates the site is not discharging surface water low in dissolved oxygen.

Fecal Coliform

Three of the four surface water sampling locations exhibited concentrations of fecal coliform above the MCL of 800 colonies per 100 milliliter (col/100ml). Concentrations observed at surface water sampling points Mine Cu t#1, 3B2B, and 3C2 were observed at 2,200, 12,000, and 4,200 col/100ml. The SWMD believes that the presence of coliform in the surface waters at these elevated concentrations is likely attributable to the numerous birds that frequent the landfill area on a daily basis.

METALS

Arsenic

Arsenic was observed above the PDWS of 0.01 mg/l in one surficial aquifer detection monitoring wells during this sampling event. Detection well TH-58 exhibited a concentration of 0.028 mg/l. The SWMD does not believe that the arsenic observed in this well is attributable to the buried waste within the landfill. The mobilization of arsenic and other metals in the anaerobic environments under the lined landfill has been discussed as a potential source of arsenic. The concentrations could also be naturally occurring within the soils surrounding this well and other localized areas at the site.

Iron

Iron concentrations in sixteen (16) of eighteen (18) surficial aquifer detection and background water quality monitoring wells were observed above the SDWS of 0.3 mg/l. The concentrations of iron ranged from 0.048 mg/l to 31 mg/l. The iron concentrations observed in the surficial aquifer wells across the site have historically been elevated in several areas. Several potential

sources for the elevated iron concentrations at the site have been discussed over the past few years, and there may be several factors contributing. However, the SWMD maintains the position that the source of the elevated iron in the surficial aquifer is not the buried wastes within the landfill.

Surface sampling sites 3A and 3B2B exhibited concentrations of iron above the surface water standard of 1 mg/l with concentrations of 4.8 mg/l and 1.4 mg/l. Private supply wells owned by Weeks and Holland exhibited levels of iron above the SDWS with concentrations of 0.58 mg/l and 1.7 mg/l, respectively. These wells consistently exhibit iron above the SDWS. No unusual changes in iron concentrations have been observed within any of the groundwater monitoring wells, surface water sampling locations, and private supply wells during this event.

VOLATILE ORGANIC CONSTITUENTS

Bis (2-ethylhexyl) phthalate

Bis (2-ethylhexyl) phthalate was observed exceeding the PDWS of 6 mg/l in two surficial aquifer detection monitoring wells during this sampling event. Detection wells TH-69 and TH-71 indicated concentrations of 8 mg/l and 15 mg/l, respectively. Additionally, one of the other new wells, TH-61A exhibited this constituent at a concentration below the PDWS. After careful review of the data, it appeared that the detections were only observed in the new groundwater monitoring wells that were recently installed and sampled in March 2008. The May 2008 sampling event did not confirm the presence of bis(2-ethylhexyl) phthalate in the groundwater. It should also be noted that this parameter has not been observed at the SCLF over the period of record.

CONCLUSIONS

Overall, the water quality at the Southeast County Landfill and surrounding areas remains consistent with the historical data set for the site. The groundwater within the surficial aquifer continues to exhibit concentrations of iron and pH values that are not within their applicable standards, but these constituents have been attributed to past mining activities and the landfill construction at the site. Arsenic concentrations exceeding the standard were observed in TH-58, but the water quality impacts at this location is believed to be a result of the mobilization of naturally occurring arsenic in the anaerobic environment under the landfill. Surface water quality exhibits some minor concerns with pH, dissolved oxygen, turbidity, iron, and fecal coliform. However these observations reflect the historical data set for the surface water sampling sites. The detections of coliform bacteria in the surface waters at the site is likely attributable to the numerous birds that frequent the landfill area on a daily basis. The Floridan aquifer monitoring wells continues to exhibit water quality within all applicable standards, and the private supply wells do not appear to exhibit any impacts attributable to the landfill.

Enclosed for your review is a detailed site location map, the data summary tables for the groundwater monitoring wells, the surface water sites, and the private supply wells. Additionally, this report provides the groundwater elevation data summary table, a surficial

aquifer groundwater elevation and contour diagram, the required turbidity data summary table, copies of the letters sent to the owners of the private supply wells, and the complete laboratory analytical data report sheets. The next quarterly sampling event for the Southeast County Landfill site was conducted during the week of August, 25-29, 2008.

Should you have any questions, require any additional information, or would like to discuss the information provided within this submittal, please feel free to contact me at (813) 276-2944 or via e-mail at adamsds@hillsboroughcounty.org.

> David S. Adams, P.G. Environmental Manager

Solid Waste Management

DSA/mdt

Enclosures

Barry M. Boldissar, Director, SWMD, w/o enclosures Patricia Berry, Section Manager, SWMD, w/o enclosures Ernest Ely, Landfill Manager, WM, Southeast Landfill Larry Ruiz, Project Manager, SWMD Jason Timmons, Jones Edmunds Chongman Lee, Florida Department of Environmental Protection Andy Schipfer, Environmental Protection Commission Irene Barnes, Southeast Hillsborough Civic Association

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Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

	DEP Form #_62-522.900(2)
	Form Title <u>Ground Water Monitoring</u> <u>Report</u>
	Effective Date
i	DEP Application No

Dept. of Environmental GROUND WATER MONITORING REPORT Protection

Rule 62-522.600(11)

PART I GENER	L INFORMATION		SEP	⁰ 4 2008
1) Facility N	ne SOUTHEAST LANDFILL			
Address	15960 C. R. 672	S	outhwe	est District
City	ITHIA, FL	Zip	33503	
	umber (813) 671-7707			
(2) The GMS	entification Number 4029C30075			
3) DEP Perm	Number35435-006-SO & 35435-012-SO/MM			
(4) Authorize	Representative Name BARRY M. BOLDISSAR, DIRECTOR, SOLI	O WASTE M	ANAGEMEN [®]	T DEPT
Address	P O BOX 1110		*	
City	TAMPA, FLORIDA		Zip	33601
Telephone	umber <u>(813) 276-2900</u>			
) (5) Type of Di	harge GROUNDWATER – POTENTIAL ONLY			
3) Method of I	schargeLANDFILL			
all attachments tḥat the informa	Certification alty of law that I have personally examined and am familiar with the inform of that, based on my inquiry of those individuals immediately responsible in is true, accurate, and complete. I am aware that there are significant pribility of fine and imprisonment.	for obtaining	the informat	ion, I believe
	Signature of Owner	er or Authoriz	zed Represen	tative
PART II QUALIT	ASSURANCE REQUIREMENTS			
l jample Organiz	ion Comp QAP #			
Analytical Lab	Comp QAP # /HRS Certification #			,
	*Comp QAP # /HRS Certification #			
ab Name	TEST AMERICA LABORATORIES, INC.	· - · · ·		
ddress	12 BENJAMIN ROAD, SUITE 100, TAMPA, FL 33634			
Phone Number	13) 885-7427			

Analytical Results from Private Well Samples at the Southeast Landfill May 19, 2008

GENERAL (mg/l)	P	rivate Wells	5	(MCL) STANDARD
PARAMETERS	Weeks	Holland	Barnes	F.A.C. 62-550
conductivity (umhos/cm) (field)	326	188 -	232 -	NS
dissolved oxygen (mg/l) (field)	0.61	0.06	2.86	NS
pH (field)	6.92 .	6.96	7.26	(6.5 - 8.5)**
temperature (°C) (field)	23.77	24.17	24.02	NS
turbidity (NTU) (field)	2.1	0.2	0.3	NS
total dissolved solids (mg/l)	310 ·	200 .		500**
total suspended solids (mg/l)	BDL	BDL	BDL	NS
total organic carbon (mg/l)	3.1	1.6	2.2	NS
chloride (mg/l)	34	19	8.5	250**
ammonia nitrogen (mg/l as N)	0.19	0.065	0.13	NS
nitrate (mg/l as N)	BDL .	BDL	0.13	10*
total alpha (pCi/l)	12.3	3.9 .	3.4	15*
radium 226 (pCi/l)	12.1	2.5	3.6	5*
radium 228 (pCi/l)	0.8	0.8	0.0	5*
adidili 220 (pci/i)	0.0	0.0	0.0	·:::::::::::::::::::::::::::::::::::::
		rivate Wells		(MCL) STANDARD
Metals: (mg/l)	Weeks	Holland	Barnes	(MCL) STANDARD F.A.C. 62-550
iron	0.74	1.6	BDL ·	0.3**
chromium	BDL ·			0.2
		000	BDL ·	140***
cobalt	BDL	BDL	BDL	1**
copper parium	BDL 0.0049	BDL	BDL	
		0.0043 ·	0.005	2*
arsenic	0.0058		BDL ·	0.01*
lead	0.0034		000	0.015*
sodium	8.7 .	5.6	16 .	160*
mercury	BDL ·	BDL ·	BDL ·	0.002
zinc	0.14	0.029	0.1	5**
antimony	BDL ·	BDL ·	BDL -	0.006*
nickel	BDL '	0.0058	BDL '	0.1*
Organics: (μg/I)		rivate Wells		(MCL) STANDARD
Organic Parameters Detected	Weeks	Holland	Barnes	F.A.C. 62-550
odomethane	0.2	0.24	0.23	NS
methylene chloride	0.19	0.18	0.16	5*
1,1-dichloroethene	BDL -	BDL ′	BDL	7*
Notes: Reference Groundwater Guid	ance Concentr	rations FDF	P June 100/	1
NS=NO STANDARD	ando concenti	ations, I DL	. Julie 1995	T
MCL=MAXIMUM CONTAMINANT LE	EVEL			
BDL=BELOW DETECTION LIMIT				
=DENOTES PRIMARY DRINKING \	NATER STAN	DARD		
*=DENOTES SECONDARY DRINK				
12.1	: EXCEEDS		19	
NTU=NEPHELOMETRIC TURBIDIT		STANDARL	13	
	TUNITS			
OCI/I=PICOCURIES PER LITER				
ug/I=MICROGRAMS PER LITER				

FinalQC: David Adams



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September 2, 2008

Mr. Howard Barnes P.O. Box 108 Lithia, FL 33547

Subject: Analytical Data
Domestic Supply Well
17502 County Road 672

Dear Mr. Barnes:

The Hillsborough County Solid Waste Management Department (SWMD) is pleased to provide the analytical data for your domestic supply well which was sampled on May 19, 2008. All parameters tested are within Florida Primary and Secondary Drinking Water Standards (FAC Ch 62-550.310-.320).

If you have any questions on the analysis, you may call me at 276-2955. Thank you for permission to test this well.

Sincerely,

9/2/2008

Michael D. Townsel Senior Hydrologist

Solid Waste Management Department

mdt

Enclosures

xc: Irene Barnes, Southeast Hillsborough Civic Association Cindy Morris, Hillsborough County Health Department



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September 2, 2008

Mr. Tom Holland 121 Carter Road Lithia, FL 33547

Subject: Analytical Data

Domestic Supply Well 121 Carter Road

Dear Mr. Holland:

The Hillsborough County Solid Waste Management Department (SWMD) is pleased to provide the analytical data for your domestic supply well which was sampled on May 19, 2008. Iron was observed at a concentration of 1.6 mg/l which is above the Florida Secondary Drinking Water Standard (FAC Ch 62-550.320) of 0.3 mg/l. All other parameters are within Primary and Secondary Drinking Water Standards (FAC Ch 62-550.310-.320).

For health effects information you may call the Hillsborough County Health Department at (813) 307-8001. If you have any questions on the analysis, you may call me at 276-2955. Thank you for your permission to test this well.

Sincerely,

9/2/2008

Michael D. Townsel Senior Hydrologist

Solid Waste Management Department

mdt

Enclosures

xc: Irene Barnes, Southeast Hillsborough Civic Association Cindy Morris, Hillsborough County Health Department



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September 2, 2008

Mr. & Mrs. Harold Weeks 116 Wendel Ave. Lithia, FL 33547

Subject: Analytical Data
Domestic Supply Well
116 Wendel Ave.

Dear Mr. & Mrs. Weeks:

The Hillsborough County Solid Waste Management Department (SWMD) is pleased to provide the analytical data for your domestic supply well which was sampled on May 19, 2008. Iron was observed at a concentration of 0.74 mg/l. This value exceeds the Florida Secondary Drinking Water Standard (FAC Ch 62-550.320) of 0.3 mg/l. Radium 226 was observed at a concentration of 12.1 pCi/l, respectfully. This value exceeds the Florida Primary Drinking Water Standards (FAC Ch 62-550.310) of 5 pCi/l. All other parameters tested are within Florida Primary and Secondary Drinking Water Standards (FAC Ch 62-550.310-.320).

For health effects information you may call the Hillsborough Health Department at (813) 307-8001. If you have any questions on the analysis, you may call me at 276-2955. Thank you for your permission to test this well.

Michael D. Townsel Senior Hydrologist

Sincerely

Solid Waste Management Department

912/2008



Client Sample ID: Holland Lab Sample ID: 660-23021-1 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1105 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier		Unit	MDL	PQL	Dilution
Method: 8260B			Date A	nalyzed: 06/01	1/2008 1710	
Prep Method: 5030B			Date P	repared: 06/01	1/2008 1710	
Acetone	1.8	U	ug/L	1.8	25	1.0
Acrylonitrile	2.5	U	ug/L	2.5	20	1.0
Benzene	0.18	U	ug/L	0.18	1.0	10
Bromoform	0.29	U	ug/L	0.29	1.0	1.0
Bromomethane	0.24	U J3	ug/L	0.24	1.0	1.0
2-Butanone (MEK)	1.8	U	ug/L	1.8	10	1.0
Carbon disulfide	0.13	U	ug/L	0.13	1.0	1.0
Carbon tetrachloride	0.15	U	ug/L	0.15	1.0	1.0
Chlorobenzene	0.18	U	ug/L	0.18	1.0	1.0
Chlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
Chlorodibromomethane	0.20	U	ug/L	0.20	1.0	1.0
Chloroethane	0.32	U	ug/L	0.32	10	1.0
Chloroform	0.094	U	ug/L	0.094	1.0	1.0
Chloromethane	0.26	U	ug/L	0.26	1.0	1.0
cis-1,2-Dichloroethene	0.17	U	ug/L	0.17	1.0	1.0
cis-1,3-Dichloropropene	0.24	U	ug/L	0.24	1.0	1.0
Dibromomethane	0.28	U	ug/L	0.28	1.0	1.0
1,4-Dichlorobenzene	0.18	U	ug/L	0.18	1.0	1.0
1,2-Dichlorobenzene	0.17	U	ug/L	0.17	1.0	1.0
Dichlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
1,1-Dichloroethane	0.10	U	ug/L	0.10	1.0	1.0
1,2-Dichloroethane	0.28	U	ug/L	0.28	1.0	1.0
1,1-Dichloroethene	0.11	U	ug/L	0.11	1.0	1.0
1,2-Dichloropropane	0.14	U	ug/L	0.14	1.0	1.0
Ethylbenzene	0.16	U	ug/L	0.16	1.0	1.0
2-Hexanone	1.7	U	ug/L	1.7	10	1.0
lodomethane	0.24	ĪV	ug/L	0.063	5.0	1.0
Methylene Chloride	0.18	i	ug/L	0.096	5.0	1.0
4-Methyl-2-pentanone (MIBK)	2.2	U	ug/L	2.2	10	1.0
Styrene	0.18	Ū	ug/L	0.18	1.0	1.0
1,1,1,2-Tetrachloroethane	0.16	Ū	ug/L	0.16	1.0	1.0
1,1,2,2-Tetrachloroethane	0.19	Ü	ug/L	0.19	1.0	1.0
Tetrachloroethene	0.28	Ü	ug/L	0.28	1.0	1.0
Toluene	0.19	U	ug/L	0.19	1.0	1.0
trans-1,4-Dichloro-2-butene	0.58	U	ug/L	0.58	2.0	1.0
trans-1,2-Dichloroethene	0.19	U	ug/L	0.19	1.0	1.0
trans-1,3-Dichloropropene	0.13	U	ug/L ug/L	0.13	1.0	1.0
1,1,1-Trichloroethane	0.13	U	ug/L ug/L	0.18	1.0	1.0
1,1,2-Trichloroethane	0.18	U	ug/L ug/L	0.18	1.0	1.0



Client Sample ID: Holland Lab Sample ID: 660-23021-1 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1105 Date Received: 05/19/2008 1445

Analyte	Result/Qua	alifier	Unit	MDL	PQL	Dilution
Trichloroethene	0.069	U	ug/L	0.069	1.0	1.0
Trichlorofluoromethane	0.16	U	ug/L	0.16	1.0	1.0
1,2,3-Trichloropropane	0.31	U	ug/L	0.31	1.0	1.0
Vinyl acetate	0.23	U	ug/L	0.23	2.0	1.0
Vinyl chloride	0.16	U	ug/L	0.16	1.0	1.0
Xylenes, Total	0.36	U	ug/L	0.36	2.0	1.0
Surrogate				Acc	eptance Limits	;
Dibromofluoromethane	97		%		83 - 123	
Toluene-d8 (Surr)	97		%		78 - 126	
4-Bromofluorobenzene	80		%		70 - 119	
Method: 8011			Date A	nalyzed: 05/29	9/2008 1640	
Prep Method: 8011			Date P	repared: 05/29	9/2008 1330	
1,2-Dibromo-3-Chloropropane	0.010	U	ug/L	0.010	0.020	1.0
Ethylene Dibromide	0.0088	U	ug/L	0.0088	0.020	1.0
Method: Total Recoverable-6020			Date A	nalyzed: 05/23	3/2008 2137	
Prep Method: 3005A			Date P	repared: 05/22	2/2008 1558	
Silver	1.9	U	ug/L	1.9	10	1.0
Arsenic	4.8	U	ug/L	4.8	10	1.0
Barium	4.3	1	ug/L	1.2	10	1.0
Beryllium	0.74	U	ug/L	0.74	4.0	1.0
Cadmium	0.71	U	ug/L	0.71	5.0	1.0
Cobalt	1.4	U	ug/L	1.4	10	1.0
Chromium	1.7	U	ug/L	1.7	10	1.0
Copper	2.9	U	ug/L	2.9	20	1.0
Iron	1600		ug/L	39	100	1.0
Sodium	5.6		mg/L	0.15	0.50	1.0
Nickel	5.8	1	ug/L	4.7	40	1.0
Lead	1.6	Ū	ug/L	1.6	5.0	1.0
Antimony	2.9	Ū	ug/L	2.9	6.0	1.0
Selenium	5.9	U	ug/L	5.9	10	1.0
Thallium	0.50	U	ug/L	0.50	1.0	1.0
Vanadium	2.5	Ū	ug/L	2.5	5.0	1.0
Zinc	29	_	ug/L	5.9	20	1.0
Method: 7470A			Date A	nalyzed: 05/23	3/2008 1816	
Prep Method: 7470A					2/2008 1228	
Mercury	0.080	U	ug/L	0.080	0.20	1.0
Method: 300.0			Date A	nalyzed: 06/03	3/2008 2058	
Chloride	19		mg/L	2.0	5.0	1.0
Official	13		mg/L	۷.0	5.0	1.0



Client Sample ID: Holland Lab Sample ID: 660-23021-1 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1105 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution	
Method: 350.1	thod: 350.1			2008 1219		
Ammonia	0.065	mg/L	0.00075	0.020	1.0	
Method: 353.2		Date A	nalyzed: 05/21/	2008 0820		
Nitrate as N	0.10 U	mg/L	0.10	0.50	1.0	
Method: SM 5310C		Date Analyzed: 05/31/2008 0929				
Total Organic Carbon	1.6	mg/L	0.53	1.0	1.0	



Client Sample ID: Holland Lab Sample ID: 660-23021-1 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1105 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	NON	E NONE	Dilution
Method: Field Sampling		Date Analy	yzed:	05/21/2008 1304	
Field pH	6.96	SU			1.0
Field Temperature	24.17	Degrees C			1.0
Oxygen, Dissolved	0.06	mg/L			1.0
Specific Conductance	188	umhos/cm			1.0
Turbidity	0.2	NTU			1.0



Client Sample ID: Holland Lab Sample ID: 660-23021-1 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1105 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	PQL	PQL	Dilution
Method: SM 2540C		Date A	nalyzed:	05/21/2008 0827	
Total Dissolved Solids	200	mg/L	5.0	5.0	1.0
Method: SM 2540D		Date A	nalyzed:	05/21/2008 1358	
Total Suspended Solids	5.0 U	mg/L	5.0	5.0	1.0

<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING



2742 N. Florida Ave. P.O. Box 1833 Tampa, Florida 33601 (813) 229-2879 Fax (813) 229-0002

TestAmerica-Tampa 6712 Benjamin Road Tampa, FL 33634

Attn: Dr. Shibu Paul

DOH Certification #E84025 DEP COMPQAP # 870251

Report Date: June 4, 2008

Field Custody:

Client

Client/Field ID:

660-23021-1

Holland

Sample Collection:

5-19-08

Lab ID No:

G8.4497

Lab Custody Date:

5-21-08

Sample description:

Water

CERTIFICATE OF ANALYSIS

					Analysis	3	Detection
Parameter	Units	Re	esul	ts	Date	Method	Limit
Gross Alpha	pCi/l	3.9	±	0.7	05-28-08/0800	EPA 900.0	0.7
Radium-226	pCi/l	2.5	#	1,1	05-30-08/1245	EPA 903.0	1.3
Radium-228	pci/1	0.8	±	0.8	05-30-08/1130	EPA Ra-05	1.0

James W. Hayes

James W. Hayes Laboratory Manager

Test results meet all requirements of NELAC standards. Contact person: Jim Hayes (813) 229-2879.

Page 1 of 1



Client Sample ID: Barnes Lab Sample ID: 660-23021-2 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1150 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier		Unit	MDL	PQL	Dilution
Method: 8260B			Date A	nalyzed: 06/0	1/2008 1742	
Prep Method: 5030B			Date P	repared: 06/0	1/2008 1742	
Acetone	1.8	U	ug/L	1.8	25	1.0
Acrylonitrile	2.5	U	ug/L	2.5	20	1.0
Benzene	0.18	U	ug/L	0.18	1.0	1.0
Bromoform	0.29	U	ug/L	0.29	1.0	1.0
Bromomethane	0.24	U J3	ug/L	0.24	1.0	1.0
2-Butanone (MEK)	1.8	U	ug/L	1.8	10	1.0
Carbon disulfide	0.13	U	ug/L	0.13	1.0	1.0
Carbon tetrachloride	0.15	U	ug/L	0.15	1.0	1.0
Chlorobenzene	0.18	U	ug/L	0.18	1.0	1.0
Chlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
Chlorodibromomethane	0.20	U	ug/L	0.20	1.0	1.0
Chloroethane	0.32	U	ug/L	0.32	1.0	1.0
Chloroform	0.094	U	ug/L	0.094	1.0	1.0
Chloromethane	0.26	U	ug/L	0.26	1.0	1.0
cis-1,2-Dichloroethene	0.17	U	ug/L	0.17	1.0	1.0
cis-1,3-Dichloropropene	0.24	U	ug/L	0.24 .	1.0	1.0
Dibromomethane	0.28	U	ug/L	0.28	1.0	1.0
1,4-Dichlorobenzene	0.18	U	ug/L	0.18	1.0	1.0
1,2-Dichlorobenzene	0.17	U	ug/L	0.17	1.0	1.0
Dichlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
1,1-Dichloroethane	0.10	U	ug/L	0.10	1.0	1.0
1,2-Dichloroethane	0.28	U	ug/L	0.28	1.0	1.0
1,1-Dichloroethene	0.11	U	ug/L	0.11	1.0	1.0
1,2-Dichloropropane	0.14	U	ug/L	0.14	1.0	1.0
Ethylbenzene	0.16	U	ug/L	0.16	1.0	1.0
2-Hexanone	1.7	U	ug/L	1.7	10	1.0
lodomethane	0.23	IV	ug/L	0.063	5.0	1.0
Methylene Chloride	0.16	ı	ug/L	0.096	5.0	1.0
4-Methyl-2-pentanone (MIBK)	2.2	Ū	ug/L	2.2	10	1.0
Styrene	0.18	U	ug/L	0.18	1.0	1.0
1,1,1,2-Tetrachloroethane	0.16	U	ug/L	0.16	1.0	1.0
1,1,2,2-Tetrachloroethane	0.19	Ū	ug/L	0.19	1.0	1.0
Tetrachloroethene	0.28	Ū	ug/L	0.28	1.0	1.0
Toluene	0.19	Ū	ug/L	0.19	1.0	1.0
trans-1,4-Dichloro-2-butene	0.58	Ü	ug/L	0.58	2.0	1.0
trans-1,2-Dichloroethene	0.19	Ü	ug/L	0.19	1.0	1.0
trans-1,3-Dichloropropene	0.13	Ü	ug/L	0.13	1.0	1.0
1,1,1-Trichloroethane	0.18	U	ug/L	0.18	1.0	1.0
1,1,2-Trichloroethane	0.21	Ü	ug/L	0.21	1.0	1.0



Client Sample ID: Barnes Lab Sample ID: 660-23021-2 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1150 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier		Unit	MDL	PQL	Dilution
Trichloroethene	0.069	U	ug/L	0.069	1.0	1.0
Trichlorofluoromethane	0.16	U	ug/L	0.16	1.0	1.0
1,2,3-Trichloropropane	0.31	U	ug/L	0.31	1.0	1.0
Vinyl acetate	0.23	U	ug/L	0.23	2.0	1.0
Vinyl chloride	0.16	U	ug/L	0.16	1.0	1.0
Xylenes, Total	0.36	U	ug/L	0.36	2.0	1.0
Surrogate				Ac	ceptance Limits	
Dibromofluoromethane	98		%		83 - 123	
Toluene-d8 (Surr)	97		%		78 - 126	
4-Bromofluorobenzene	82		%		70 - 119	
Method: 8011			Date A	nalyzed: 05/2	29/2008 1750	
Prep Method: 8011			Date Pi	repared: 05/2	9/2008 1330	
1,2-Dibromo-3-Chloropropane	0.010	U	ug/L	0.010	0.021	1.0
Ethylene Dibromide	0.0090	U	ug/L	0.0090	0.021	1.0
Method: Total Recoverable-6020			Date A	nalyzed: 05/2	23/2008 2211	
Prep Method: 3005A			Date Pr	repared: 05/2	2/2008 1558	
Silver	1.9	U	ug/L	1.9	10	1.0
Arsenic	4.8	U	ug/L	4.8	10	1.0
Barium	5.0	ı	ug/L	1.2	10	1.0
Beryllium	0.74	U	ug/L	0.74	4.0	1.0
Cadmium	0.71	U	ug/L	0.71	5.0	1.0
Cobalt	1.4	U	ug/L	1.4	10	1.0
Chromium	1.7	U	ug/L	1.7	10	1.0
Copper	2.9	U	ug/L	2.9	20	1.0
Iron	39	U	ug/L	39	100	1.0
Sodium	16		mg/L	0.15	0.50	1.0
Nickel	4.7	U	ug/L	4.7	40	1.0
Lead	1.6	U	ug/L	1.6	5.0	1.0
Antimony	2.9	U	ug/L	2.9	6.0	1.0
Selenium	5.9	U	ug/L	5.9	10	1.0
Thallium	0.50	U	ug/L	0.50	1.0	1.0
Vanadium	2.5	U	ug/L	2.5	5.0	1.0
Zinc	100		ug/L	5.9	20	1.0
Method: 7470A			Date Ar	nalyzed: 05/2	3/2008 1825	
Prep Method: 7470A					2/2008 1228	
Mercury	0.080	U	ug/L	0.080	0.20	1.0
Method: 300.0			Date Ar	nalyzed: 06/0	3/2008 2135	
Chloride	8.5		mg/L	2.0	5.0	1.0



Client Sample ID: Barnes Lab Sample ID: 660-23021-2 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1150 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 350.1		Date A	nalyzed: 06/02/	2008 1220	
Ammonia	0.13	mg/L	0.00075	0.020	1.0
Method: 353.2		Date A	nalyzed: 05/21/	2008 0820	
Nitrate as N	0.13 I	mg/L	0.10	0.50	1.0
Method: SM 5310C		Date A	nalyzed: 05/31/	2008 1058	
Total Organic Carbon	2.2	mg/L	0.53	1.0	1.0



Client Sample ID: Barnes Lab Sample ID: 660-23021-2 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1150 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	NONE	NONE	Dilution
Method: Field Sampling		Date Analy	zed: 05/	/21/2008 1304	
Field pH	7.26	SU			1.0
Field Temperature	24.02	Degrees C			1.0
Oxygen, Dissolved	2.86	mg/L			1.0
Specific Conductance	232	umhos/cm			1.0
Turbidity	0.3	NTU			1.0



Client Sample ID: Barnes Lab Sample ID: 660-23021-2 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1150 Date Received: 05/19/2008 1445

Analyte	Result/Qualifie	r Unit	PQL	PQL	Dilution
Method: SM 2540C Total Dissolved Solids	230	Da mg/L	ate Analyzed: 5.0	05/21/2008 0828 5.0	1.0
Method: SM 2540D Total Suspended Solids	5.0 U		ate Analyzed: 5.0	05/21/2008 1400 5.0	1.0



THE LEADER IN ENVIRONMENTAL TESTING



LABORATORY SERVICES

2742 N. Florida Ave. P.O. Box 1833 Tampa, Florida 33601 (813) 229-2879 Fax (813) 229-0002 TestAmerica-Tampa

6712 Benjamin Road Tampa, FL 33634

Attn: Dr. Shibu Paul

DOH Certification #E84025 DEP COMPQAP # 870251

Report Date: June 4, 2008

Field Custody:

Client

Client/Field ID:

660-23021-2

Barnes

Sample Collection:

5-19-08

Lab ID No:

08.4498

Lab Custody Date:

5-21-08

Sample description:

Water

CERTIFICATE OF ANALYSIS

					Analysis	1	Detection
Parameter	Units	Re	sul	ts	Date	Method	Limit
Gross Alpha	pCi/l	3.4	±	0.6	05-28-08/0800	EPA 900.0	0.7
Radium-226	pCi/l	3.6	±	1.2	05-30-08/1245	EPA 903.0	1.1
Radium-228	.pCi/l	0.0	±	0.7	05-30-08/1130	EPA Ra-05	1.0

Jamu W. Hages

James W. Hayes Laboratory Manager

Test results meet all requirements of NELAC standards. Contact person: Jim Hayes (813) 229-2879.

Page 1 of 1



Client Sample ID: Weeks Lab Sample ID: 660-23021-3 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1025 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier		Unit	MDL	PQL	Dilution	
Method: 8260B			Date A	nalyzed: 06/01	1/2008 1813		
Prep Method: 5030B			Date Prepared: 06/01/2008 1813				
Acetone	1.8	U	ug/L	1.8	25	1.0	
Acrylonitrile	2.5	U	ug/L	2.5	20	1.0	
Benzene	0.18	U	ug/L	0.18	1.0	1.0	
Bromoform	0.29	U	ug/L	0.29	1.0	1.0	
Bromomethane	0.24	U J3	ug/L	0.24	1.0	1.0	
2-Butanone (MEK)	1.8	U	ug/L	1.8	10	1.0	
Carbon disulfide	0.13	U	ug/L	0.13	1.0	1.0	
Carbon tetrachloride	0.15	U	ug/L	0.15	1.0	1.0	
Chlorobenzene	0.18	U	ug/L	0.18	1.0	1.0	
Chlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0	
Chlorodibromomethane	0.20	U	ug/L	0.20	1.0	1.0	
Chloroethane	0.32	U	ug/L	0.32	1.0	1.0	
Chloroform	0.094	U	ug/L	0.094	1.0	1.0	
Chloromethane	0.26	U	ug/L	0.26	1.0	1.0	
cis-1,2-Dichloroethene	0.17	U	ug/L	0.17	1.0	1.0	
cis-1,3-Dichloropropene	0.24	U	ug/L	0.24	1.0	1.0	
Dibromomethane	0.28	U	ug/L	0.28	1.0	1.0	
1,4-Dichlorobenzene	0.18	U	ug/L	0.18	1.0	1.0	
1,2-Dichlorobenzene	0.17	U	ug/L	0.17	1.0	1.0	
Dichlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0	
1,1-Dichloroethane	0.10	U	ug/L	0.10	1.0	1.0	
1,2-Dichloroethane	0.28	U	ug/L	0.28	1.0	1.0	
1,1-Dichloroethene	0.11	U	ug/L	0.11	1.0	1.0	
1,2-Dichloropropane	0.14	Ū	ug/L	0.14	1.0	1.0	
Ethylbenzene	0.16	Ū	ug/L	0.16	1.0	1.0	
2-Hexanone	1.7	Ü	ug/L	1.7	10	1.0	
lodomethane	0.20	ĪV	ug/L	0.063	5.0	1.0	
Methylene Chloride	0.19	j	ug/L	0.096	5.0	1.0	
4-Methyl-2-pentanone (MIBK)	2.2	Ü	ug/L	2.2	10	1.0	
Styrene	0.18	Ü	ug/L	0.18	1.0	1.0	
1,1,1,2-Tetrachloroethane	0.16	Ü	ug/L	0.16	1.0	1.0	
1,1,2,2-Tetrachloroethane	0.19	Ü	ug/L	0.19	1.0	1.0	
Tetrachloroethene	0.28	Ü	ug/L	0.28	1.0	1.0	
Toluene	0.19	Ü	ug/L	0.19	1.0	1.0	
trans-1,4-Dichloro-2-butene	0.58	U	ug/L	0.58	2.0	1.0	
trans-1,2-Dichloroethene	0.19	U	ug/L ug/L	0.19	1.0	1.0	
trans-1,3-Dichloropropene	0.13	U	ug/L	0.13	1.0	1.0	
1,1,1-Trichloroethane	0.18	U	ug/L ug/L	0.18	1.0	1.0	
1,1,2-Trichloroethane	0.21	U	ug/L ug/L	0.21	1.0	1.0	



Client Sample ID: Weeks Lab Sample ID: 660-23021-3 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1025 Date Received: 05/19/2008 1445

Analyte	Result/Qua	alifier	Unit	MDL	PQL	Dilution
Trichloroethene	0.069	U	ug/L	0.069	10	1.0
Trichlorofluoromethane	0.16	U	ug/L	0.16	1.0	1.0
1,2,3-Trichloropropane	0.31	U	ug/L	0.31	1.0	1.0
Vinyl acetate	0.23	U	ug/L	0.23	2.0	1.0
Vinyl chloride	0.16	U	ug/L	0.16	1.0	1.0
Xylenes, Total	0.36	U	ug/L	0.36	2.0	1.0
Surrogate				Acc	eptance Limits	
Dibromofluoromethane	98		%		83 - 123	
Toluene-d8 (Surr)	101		%		78 - 126	
4-Bromofluorobenzene	81		%		70 - 119	
Method: 8011			Date A	nalyzed: 05/29	9/2008 1837	
Prep Method: 8011			Date P	repared: 05/2	9/2008 1330	
1,2-Dibromo-3-Chloropropane	0.010	U	ug/L	0.010	0.020	1.0
Ethylene Dibromide	0.0089	U	ug/L	0.0089	0.020	1.0
Method: Total Recoverable-6020			Date A	nalyzed: 05/23	3/2008 2218	
Prep Method: 3005A				•	2/2008 1558	
Silver	1.9	U	ug/L	1.9	10	1.0
Arsenic	5.8	ı	ug/L	4.8	10	1.0
Barium	4.9	J	ug/L	1.2	10	1.0
Beryllium	0.74	U	ug/L	0.74	4.0	1.0
Cadmium	0.71	Ū	ug/L	0.71	5.0	1.0
Cobalt	1.4	U	ug/L	1.4	10	1.0
Chromium	1.7	U	ug/L	1.7	10	1.0
Copper	2.9	U	ug/L	2.9	20	1.0
Iron	740	_	ug/L	39	100	1.0
Sodium	8.7		mg/L	0.15	0.50	1.0
Nickel	4.7	U	ug/L	4.7	40	1.0
Lead	3.4	ī	ug/L	1.6	5.0	1.0
Antimony	2.9	Ü	ug/L	2.9	6.0	1.0
Selenium	5.9	Ü	ug/L	5.9	10	1.0
Thallium	0.50	Ü	ug/L	0.50	1.0	1.0
Vanadium	2.5	Ü	ug/L	2.5	5.0	1.0
Zinc	140	J	ug/L	5.9	20	1.0
Method: 7470A			<u>-</u>	nalyzed: 05/23	3/2008 1828	
Prep Method: 7470A				-	2/2008 1828	
Mercury	0.080	U		0.080	0.20	1.0
•	0,000	U	ug/L			1.0
Method: 300.0	2.4				3/2008 2148	
Chloride	34		mg/L	2.0	5.0	1.0



Client Sample ID: Weeks Lab Sample ID: 660-23021-3 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1025 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 350.1		Date A	nalyzed: 06/02/	2008 1224	
Ammonia	0.19	mg/L	0.00075	0.020	1.0
Method: 353.2		Date A	nalyzed: 05/21/	2008 0820	
Nitrate as N	0.10 U	mg/L	0.10	0.50	1.0
Method: SM 5310C		Date A	nalyzed: 05/31/	2008 1128	
Total Organic Carbon	3.1	mg/L	0.53	1.0	1.0



Client Sample ID: Weeks Lab Sample ID: 660-23021-3 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1025 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	NON	1E	NONE	Dilution
Method: Field Sampling		Date An	alyzed:	05/21/	/2008 1304	
Field pH	6.92	SU				1.0
Field Temperature	23.77	Degrees C				1.0
Oxygen, Dissolved	0.61	mg/L				1.0
Specific Conductance	326	umhos/cm				1.0
Turbidity	2.1	NTU				1.0



Client Sample ID: Weeks Lab Sample ID: 660-23021-3 Job Number: 660-23021-1

Date Sampled: 05/19/2008 1025 Date Received: 05/19/2008 1445

Analyte	Result/Qualif	ier	Unit	PQL	PQL	Dilution
Method: SM 2540C Total Dissolved Solids	310		Date Ai	nalyzed: 5.0	05/21/2008 0829 5.0	1.0
Method: SM 2540D Total Suspended Solids	5.0	U	J		05/21/2008 1358 5.0	1.0



THE LEADER IN ENVIRONMENTAL TESTING



2742 N. Florida Ave. P.O. Box 1833 Tampa, Florida 33601 (813) 229-2879 Fax (813) 229-0002

TestAmerica-Tampa 6712 Benjamin Road Tampa, FL 33634

Attn: Dr. Shibu Paul

DOH Certification #E84025 DEP COMPQAP # 870251

Report Date: June 4, 2008

Field Custody:

Client

Client/Field ID:

660-23021-3

Weeks

Sample Collection:

5-19-08

Lab ID No:

08.4499

Lab Custody Date:

5-21-08

Sample description:

Water

CERTIFICATE OF ANALYSIS

					Analysis		Detection
Parameter	Units	Results		ts	Date	Method	Limit
Gross Alpha	pCi/l	12.3	±	1.2	05-28-08/0800	EPA 900.0	0.8
Radium-226	pCi/l	12.1	±	3.0	05-30-08/1245	EPA 903.0	2.2
Radium-228 Alpha Standard: Th-230	pCi/l	0.8	±	0.8	05-30-08/1130	EPA Ra-05	1.0

James W. Hages

James W. Hayes Laboratory Manager

Test results meet all requirements of NELAC standards. Contact person: Jim Hayes (813) 229-2879.

Page 1 of 1



Client Sample ID: Equipment Blank Lab Sample ID: 660-23021-4

Job Number: 660-23021-1

Date Sampled: 05/19/2008 0955 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier		Unit	MDL	PQL	Dilutio
Method: 8260B			Date Analyzed: 06/		1/2008 1639	
Prep Method: 5030B			Date P			
Acetone	1.8	U	ug/L	1.8	25	1.0
Acrylonitrile	2.5	U	ug/L	2.5	20	1.0
Benzene	0.18	U	ug/L	0.18	1.0	1.0
Bromoform	0.29	U	ug/L	0.29	1.0	1.0
Bromomethane	0.24	U J3	ug/L	0.24	1.0	1.0
2-Butanone (MEK)	1.8	U	ug/L	1.8	10	1.0
Carbon disulfide	0.13	U	ug/L	0.13	1.0	1.0
Carbon tetrachloride	0.15	U	ug/L	0.15	1.0	1.0
Chlorobenzene	0.18	U	ug/L	0.18	1.0	1.0
Chlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
Chlorodibromomethane	0.20	U	ug/L	0.20	1.0	1.0
Chloroethane	0.32	U	ug/L	0.32	1.0	1.0
Chloroform	0.094	U	ug/L	0.094	1.0	1.0
Chloromethane	0.26	U	ug/L	0.26	1.0	1.0
cis-1,2-Dichloroethene	0.17	U	ug/L	0.17	1.0	1.0
cis-1,3-Dichloropropene	0.24	U	ug/L	0.24	1.0	1.0
Dibromomethane	0.28	U	ug/L	0.28	1.0	1.0
1,4-Dichlorobenzene	0.18	U	ug/L	0.18	1.0	1.0
1,2-Dichlorobenzene	0.17	U	ug/L	0.17	1.0	1.0
Dichlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
1,1-Dichloroethane	0.10	U	ug/L	0.10	1.0	1.0
1,2-Dichloroethane	0.28	U	ug/L	0.28	1.0	1.0
1,1-Dichloroethene	0.11	U	ug/L	0.11	1.0	1.0
1,2-Dichloropropane	0.14	U	ug/L	0.14	1.0	1.0
Ethylbenzene	0.16	U	ug/L	0.16	1.0	1.0
2-Hexanone	1.7	U	ug/L	1.7	10	1.0
lodomethane	0.20	١٧	ug/L	0.063	5.0	1.0
Methylene Chloride	0.58	1	ug/L	0.096	5.0	1.0
4-Methyl-2-pentanone (MIBK)	2.2	U	ug/L	2.2	10	1.0
Styrene	0.18	Ū	ug/L	0.18	1.0	1.0
1,1,1,2-Tetrachloroethane	0.16	Ū	ug/L	0.16	1.0	1.0
1,1,2,2-Tetrachloroethane	0.19	Ū	ug/L	0.19	1.0	1.0
Tetrachloroethene	0.28	Ü	ug/L	0.28	1.0	1.0
Toluene	0.19	Ü	ug/L	0.19	1.0	1.0
trans-1,4-Dichloro-2-butene	0.58	Ü	ug/L	0.58	2.0	1.0
trans-1,2-Dichloroethene	0.19	Ü	ug/L	0.19	1.0	1.0
trans-1,3-Dichloropropene	0.13	Ü	ug/L	0.13	1.0	1.0
1,1,1-Trichloroethane	0.18	U	ug/L	0.18	1.0	1.0
1,1,2-Trichloroethane	0.21	Ü	ug/L	0.21	1.0	1.0



Client Sample ID: Equipment Blank Lab Sample ID: 660-23021-4

Job Number: 660-23021-1

Date Sampled: 05/19/2008 0955 Date Received: 05/19/2008 1445

Analyte	Result/Qua	alifier	Unit	MDL	PQL	Dilution
Trichloroethene	0.069	U	ug/L	0.069	1.0	1.0
Trichlorofluoromethane	0.16	U	ug/L	0.16	1.0	1.0
1,2,3-Trichloropropane	0.31	U	ug/L	0.31	1.0	1.0
Vinyl acetate	0.23	U	ug/L	0.23	2.0	1.0
Vinyl chloride	0.16	U	ug/L	0.16	1.0	1.0
Xylenes, Total	0.36	U	ug/L	0.36	2.0	1.0
Surrogate				Acc	eptance Limits	
Dibromofluoromethane	98		%	***************************************	83 - 123	
Toluene-d8 (Surr)	98		%		78 - 126	
4-Bromofluorobenzene	79		%		70 - 119	
Method: 8011				nalyzed: 05/29	9/2008 1901	
Prep Method: 8011			Date Pi	repared: 05/29	9/2008 1330	
1,2-Dibromo-3-Chloropropane	0.010	U	ug/L	0.010	0.020	1.0
Ethylene Dibromide	0.0088	U	ug/L	0.0088	0.020	1.0
Method: Total Recoverable-6020			Date A	nalyzed: 05/23	3/2008 2224	
Prep Method: 3005A			Date Pi	repared: 05/22	2/2008 1558	
Silver	1.9	Ų	ug/L	1.9	10	1.0
Arsenic	4.8	U	ug/L	4.8	10	1.0
Barium	1.2	U	ug/L	1.2	10	1.0
Beryllium	0.74	U	ug/L	0.74	4.0	1.0
Cadmium	0.71	U	ug/L	0.71	5.0	1.0
Cobalt	1.4	U	ug/L	1.4	10	1.0
Chromium	1.7	U	ug/L	1.7	10	1.0
Copper	2.9	U	ug/L	2.9	20	1.0
Iron	39	U	ug/L	39	100	1.0
Sodium	0.45	l	mg/L	0.15	0.50	1.0
Nickel	4.7	U	ug/L	4.7	40	1.0
Lead	1.6	U	ug/L	1.6	5.0	1.0
Antimony	2.9	U	ug/L	2.9	6.0	1.0
Selenium	5.9	U	ug/L	5.9	10	1.0
Thallium	0.50	Ü	ug/L	0.50	1.0	1.0
Vanadium	2.5	U	ug/L	2.5	5.0	1.0
Zinc	5.9	U	ug/L	5.9	20	1.0
Method: 7470A			Date A	nalyzed: 05/27	7/2008 1100	
Prep Method: 7470A				-	2/2008 1228	
Mercury	0.080	U	ug/L	0.080	0.20	1.0
Method: 300.0			Date A	nalyzed: 06/03	3/2008 2200	
Chloride	2.0	U	mg/L	2.0	5.0	1.0



Client Sample ID: Equipment Blank Lab Sample ID: 660-23021-4

Job Number: 660-23021-1

Date Sampled: 05/19/2008 0955 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier	Unit	MDL	PQL	Dilution
Method: 350.1		Date A	nalyzed: 06/02/	2008 1242	
Ammonia	0.12	mg/L	0.00075	0.020	1.0
Method: 353.2		Date A	nalyzed: 05/21	2008 0820	
Nitrate as N	0.10 U	mg/L	0.10	0.50	1.0
Method: SM 5310C		Date A	nalyzed: 05/31	2008 1157	
Total Organic Carbon	0.53 U	mg/L	0.53	1.0	1.0



Client Sample ID: Equipment Blank Lab Sample ID: 660-23021-4

Job Number: 660-23021-1

Date Sampled: 05/19/2008 0955 Date Received: 05/19/2008 1445

Analyte	Result/Q	ualifier	Unit	PQL	PQL	Dilution
Method: SM 2540C Total Dissolved Solids	5.0	U	Date A	nalyzed: 05 5.0	5/21/2008 0830 5.0	1.0
Method: SM 2540D Total Suspended Solids	5.0	U	Date A mg/L	nalyzed: 05 5.0	5/21/2008 1358 5.0	1.0



THE LEADER IN ENVIRONMENTAL TESTING



2742 N. Florida Ave. P.O. Box 1833 Tampa, Florida 33601 (813) 229-2879 Fax (813) 229-0002

TestAmerica-Tampa 6712 Benjamin Road Tampa, FL 33634

Attn: Dr. Shibu Paul

DOH Certification #E84025 DEP COMPQAP # 870251

Report Date: June 4, 2008

Field Custody:

Client

Client/Field ID:

660-23021-4

Equipment Blank

Sample Collection:

5-19-08

Lab ID No:

08.4500

Lab Custody Date:

5-21-08

Sample description:

Water

CERTIFICATE OF ANALYSIS

						Detection		
Parameter	Units	Results		.ts	Date	Method	Limit	
Gross Alpha	pCi/l	0.0	±	0.2	05-28-08/0800	EPA 900.0	0.5	
Radium-226	pCi/l	0.3	ź	0.8	05-30-08/1245	EPA 903.0	1.4	
Radium-228	pCi/l	0.0	±	0.7	05-31-08/0930	EPA Ra-05	1.0	
Alpha Standard: Th-230								

James W. Hayes

James W. Hayes Laboratory Manager

Test results meet all requirements of NELAC standards. Contact person: Jim Hayes (813) 229-2879.

Page 1 of 1



Client Sample ID: Travel Blank Lab Sample ID: 660-23021-5

Job Number: 660-23021-1

Date Sampled: 05/19/2008 1445 Date Received: 05/19/2008 1445

Analyte	Result/Qualifier		Unit	MDL	PQL	Dilution
Method: 8260B			Date A	Date Analyzed: 06/01/2008 1607		
Prep Method: 5030B			Date P	repared: 06/01	1/2008 1607	
Acetone	1.8	U	ug/L	1.8	25	1.0
Acrylonitrile	2.5	U	ug/L	2.5	20	1.0
Benzene	0.18	U	ug/L	0.18	1.0	1.0
Bromoform	0.29	U	ug/L	0.29	1.0	1.0
Bromomethane	0.24	U J3	ug/L	0.24	1.0	1.0
2-Butanone (MEK)	1.8	U	ug/L	1.8	10	1.0
Carbon disulfide	0.13	U	ug/L	0.13	1.0	1.0
Carbon tetrachloride	0.15	U	ug/L	0.15	1.0	1.0
Chiorobenzene	0.18	U	ug/L	0.18	1.0	1.0
Chlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
Chlorodibromomethane	0.20	U	ug/L	0.20	1.0	1.0
Chloroethane	0.32	U	ug/L	0.32	1.0	1.0
Chloroform	0.094	U	ug/L	0.094	1.0	1.0
Chloromethane	0.26	U	ug/L	0.26	1.0	1.0
cis-1,2-Dichloroethene	0.17	U	ug/L	0.17	1.0	1.0
cis-1,3-Dichloropropene	0.24	U	ug/L	0.24	1.0	1.0
Dibromomethane	0.28	Ú	ug/L	0.28	1.0	1.0
1,4-Dichlorobenzene	0.18	U	ug/L	0.18	1.0	1.0
1,2-Dichlorobenzene	0.17	U	ug/L	0.17	1.0	1.0
Dichlorobromomethane	0.18	U	ug/L	0.18	1.0	1.0
1,1-Dichloroethane	0.10	U	ug/L	0.10	1.0	1.0
1,2-Dichloroethane	0.28	U	ug/L	0.28	1.0	1.0
1,1-Dichloroethene	0.11	Ü	ug/L	0.11	1.0	1.0
1,2-Dichloropropane	0.14	U	ug/L	0.14	1.0	1.0
Ethylbenzene	0.16	Ū	ug/L	0.16	1.0	1.0
2-Hexanone	1.7	U	ug/L	1.7	10	1.0
lodomethane	0.17	ĪV	ug/L	0.063	5.0	1.0
Methylene Chloride	0.60	i	ug/L	0.096	5.0	1.0
4-Methyi-2-pentanone (MIBK)	2.2	Ü	ug/L	2.2	10	1.0
Styrene	0.18	Ū	ug/L	0.18	1.0	1.0
1,1,1,2-Tetrachloroethane	0.16	Ū	ug/L	0.16	1.0	1.0
1,1,2,2-Tetrachloroethane	0.19	Ü	ug/L	0.19	1.0	1.0
Tetrachloroethene	0.28	Ü	ug/L	0.28	1.0	1.0
Toluene	0.19	Ü	ug/L	0.19	1.0	1.0
trans-1,4-Dichloro-2-butene	0.58	U	ug/L ug/L	0.58	2.0	1.0
trans-1,4-Dichloro-2-butefie	0.19	U	ug/L	0.19	1.0	1.0
trans-1,3-Dichloropropene	0.13	U	ug/L ug/L	0.19	1.0	1.0
1,1,1-Trichloroethane	0.13	U	ug/L ug/L	0.18	1.0	1.0
1,1,2-Trichloroethane	0.16	U	ug/L ug/L	0.16	1.0	1.0



Client Sample ID: Travel Blank Lab Sample ID: 660-23021-5

Job Number: 660-23021-1

Date Sampled: 05/19/2008 1445 Date Received: 05/19/2008 1445

Analyte	Result/Qu	alifier	Unit	MDL	PQL	Dilution
Trichloroethene	0.069	U	ug/L	0.069	1.0	1.0
Trichlorofluoromethane	0.16	U	ug/L	0.16	1.0	1.0
1,2,3-Trichloropropane	0.31	U	ug/L	0.31	1.0	1.0
Vinyl acetate	0.23	U	ug/L	0.23	2.0	1.0
Vinyl chloride	0.16	U	ug/L	0.16	1.0	1.0
Xylenes, Total	0.36	U	ug/L	0.36	2.0	1.0
Surrogate				Acc	ceptance Limits	3
Dibromofluoromethane	96	96		83 - 123		
Toluene-d8 (Surr)	97	97		78 - 126		
4-Bromofluorobenzene	82	82		70 - 119		



THE LEADER IN ENVIRONMENTAL TESTING DATA REPORTING QUALIFIERS

Client: Hillsborough County

Job Number: 660-23021-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
	U	Indicates that the compound was analyzed for but not detected.
	V	Indicates the analyte was detected in both the sample and the associated method blank.
	I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
GC Semi VOA		
	U	Indicates that the compound was analyzed for but not detected.
Metals		
	U	Indicates that the compound was analyzed for but not detected.
	I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
General Chemistry		
	U	Indicates that the compound was analyzed for but not detected.
	I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.