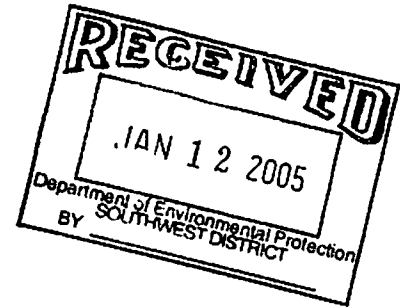




An employee-owned company

January 10, 2005

Mr. John Morris, P.G.
Southwest District Office
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619-8318



**Re: Semi-Annual Water Quality Monitoring Report
Second Half 2004 Sampling Event
Lena Road Landfill**

Dear Mr. Morris:

On behalf of the Solid Waste Division of Manatee County's Utility Operations Department, PBS&J is pleased to present this Semi-Annual Water Quality Monitoring Report for the Second Half 2004 sampling event at the Lena Road Landfill (LRL) in Manatee County. This document is designed to meet the requirements of Specific Condition 39 of the LRL's permit, and was prepared in general accordance with the guidelines promulgated in Chapter 62-701.510(9)(a) of the Florida Administrative Code (FAC).

BACKGROUND

The LRL facility is located at 3333 Lena Road in Bradenton, Florida. The LRL facility operates under Permit Number 39884-001-SO, which is on file with the Florida Department of Environmental Protection (FDEP). The LRL is constructed with a perimeter slurry wall in three stages that are designated Stages I, II and III. Landfill leachate is collected by a leachate collection system.

Specific Conditions 31, 32, and 35 of the facility's permit stipulates that the water quality program involve monitoring of the leachate, surface water, and the groundwater in the surficial (or shallow) and artesian (or deep) aquifers. The monitoring network consists of the following components:

- The leachate samples are collected from the lift stations.
- Groundwater samples are collected from 27 monitoring wells. Nineteen of the wells are used to monitor the quality of the groundwater of the surficial aquifer, and the other eight

wells are used to monitor the deep aquifer. Wells MW-1, GC-6 and SMR-1 are the designated background wells for the surficial aquifer. Well CW-4 is designated a compliance well and the rest of the shallow wells are designated detection/compliance wells. Well SMR-2 is the designated background well for the deep aquifer and the rest of the deep wells are designated detection/compliance wells.

- The surface water samples are collected from two points along the Cypress Strand. One is located upstream of the LRL and is designated SW-2, and the other, designated SW-1, is located downstream of the LRL.

Leachate, groundwater and surface water samples were collected from the LRL network for the second half 2004 sampling event during the period between August 8 and 18, 2004. The samples were collected by representatives of P.E. LaMoreaux and Associates, Inc. (PELA). The samples were analyzed for the inorganic parameters by Manatee County Utility Operations' Central Wastewater Laboratory. The samples were analyzed for the other parameters at PELA's Lakeland, Florida laboratory. The leachate, surface water and groundwater samples were analyzed for the parameters listed in Specific Conditions 31(a), 32(b) and 35, respectively, of the LRL's permit.

A Florida Department of Environmental Protection (FDEP) Ground Water Monitoring Report form for the second half 2004 sampling event at the LRL is provided in Attachment A.

SECOND HALF 2004 SAMPLING EVENT

Sample Collection Methodology

The samples were collected in general accordance with the FDEP's Standard Operating Procedure for Field Activities (SOP 001/01). Prior to sampling the monitoring wells, they were purged with a peristaltic pump using the "low-flow" method. A minimum equivalent of three well volumes was purged from each well prior to sample collection. Temperature, pH, conductivity, dissolved oxygen (DO), and turbidity measurements were monitored and recorded throughout the purging process to ensure that representative water samples were collected. Copies of the field data sheets and the field equipment calibration logs from this sampling event are provided in Attachment B.

Depth-to-groundwater measurements were made from the top-of-casing (TOC) at each monitoring well prior to initiating the purging process. The water level measurements were subtracted from the TOC elevations to determine the elevation of the water table at each well. The TOC and water level elevations are referenced in feet above the National Geodetic Vertical Datum (NGVD). The groundwater elevation data is presented in Table 1.

Groundwater Flow Patterns

The water level elevation data from the shallow monitoring wells was plotted and contoured to generate the water table elevation contour map presented as Figure 1. The data from the deep wells was used to generate the potentiometric surface contour map for the deep aquifer that is presented in Figure 2.

The configuration of the water table indicates that the groundwater within the surficial aquifer beneath the LRL (outside the boundary of the landfill) was flowing in a north-northwesterly direction during this sampling event. The average horizontal gradient across the site measured 0.01 feet per foot (ft/ft).

There was a ridge in the potentiometric surface of the deep aquifer, which was oriented northwest-southeast just outside of the northwest boundary of the landfill. Groundwater was flowing southwestward from the ridge flanks toward the landfill. In the area directly beneath the landfill, the potentiometric surface dipped northwestward, suggesting that the groundwater was flowing in that direction. The horizontal gradient along the flanks of the ridge measured 0.12 ft/ft, and the gradient in the area beneath the landfill measured 0.09 ft/ft.

Analytical Results

Leachate Analytical Results

Both inorganic and organic parameters were detected in the leachate during this sampling event. The inorganic constituents included all of those in Appendix II except for antimony, beryllium, cadmium, chromium, cobalt, cyanide, mercury, silver, thallium, tin (as SN) and vanadium. The organic parameters that were detected in at least one of the leachate samples included naphthalene, 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, ethylbenzene, toluene, vinyl chloride and xylenes.

The concentration of the parameters that were detected in the leachate was compared to the regulatory levels listed in 40 CFR Part 261.24, as promulgated by the Florida solid waste regulations. A standard has not been established for every parameter. None of the parameter concentrations detected in the leachate exceeded their respective regulatory level.

A summary of the leachate analytical results is presented Table 2. The complete leachate analytical report is provided in Attachment C-1.

Groundwater Analytical Results

A description of the parameters that were detected in the groundwater of each aquifer beneath the LRL during this sampling event at concentrations in excess of the regulatory criteria is presented below.

Surficial Aquifer

There were no organic parameters detected in the surficial aquifer monitoring wells, but all of the inorganic parameters except lead, mercury, selenium and thallium were detected in at least one well location.

All of the parameters detected in the network were compared to their respective Maximum Contaminant Level (MCL) or Secondary Drinking Water Standard (SDWS) in accordance with the solid waste regulations. The MCLs and SDWSs for Drinking Water Standards, Monitoring, and Reporting are promulgated in Chapter 62-550 of the Florida Administrative Code (FAC). Not every parameter has an MCL or SDWS. One of the field parameters, pH, was detected in the surficial aquifer at concentrations in excess of the regulatory criteria along with arsenic, iron and TDS. A description of the detection patterns with these parameters is as follows:

- pH - The pH was lower than the prescribed SDWS range of 6.5 to 8.5 at all of the shallow wells, including the background wells, except CW-5A, GC-1A and GC-4.
- Arsenic - Arsenic was detected at concentrations in excess of its MCL in the samples collected at well GC-2.
- Iron - Iron was detected at concentrations in excess of the SDWS in the samples collected at every shallow well except MW-3.
- TDS - TDS was detected at concentrations that exceed the SDWS in the samples collected at CW-4 and MW-3.

Deep Aquifer

The only parameters that were detected in the deep aquifer were inorganic parameters, and included antimony, arsenic, barium, chloride, chromium, cobalt, iron, nickel, nitrate, selenium, sodium, ammonia-N, TDS and vanadium. The only parameters that were detected in excess of the regulatory criteria were pH, TDS and iron. A description of the detection patterns with these parameters is as follows:

- pH - The pH was higher than the prescribed SDWS range at wells SA-7 and SA-8.

- Iron - Iron was detected at concentrations in excess of the SDWS in the samples collected at well SA-3.
- TDS - TDS was detected at concentrations that exceed the SDWS in the samples collected at SA-6 and SA-8.

A summary of the results is presented in Table 3. The complete groundwater analytical report is provided in Attachment C-2.

Surface Water Analytical Results

There were no organic constituents detected in the surface water, however, all of the inorganic parameters except antimony, cadmium, cobalt, mercury, selenium, silver and thallium were detected in at least one of the surface samples. The concentrations of the inorganic parameters were compared to their respective Surface Water Cleanup Target Levels (SWCTLs) for Class III fresh water as a relative measure of the water quality. The SWCTLs are promulgated in Chapter 62-777, FAC. The only parameters that were detected in the surface water at concentrations in excess of its SWCTL were DO at both sampling locations, fecal coliform at SW-2, and iron at both sampling locations. The DO readings were actually lower than the SWCTL but the standard calls for a reading of 5 or more milligrams per liter (mg/L).

A summary of the surface water analytical results for each sampling event is presented in Table 4. The complete surface water analytical report is provided in Attachment C-3.

SUMMARY AND CONCLUSIONS

The groundwater in shallow aquifer was flowing to the northwest at a relatively shallow gradient beneath the LRL during the second half 2004 sampling event. This is consistent with the pattern observed during the recent sampling events. In contrast to the recent events, however, there was a ridge in the potentiometric surface of the deep aquifer just outside the northwest boundary of the landfill whereas in the recent past the data indicated that the surface dipped northwestward beneath the area. The potentiometric surface directly beneath the landfill was dipping northwestward during this sampling event and, as a result, the groundwater was apparently flowing from the ridge area toward the landfill and the groundwater beneath the landfill was flowing northwestward.

The parameters that were detected at concentrations in excess of the regulatory standards in the LRL's monitoring network during the second half 2004 were limited to inorganic parameters and to the groundwater and surface water.

Mr. John Morris
January 10, 2005
Page 6

The only parameters that were consistently detected above the standards in the groundwater were pH and iron. These parameters were also detected at elevated concentrations at the background wells, suggesting that their presence reflects the natural chemistry of the groundwater in the area.

The only parameters that were detected in the surface water at concentrations in excess of its SWCTL were DO, fecal coliform and iron. The most significant exceedance was to the fecal coliform, but it was only detected at the elevated concentration at the upstream surface water sampling point.

Please call me at (407) 647-7275, ext. 4339 if you have any questions or need any additional information.

Very truly yours,



Greg Mudd, P.G.
Senior Geologist

C: File, 120498.93 0300

U:\OldG\HAZARD\Manatee\LenaRoadLandfill\SemiAnnualReportSecondHalf2004\Lean Road Second Half 2004 Summary Report.doc

Table 4 - Lena Road Surface Water Analytical Summary
Second Half 2004

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		08/11/04	08/11/04
	Standard(1)	Units		
Field Measurements				
Temperature		deg. C	28.36	32.16
pH		STD	6.93	6.42
Conductivity		umhos/cm	358	274
Dissolved Oxygen (DO)	>5	mg/l	2.65	2.69
Turbidity	29	NTU	8.79	5.41
Inorganics				
Antimony	4.3	mg/l	<0.002	<0.002
Arsenic	0.05	mg/l	0.009	<0.007
Barium		mg/l	0.017	0.014
Beryllium	0.13	mg/l	<0.0002	0.0002
Biochemical Oxygen Demand (BOD)		mg/l	<2	4.53
Cadmium	Note 2	mg/l	<0.0005	<0.0005
Chemical Oxygen Demand (COD)		mg/l	79	158
Chlorophyll A		mg/m3	1.62	1.65
Chromium	Note 3	mg/l	0.01	0.003
Cobalt		mg/l	<0.001	<0.001
Copper	Note 4	mg/l	0.013	0.007
Fecal coliform	800	cfu/100ml	290	6800
Iron	1	mg/l	2.36	1.58
Lead	Note 5	mg/l	0.0079	0.008
Mercury	12	ug/l	<0.1	<0.1
Nickel	Note 6	mg/l	0.01	0.004
Nitrate		mg/l	0.038	0.014
Selenium	0.005	mg/l	<0.0002	<0.0002
Silver	0.07	mg/l	<0.002	<0.002
Thallium	0.0063	mg/l	<0.0004	<0.0004
Total Dissolved Solids (TDS)		mg/l	270	251
Total Hardness		mg/l	136	78.9
Total Nitrogen		mg/l	1.63	0.684
Total Organic Carbon (TOC)		mg/l	28.2	54.8
Total phosphorous		mg/l	0.741	0.204
Total Suspended Solids (TSS)		mg/l	5.2	8.4
Unionized ammonia	0.02	mg/l	0.0004	0.0008
Vanadium		mg/l	0.009	0.003
Zinc	Note 7	mg/l	0.257	0.103
Organics				
Acetone		ug/l	< 2.5	< 2.5
Acrylonitrile		ug/l	< 1.5	< 1.5
Benzene		ug/l	< 0.04	< 0.04

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		08/11/04	08/11/04
	Standard(1)	Units		
Bromochloromethane		ug/l	< 0.03	< 0.5
Bromodichloromethane		ug/l	< 0.08	< 0.05
Carbon disulfide		ug/l	< 4.1	< 4.1
Carbon tetrachloride	4.42	ug/l	< 0.21	< 0.21
Chlorobenzene		ug/l	< 0.04	< 0.04
Chloroethane		ug/l	< 0.10	< 0.10
Dibromomethane		ug/l	< 0.3	< 0.3
Dibromochloromethane		ug/l	< 0.05	< 0.05
1,2-Dichlorobenzene		ug/l	< 0.03	< 0.03
1,4-Dichlorobenzene		ug/l	< 0.03	< 0.03
Dichloromethane	1580	ug/l	< 0.03	< 0.03
1,2-Dibromo-3-chloropropane		ug/l	< 0.01	< 0.01
1,1-Dichloroethane		ug/l	< 0.03	< 0.03
1,2-Dichloroethane		ug/l	< 0.02	< 0.02
1,1-Dichloroethene		ug/l	< 0.12	< 0.12
cis-1,2-Dichloroethene	3.2	ug/l	< 0.10	< 0.10
trans-1,2-Dichloroethene		ug/l	< 0.06	< 0.06
1,2-Dichloropropane		ug/l	< 0.04	< 0.04
cis-1,3-Dichloropropene		ug/l	< 0.05	< 0.05
trans-1,3-Dichloropropene		ug/l	< 0.04	< 0.05
Ethylbenzene		ug/l	< 0.06	< 0.06
Ethylene Dibromide		ug/l	< 0.01	< 0.01
2-Hexanone		ug/l	< 2.5	< 2.5
Iodomethane		ug/l	< 0.5	< 0.5
Methyl bromide		ug/l	< 0.11	< 0.11
Chloromethane		ug/l	< 0.13	< 0.13
2-Butanone		ug/l	< 2.5	< 2.5
4-Methyl-2-pentanone		ug/l	< 2.5	< 2.5
Styrene		ug/l	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane		ug/l	< 0.1	< 0.1
1,1,2,2-Tetrachloroethane	10.8	ug/l	< 0.04	< 0.04
t-1,4-Dichloro-2-butene		ug/l	< 10.0	< 10.0
Tetrachloroethene		ug/l	< 0.14	< 0.14
Toluene		ug/l	< 0.11	< 0.11
1,1,1-Trichloroethane		ug/l	< 0.04	< 0.04
1,1,2-Trichloroethane		ug/l	< 0.10	< 0.10
Tribromomethane		ug/l	< 0.12	< 0.12
Trichloroethene	80.7	ug/l	< 0.19	< 0.19
Trichloromethane		ug/l	< 0.03	< 0.03
Trichlorofluoromethane		ug/l	< 0.08	< 0.08
1,2,3-Trichloropropane		ug/l	< 0.3	< 0.3
Vinyl acetate		ug/l	< 10.0	< 10.0

Table 4, Page 2

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		08/11/04	08/11/04
	Standard(1)	Units		
Vinyl chloride		ug/l	< 0.17	< 0.17
Total xylenes		ug/l	< 0.11	< 0.11

Abbreviations: mg/l = milligrams per liter; ug/l = micrograms per liter; NTU = nephelometric turbidity units.

Notes:

(1) Surface water standards presented in Chapter 62-302, FAC. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

(3) Cr less than or equal to $e(0.819(\ln H)+0.6848)$

(4) Cu less than or equal to $e(0.845(\ln H)-1.702)$

(5) Pb less than or equal to $e(1.273(\ln H)-4.705)$

(6) Ni less than or equal to $e(0.846(\ln H)+0.0584)$

(7) Zn less than or equal to $e(0.8473(\ln H)+0.884)$

Attachment C-3

Surface Water Analytical Report

REPORT OF ANALYSIS

**MANATEE COUNTY UTILITY OPERATIONS
CENTRAL WASTEWATER LABORATORY**

**5101 65TH STREET WEST
BRADENTON, FL 34210**

Phone: (941) 792-8811 ext. 5285

Fax: (941) 795-3477

FDOH LAB ID: E54560

USEPA LAB CODE: FL00031

Laboratory Contact: Jeff Goodwin

**PREPARED FOR: Mr. Gus Difonzo
MCUOD Solid Waste Division
4410 66th Street West
Bradenton, FL 34210**

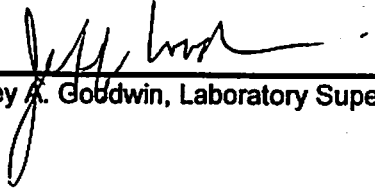
SAMPLE RECEIPT DATE: AUGUST 11, 2004

REPORT DATE: NOVEMBER 3, 2004

**PROJECT NAME: Lena Road Landfill
Semiannual Surface Water Monitoring**

Data Release Authorization:

The Methods of analysis in this report are in accordance with MCUOD Central Wastewater Laboratory's Quality Assurance Manual and meet all NELAC standards except where noted. Results pertain only to the items tested and to the samples specified. This report may not be reproduced, except in full, without the written approval of this laboratory.



Jeffrey A. Goodwin, Laboratory Supervisor



CENTRAL WASTEWATER LABORATORY

5101 65TH STREET WEST

BRADENTON, FL 34210

Phone: (941) 792-8811 ext. 5285

Fax: (941) 795-3477

FDOH LAB ID: E54560

USEPA LAB CODE: FL00031

Laboratory Contact: Jeff Goodwin

PREPARED FOR: Mr. Gus Difonzo

MCUOD Solid Waste Division

4410 66th Street West

Bradenton, FL 34210

TOTAL COST FOR LEANA ROAD SURFACE WATER: \$429.00

LIMS ID	Client ID	Sample Location	Collection Date/Time	Parameter	Method	Results	Date /Time Analyzed	MDL	Analys	Cost per sample
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Antimony	EPA 204.2	0.002 U mg/L	09/16/04 15:47	0.002 mg/L	WC	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Arsenic	EPA 200.7	0.009 mg/L	10/26/04 13:43	0.007 mg/L	WC	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Barium	EPA 200.7	0.017 mg/L	10/26/04 13:43	0.0002 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Beryllium	EPA 200.7	0.0002 U mg/L	10/26/04 13:43	0.0002 mg/L	WC	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Cadmium	EPA 200.7	0.0005 U mg/L	10/26/04 13:43	0.0005 mg/L	WC	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Chromium	EPA 200.7	0.010 mg/L	10/26/04 13:43	0.0005 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Cobalt	EPA 200.7	0.001 U mg/L	10/26/04 13:43	0.001 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Copper	EPA 200.7	0.013 mg/L	10/26/04 13:43	0.005 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Iron	EPA 200.7	2.36 mg/L	10/26/04 13:43	0.010 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Lead	EPA 200.7	0.0079 mg/L	10/26/04 13:43	0.005 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Nickel	EPA 200.7	0.010 mg/L	10/26/04 13:43	0.001 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	NITRATE	EPA 200.7	0.038 mg/L	08/12/04 20:29	0.006 mg/L	IR	
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Selenium	EPA 200.7	0.0002 U mg/L	10/21/04 11:54	0.0002 mg/L	WC	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Silver	EPA 200.7	0.002 U mg/L	10/26/04 13:43	0.002 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Thallium	EPA 279.2	0.0004 U mg/L	09/14/04 13:41	0.0004 mg/L	WC	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Vanadium	EPA 200.7	0.009 mg/L	10/26/04 13:43	0.0005 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Zinc	EPA 200.7	0.257 mg/L	10/26/04 13:43	0.010 mg/L	WC	\$3.70
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Mercury	EPA 245.1	0.100 U ug/L	09/03/04 10:05	0.100 ug/L	WC	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	TOC	EPA 415.1	28.2 mg/L	08/25/04 18:08	0.050 mg/L	EMM	\$8.60
AEO1827	SW - 1	Lena Road	08/11/04 14:35	cBOD	SM 5210B	2.00 U mg/L	08/17/04 9:45	2.00 mg/L	LK/IR	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	COD	EPA 410.4	79.0 mg/L	08/27/04 8:15	5.00 mg/L	IR	\$8.60
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Ammonia	EPA 350.1	0.064 mg/L	08/31/04 13:38	0.009 mg/L	EMM	\$4.90
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Fecal Coliform	SM 9222D	290 CFU/100 ml	08/11/04 16:10	1.00 CFU/100 ml	LK	\$4.90
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Total Phosphorus	EPA 365.1	0.741 mg/L	08/20/04 15:10	0.002 mg/L	EMM	\$6.15
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Union. Ammonia	DEP SOP 10/3/83	0.0004 mg/L		CALCULATION		\$4.90
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Total Nitrogen	Calculation	1.63 mg/L		CALCULATION		\$8.95
AEO1827	SW - 1	Lena Road	08/11/04 14:35	Total Hardness	Calculation	136 mg/L		CALCULATION		
AEO1827	SW - 1	Lena Road	08/11/04 14:35	TDS	SM 2540C	270 mg/L	08/16/04 16:00	4.50 mg/L	EMM/IR	\$4.90
AEO1827	SW - 1	Lena Road	08/11/04 14:35	TSS	SM 2540D	5.20 mg/L	08/12/04 1:47	0.500 mg/L	emm	\$4.90
Total Cost for Lena Road SW-1										\$143.00

{revised 12/14/04}

LIMS ID	Client ID	Sample Location	Collection Date/Time	Parameter	Method	Results	Date /Time Analyzed	MDL	Analyst	Cost per sample
AEO1847	DUP-SW1	Lena Road	08/11/04	Antimony	EPA 204.2	0.002U mg/L	09/16/04 16:03	0.002 mg/L	WC	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	Arsenic	EPA 200.7	0.007 U mg/L	10/26/04 14:23	0.007 mg/L	WC	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	Barium	EPA 200.7	0.013 mg/L	10/26/04 14:23	0.0002 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Beryllium	EPA 200.7	0.0002 U mg/L	10/26/04 14:23	0.0002 mg/L	WC	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	Cadmium	EPA 200.7	0.0005 U mg/L	10/26/04 14:23	0.0005 mg/L	WC	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	Chromium	EPA 200.7	0.003 mg/L	10/26/04 14:23	0.0005 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Cobalt	EPA 200.7	0.001 U mg/L	10/26/04 14:23	0.001 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Copper	EPA 200.7	0.006 mg/L	10/26/04 14:23	0.005 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Iron	EPA 200.7	1.97 mg/L	10/26/04 14:23	0.010 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Lead	EPA 200.7	0.008 mg/L	10/26/04 14:23	0.005 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Nickel	EPA 200.7	0.003 mg/L	10/26/04 14:23	0.001 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	NITRATE	EPA 200.7	0.037 mg/L	08/12/04 21:00	0.006 mg/L	IR	
AEO1847	DUP-SW1	Lena Road	08/11/04	Selenium	EPA 200.7	0.0002 U mg/L	10/21/04 12:09	0.0002 mg/L	WC	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	Silver	EPA 200.7	0.002 U mg/L	10/26/04 14:23	0.002 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Thallium	EPA 279.2	0.0004 U mg/L	09/14/04 13:58	0.0004 mg/L	WC	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	Vanadium	EPA 200.7	0.002 mg/L	10/26/04 14:23	0.0005 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Zinc	EPA 200.7	0.064 mg/L	10/26/04 14:23	0.010 mg/L	WC	\$3.70
AEO1847	DUP-SW1	Lena Road	08/11/04	Mercury	EPA 245.1	0.100 U ug/L	09/03/04 10:15	0.100 ug/L	WC	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	TOC	EPA 415.1	28.1 mg/L	08/25/04 20:28	0.050 mg/L	EMM	\$8.60
AEO1847	DUP-SW1	Lena Road	08/11/04	cBOD	SM 5210B	2.00 U mg/L	08/17/04 9:45	2.00 mg/L	LK/IR	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	COD	EPA 410.4	79.0 mg/L	08/27/04 8:15	5.00 mg/L	IR	\$8.60
AEO1847	DUP-SW1	Lena Road	08/11/04	Ammonia	EPA 350.1	0.106 mg/L	08/31/04 13:28	0.009 mg/L	EMM	\$4.90
AEO1847	DUP-SW1	Lena Road	08/11/04	Fecal Coliform	SM 9222D	350 CFU/100 ml	08/11/04 16:10	1.00 CFU/100 ml	LK	\$4.90
AEO1847	DUP-SW1	Lena Road	08/11/04	Total Phosphorus	EPA 365.1	0.733 mg/L	08/20/04 15:11	0.002 mg/L	EMM	\$6.15
AEO1847	DUP-SW1	Lena Road	08/11/04	Union. Ammonia	DEP SOP 10/3/83	0.0008 mg/L		CALCULATION		\$4.90
AEO1847	DUP-SW1	Lena Road	08/11/04	Total Nitrogen	Calculation	1.69 mg/L		CALCULATION		\$8.95
AEO1847	DUP-SW1	Lena Road	08/11/04	Total Hardness	Calculation	131 mg/L		CALCULATION		
AEO1847	DUP-SW1	Lena Road	08/11/04	TDS	SM 2540C	267 mg/L	08/16/04 16:00	4.50 mg/L	EMM/IR	\$4.90
AEO 1847	DUP-SW1	Lena Road	08/11/04	TSS	SM 2540D	6.80 mg/L	08/12/04 1:47	0.500 mg/L	emm	\$4.90
Total Cost for Lena Road DUP - SW1										\$143.00

LIMS ID	Client ID	Sample Location	Collection Date/Time	Parameter	Method	Results	Date /Time Analyzed	MDL	Analysis	Cost per sample
AEO1828	SW - 2	Lena Road	08/11/04 13:36	Antimony	EPA 204.2	0.002 U mg/L	09/16/04 15:55	0.002 mg/L	WC	\$6.15
AEO1828	SW - 2	Lena Road	08/12/04 13:36	Arsenic	EPA 200.7	0.007 U mg/L	10/26/04 14:18	0.007 mg/L	WC	\$6.15
AEO1828	SW - 2	Lena Road	08/13/04 13:36	Barium	EPA 200.7	0.014 mg/L	10/26/04 14:18	0.0002 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/14/04 13:36	Beryllium	EPA 200.7	0.0002 U mg/L	10/26/04 14:18	0.0002 mg/L	WC	\$6.15
AEO1828	SW - 2	Lena Road	08/15/04 13:36	Cadmium	EPA 200.7	0.0005 U mg/L	10/26/04 14:18	0.0005 mg/L	WC	\$6.15
AEO1828	SW - 2	Lena Road	08/16/04 13:36	Chromium	EPA 200.7	0.003 mg/L	10/26/04 14:18	0.0005 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/17/04 13:36	Cobalt	EPA 200.7	0.001 U mg/L	10/26/04 14:18	0.001 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/18/04 13:36	Copper	EPA 200.7	0.007 mg/L	10/26/04 14:18	0.005 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/19/04 13:36	Iron	EPA 200.7	1.58 mg/L	10/26/04 14:18	0.010 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/20/04 13:36	Lead	EPA 200.7	0.008 mg/L	10/26/04 14:18	0.005 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/21/04 13:36	Nickel	EPA 200.7	0.004 mg/L	10/26/04 14:18	0.001 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/21/04 13:36	NITRATE	EPA 200.7	0.014 mg/L	08/12/04 17:55	0.008 mg/L	IR	
AEO1828	SW - 2	Lena Road	08/22/04 13:36	Selenium	EPA 200.7	0.0002 U mg/L	10/21/04 12:01	0.0002 mg/L	WC	\$6.15
AEO1828	SW - 2	Lena Road	08/23/04 13:36	Silver	EPA 200.7	0.002 U mg/L	10/26/04 14:18	0.002 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/24/04 13:36	Thallium	EPA 279.2	0.0004 U mg/L	09/14/04 13:50	0.0004 mg/L	WC	\$6.15
AEO1828	SW - 2	Lena Road	08/25/04 13:36	Vanadium	EPA 200.7	0.003 mg/L	10/26/04 14:18	0.0005 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/26/04 13:36	Zinc	EPA 200.7	0.103 mg/L	10/26/04 14:18	0.010 mg/L	WC	\$3.70
AEO1828	SW - 2	Lena Road	08/27/04 13:36	Mercury	EPA 245.1	0.100 U ug/L	09/03/04 10:08	0.100 ug/L	WC	\$6.15
AEO1828	SW - 2	Lena Road	08/28/04 13:36	TOC	EPA 415.1	54.8 mg/L	08/25/04 19:53	0.050 mg/L	EMM	\$8.60
AEO1828	SW - 2	Lena Road	08/29/04 13:36	cBOD	SM 5210B	4.53 mg/L	08/17/04 9:45	2.00 mg/L	LK/IR	\$6.15
AEO1828	SW - 2	Lena Road	08/30/04 13:36	COD	EPA 410.4	158 mg/L	08/27/04 8:15	5.00 mg/L	IR	\$8.60
AEO1828	SW - 2	Lena Road	08/31/04 13:36	Ammonia	EPA 350.1	0.026 mg/L	08/31/04 13:26	0.009 mg/L	EMM	\$4.90
AEO1828	SW - 2	Lena Road	09/01/04 13:36	Fecal Coliform	SM 9222D	6800 A CFU/100 ml	08/11/04 16:10	1.00 CFU/100 ml	LK	\$4.90
AEO1828	SW - 2	Lena Road	09/02/04 13:36	Total Phosphorus	EPA 365.1	0.204 mg/L	08/20/04 15:10	0.002 mg/L	EMM	\$6.15
AEO1828	SW - 2	Lena Road	09/03/04 13:36	Union. Ammonia	DEP SOP 10/3/83	0.0008 mg/L		CALCULATION		\$4.90
AEO1828	SW - 2	Lena Road	09/04/04 13:36	Total Nitrogen	Calculation	0.884 mg/L		CALCULATION		\$8.95
AEO1828	SW - 2	Lena Road	09/04/04 13:36	Total Hardness	Calculation	78.9 mg/L		CALCULATION		
AEO1828	SW - 2	Lena Road	09/05/04 13:36	TDS	SM 2540C	251 mg/L	08/16/04 16:00	4.50 mg/L	EMM/IR	\$4.90
AEO1828	SW - 2	Lena Road	09/06/04 13:36	TSS	SM 2540D	8.40 mg/L	08/12/04 1:47	0.500 mg/L	emm	\$4.90
Total Cost for Lena Road SW-2										\$143.00

METHOD BLANK REPORT**Sample ID# Lena Road****Date Sampled: AUGUST 11, 2004****SW-1, SW-2, FDUP**

Parameter	Unit	Method	Date Analyzed	Concentration
Antimony	mg/L	EPA 204.2	09/16/04	0.002 U
Arsenic	mg/L	EPA 200.7	10/26/04	0.007 U
Barium	mg/L	EPA 200.7	10/26/04	0.0002 U
Beryllium	mg/L	EPA 200.7	10/26/04	0.0002 U
Cadmium	mg/L	EPA 200.7	10/26/04	0.0005 U
Chromium	mg/L	EPA 200.7	10/26/04	0.006 U
Cobalt	mg/L	EPA 200.7	10/26/04	0.001 U
Copper	mg/L	EPA 200.7	10/26/04	0.005 U
Iron	mg/L	EPA 200.7	10/26/04	0.010 U
Lead	mg/L	EPA 200.7	10/26/04	0.005 U
Nickel	mg/L	EPA 200.7	10/26/04	0.001 U
Nitrite	mg/L	EPA 300.0	08/12/04	0.0005 U
Nitrate	mg/L	EPA 300.0	08/12/04	0.0006 U
Selenium	mg/L	EPA 200.7	10/21/04	0.0002 U
Silver	mg/L	EPA 200.7	10/26/04	0.002 U
Thallium	mg/L	EPA 279.2	09/14/04	0.0004 U
Vanadium	mg/L	EPA 200.7	10/26/04	0.0005 U
Zinc	mg/L	EPA 200.7	10/26/04	0.010 U
Mercury	ug/L	EPA 245.1	09/03/04	0.100 U
Ammonia (as N)	mg/L	EPA 350.1	08/31/04	0.009 U
cBOD	mg/L	SM 5210B	08/17/04	2.00 U
Fecal Coliform	CFU/100 ml	SM 9222D	08/11/04	1 U
TDS	mg/L	SM 2540C	08/16/04	4.50 U
TOC	mg/L	EPA 415.1	08/25/04	0.075 U
Total Phosphorus	mg/L	EPA 365.1	08/20/04	0.005 U
TSS	mg/L	SM 2540D	08/12/04	0.600 U
TKN	mg/L	EPA 351.2	09/07/04	0.050 U

Duplicate Report

Sample ID# Lena Road

Date Sampled: AUGUST 11, 2004

SW-1, SW-2, FDUP

Parameter	Unit	Method	Date Analyzed	Sample Result	Duplicate	% RSD
Antimony	mg/L	EPA 204.2	09/16/04	0.002U	0.002U	0.000
Arsenic	mg/L	EPA 200.7	10/26/04	0.009	0.010	7.44
Barium	mg/L	EPA 200.7	10/26/04	0.017	0.017	0.000
Beryllium	mg/L	EPA 200.7	10/26/04	0.0002U	0.0002U	0.000
Cadmium	mg/L	EPA 200.7	10/26/04	0.0005U	0.0005U	0.000
Chromium	mg/L	EPA 200.7	10/26/04	0.010	0.010	0.000
Cobalt	mg/L	EPA 200.7	10/26/04	0.001U	0.001U	0.000
Copper	mg/L	EPA 200.7	10/26/04	0.013	0.013	0.000
Iron	mg/L	EPA 200.7	10/26/04	2.36	2.37	0.299
Lead	mg/L	EPA 200.7	10/26/04	0.0079	0.0064	14.8
Nickel	mg/L	EPA 200.7	10/26/04	0.010	0.010	0.000
Nitrite	mg/L	EPA 300.0	08/12/04	0.829	0.829	0.000
Nitrate	mg/L	EPA 300.0	08/12/04	0.414	0.414	0.000
Selenium	mg/L	EPA 200.7	10/21/04	0.0002U	0.0002U	0.000
Silver	mg/L	EPA 200.7	10/26/04	0.002U	0.002U	0.000
Thallium	mg/L	EPA 279.2	09/14/04	0.0004U	0.0004U	0.000
Vanadium	mg/L	EPA 200.7	10/26/04	0.009	0.009	0.000
Zinc	mg/L	EPA 200.7	10/26/04	0.257	0.255	0.552
Mercury	ug/L	EPA 245.1	09/03/04	0.100U	1.000	0.000
Ammonia (as N)	mg/L	EPA 350.1	08/31/04	0.260	0.253	1.93
cBOD	mg/L	SM 5210B	08/17/04	3.38	3.28	2.12
COD	mg/L	EPA 410.4	08/27/04	79.0	79.0	0.000
Fecal Coliform	CFU/100 ml	SM 9222D	08/11/04	7100	6500	6.24
TDS	mg/L	SM 2540C	08/16/04	414	417	0.511
TOC	mg/L	EPA 415.1	08/25/04	54.8	53.3	1.96
Total Phosphorus	mg/L	EPA 365.1	08/17/04	5.57	5.44	1.67
TSS	mg/L	SM 2540D	08/12/04	8.40	8.40	0.000
TKN	mg/L	EPA 351.2	09/07/04	38.4	38.0	0.740

QCCS SAMPLE RECOVERY

Sample ID# Lena Road

Date Sampled: AUGUST 11, 2004

SW-1, SW-2, FDUP

Parameter	Unit	Method	Date Analyzed	QCCS Expected	QCCS Measured	Rec. %	Acceptable Limits
Antimony	mg/L	EPA 204.2	09/16/04	0.050	0.050	100%	95 -105
Arsenic	mg/L	EPA 200.7	10/26/04	1.00	1.02	102%	95 -105
Barium	mg/L	EPA 200.7	10/26/04	1.00	0.996	100%	95 -105
Beryllium	mg/L	EPA 200.7	10/26/04	0.250	0.257	103%	95 -105
Cadmium	mg/L	EPA 200.7	10/26/04	1.00	1.01	101%	95 -105
Chromium	mg/L	EPA 200.7	10/26/04	1.00	0.993	99%	95 -105
Cobalt	mg/L	EPA 200.7	10/26/04	1.00	1.01	101%	95 -105
Copper	mg/L	EPA 200.7	10/26/04	1.00	1.00	100%	95 -105
Iron	mg/L	EPA 200.7	10/26/04	5.00	4.99	100%	95 -105
Lead	mg/L	EPA 200.7	10/26/04	1.00	1.02	102%	95 -105
Nitrite	mg/L	EPA 300.0	08/12/04	1.00	0.994	99.4%	95 -105
Nitrate	mg/L	EPA 300.0	08/12/04	22.1	23.0	104.1%	95 -105
Nickel	mg/L	EPA 200.7	10/26/04	1.00	0.993	99.3%	95 -105
Selenium	mg/L	EPA 200.7	10/21/04	0.050	0.052	104%	95 -105
Silver	mg/L	EPA 200.7	10/26/04	0.250	0.261	104%	95 -105
Thallium	mg/L	EPA 279.2	09/14/04	0.050	0.052	104%	95 -105
Vanadium	mg/L	EPA 200.7	10/26/04	1.00	0.992	99.2%	95 -105
Zinc	mg/L	EPA 200.7	10/26/04	1.00	0.984	98.4%	95 -105
Mercury	ug/L	EPA 245.1	09/03/04	2.50	2.56	102%	95 -105
Ammonia (as N)	mg/L	EPA 350.1	08/31/04	0.500	0.531	106%	90 - 110
TOC	mg/L	EPA 415.1	08/25/04	5.00	4.76	95.2%	90 - 110
Total Phosphorus	mg/L	EPA 365.1	08/20/04	1.00	0.991	99.1%	90 - 110
TKN	mg/L	EPA 351.2	09/07/04	2.00	2.06	103%	90-110
COD	mg/L	EPA 410.4	8/27/2004	20.0	18.4	92.0%	90-110

Matrix Spike Report

Sample ID# Lena Road

Date Sampled: AUGUST 11, 2004

SW-1, SW-2, FDUP

Parameter	Unit	Method	Date Analyzed	Unspiked Results	Spiked Results	Spike Level	% Spike Recovery
Antimony	mg/L	EPA 204.2	09/16/04	0.002U	0.051	0.050	102%
Arsenic	mg/L	EPA 200.7	10/26/04	0.009	1.01	1.00	100%
Barium	mg/L	EPA 200.7	10/26/04	0.017	1.02	1.00	100%
Beryllium	mg/L	EPA 200.7	10/26/04	0.0002U	0.250	0.250	100%
Cadmium	mg/L	EPA 200.7	10/26/04	0.0005U	0.971	1.00	97.1%
Chromium	mg/L	EPA 200.7	10/26/04	0.010	0.976	1.00	96.6%
Cobalt	mg/L	EPA 200.7	10/26/04	0.001U	0.989	1.00	98.9%
Copper	mg/L	EPA 200.7	10/26/04	0.013	1.02	1.00	101%
Iron	mg/L	EPA 200.7	10/26/04	2.36	7.11	5.00	95.0%
Lead	mg/L	EPA 200.7	10/26/04	0.0079	0.992	1.00	98.4%
Nickel	mg/L	EPA 200.7	10/26/04	0.010	0.980	1.00	97.0%
Nitrite	mg/L	EPA 300.0	08/12/04	0.829	1.78	1.00	95.1%
Nitrate	mg/L	EPA 300.0	08/12/04	0.414	1.48	1.00	107%
Selenium	mg/L	EPA 200.7	10/21/04	0.0002U	0.052	0.050	104%
Silver	mg/L	EPA 200.7	10/26/04	0.002U	0.242	0.250	96.8%
Thallium	mg/L	EPA 279.2	09/14/04	0.0004U	0.047	0.050	94.0%
Vanadium	mg/L	EPA 200.7	10/26/04	0.009	0.991	1.00	98.2%
Zinc	mg/L	EPA 200.7	10/26/04	0.257	1.22	1.00	96.3%
Mercury	ug/L	EPA 245.1	09/03/04	0.100U	1.00	1.00	100%
Ammonia (as N)	mg/L	EPA 350.1	08/31/04	0.026	0.569	0.500	109%
TOC	mg/L	EPA 415.1	08/25/04	54.8	102.0	50.0	94.4%
Total Phosphorus	mg/L	EPA 365.1	08/20/04	0.163	0.669	0.500	101%
TKN	mg/L	EPA 351.2	09/07/04	1.07	3.00	2.00	96.5%
COD	mg/L	EPA 410.4	08/27/04	158	249	100	91.0%

P.E. LaMoreaux & Associates
4320 Old Highway 37
Lakeland, Florida 33813
(863) 646-8526
CHAIN OF CUSTODY

№ 67745

CLIENT:

ADDRESS:

TYPE: WATER (S)OIL (O)THER

REQUIRED ANALYSIS

PAGE	2	OF	2
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FIELD PARAMETERS

SC
(umnos/cm)

한

TEMP (°C)

cc

NUMBER OF CONTAINERS / CONTAINER SIZE & TYPE / PRESERVATIVE
CONTAINER TYPES: (P)LASTIC (G)LASS (O)THER
PRESERVATIVES: (S)ODIUM HYDROXIDE (SU)LFURIC (N)ITRIC (H)YDROCHLORIC (I)CED (O)THER

PRESERVATIVES: (S)ODIUM HYDROXIDE (Su)LFURIC (N)ITRIC (H)YDROCLORIC (I)CED (O)THER

W	1	P	N	1	P	I	2	G	H
"		"		"			3	G	H
W		"		"			2	G	H

RELINQUISHED BY

DATE _____

TIME

RECEIVED BY:

RELINQUISHED BY:

DATE _____

TIME

RECEIVED BY:

FOR PELA LABORATORY USE ONLY

LABORATORY REMARKS

RECEIVED FOR LAB

214

附刊

WORKBOOK

WORKER

P. E. LaMoreaux & Associates

Hydrogeologists Geologists Engineers & Environmental Scientists



Invoice

Invoice Number: 53713

Invoice Date: 09/30/04

To: MANATEE COUNTY-SWRTP

P.O. BOX 1000

BRADENTON, FLORIDA 34206

P. E. LaMoreaux and Associates, Inc.

4320 Old Hwy 37

Lakeland, FL 33813

(863) 646-8526

Report ID: 0408067743

Your Purchase Order:

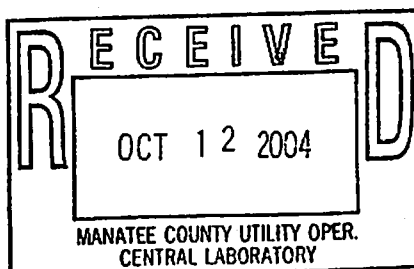
Project number code:

Comments: LENA RD LANDFILL(SURFACE WATER): SW-1, SW-2, DUPLICATE

Our Sample Reference: KE12495 KE12496 KE12497 KE12498 KE12499 KE12504

Analysis Name	Quantity	Unit Price	Total Price
APPENDIX I VOLATILES (EPA 8260)	3	\$57.68	\$173.04
EDB	3	\$28.84	\$86.52
CHLOROPHYLL A	3	\$16.22	\$48.66
SPECIFIC CONDUCTIVITY	2	\$10.30	\$20.60
Ph	2	\$10.30	\$20.60
DISSOLVED OXYGEN	2	\$10.30	\$20.60
COLOR SHEEN	2	\$10.30	\$20.60
TURBIDITY	2	\$10.30	\$20.60
TEMPERATURE	2	\$10.30	\$20.60
FIELD SAMPLING 08/11/04	3	\$41.20	\$123.60
COC #67743			\$0.00
Invoice Total			\$555.42

Remit To: 4320 Old Hwy 37
LAKELAND, FL 33813
(863) 646-8526
NET 30 DAYS



Lakeland:
Other Offices:

4320 Old Hwy 37 Lakeland, FL 33813 863/646-8526 Fax 863/646-1042
P. O. Box 2310, Tuscaloosa, AL 35403 205/752-5543 Fax 205/752-4043
273 Azalea Rd. 2-519 Mobile, AL 36609 251/342-8714 Fax 251/342-8739
106 Administration Rd., Ste 4 Oak Ridge, TN 37831-4412 865/483-7483 Fax 865/483-7630
P. O. Box 321090, Flowood, MS 39323 601/919-9940



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CASE NARRATIVE

SENT TO: MANATEE COUNTY-SWRTP
JEFF GOODWIN
5101 65TH STREET WEST
BRADENTON FLORIDA 34210
941 792-8788

REPORT ID : 0408067743
PROJECT NO. :
PELA CONTACT :
RECEIVED DATE : 08/11/04
REPORTED DATE : 10/05/04



LAB ID #
KE12495-02Y
KE12496-02X-5
KE12496-03S
KE12497-02Y
KE12498-02X-5
KE12498-03S
KE12499-02Y
KE12504-02X-5
KE12504-03S

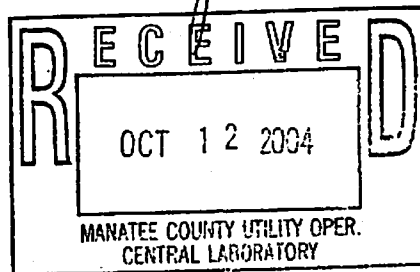
REPORT SUMMARY

Sampling, handling and holding time criteria was met for all samples.

Samples were collected by PELA according to the DEP-SOP-001/01 revised February 1, 2004

QUALIFIER KEY

U = Indicates that the compound was analyzed but lower than the reported MDL



Keith Rice

ASSISTANT LABORATORY DIRECTOR

Anna J. Mostafa

LABORATORY DIRECTOR

CERTIFICATE OF RESULTS

Sample integrity certified prior to analysis. Uncertainties in test results are available upon request. Test results meet all requirements of the NELAC Standards, except as noted in the Case Narrative. This report may not be reproduced in part, results relate only to items tested. This report includes a case narrative, report of analysis, attachments, and chain of custody.

Narrative Page 1 of 1



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813 PHONE 863/646-8526 FAX 863/646-1042

CLIENT

Client : MANATEE COUNTY-SWRTP
5101 65TH STREET WEST
BRADENTON FLORIDA 34210
Attention : JEFF GOODWIN

Report ID: 0408067743

BILLING

Bill : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

Purchase Order :

Identification : SW2
Site : LENA RD LAND FILL
Type : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE	:	274	MICROMHOS
pH	:	6.42	STANDARD UNITS
WATER TEMPERATURE	:	32.16	DEGREES C
DISSOLVED OXYGEN	:	2.69	mg/L
INITIAL WATER LEVEL	:		
WELL ELEVATION	:		
FIELD TURBIDITY	:	5.41	NTU
FIELD COLOR	:		
FACILITY GMS #	:		

COMMENTS

UNIQUE ID#
01A APP1VOLS



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

Client Name : MANATEE COUNTY-SWRTP
Identification : SW2
Site : LENA RD LAND FILL
Type : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 13:36

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
-----------	---------	--------------------	-------	---------	------------------

ORGANICS

APPENDIX I VOLATILES (EPA 8260)

KE12495-02Y

1,2,3-TRICHLOROPROPANE	U	0.3	ug/l	JMS	08/20/04
IODOMETHANE	U	0.5	ug/l	JMS	08/20/04
CIS 1,2-DICHLOROETHENE	U	0.10	ug/l	JMS	08/20/04
T-1,4-DICHLORO-2-BUTENE	U	10.0	ug/l	JMS	08/20/04
STYRENE	U	1.0	ug/l	JMS	08/20/04
1,1,1,2-TETRACHLOROETHANE	U	0.1	ug/l	JMS	08/20/04
2-HEXANONE	U	2.5	ug/l	JMS	08/20/04
DIBROMOMETHANE	U	0.3	ug/l	JMS	08/20/04
2-BUTANONE	U	2.5	ug/l	JMS	08/20/04
ACETONE	U	2.5	ug/l	JMS	08/20/04
VINYL ACETATE	U	10.0	ug/l	JMS	08/20/04
CARBON DISULFIDE	U	4.1	ug/l	JMS	08/20/04
4-METHYL-2-PENTANONE	U	2.5	ug/l	JMS	08/20/04
BROMOCHLOROMETHANE	U	0.5	ug/l	JMS	08/20/04
CHLOROMETHANE	U	0.13	ug/l	JMS	08/20/04
DICHLOROMETHANE	U	0.03	ug/l	JMS	08/20/04
1,1-DICHLOROETHENE	U	0.12	ug/l	JMS	08/20/04
TRICHLOROFLUOROMETHAN	U	0.08	ug/l	JMS	08/20/04
CHLOROETHANE	U	0.10	ug/l	JMS	08/20/04
VINYL CHLORIDE	U	0.17	ug/l	JMS	08/20/04
ACRYLONITRILE	U	1.50	ug/l	JMS	08/20/04
1,1-DICHLOROETHANE	U	0.03	ug/l	JMS	08/20/04
BROMOMETHANE	U	0.11	ug/l	JMS	08/20/04
TOLUENE	U	0.11	ug/l	JMS	08/20/04
1,4-DICHLOROBENZENE	U	0.03	ug/l	JMS	08/20/04
1,1,2,2-TETRACHLOROETHANE	U	0.04	ug/l	JMS	08/20/04
O-XYLENE	U	0.11	ug/l	JMS	08/20/04
TRIBROMOMETHANE	U	0.12	ug/l	JMS	08/20/04
M,P-XYLENES	U	0.11	ug/l	JMS	08/20/04
ETHYLBENZENE	U	0.06	ug/l	JMS	08/20/04
CHLOROBENZENE	U	0.04	ug/l	JMS	08/20/04
TETRACHLOROETHENE	U	0.14	ug/l	JMS	08/20/04
DIBROMOCHLOROMETHANE	U	0.05	ug/l	JMS	08/20/04
TRANS-1,2-DICHLOROETHENE	U	0.06	ug/l	JMS	08/20/04
TRANS-1,3-DICHLOROPROPEN	U	0.04	ug/l	JMS	08/20/04



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Site : LENA RD LAND FILL
Type : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 13:36

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	RESULTS	DETECTION		UNITS	ANALYST	DATE
		LIMIT				FINISHED
1,2-DICHLOROBENZENE	U	0.03		ug/l	JMS	08/20/04
CIS-1,3-DICHLOROPROPENE	U	0.05		ug/l	JMS	08/20/04
BROMODICHLOROMETHANE	U	0.08		ug/l	JMS	08/20/04
TRICHLOROETHENE	U	0.19		ug/l	JMS	08/20/04
1,2-DICHLOROPROPANE	U	0.04		ug/l	JMS	08/20/04
CARBON TETRACHLORIDE	U	0.21		ug/l	JMS	08/20/04
BENZENE	U	0.04		ug/l	JMS	08/20/04
1,2-DICHLOROETHANE	U	0.02		ug/l	JMS	08/20/04
1,1,1-TRICHLOROETHANE	U	0.04		ug/l	JMS	08/20/04
TRICHLOROMETHANE	U	0.03		ug/l	JMS	08/20/04
1,1,2-TRICHLOROETHANE	U	0.10		ug/l	JMS	08/20/04

DETECTION LIMITS REPORTED ARE METHOD DETECTION LIMITS WHICH MAY VARY WITH MATRIX AND CONCENTRATION. ND- NONE DETECTED.



REPORT OF ANALYSIS

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CLIENT

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5101 65TH STREET WEST
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Attention : JEFF GOODWIN

Report ID: 0408067743

BILLING

Bill To : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

Purchase Order :

SAMPLE

IDENTIFICATION : SW2
SITE : LENA RD LAND FILL
TYPE : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE	:	274	MICROMHOS
pH	:	6.42	STANDARD UNITS
WATER TEMPERATURE	:	32.16	DEGREES C
DISSOLVED OXYGEN	:	2.69	mg/L
INITIAL WATER LEVEL	:		
WELL ELEVATION	:		
FIELD TURBIDITY	:	5.41	NTU
FIELD COLOR	:		
FACILITY GMS #	:		

COMMENTS

UNIQUE ID#
01C-3,4
03S CHA



REPORT OF ANALYSIS

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Geochemistry Laboratory

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CLIENT NAME : MANATEE COUNTY-SWRTP
IDENTIFICATION : SW2
SITE : LENA RD LAND FILL
TYPE : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 13:36

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	METHOD	DETECTION LIMITS	RESULT	UNIT	ANALYST	TIME/DATE STARTED
<u>INORGANICS</u>						

KE12496-03S

CHLOROPHYLL A

10200 H

0.1

1.65

mg/m3

RLG

14:30 08/19/04

DETECTION LIMITS REPORTED ARE METHOD DETECTION LIMITS WHICH MAY VARY WITH MATRIX AND CONCENTRATION.



REPORT OF ANALYSIS

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CLIENT NAME : MANATEE COUNTY-SWRTP
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SITE : LENA RD LAND FILL
TYPE : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 13:36

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

TIME/DATE

STARTED

PARAMETER

METHOD DETECTION

LIMITS

RESULT UNIT ANALYST

ORGANICS

EDB & DBCP/ENVIRON WATER

KE12496-02X-5

ETHYLENE DIBROMIDE

DIBROMCHLORPROPANE

EPA 504.1

0.01

U

ug/L

JPT

8:06 08/17/04

EPA 504.1

0.01

U

ug/L

JPT

8:06 08/17/04



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Attention : JEFF GOODWIN

Report ID: 0408067743

BILLING

Bill : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

Purchase Order :

Identification : SW1
Site : LENA RD LAND FILL
Type : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE	:	358	MICROMHOS
pH	:	6.93	STANDARD UNITS
WATER TEMPERATURE	:	28.96	DEGREES C
DISSOLVED OXYGEN	:	2.65	mg/L
INITIAL WATER LEVEL	:		
WELL ELEVATION	:		
FIELD TURBIDITY	:	8.79	NTU
FIELD COLOR	:		
FACILITY GMS #	:		

COMMENTS

UNIQUE ID#
01A APP1VOLS



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P.E. LaMoreaux and Associates, Inc.

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Client Name : MANATEE COUNTY-SWRTP
Identification : SW1
Site : LENA RD LAND FILL
Type : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 14:35

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
-----------	---------	--------------------	-------	---------	------------------

ORGANICS

APPENDIX I VOLATILES (EPA 8260)

KE12497-02Y					
1,2,3-TRICHLOROPROPANE	U	0.3	ug/l	JMS	08/20/04
IODOMETHANE	U	0.5	ug/l	JMS	08/20/04
CIS 1,2-DICHLOROETHENE	U	0.10	ug/l	JMS	08/20/04
T-1,4-DICHLORO-2-BUTENE	U	10.0	ug/l	JMS	08/20/04
STYRENE	U	1.0	ug/l	JMS	08/20/04
1,1,1,2-TETRACHLOROETHANE	U	0.1	ug/l	JMS	08/20/04
2-HEXANONE	U	2.5	ug/l	JMS	08/20/04
DIBROMOMETHANE	U	0.3	ug/l	JMS	08/20/04
2-BUTANONE	U	2.5	ug/l	JMS	08/20/04
ACETONE	U	2.5	ug/l	JMS	08/20/04
VINYL ACETATE	U	10.0	ug/l	JMS	08/20/04
CARBON DISULFIDE	U	4.1	ug/l	JMS	08/20/04
4-METHYL-2-PENTANONE	U	2.5	ug/l	JMS	08/20/04
BROMOCHLOROMETHANE	U	0.5	ug/l	JMS	08/20/04
CHLOROMETHANE	U	0.13	ug/l	JMS	08/20/04
DICHLOROMETHANE	U	0.03	ug/l	JMS	08/20/04
1,1-DICHLOROETHENE	U	0.12	ug/l	JMS	08/20/04
TRICHLOROFLUOROMETHAN	U	0.08	ug/l	JMS	08/20/04
CHLOROETHANE	U	0.10	ug/l	JMS	08/20/04
VINYL CHLORIDE	U	0.17	ug/l	JMS	08/20/04
ACRYLONITRILE	U	1.50	ug/l	JMS	08/20/04
1,1-DICHLOROETHANE	U	0.03	ug/l	JMS	08/20/04
BROMOMETHANE	U	0.11	ug/l	JMS	08/20/04
TOLUENE	U	0.11	ug/l	JMS	08/20/04
1,4-DICHLOROBENZENE	U	0.03	ug/l	JMS	08/20/04
1,1,2,2-TETRACHLOROETHANE	U	0.04	ug/l	JMS	08/20/04
O-XYLENE	U	0.11	ug/l	JMS	08/20/04
TRIBROMOMETHANE	U	0.12	ug/l	JMS	08/20/04
M,P-XYLENES	U	0.11	ug/l	JMS	08/20/04
ETHYLBENZENE	U	0.06	ug/l	JMS	08/20/04
CHLOROBENZENE	U	0.04	ug/l	JMS	08/20/04
TETRACHLOROETHENE	U	0.14	ug/l	JMS	08/20/04
DIBROMOCHLOROMETHANE	U	0.05	ug/l	JMS	08/20/04
TRANS-1,2-DICHLOROETHENE	U	0.06	ug/l	JMS	08/20/04
TRANS-1,3-DICHLOROPROPEN	U	0.04	ug/l	JMS	08/20/04



REPORT OF ANALYSIS

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PHONE 863/646-8526

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Client Name : MANATEE COUNTY-SWRTP
Identification : SW1
Site : LENA RD LAND FILL
Type : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 14:35

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
1,2-DICHLOROBENZENE	U	0.03	ug/l	JMS	08/20/04
CIS-1,3-DICHLOROPROPENE	U	0.05	ug/l	JMS	08/20/04
BROMODICHLOROMETHANE	U	0.08	ug/l	JMS	08/20/04
TRICHLOROETHENE	U	0.19	ug/l	JMS	08/20/04
1,2-DICHLOROPROPANE	U	0.04	ug/l	JMS	08/20/04
CARBON TETRACHLORIDE	U	0.21	ug/l	JMS	08/20/04
BENZENE	U	0.04	ug/l	JMS	08/20/04
1,2-DICHLOROETHANE	U	0.02	ug/l	JMS	08/20/04
1,1,1-TRICHLOROETHANE	U	0.04	ug/l	JMS	08/20/04
TRICHLOROMETHANE	U	0.03	ug/l	JMS	08/20/04
1,1,2-TRICHLOROETHANE	U	0.10	ug/l	JMS	08/20/04

DETECTION LIMITS REPORTED ARE METHOD DETECTION LIMITS WHICH MAY VARY WITH MATRIX AND CONCENTRATION. ND- NONE DETECTED.



REPORT OF ANALYSIS

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Report ID: 0408067743

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Bill To : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

Purchase Order :

SAMPLE

IDENTIFICATION : SW1
SITE : LENA RD LAND FILL
TYPE : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE	:	358	MICROMHOS
pH	:	6.93	STANDARD UNITS
WATER TEMPERATURE	:	28.96	DEGREES C
DISSOLVED OXYGEN	:	2.65	mg/L
INITIAL WATER LEVEL	:		
WELL ELEVATION	:		
FIELD TURBIDITY	:	8.79	NTU
FIELD COLOR	:		
FACILITY GMS #	:		

COMMENTS

UNIQUE ID#
01C-3,4
03S CHA



REPORT OF ANALYSIS

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Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 14:35

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

TIME/DATE

STARTED

PARAMETER

METHOD

DETECTION

LIMITS

RESULT

UNIT

ANALYST

INORGANICS

KE12498-03S

CHLOROPHYLL A

10200 H

0.1

1.62

mg/m3

RLG

14:30 08/19/04

DETECTION LIMITS REPORTED ARE METHOD DETECTION LIMITS WHICH MAY VARY WITH MATRIX AND CONCENTRATION.



REPORT OF ANALYSIS

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COLLECTION TIME : 14:35

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

TIME/DATE

STARTED

PARAMETER ORGANICS

METHOD DETECTION LIMITS RESULT UNIT ANALYST

EDB & DBCP/ENVIRON WATER

KE12498-02X-5

ETHYLENE DIBROMIDE

DIBROMCHLORPROPANE

EPA 504.1

0.01

U

ug/L

JPT

8:38 08/17/04

EPA 504.1

0.01

U

ug/L

JPT

8:38 08/17/04



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Attention : JEFF GOODWIN

Report ID: 0408067743

BILLING

Bill : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

Purchase Order :

Identification : DUPLICATE
Site : LENA RD LAND FILL
Type : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE :
pH :
WATER TEMPERATURE :
DISSOLVED OXYGEN :
INITIAL WATER LEVEL :
WELL ELEVATION :
FIELD TURBIDITY :
FIELD COLOR :
FACILITY GMS # :

COMMENTS

UNIQUE ID#
02Y APP1VOL



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Client Name : MANATEE COUNTY-SWRTP
Identification : DUPLICATE
Site : LENA RD LAND FILL
Type : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 0:00

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
-----------	---------	--------------------	-------	---------	------------------

APPENDIX I VOLATILES (EPA 8260)

KE12499-02Y

1,2,3-TRICHLOROPROPANE	U	0.3	ug/l	JMS	08/20/04
IODOMETHANE	U	0.5	ug/l	JMS	08/20/04
CIS 1,2-DICHLOROETHENE	U	0.10	ug/l	JMS	08/20/04
T-1,4-DICHLORO-2-BUTENE	U	10.0	ug/l	JMS	08/20/04
STYRENE	U	1.0	ug/l	JMS	08/20/04
1,1,1,2-TETRACHLOROETHANE	U	0.1	ug/l	JMS	08/20/04
2-HEXANONE	U	2.5	ug/l	JMS	08/20/04
DIBROMOMETHANE	U	0.3	ug/l	JMS	08/20/04
2-BUTANONE	U	2.5	ug/l	JMS	08/20/04
ACETONE	U	2.5	ug/l	JMS	08/20/04
VINYL ACETATE	U	10.0	ug/l	JMS	08/20/04
CARBON DISULFIDE	U	4.1	ug/l	JMS	08/20/04
4-METHYL-2-PENTANONE	U	2.5	ug/l	JMS	08/20/04
BROMOCHLOROMETHANE	U	0.5	ug/l	JMS	08/20/04
CHLOROMETHANE	U	0.13	ug/l	JMS	08/20/04
DICHLOROMETHANE	U	0.03	ug/l	JMS	08/20/04
1,1-DICHLOROETHENE	U	0.12	ug/l	JMS	08/20/04
TRICHLOROFLUOROMETHANE	U	0.08	ug/l	JMS	08/20/04
CHLOROETHANE	U	0.10	ug/l	JMS	08/20/04
VINYL CHLORIDE	U	0.17	ug/l	JMS	08/20/04
ACRYLONITRILE	U	1.50	ug/l	JMS	08/20/04
1,1-DICHLOROETHANE	U	0.03	ug/l	JMS	08/20/04
BROMOMETHANE	U	0.11	ug/l	JMS	08/20/04
TOLUENE	U	0.11	ug/l	JMS	08/20/04
1,4-DICHLOROBENZENE	U	0.03	ug/l	JMS	08/20/04
1,1,2,2-TETRACHLOROETHANE	U	0.04	ug/l	JMS	08/20/04
O-XYLENE	U	0.11	ug/l	JMS	08/20/04
TRIBROMOMETHANE	U	0.12	ug/l	JMS	08/20/04
M,P-XYLENES	U	0.11	ug/l	JMS	08/20/04
ETHYLBENZENE	U	0.06	ug/l	JMS	08/20/04
CHLOROBENZENE	U	0.04	ug/l	JMS	08/20/04
TETRACHLOROETHENE	U	0.14	ug/l	JMS	08/20/04
DIBROMOCHLOROMETHANE	U	0.05	ug/l	JMS	08/20/04
TRANS-1,2-DICHLOROETHENE	U	0.06	ug/l	JMS	08/20/04
TRANS-1,3-DICHLOROPROPEN	U	0.04	ug/l	JMS	08/20/04

Page 14 of 18



REPORT OF ANALYSIS

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Identification : DUPLICATE
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Type : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 0:00

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
1,2-DICHLOROBENZENE	U	0.03	ug/l	JMS	08/20/04
CIS-1,3-DICHLOROPROPENE	U	0.05	ug/l	JMS	08/20/04
BROMODICHLOROMETHANE	U	0.08	ug/l	JMS	08/20/04
TRICHLOROETHENE	U	0.19	ug/l	JMS	08/20/04
1,2-DICHLOROPROPANE	U	0.04	ug/l	JMS	08/20/04
CARBON TETRACHLORIDE	U	0.21	ug/l	JMS	08/20/04
BENZENE	U	0.04	ug/l	JMS	08/20/04
1,2-DICHLOROETHANE	U	0.02	ug/l	JMS	08/20/04
1,1,1-TRICHLOROETHANE	U	0.04	ug/l	JMS	08/20/04
TRICHLOROMETHANE	U	0.03	ug/l	JMS	08/20/04
1,1,2-TRICHLOROETHANE	U	0.10	ug/l	JMS	08/20/04

DETECTION LIMITS REPORTED ARE METHOD DETECTION LIMITS WHICH MAY VARY WITH MATRIX AND CONCENTRATION. ND- NONE DETECTED.



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

Report ID: 0408067743

BILLING

Bill To : MANATEE COUNTY-SWRTP

P.O. BOX 1000

BRADENTON, FLORIDA 34206

Purchase Order :

CLIENT

Client : MANATEE COUNTY-SWRTP
5101 65TH.STREET WEST
BRADENTON FLORIDA 34210
Attention : JEFF GOODWIN

SAMPLE

IDENTIFICATION : DUPLICATE
SITE : LENA RD LAND FILL
TYPE : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE :
pH :
WATER TEMPERATURE :
DISSOLVED OXYGEN :
INITIAL WATER LEVEL :
WELL ELEVATION :
FIELD TURBIDITY :
FIELD COLOR :
FACILITY GMS # :

COMMENTS

UNIQUE ID#
01C-3,4 EDBE
03S CHA



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT NAME : MANATEE COUNTY-SW RTP
IDENTIFICATION : DUPLICATE
SITE : LENA RD LAND FILL
TYPE : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 0:00

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

TIME/DATE

STARTED

PARAMETER

METHOD

DETECTION

LIMITS

RESULT UNIT ANALYST

INORGANICS

KE12504-03S

CHLOROPHYLL A

10200 H

0.1

1.50

mg/m3

RLG

14:30 08/19/04

DETECTION LIMITS REPORTED ARE METHOD DETECTION LIMITS WHICH MAY VARY WITH MATRIX AND CONCENTRATION.



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT NAME : MANATEE COUNTY-SW RTP
IDENTIFICATION : DUPLICATE
SITE : LENA RD LAND FILL
TYPE : WATER

Report ID: 0408067743

COLLECTION DATE : 08/11/04

COLLECTION TIME : 0:00

COLLECTED : PELA

DATE RECEIVED IN LAB : 08/11/04

PARAMETER	METHOD	DETECTION LIMITS	RESULT	UNIT	ANALYST	TIME/DATE STARTED
-----------	--------	------------------	--------	------	---------	-------------------

ORGANICS

EDB & DBCP/ENVIRON WATER

KE12504-02X-5

ETHYLENE DIBROMIDE

DIBROMCHLORPROPANE

EPA 504.1

0.01

U

ug/L

JPT

13:28 08/17/04

EPA 504.1

0.01

U

ug/L

JPT

13:28 08/17/04

ATTN: Jeff Goodwin
CLIENT: Munstecco
ADDRESS: _____

P.E. LaMoreaux & Associates
4320 Old Highway 37
Lakeland, Florida 33813
(863) 646-8526

ATTN: _____
CLIENT: _____
ADDRESS: _____

67743

CHAIN OF CUSTODY

[illegible]

ATTN: Phil Goodwin
CLIENT: Murphy
ADDRESS: _____

CHAIN OF CUSTODY

ATTN: _____
CLIENT: _____
ADDRESS: _____

67743

[illegible]

ADDRESS:

ADDRESS:

WOLFSTON



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT INFORMATION

Client : MANATEE COUNTY-SWRTP
5101 65TH STREET WEST
BRADENTON FLORIDA 34210
Attention : JEFF GOODWIN

Report ID: 0408067743

BILLING INFORMATION

Bill To : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : SW2

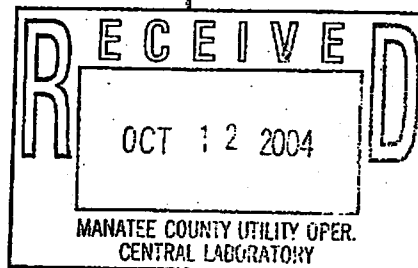
Purchase Order No. :

FIELD PARAMETERS

SPECIFIC CONDUCTANCE	: 274	MICROMHOS
pH	: 6.42	STANDARD UNITS
WATER TEMPERATURE	: 32.16	DEGREES C
DISSOLVED OXYGEN	: 2.69	mg/L
INITIAL WATER LEVEL	:	
WELL ELEVATION	:	
FIELD TURBIDITY	: 5.41	NTU
FIELD COLOR	:	

COMMENTS

UNIQUE ID#
01A APPIVOLS





REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

PHASE III ANALYTICAL RESULTS

FACILITY GMS # :

Report ID: 0408067743

TEST SITE ID # : LENA RD LAND FILL

SAMPLING DATE/TIME : 8/11/04 1:36:00

WELL NAME : SW2

REPORT PERIOD (YR/QTR) :

CLASSIFICATION OF GROUNDWATER : G II

WELL PURGED (Y/N) : Y

GROUND WATER ELEVATION (NGVD):

WELL TYPE :

OR (MSL) :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 13:36

FEET BMP :

COLLECTED BY : PELLA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
	ORGANICS KE12495- APPENDIX I VOLATILES (	*	N		9/10/04 14:26	COMPLETED	

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER

	ORGANICS KE12495-02Y								
344	1,1,1-trichloroethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.04	ug/l
34	1,1,2,2-tetrachloroethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.04	ug/l
34511	1,1,2-trichloroethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.10	ug/l
34496	1,1-dichloroethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.03	ug/l
34501	1,1-dichloroethene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.12	ug/l
34536	1,2-dichlorobenzene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.03	ug/l
34531	1,2-dichloroethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.02	ug/l
34541	1,2-dichloropropane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.04	ug/l
34571	1,4-dichlorobenzene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.03	ug/l
34215	Acrylonitrile	*	N	EPA 8260	8/20/04 14:41	U	ug/l	1.50	ug/l
34030	Benzene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.04	ug/l
32101	Bromodichloromethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.08	ug/l
34413	Bromomethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.11	ug/l
32102	Carbon tetrachloride	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.21	ug/l
34301	Chlorobenzene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.04	ug/l
34311	Chloroethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.10	ug/l
34418	Chloromethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.13	ug/l
34704	cis-1,3-dichloropropene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.05	ug/l
32105	Dibromochloromethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.05	ug/l
34423	Dichloromethane	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.03	ug/l
34371	Ethylbenzene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.06	ug/l
81551	m,p-Xylenes	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.11	ug/l
77135	o-Xylene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.11	ug/l
34475	Tetrachloroethene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.14	ug/l
34010	Toluene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.11	ug/l
34546	trans-1,2-dichloroethene	*	N	EPA 8260	8/20/04 14:41	U	ug/l	0.06	ug/l

Page 4

CERTIFICATIONS: State of FL #E84098 • State of AL #40120 • State of KY #90013 • State of TN #02958 • State of SC #96022 • State of GA #927 • State of MS Dept. of Health

FL - DEP CompQAP: 870072 • Methods: Standard Methods for the Examination of Water and Wastewater, Latest Edition, APHA, AWWA, and WEF and/or other EPA-approved methods which meet FDER or other state protocol, unless otherwise designated.



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

PART III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : SW2

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067743

SAMPLING DATE/TIME : 8/11/04 1:36:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 13:36

COLLECTED BY : PELLA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS RESULTS	ANALYSIS UNITS	DETECTION LIMITS	DETECTION UNITS
34699	trans-1,3-dichloropropene	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.04	ug/l
32104	Tribromomethane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.12	ug/l
39180	Trichloroethene	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.19	ug/l
34488	Trichlorofluoromethane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.08	ug/l
32106	Trichloromethane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.03	ug/l
39175	Vinyl Chloride	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.17	ug/l
	KE12495-02Y									
77562	1,1,1,2-tetrachloroethane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.1	ug/l
	1,2,3-Trichloropropane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.3	ug/l
	2-Butanone	*	N	EPA 8260	8/20/04	14:41	U	ug/l	2.5	ug/l
77103	2-Hexanone	*	N	EPA 8260	8/20/04	14:41	U	ug/l	2.5	ug/l
78133	4-Methyl-2-pentanone	*	N	EPA 8260	8/20/04	14:41	U	ug/l	2.5	ug/l
81552	Acetone	*	N	EPA 8260	8/20/04	14:41	U	ug/l	2.5	ug/l
73085	Bromochloromethane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.5	ug/l
81309	Carbon Disulfide	*	N	EPA 8260	8/20/04	14:41	U	ug/l	4.1	ug/l
77093	cis 1,2-Dichloroethene	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.10	ug/l
34536	Dibromomethane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.3	ug/l
77424	Iodomethane	*	N	EPA 8260	8/20/04	14:41	U	ug/l	0.5	ug/l
77128	Styrene	*	N	EPA 8260	8/20/04	14:41	U	ug/l	1.0	ug/l
49263	t-1,4-Dichloro-2-butene	*	N	EPA 8260	8/20/04	14:41	U	ug/l	10.0	ug/l
77057	Vinyl Acetate	*	N	EPA 8260	8/20/04	14:41	U	ug/l	10.0	ug/l

*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

TEST III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : SW2

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067743

SAMPLING DATE/TIME : 8/11/04 1:36:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 13:36

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
32223	INORGANICS KE12496-03S CHLOROPHYLL A	*	N	10200 H	8/19/04 14:30	1.65 mg/m3	0.1 mg/m3

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER

	ORGANICS KE12496- EDB & DBCP/EW	*	N		9/10/04 14:26	COMPLETED	
--	---------------------------------------	---	---	--	---------------	-----------	--

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER

38437	ORGANICS KE12496-02X-5 DIBROMCHLORPROPANE	*	N	EPA 504.1	8/17/04 8:06	U ug/L	0.01 ug/L
46369	ETHYLENE DIBROMIDE	*	N	EPA 504.1	8/17/04 8:06	U ug/L	0.01 ug/L

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

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PHONE 863/646-8526

FAX 863/646-1042

CLIENT INFORMATION

Client : MANATEE COUNTY-SWRTP
5101 65TH STREET WEST
BRADENTON FLORIDA 34210
Attention : JEFF GOODWIN

Report ID: 0408067743

BILLING INFORMATION

Bill To : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : SW1

Purchase Order No. :

FIELD PARAMETERS

SPECIFIC CONDUCTANCE : 358

pH : 6.93

WATER TEMPERATURE : 28.96

DISSOLVED OXYGEN : 2.65

INITIAL WATER LEVEL :

WELL ELEVATION :

FIELD TURBIDITY : 8.79

FIELD COLOR :

MICROMHOS

STANDARD UNITS

DEGREES C

mg/L

NTU

COMMENTS

UNIQUE ID#
01A APPIVOLS



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

T III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : SW1

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD):

OR (MSL) :

FEET BMP :

Report ID: 0408067743

SAMPLING DATE/TIME : 8/11/04 2:35:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 14:35

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
	ORGANICS KE12497- APPENDIX I VOLATILES (	*	N		9/10/04 14:26	COMPLETED	

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER

	ORGANICS KE12497-02Y								
3	1,1,1-trichloroethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.04	ug/l
3	1,1,2,2-tetrachloroethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.04	ug/l
34511	1,1,2-trichloroethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.10	ug/l
34496	1,1-dichloroethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.03	ug/l
34501	1,1-dichloroethene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.12	ug/l
34536	1,2-dichlorobenzene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.03	ug/l
34531	1,2-dichloroethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.02	ug/l
34541	1,2-dichloropropane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.04	ug/l
34571	1,4-dichlorobenzene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.03	ug/l
34215	Acrylonitrile	*	N	EPA 8260	8/20/04 15:15	U	ug/l	1.50	ug/l
34030	Benzene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.04	ug/l
32101	Bromodichloromethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.08	ug/l
34413	Bromomethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.11	ug/l
32102	Carbon tetrachloride	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.21	ug/l
34301	Chlorobenzene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.04	ug/l
34311	Chloroethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.10	ug/l
34418	Chloromethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.13	ug/l
34704	cis-1,3-dichloropropene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.05	ug/l
32105	Dibromochloromethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.05	ug/l
34423	Dichloromethane	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.03	ug/l
34371	Ethylbenzene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.06	ug/l
81551	m,p-Xylenes	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.11	ug/l
77135	o-Xylene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.11	ug/l
34475	Tetrachloroethene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.14	ug/l
34010	Toluene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.11	ug/l
34546	trans-1,2-dichloroethene	*	N	EPA 8260	8/20/04 15:15	U	ug/l	0.06	ug/l

Pa. 74



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

PART III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : SW1

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067743

SAMPLING DATE/TIME : 8/11/04 2:35:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 14:35

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS RESULTS	UNITS	DETECTION LIMITS	UNITS
34699	trans-1,3-dichloropropene	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.04	ug/l
32104	Tribromomethane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.12	ug/l
39180	Trichloroethene	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.19	ug/l
34488	Trichlorofluoromethane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.08	ug/l
32106	Trichloromethane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.03	ug/l
39175	Vinyl Chloride	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.17	ug/l
	KE12497-02Y									
77562	1,1,1,2-tetrachloroethane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.1	ug/l
77562	1,2,3-Trichloropropane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.3	ug/l
8	2-Butanone	*	N	EPA 8260	8/20/04	15:15	U	ug/l	2.5	ug/l
77103	2-Hexanone	*	N	EPA 8260	8/20/04	15:15	U	ug/l	2.5	ug/l
78133	4-Methyl-2-pentanone	*	N	EPA 8260	8/20/04	15:15	U	ug/l	2.5	ug/l
81552	Acetone	*	N	EPA 8260	8/20/04	15:15	U	ug/l	2.5	ug/l
73085	Bromochloromethane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.5	ug/l
81309	Carbon Disulfide	*	N	EPA 8260	8/20/04	15:15	U	ug/l	4.1	ug/l
77093	cis 1,2-Dichloroethene	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.10	ug/l
34536	Dibromomethane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.3	ug/l
77424	Iodomethane	*	N	EPA 8260	8/20/04	15:15	U	ug/l	0.5	ug/l
77128	Styrene	*	N	EPA 8260	8/20/04	15:15	U	ug/l	1.0	ug/l
49263	t-1,4-Dichloro-2-butene	*	N	EPA 8260	8/20/04	15:15	U	ug/l	10.0	ug/l
77057	Vinyl Acetate	*	N	EPA 8260	8/20/04	15:15	U	ug/l	10.0	ug/l

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

TEST III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : SW1

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067743

SAMPLING DATE/TIME : 8/11/04 2:35:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 14:35

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
32223	INORGANICS KE12498-03S CHLOROPHYLL A	*	N	10200 H	8/19/04 14:30	1.62 mg/m3	0.1 mg/m3

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER

	ORGANICS KE12498- EDB & DBCP/EW	*	N		9/10/04 14:26	COMPLETED	
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*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER

38437	ORGANICS KE12498-02X-5 DIBROMCHLORPROPANE	*	N	EPA 504.1	8/17/04 8:38	U ug/L	0.01 ug/L
46369	ETHYLENE DIBROMIDE	*	N	EPA 504.1	8/17/04 8:38	U ug/L	0.01 ug/L

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER



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CLIENT INFORMATION

Client : MANATEE COUNTY-SWRTP
5101 65TH STREET WEST
BRADENTON FLORIDA 34210
Attention : JEFF GOODWIN

Report ID: 0408067743

BILLING INFORMATION

Bill To : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : DUPLICATE

Purchase Order No. :

FIELD PARAMETERS

SPECIFIC CONDUCTANCE :

pH :

WATER TEMPERATURE :

DISSOLVED OXYGEN :

INITIAL WATER LEVEL :

WELL ELEVATION :

FIELD TURBIDITY :

FIELD COLOR :

COMMENTS

UNIQUE ID#
02Y APP1VOL



REPORT OF ANALYSIS

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PHONE 863/646-8526

FAX 863/646-1042

RT III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : DUPLICATE

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067743

SAMPLING DATE/TIME : 8/11/04 12:00:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 0:00

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
	ORGANICS KE12499- APPENDIX I VOLATILES (	*	N		9/10/04 14:26	COMPLETED	

*SUBMERSIBLE OR PERISTALTIC PUMP

** BAILER

	ORGANICS KE12499-02Y								
34516	1,1,1-trichloroethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.04	ug/l
34511	1,1,2,2-tetrachloroethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.04	ug/l
34496	1,1,2-trichloroethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.10	ug/l
34501	1,1-dichloroethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.03	ug/l
34536	1,1-dichloroethene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.12	ug/l
34531	1,2-dichlorobenzene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.03	ug/l
34541	1,2-dichloroethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.02	ug/l
34541	1,2-dichloropropane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.04	ug/l
34571	1,4-dichlorobenzene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.03	ug/l
34215	Acrylonitrile	*	N	EPA 8260	8/20/04 15:50	U	ug/l	1.50	ug/l
34030	Benzene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.04	ug/l
32101	Bromodichloromethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.08	ug/l
34413	Bromomethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.11	ug/l
32102	Carbon tetrachloride	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.21	ug/l
34301	Chlorobenzene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.04	ug/l
34311	Chloroethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.10	ug/l
34418	Chloromethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.13	ug/l
34704	cis-1,3-dichloropropene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.05	ug/l
32105	Dibromochloromethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.05	ug/l
34423	Dichloromethane	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.03	ug/l
34371	Ethylbenzene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.06	ug/l
81551	m,p-Xylenes	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.11	ug/l
77135	o-Xylene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.11	ug/l
34475	Tetrachloroethene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.14	ug/l
34010	Toluene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.11	ug/l
34555	trans-1,2-dichloroethene	*	N	EPA 8260	8/20/04 15:50	U	ug/l	0.06	ug/l



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TEST III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD LAND FILL

WELL NAME : DUPLICATE

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067743

SAMPLING DATE/TIME : 8/11/04 12:00:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 0:00

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	ANALYSIS TIME	ANALYSIS RESULTS	ANALYSIS UNITS	DETECTION LIMITS	DETECTION UNITS
34699	trans-1,3-dichloropropene	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.04	ug/l
32104	Tribromomethane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.12	ug/l
39180	Trichloroethene	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.19	ug/l
34488	Trichlorofluoromethane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.08	ug/l
32106	Trichloromethane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.03	ug/l
39175	Vinyl Chloride	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.17	ug/l
	KE12499-02Y									
72062	1,1,1,2-tetrachloroethane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.1	ug/l
	1,2,3-Trichloropropane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.3	ug/l
81595	2-Butanone	*	N	EPA 8260	8/20/04	15:50	U	ug/l	2.5	ug/l
77103	2-Hexanone	*	N	EPA 8260	8/20/04	15:50	U	ug/l	2.5	ug/l
78133	4-Methyl-2-pentanone	*	N	EPA 8260	8/20/04	15:50	U	ug/l	2.5	ug/l
81552	Acetone	*	N	EPA 8260	8/20/04	15:50	U	ug/l	2.5	ug/l
73085	Bromochloromethane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.5	ug/l
81309	Carbon Disulfide	*	N	EPA 8260	8/20/04	15:50	U	ug/l	4.1	ug/l
77093	cis 1,2-Dichloroethene	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.10	ug/l
34536	Dibromomethane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.3	ug/l
77424	Iodomethane	*	N	EPA 8260	8/20/04	15:50	U	ug/l	0.5	ug/l
77128	Styrene	*	N	EPA 8260	8/20/04	15:50	U	ug/l	1.0	ug/l
49263	t-1,4-Dichloro-2-butene	*	N	EPA 8260	8/20/04	15:50	U	ug/l	10.0	ug/l
77057	Vinyl Acetate	*	N	EPA 8260	8/20/04	15:50	U	ug/l	10.0	ug/l

*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER



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COLLECTION TIME : 0:00

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DATE RECEIVED IN LAB : 8/11/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
223	INORGANICS KE12504-03S CHLOROPHYLL A	*	N	10200 H	8/19/04 14:30	1.50 mg/m3	0.1 mg/m3

*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER

	ORGANICS KE12504- EDB & DBCP/EW	*	N		9/10/04 14:26	COMPLETED	
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*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER

38437	ORGANICS KE12504-02X-5 DIBROMCHLORPROPANE	*	N	EPA 504.1	8/17/04 13:28	U ug/L	0.01 ug/L
46369	ETHYLENE DIBROMIDE	*	N	EPA 504.1	8/17/04 13:28	U ug/L	0.01 ug/L

*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER