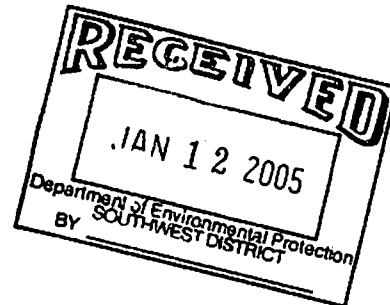




An employee-owned company

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.

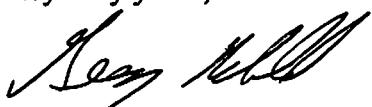
Mr. John Morris
January 10, 2005
Page 6

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\LeuRoadLandfill\SemiAnnualReportSecondHalf2004\Lean Road Second Half 2004 Summary Report.doc

**Table 2 - Lena Road Leachate Analytical Summary
Second Half 2004**

Analyte	Location	Lift Station #1	Lift Station #2
	Sample Identifier	Leachate I	Leachate II
	Date of Test	08/11/04	08/11/04
Standard (I)	Units		
Field Measurements			
pH		STD	6.7
Temperature		Degrees C	29.08
Turbidity		NTUs	91.5
Conductivity		umhos/cm	3871
Dissolved Oxygen (DO)		mg/l	1.14
			0.59
Inorganics			
Antimony		mg/l	<0.003
Arsenic	5.0	mg/l	0.013
Barium	100	mg/l	0.15
Beryllium		mg/l	<0.003
Bicarbonate alkalinity		mg/l	1545
Cadmium	1.0	mg/l	<0.005
Chloride		mg/l	183
Chromium		mg/l	<0.001
Cobalt		mg/l	<0.05
Copper		mg/l	0.03
Cyanide		mg/l	<0.005
Iron		mg/l	17
Lead	5,000	mg/l	0.004
Mercury	200	mg/l	<0.0001
Nickel		mg/l	<0.02
Nitrate		mg/l	0.012
Selenium	1.0	mg/l	<0.002
Silver	5.0	mg/l	<0.0002
Sodium		mg/l	443
Total Ammonia - N		mg/l	185
Total phenols		mg/l	0.025
Thallium		mg/l	<0.001
Tin as SN		mg/l	<0.1
Total Dissolved Solids (TDS)		mg/l	2220
Vanadium		mg/l	<0.01
Zinc		mg/l	0.067
Pesticides & Herbicides			
2,4-D	10,000	ug/l	<0.2
2,4,5-T		ug/l	<0.2
A-BHC		ug/l	<0.003
Aldrin		ug/l	<0.004
B-BHC		ug/l	<0.006
Chlordane	30	ug/l	<0.02
D-BHC		ug/l	<0.009
Dinoseb		ug/l	<0.2
Endosulfan Sulfate		ug/l	<0.03
Endosulfan-I		ug/l	<0.014
Endosulfan-II		ug/l	<0.004
Endrin	20	ug/l	<0.006
Endrin Aldehyde		ug/l	<0.023
G-BHC(Lindane)	400	ug/l	<0.004
Heptachlor	8	ug/l	<0.003
Heptachlor Epoxide		ug/l	<0.01
Methoxychlor	10,000	ug/l	<0.05

Analyte	Location:		Lift Station #1	Lift Station #2
	Sample Identifier:	Date of Test:	Leachate I	Leachate II
	Standard(1)	Units		
PP-DDD		ug/l	<0.011	<0.011
PP-DDE/Dieldrin		ug/l	<0.004	<0.004
PP-DDT		ug/l	<0.012	<0.012
Silvex	1,000	ug/l	<0.1	<0.1
Toxaphene	500	ug/l	<0.2	<0.2
PCB-1016		ug/l	<0.04	<0.04
PCB-1221		ug/l	<0.07	<0.07
PCB-1232		ug/l	<0.09	<0.09
PCB-1242		ug/l	<0.06	<0.06
PCB-1248		ug/l	<0.04	<0.04
PCB-1254		ug/l	<0.04	<0.04
PCB-1260		ug/l	<0.07	<0.07
<i>Organic Acid Extractibles</i>				
2,4,6-Trichlorophenol	2,000	ug/l	<2.7	<2.7
2,4,5-Trichlorophenol	400,000	ug/l	<3.9	<3.9
2,4-Dinitrophenol		ug/l	<5.0	<5.0
4-Nitrophenol		ug/l	<2.4	<2.4
2,3,4,6-Tetrachlorophenol		ug/l	<5.0	<5.0
Pentachlorophenol	100,000	ug/l	<1.5	<1.5
2,4-Dichlorophenol		ug/l	<2.7	<2.7
4,6-Dinitro-2-methylphenol		ug/l	<9.5	<9.5
(3+4)-Methylphenol		ug/l	<3.5	<3.5
2-Methyphenol		ug/l	<3.5	<3.5
2,4-Dimethylphenol		ug/l	<2.7	<2.7
2-Nitrophenol		ug/l	<3.6	<3.6
Phenol		ug/l	<1.5	<1.5
2-Chlorophenol		ug/l	<3.3	<3.3
2,6-Dichlorophenol		ug/l	<5.0	<5.0
4-Chloro-3-methylphenol		ug/l	<3.0	<3.0
<i>Basis: Neutrals</i>				
1,3,5-Trinitrobenzene		ug/l	<10.0	<10.0
1,3-Dinitrobenzene		ug/l	<10.0	<10.0
1,4-Naphthoquinone		ug/l	<7.5	<7.5
2-Acetylaminoflourene		ug/l	<7.5	<7.5
3,3-Dimethylbenzidine		ug/l	<5.0	<5.0
5-Nitro-o-toluidine		ug/l	<10.0	<10.0
Chlorobenzilate		ug/l	<10.0	<10.0
Diallate		ug/l	<5.0	<5.0
Dimethoate		ug/l	<5.0	<5.0
Disulfoton		ug/l	<5.0	<5.0
Famphur		ug/l	<20.0	<20.0
Hexylchloropropene		ug/l	<5.0	<5.0
Isodrin		ug/l	<6.0	<6.0
Isosafrole		ug/l	<5.0	<5.0
Kepone		ug/l	<30.0	<30.0
Methapyrilene		ug/l	<30.0	<30.0
Methyl parathion		ug/l	<15.0	<15.0
N-Nitrosoethylmethylamine		ug/l	<10.0	<10.0
N-Nitrosopyrrolidine		ug/l	<15.0	<15.0
N-Nitrosodiethylamine		ug/l	<10.0	<10.0
OOO-Triethylphosphorothioate		ug/l	<30.0	<30.0

Analyte	Location:	Lift Station #1	Lift Station #2
	Sample Identifier:	Leachate I	Leachate II
	Date of Test:	08/11/04	08/11/04
	Standard(1)	Units	
Ortho-toluidine		ug/l	<10.0
Para-Phenylenediamine		ug/l	<10.0
Parathion		ug/l	<15.0
Phorate		ug/l	<3.0
Safrole		ug/l	<7.5
Thionazin		ug/l	<10.0
1,2,4,5-Tetrachlorobenzene		ug/l	<5.0
1,2,4-Trichlorobenzene		ug/l	<1.9
1-Naphthylamine		ug/l	<10.0
2,4-Dinitrotoluene	13,000	ug/l	<2.2
2,6-Dinitrotoluene		ug/l	<1.9
2-Chloronaphthalene		ug/l	<1.9
2-Methylnaphthalene		ug/l	<2.0
2-Naphthylamine		ug/l	<10.0
2-Nitroaniline		ug/l	<20.0
3,3-Dichlorobenzidine		ug/l	<3.2
3-Methylcholanthrene		ug/l	<5.0
3-Nitroaniline		ug/l	<20.0
4-Aminobiphenyl		ug/l	<5.0
4-Bromophenyl-phenylether		ug/l	<1.9
4-Chloroaniline		ug/l	<6.0
4-Chlorophenylphenylether		ug/l	<4.2
4-Nitronaline		ug/l	<20.0
7,12-Dimethylbenz(a)anthracene		ug/l	<5.0
Acenaphthene		ug/l	<1.9
Acenaphthylene		ug/l	<2.5
Acetone		ug/l	<2.5
Acetophenone		ug/l	<5.0
Anthracene		ug/l	<1.9
Benzo(a)anthracene		ug/l	<3.1
Benzo(a)pyrene		ug/l	<0.1
Benzo(b)flouranthene		ug/l	<2.5
Benzo(g,h,i)perylene		ug/l	<4.1
Benzo(k)flouranthene		ug/l	<2.5
Benzyl alcohol		ug/l	<5.0
Bis(2-chloroethoxy)methane		ug/l	<2.5
Bis(2-chloroethyl)ether		ug/l	<2.5
Bis(2-chloroisopropyl)ether		ug/l	<5.7
Bis(2-ethylhexyl)phthalate		ug/l	<2.5
Butylbenzylphthalate		ug/l	<2.5
Chrysene		ug/l	<2.5
Dibenz(a,h)anthracene		ug/l	<2.5
Dibenzofuran		ug/l	<5.0
Diethylphthalate		ug/l	<1.9
Dimethylphthalate		ug/l	<1.6
Di-N-butylphthalate		ug/l	<2.5
Di-N-octylphthalate		ug/l	<2.5
Diphenylamine		ug/l	<5.0
Ethylmethanesulfonate		ug/l	<10.0
Flouranthene		ug/l	<2.2
Flourene		ug/l	<1.9

Analyte	Location:		Lift Station #1	Lift Station #2
	Sample Identifier:	Date of Test:	Leachate I 08/11/04	Leachate II 08/11/04
	Standard(1)	Units		
Hexachlorobenzene	130	ug/l	<1.0	<1.0
Hexachlorobutadiene	500	ug/l	<0.9	<0.9
Hexachlorocyclopentadiene		ug/l	<5.0	<5.0
Hexachloroethane	3,000	ug/l	<1.6	<1.6
Indeno(1,2,3-cd)pyrene		ug/l	<3.7	<3.7
Isophorone		ug/l	<2.2	<2.2
Methylmethanesulfonate		ug/l	<10.0	<10.0
Naphthalene		ug/l	<1.6	2.2
N-Nitrosodi-n-butylamine		ug/l	<10.0	<10.0
Nitrobenzene	2,000	ug/l	<1.9	<1.9
N-Nitrosodimethylamine		ug/l	<10.0	<10.0
N-Nitroso-di-n-propylamine		ug/l	<10.0	<10.0
N-Nitrosodiphenylamine		ug/l	<1.9	<1.9
N-Nitrosopiperidine		ug/l	<10.0	<10.0
P-Dimethylaminoazobenzene		ug/l	<6.0	<6.0
Pentachlorobenzene		ug/l	<5.0	<5.0
Pentachloronitrobenzene		ug/l	<10.0	<10.0
Phenacetin		ug/l	<10.0	<10.0
Phenanathrene		ug/l	<2.5	<2.5
Pronamide		ug/l	<10.0	<10.0
Pyrene		ug/l	<1.9	<1.9
Halide Organics				
1,1,1,2-Tetrachloroethane		ug/l	<1.0	<0.1
1,1,1-Trichloroethane		ug/l	<0.04	<0.04
1,1,2,2-Tetrachloroethane		ug/l	<0.04	<0.04
1,1,2-Trichloroethane		ug/l	<0.10	<0.10
1,1-Dichloroethane		ug/l	0.16	0.6
1,1-Dichloroethene	700	ug/l	<0.12	<0.12
1,1-Dichloropropene		ug/l	<1.0	<1.0
1,2,3-Trichloropropane		ug/l	<0.3	<0.3
1,2-Dichlorobenzene		ug/l	<0.03	<0.03
1,2-Dichloroethane	500	ug/l	<0.02	<0.02
1,2-Dichloropropane		ug/l	<0.04	<0.04
1,3-Dichlorobenzene		ug/l	<0.12	<0.12
1,3-Dichloropropane		ug/l	<1.0	<1.0
1,4-Dichlorobenzene	7,500	ug/l	4.27	12.4
2,2-Dichloropropane		ug/l	<1.0	<1.0
2-Butanone		ug/l	<2.5	<2.5
2-Hexanone		ug/l	<2.5	<2.5
4-Methyl-2-pentanone		ug/l	<2.5	<2.5
Acetonitrile		ug/l	<10.0	<10.0
Acrolein		ug/l	<1.7	<1.7
Acrylonitrile		ug/l	<1.5	<1.5
Allyl chloride		ug/l	<0.5	<0.5
Benzene	500	ug/l	1.23	7.9
Bromomethane		ug/l	<0.11	<0.11
Bromoform		ug/l	<0.5	<0.5
Bromochloromethane		ug/l	<0.08	<0.08
Carbon Disulfide		ug/l	<4.1	<4.1
Carbon tetrachloride	500	ug/l	<0.21	<0.21
Chlorobenzene	100,000	ug/l	6.43	4.69

Analyte	Location:		Lift Station #1	Lift Station #2
	Sample Identifier:		Leachate I	Leachate II
	Date of Test:		08/11/04	08/11/04
	Standard(1)	Units		
Chloroethane		ug/l	<0.10	<0.1
Chloromethane		ug/l	<0.13	<0.13
Chloroprene		ug/l	<0.03	<0.03
cis-1,2-Dichloroethene		ug/l	<0.10	<0.1
cis-1,3-Dichloropropene		ug/l	<0.05	<0.05
Dibromochloromethane		ug/l	<0.05	<0.05
Dibromomethane		ug/l	<0.3	<0.3
Dichlorodifluoromethane		ug/l	<0.10	<0.10
Dichloromethane		ug/l	<0.03	<0.03
Ethyl methacrylate		ug/l	<0.5	<0.5
Ethylbenzene		ug/l	0.77	4.7
Iodomethane		ug/l	<0.5	<0.5
Isobutyl Alcohol		ug/l	<10.0	<10.0
Methacrylonitrile		ug/l	<10.0	<10.0
Methyl methacrylate		ug/l	<0.5	<0.5
Propionitrile		ug/l	<10.0	<10.0
Styrene		ug/l	<1.0	<1.0
t-1,4-Dichloro-2-butene		ug/l	<10.0	<10.0
Tetrachloroethylene	700	ug/l	<0.14	<0.14
Toluene		ug/l	<0.11	0.96
trans-1,2-Dichloroethene		ug/l	<0.06	<0.06
trans-1,3-Dichloropropene		ug/l	<0.04	<0.04
Tribromomethane		ug/l	<0.12	<0.12
Trichloroethylene	500	ug/l	<0.19	<0.19
Trichlorofluoromethane		ug/l	<0.08	<0.08
Trichloromethane		ug/l	<0.03	<0.03
Vinyl acetate		ug/l	<10.0	<10.0
Vinyl chloride	200	ug/l	<0.17	5.91
o-Xylene		ug/l	1.55	5.8
m,p-Xylenes		ug/l	2.64	3.34
Ethylene dibromide		ug/l	<0.01	<0.01
Dibromochloropropane		ug/l	<0.01	<0.01
Total sulfide		mg/l	<1.0	<1.0

Notes: (1) - Regulatory standard listed in 40 CFR Part 261.24. Analyte concentrations shown with shading represent an exceedance of the regulatory level.

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

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JAN 12 2005

SOUTHWEST DISTRICT
TAMPA

Attachment C-1

Leachate Analytical Report



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory

1020 Old Highway 27, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT NAME : MANATEE COUNTY
 IDENTIFICATION : PHASE 1 LECHATE
 SITE : LENA RD/LECHATE
 TYPE : WATER

JAN 12 2005
 SOUTHWEST DISTRICT
 TAMPA

Report ID: 0408067746

COLLECTION DATE : 08/11/04

COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 08/12/04

TIME/DATE
STARTED

PARAMETER	METHOD	DETECTION LIMITS	RESULT	UNIT	ANALYST	
-----------	--------	------------------	--------	------	---------	--

INORGANICS

KE12599-01P ANTIMONY AS SB	EPA 7041	0.003	U	mg/L	SMW	14:46 08/19/04
KE12599-01P ARSENIC AS AS	EPA 7060	0.001	0.013	mg/L	SMW	17:17 08/23/04
KE12599-01P BARIUM AS BA	EPA 6010	0.1	0.15	mg/L	SMW	13:38 08/17/04
KE12599-01P BERYLLIUM AS BE	EPA 7091	0.003	U	mg/L	SMW	11:59 08/20/04
KE12599-01P CADMIUM AS CD	EPA 6010	0.005	U	mg/L	SMW	13:38 08/17/04
KE12599-01P CHROMIUM AS CR	EPA 7191	0.001	U	mg/L	SMW	13:38 08/17/04
KE12599-01P COBALT AS CO	EPA 6010	0.05	U	mg/L	SMW	10:42 08/23/04
KE12599-01P COPPER AS CU	EPA 6010	0.02	0.03	mg/L	SMW	13:38 08/17/04
KE12599-01I CYANIDE AS CN	EPA 9010A	0.005	U	mg/L	RLG	9:00 08/19/04
KE12599- IRON AS FE	EPA 6010	0.02	17.0	mg/L	SMW	14:14 08/26/04
KE12599-01P LEAD AS PB	EPA 7421	0.001	0.004	mg/L	SMW	15:19 08/17/04
KE12599-01P MERCURY AS HG	EPA 7470	0.0001	U	mg/L	SMW	16:27 08/27/04
KE12599-01P NICKEL AS NI	EPA 6010	0.02	U	mg/L	SMW	11:50 08/30/04



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 : PHASE 1 LECHATE
SITE : LENA RD/LECHATE
TYPE : WATER

Report ID: 0408067746
COLLECTION DATE : 08/11/04
COLLECTION TIME : 12:10
COLLECTED BY : PELA
DATE RECEIVED IN LAB : 08/12/04

PARAMETER	METHOD	DETECTION LIMITS	RESULT	UNIT	ANALYST	TIME/DATE STARTED
<u>INORGANICS</u>						
KE12599-01P SELENIUM AS SE	EPA 7740	0.002	U	mg/L	SMW	9:01 08/19/04
KE12599-01P SILVER AS AG	EPA 7761	0.0002	U	mg/L	SMW	11:50 08/30/04
KE12599- SODIUM AS NA	EPA 6010	0.10	443	mg/L	SMW	17:09 08/18/04
KE12599-01P THALLIUM AS TL	EPA 7841	0.001	U	mg/L	SMW	16:16 08/27/04
KE12599-01P TIN AS SN	EPA 6010	0.10	U	mg/L	SMW	14:26 08/31/04
KE12599-03S TOTAL PHENOLS	EPA 420.1	0.005	0.025	mg/L	RLG	9:00 08/30/04
KE12599-02L TOTAL SULFIDE	EPA 376.1	1.0	U	mg/L	RLG	9:30 08/13/04
KE12599-01P VANADIUM AS V	EPA 6010	0.01	U	mg/L	SMW	10:42 08/23/04
KE12599-01P ZINC AS ZN	EPA 6010	0.005	0.067	mg/L	SMW	13:38 08/17/04

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-SWRTP
IDENTIFICATION : PHASE 1 LECHATE
SITE : LENA RD/LECHATE
TYPE : WATER

Report ID: 0408067746
COLLECTION DATE : 08/11/04
COLLECTION TIME : 12:10
COLLECTED BY : PELA
DATE RECEIVED IN LAB : 08/12/04

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

ORGANICS

EDB & DBCP/ENVIRON WATER

KE12599-02X-5						
ETHYLENE DIBROMIDE	EPA 504.1	0.01	U	ug/L	JPT	15:04 08/17/04
DIBROMCHLORPROPANE	EPA 504.1	0.01	U	ug/L	JPT	15:04 08/17/04



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: 0408067746

BILLING INFORMATION

Bill To : MANATEE COUNTY-SWRTP
P.O. BOX 1000
BRADENTON, FLORIDA 34206

TEST SITE ID # : LENA RD/LECHATE

WELL NAME : PHASE 1 LECHATE

Purchase Order No. :

FIELD PARAMETERS

SPECIFIC CONDUCTANCE	: 3871	MICROMHOS
pH	: 6.70	STANDARD UNITS
WATER TEMPERATURE	: 29.08	DEGREES C
DISSOLVED OXYGEN	: 1.14	mg/L
INITIAL WATER LEVEL	:	
WELL ELEVATION	:	
FIELD TURBIDITY	: 91.5	NTU
FIELD COLOR	:	

COMMENTS

UNIQUE ID#
03A APPIVOL
02R-1 CHLOR PEST
02R-2 HERB
02T SEMIVOL

of 10



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

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATEWELL NAME : PHASE 1 LECHATECLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
	ORGANICS KE12598-APPENDIX II (COMPLETL)	*	N		9/9/04	18:05	COMPLETED	

*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER

	ORGANICS KE12598-02R-1							
39338	a-BHC	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.003 ug/L
34259	ALDRIN	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.004 ug/L
34351	b-BHC	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.006 ug/L
34361	d-BHC	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.009 ug/L
34356	ENDOSULFAN SULFATE	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.030 ug/L
39390	ENDOSULFAN-I	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.014 ug/L
34366	ENDOSULFAN-II	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.004 ug/L
39782	ENDRIN	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.006 ug/L
34366	ENDRIN ALDEHYDE	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.023 ug/L
39410	g-BHC (Lindane)	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.004 ug/L
39420	HEPTACHLOR	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.003 ug/L
39480	HEPTACHLOR EPOXIDE	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.01 ug/L
39310	METHOXYCHLOR	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.050 ug/L
34320	p,p-DDD	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.011 ug/L
39300	pp-DDE/DIELDRIN	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.004 ug/L
	pp-DDT	*	N	EPA 8081	8/28/04	6:59	U	ug/L 0.012 ug/L
	KE12598-02T-4							
39460	Chlorobenzilate	*	N	EPA 8270	9/23/04	19:11	U	ug/L 10.0 ug/L
09999	cis-Diallate	*	N	EPA 8270	9/23/04	19:11	U	ug/L 5.0 ug/L
46314	Dimethoate	*	N	EPA 8270	9/23/04	19:11	U	ug/L 5.0 ug/L
81888	Disulfoton	*	N	EPA 8270	9/23/04	19:11	U	ug/L 5.0 ug/L
38462	Famfur	*	N	EPA 8270	9/23/04	19:11	U	ug/L 20.0 ug/L
81281	Kepone	*	N	EPA 8270	9/23/04	19:11	U	ug/L 30.0 ug/L
39600	Methyl Parathion	*	N	EPA 8270	9/23/04	19:11	U	ug/L 15.0 ug/L
09999	O,O,O-Triethylphosphorothio	*	N	EPA 8270	9/23/04	19:11	U	ug/L 30.0 ug/L
39540	Parathion(ethyl)	*	N	EPA 8270	9/23/04	19:11	U	ug/L 15.0 ug/L

2 of 10

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.

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATEWELL NAME : PHASE I LECHATECLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	TIME	ANALYSIS RESULTS	UNITS	DETECTION LIMITS	UNITS
46313	Phorate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.0	ug/L
73149	Thionazin	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
09999	trans-Diallate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
	KE12598-02T-4									
09999	(3+4)-Methylphenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.5	ug/L
39035	2,3,4,6-Tetrachlorophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
81848	2,4,5-Trichlorophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.9	ug/L
34621	2,4,6-Trichlorophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.7	ug/L
	2,4-Dichlorophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.7	ug/L
	2,4-Dimethylphenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.7	ug/L
34616	2,4-Dinitrophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
77981	2,6-Dichlorophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
34586	2-Chlorophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.3	ug/L
77152	2-Methylphenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.5	ug/L
34591	2-Nitrophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.6	ug/L
30204	4,6-Dinitro-2-methylphenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	9.5	ug/L
09999	4-Chloro-3-methylphenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.0	ug/L
34646	4-Nitrophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.4	ug/L
39032	Pentachlorophenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.5	ug/L
34694	Phenol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.5	ug/L
	KE12598-									
73653	1,3,5-Trinitrobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
45622	1,3-Dinitrobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
09999	1,4-Naphthoquinone	*	N	EPA 8270	9/23/04	19:11	U	ug/L	7.5	ug/L
82204	2-Acetylaminofluorene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	7.5	ug/L
73319	3,3'-Dimethylbenzidine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
09999	5-Nitro-o-toluidine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
09999	Hexachloropropene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
39430	Isodrin	*	N	EPA 8270	9/23/04	19:11	U	ug/L	6.0	ug/L
09999	Isosafrole	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
09999	Methapyrilene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	30.0	ug/L
78200	N-Nitrosodiethylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
09999	N-Nitrosoethylmethylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
7	N-Nitrosopyrrolidine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	15.0	ug/L

of 10



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

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATE

WELL NAME : PHASE 1 LECHATE

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	TIME	RESULTS	UNITS	DETECTION LIMITS	UNITS
77142	ortho-Toluidine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
09999	para-Phenylenediamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
77545	Safrole	*	N	EPA 8270	9/23/04	19:11	U	ug/L	7.5	ug/L
	KE12598-02T-4									
77734	1,2,4,5-Tetrachlorobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
34551	1,2,4-Trichlorobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
73600	1-Naphthylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
34611	2,4-Dinitrotoluene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.2	ug/L
	2,6-Dinitrotoluene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
34501	2-Chloronaphthalene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
30194	2-Methylnaphthalene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.0	ug/L
82191	2-Naphthylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
30195	2-Nitroaniline	*	N	EPA 8270	9/23/04	19:11	U	ug/L	20.0	ug/L
34631	3,3'-Dichlorobenzidine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.2	ug/L
09999	3-Methylcholanthrene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
78300	3-Nitroaniline	*	N	EPA 8270	9/23/04	19:11	U	ug/L	20.0	ug/L
09999	4-Aminobiphenyl	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
34636	4-Bromophenyl-phenylether	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
09999	4-Chloroaniline	*	N	EPA 8270	9/23/04	19:11	U	ug/L	6.0	ug/L
34641	4-Chlorophenyl-phenylether	*	N	EPA 8270	9/23/04	19:11	U	ug/L	4.2	ug/L
30342	4-Nitroaniline	*	N	EPA 8270	9/23/04	19:11	U	ug/L	20.0	ug/L
73559	7,12-Dimethylbenz(a)anthrac	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
34205	Acenaphthene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
34205	Acenaphthylene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
81553	Acetophenone	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
34220	Anthracene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
34526	Benzo[a]anthracene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.1	ug/L
34247	Benzo[a]pyrene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	0.1	ug/L
34230	Benzo[b]fluoranthene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
34521	Benzo[g,h,i]perylene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	4.1	ug/L
34242	Benzo[k]fluoranthene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
77147	Benzyl alcohol	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
34278	bis(2-Chloroethoxy)methane	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
	bis(2-Chloroethyl)ether	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L

+ of 10

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

T III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATE

WELL NAME : PHASE 1 LECHATE

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : X

WELL TYPE :

COLLECTION DATE : 8/11/04

COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	TIME	ANALYSIS RESULTS	UNITS	DETECTION LIMITS	UNITS
34283	bis(2-chloroisopropyl)ether	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.7	ug/L
39100	bis(2-Ethylhexyl)phthalate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
34292	Butylbenzylphthalate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
34320	Chrysene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
34596	Di-n-butylphthalate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
34596	Di-n-octylphthalate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
34556	Dibenz[a,h]anthracene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
81302	Dibenzofuran	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
	Diethylphthalate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
	Dimethylphthalate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.6	ug/L
77579	Diphenylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
73571	Ethylmethanesulfonate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
34376	Fluoranthene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.2	ug/L
34381	Fluorene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
39700	Hexachlorobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.0	ug/L
34391	Hexachlorobutadiene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	0.9	ug/L
34386	Hexachlorocyclopentadiene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
34396	Hexachloroethane	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.6	ug/L
34403	Indeno[1,2,3-cd]pyrene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	3.7	ug/L
34408	Isophorone	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.2	ug/L
73595	Methylmethanesulfonate	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
78207	N-Nitroso-di-n-butylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
34428	N-Nitroso-di-n-propylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
34438	N-Nitrosodimethylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
34433	n-Nitrosodiphenylamine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
09999	N-Nitrosopiperidine	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
34696	Naphthalene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.6	ug/L
34447	Nitrobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
09999	p-Dimethylaminoazobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	6.0	ug/L
77793	Pentachlorobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	5.0	ug/L
81316	Pentachloronitrobenzene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
09999	Phenacetin	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
34461	Phenanthrene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	10.0	ug/L
38	Pronamide	*	N	EPA 8270	9/23/04	19:11	U	ug/L	2.5	ug/L
									10.0	ug/L

of 10

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

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATEWELL NAME : PHASE 1 LECHATECLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	TIME	RESULTS	UNITS	DETECTION LIMITS	UNITS
34469	Pyrene	*	N	EPA 8270	9/23/04	19:11	U	ug/L	1.9	ug/L
39356	KE12598-02R-1 CHLORDANE	*	N	EPA 8081	8/28/04	6:59	U	ug/L	0.02	ug/L
39740	KE12598-02R-2 2,4,5-T	*	N	EPA 8151	8/31/04	12:14	U	ug/L	0.2	ug/L
39730	2,4-D	*	N	EPA 8151	8/31/04	12:14	U	ug/L	0.2	ug/L
30191	DINOSEB	*	N	EPA 8151	8/31/04	12:14	U	ug/L	0.2	ug/L
39760	SILVEX	*	N	EPA 8151	8/31/04	12:14	U	ug/L	0.1	ug/L
	KE12598-02R-1 PCB-1016	*	N	EPA 8082	8/28/04	6:59	U	ug/L	0.04	ug/L
39488	PCB-1221	*	N	EPA 8082	8/28/04	6:59	U	ug/L	0.07	ug/L
39492	PCB-1232	*	N	EPA 8082	8/28/04	6:59	U	ug/L	0.09	ug/L
39496	PCB-1242	*	N	EPA 8082	8/28/04	6:59	U	ug/L	0.06	ug/L
39500	PCB-1248	*	N	EPA 8082	8/28/04	6:59	U	ug/L	0.04	ug/L
39504	PCB-1254	*	N	EPA 8082	8/28/04	6:59	U	ug/L	0.04	ug/L
39508	PCB-1260	*	N	EPA 8082	8/28/04	6:59	U	ug/L	0.07	ug/L
	KE12598-02R-1 TOXAPHENE	*	N	EPA 8081	8/28/04	6:59	U	ug/L	0.2	ug/L
	KE12598-1,1,1-trichloroethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.04	ug/L
34506	1,1,2,2-tetrachloroethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.04	ug/L
34516	1,1,2-trichloroethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.10	ug/L
34511	1,1-dichloroethane	*	N	EPA 8260	8/20/04	10:41	0.16	ug/L	0.03	ug/L
34496	1,1-dichloroethene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.12	ug/L
34501	1,2-dichlorobenzene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.03	ug/L
34536	1,2-dichloroethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.02	ug/L
34531	1,2-dichloropropane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.04	ug/L
34541	1,3-dichlorobenzene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.12	ug/L
34571	1,4-dichlorobenzene	*	N	EPA 8260	8/20/04	10:41	4.27	ug/L	0.03	ug/L
34210	Acrolein	*	N	EPA 8260	8/20/04	10:41	U	ug/L	1.70	ug/L
34215	Acrylonitrile	*	N	EPA 8260	8/20/04	10:41	U	ug/L	1.50	ug/L
34030	Benzene	*	N	EPA 8260	8/20/04	10:41	1.23	ug/L	0.04	ug/L
32101	Bromodichloromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.08	ug/L
	Bromomethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.11	ug/L

of 10

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

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATEWELL NAME : PHASE 1 LECHATECLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	TIME	ANALYSIS RESULTS	UNITS	DETECTION LIMITS	UNITS
32102	Carbon tetrachloride	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.21	ug/L
34301	Chlorobenzene	*	N	EPA 8260	8/20/04	10:41	6.43	ug/L	0.04	ug/L
34311	Chloroethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.10	ug/L
34418	Chloromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.13	ug/L
81520	Chloroprene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.03	ug/L
34704	cis-1,3-dichloropropene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.05	ug/L
32105	Dibromo-chloromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.05	ug/L
34668	Dichlorodifluoromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.10	ug/L
	Dichloromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.03	ug/L
34511	Ethylbenzene	*	N	EPA 8260	8/20/04	10:41	0.77	ug/L	0.06	ug/L
81551	m,p-Xylenes	*	N	EPA 8260	8/20/04	10:41	2.64	ug/L	0.11	ug/L
77135	o-Xylene	*	N	EPA 8260	8/20/04	10:41	1.55	ug/L	0.11	ug/L
34475	Tetrachloroethene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.14	ug/L
34010	Toluene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.11	ug/L
34546	trans-1,2-dichloroethene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.06	ug/L
34699	trans-1,3-dichloropropene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.04	ug/L
32104	Tribromomethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.04	ug/L
39180	Trichloroethene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.12	ug/L
34488	Trichlorofluoromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.08	ug/L
32106	Trichloromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.03	ug/L
39175	Vinyl Chloride	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.17	ug/L
	KE12598-03A									
77562	1,1,1,2-tetrachloroethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.1	ug/L
77168	1,1-DICHLOROPROPENE	*	N	EPA 8260	8/20/04	10:41	U	ug/L	1.0	ug/L
77443	1,2,3-Trichloropropane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.3	ug/L
77173	1,3-DICHLOROPROPANE	*	N	EPA 8260	8/20/04	10:41	U	ug/L	1.0	ug/L
77170	2,2-DICHLOROPROPANE	*	N	EPA 8260	8/20/04	10:41	U	ug/L	1.0	ug/L
81595	2-Butanone	*	N	EPA 8260	8/20/04	10:41	U	ug/L	2.5	ug/L
77103	2-Hexanone	*	N	EPA 8260	8/20/04	10:41	U	ug/L	2.5	ug/L
78133	4-Methyl-2-pentanone	*	N	EPA 8260	8/20/04	10:41	U	ug/L	2.5	ug/L
81552	Acetone	*	N	EPA 8260	8/20/04	10:41	U	ug/L	2.5	ug/L
76997	Acetonitrile	*	N	EPA 8260	8/20/04	10:41	U	ug/L	10.0	ug/L
78109	Allyl Chloride	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.5	ug/L
	Bromochloromethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.5	ug/L

/ of 10

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

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATEWELL NAME : PHASE 1 LECHATECLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD):

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE	TIME	ANALYSIS RESULTS	UNITS	DETECTION LIMITS	UNITS
81309	Carbon Disulfide	*	N	EPA 8260	8/20/04	10:41	U	ug/L	4.1	ug/L
77093	cis 1,2-Dichloroethene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.10	ug/L
34536	Dibromomethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.3	ug/L
09999	Ethyl methacrylate	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.5	ug/L
77424	Iodomethane	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.5	ug/L
77033	Isobutyl Alcohol	*	N	EPA 8260	8/20/04	10:41	U	ug/L	10.0	ug/L
81593	Methacrylonitrile	*	N	EPA 8260	8/20/04	10:41	U	ug/L	10.0	ug/L
81597	Methyl methacrylate	*	N	EPA 8260	8/20/04	10:41	U	ug/L	0.5	ug/L
77128	Propionitrile	*	N	EPA 8260	8/20/04	10:41	U	ug/L	10.0	ug/L
49263	Styrene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	1.0	ug/L
77057	t-1,4-Dichloro-2-butene	*	N	EPA 8260	8/20/04	10:41	U	ug/L	10.0	ug/L
	Vinyl Acetate	*	N	EPA 8260	8/20/04	10:41	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

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATEWELL NAME : PHASE 1 LECHATECLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS	UNITS	DETECTION LIMITS	UNITS
01077	INORGANICS KE12599-01P								
01002	SILVER AS AG KE12599-01P	*	N	EPA 7761	8/30/04 11:50	U	mg/L	0.0002	mg/L
01007	ARSENIC AS AS KE12599-01P	*	N	EPA 7060	8/23/04 17:17	0.013	mg/L	0.001	mg/L
01007	BARIUM AS BA KE12599-01P	*	N	EPA 6010	8/17/04 13:38	0.15	mg/L	0.1	mg/L
01027	BERYLLIUM AS BE KE12599-01P	*	N	EPA 7091	8/20/04 11:59	U	mg/L	0.003	mg/L
00720	CADMIUM AS CD KE12599-01I	*	N	EPA 6010	8/17/04 13:38	U	mg/L	0.005	mg/L
01037	CYANIDE AS CN KE12599-01P	*	N	EPA 9010	8/19/04 9:00	U	mg/L	0.005	mg/L
01034	COBALT AS CO KE12599-01P	*	N	EPA 6010	8/23/04 10:42	U	mg/L	0.05	mg/L
01042	CHROMIUM AS CR KE12599-01P	*	N	EPA 7191	8/17/04 13:38	U	mg/L	0.001	mg/L
01045	COPPER AS CU KE12599-01P	*	N	EPA 6010	8/17/04 13:38	0.03	mg/L	0.02	mg/L
71900	IRON AS FE KE12599-01P	*	N	EPA 6010	8/26/04 14:14	17.0	mg/L	0.02	mg/L
00929	MERCURY AS HG KE12599-01P	*	N	EPA 7470	8/27/04 16:27	U	mg/L	0.0001	mg/L
01067	SODIUM AS NA KE12599-01P	*	N	EPA 6010	8/18/04 17:09	443	mg/L	0.10	mg/L
01051	NICKEL AS NI KE12599-01P	*	N	EPA 6010	8/30/04 11:50	U	mg/L	0.02	mg/L
01097	LEAD AS PB KE12599-01P	*	N	EPA 7421	8/17/04 15:19	0.004	mg/L	0.001	mg/L
01147	ANTIMONY AS SB KE12599-01P	*	N	EPA 7041	8/19/04 14:46	U	mg/L	0.003	mg/L
	SELENIUM AS SE KE12599-01P	*	N	EPA 7740	8/19/04 9:01	U	mg/L	0.002	mg/L

J of 10

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

III ANALYTICAL RESULTS

FACILITY GMS # :

TEST SITE ID # : LENA RD/LECHATEWELL NAME : PHASE 1 LECHATECLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD) :

OR (MSL) :

FEET BMP :

Report ID: 0408067746

SAMPLING DATE/TIME : 8/11/04 12:10:00

REPORT PERIOD (YR/QTR) :

WELL PURGED (Y/N) : Y

WELL TYPE :

COLLECTION DATE : 8/11/04COLLECTION TIME : 12:10

COLLECTED BY : PELA

DATE RECEIVED IN LAB : 8/12/04

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
01102	TIN AS SN KE12599-01P	*	N	EPA 6010	8/31/04 14:26	U mg/L	0.10 mg/L
01059	THALLIUM AS TL KE12599-02L	*	N	EPA 7841	8/27/04 16:16	U mg/L	0.001 mg/L
00745	TOTAL SULFIDE KE12599-03S	*	N	EPA 376.1	8/13/04 9:30	U mg/L	1.0 mg/L
46000	TOTAL PHENOLS KE12599-01P	*	N	EPA 420.1	8/30/04 9:00	0.025 mg/L	0.005 mg/L
	VANADIUM AS V KE12599-01P	*	N	EPA 6010	8/23/04 10:42	U mg/L	0.01 mg/L
01092	ZINC AS ZN	*	N	EPA 6010	8/17/04 13:38	0.067 mg/L	0.005 mg/L

*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER

	ORGANICS KE12599- EDB & DBCP/EW	*	N		9/9/04 18:05	COMPLETED	
--	---------------------------------------	---	---	--	--------------	-----------	--

*SUBMERSIBLE OR PERISTALTIC PUMP

**BAILER

	ORGANICS KE12599-02X-5 DIBROMCHLORPROPANE ETHYLENE DIBROMIDE	*	N	EPA 504.1	8/17/04 15:04	U ug/L	0.01 ug/L
		*	N	EPA 504.1	8/17/04 15:04	U ug/L	0.01 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

CLIENT INFORMATION

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

Report ID: 0408067746

BILLING INFORMATION

Bill To : MANATEE COUNTY-SWRTP
P.O. BOX 1000
BRADENTON, FLORIDA 34206

Purchase Order No. :

SAMPLE IDENTIFICATION

IDENTIFICATION : PHASE 1 LECHATE
SITE : LENA RD/LECHATE
TYPE : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE : 3871 MICROMHOS
pH : 6.70 STANDARD UNITS
WATER TEMPERATURE : 29.08 DEGREES C
DISSOLVED OXYGEN : 1.14 mg/L
INITIAL WATER LEVEL :
WELL ELEVATION :
FIELD TURBIDITY : 91.5 NTU
FIELD COLOR :
FACILITY GMS # :

COMMENTS

UNIQUE ID#
03A APPIVOL
02R-1 CHLOR PEST
02R-2 HERB
02T SEMIVOL



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 : PHASE 1 LECHATE
SITE : LENA RD/LECHATE
TYPE : WATER

Report ID: 0408067746
COLLECTION DATE : 08/11/04
COLLECTION TIME : 12:10
COLLECTED BY : PELA
DATE RECEIVED IN LAB : 08/12/04

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

ORGANICS

ACID EXTRCTBLES IN H₂O 8270

KE12598-02T-4						
2-CHLOROPHENOL	EPA 8270	3.3	U	ug/L	JMS	19:11 09/23/04
PHENOL	EPA 8270	1.5	U	ug/L	JMS	19:11 09/23/04
2-METHYLPHENOL	EPA 8270	3.5	U	ug/L	JMS	19:11 09/23/04
(3+4)-METHYLPHENOL	EPA 8270	3.5	U	ug/L	JMS	19:11 09/23/04
2-NITROPHENOL	EPA 8270	3.6	U	ug/L	JMS	19:11 09/23/04
2,4-DIMETHYLPHENOL	EPA 8270	2.7	U	ug/L	JMS	19:11 09/23/04
2,4-DICHLOROPHENOL	EPA 8270	2.7	U	ug/L	JMS	19:11 09/23/04
2,6-DICHLOROPHENOL	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
4-CHLORO-3-METHYLPHENOL	EPA 8270	3.0	U	ug/L	JMS	19:11 09/23/04
2,4,6-TRICHLOROPHENOL	EPA 8270	2.7	U	ug/L	JMS	19:11 09/23/04
2,4,5-TRICHLOROPHENOL	EPA 8270	3.9	U	ug/L	JMS	19:11 09/23/04
2,4-DINITROPHENOL	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
4-NITROPHENOL	EPA 8270	2.4	U	ug/L	JMS	19:11 09/23/04
2,3,4,6-TETRACHLOROPHENOL	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
4,6-DINITRO-2-METHYLPHENOL	EPA 8270	9.5	U	ug/L	JMS	19:11 09/23/04
PENTACHLOROPHENOL	EPA 8270	1.5	U	ug/L	JMS	19:11 09/23/04



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 : PHASE 1 LECHATE
 SITE : LENA RD/LECHATE
 TYPE : WATER

Report ID: 0408067746
 COLLECTION DATE : 08/11/04
 COLLECTION TIME : 12:10
 COLLECTED BY : PELA
 DATE RECEIVED IN LAB : 08/12/04

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

ADDITIONAL EXT H2O APP II 8270

KE12598-02T-4						
O,O,O-TRIETHYLPHOSPHOROTHIOATE	EPA 8270	30.0	U	ug/L	JMS	19:11 09/23/04
THIONAZIN	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
CIS-DIALLATE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
PHORATE	EPA 8270	3.0	U	ug/L	JMS	19:11 09/23/04
TRANS-DIALLATE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
DIMETHOATE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
DISULFOTON	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
METHYL PARATHION	EPA 8270	15.0	U	ug/L	JMS	19:11 09/23/04
KEPONE	EPA 8270	30.0	U	ug/L	JMS	19:11 09/23/04
PARATHION(ETHYL)	EPA 8270	15.0	U	ug/L	JMS	19:11 09/23/04
CHLOROBENZILATE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
FAMFUR	EPA 8270	20.0	U	ug/L	JMS	19:11 09/23/04
KE12598-						
N-NITROSOETHYLMETHYLAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
N-NITROSODIETHYLAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
N-NITROSOPIRROLIDINE	EPA 8270	15.0	U	ug/L	JMS	19:11 09/23/04
ORTHO-TOLUIDINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
HEXACHLOROPROPENE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
PARA-PHENYLENEDIAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
ISOSAFROLE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
SAFROLE	EPA 8270	7.5	U	ug/L	JMS	19:11 09/23/04
1,4-NAPHTHOQUINONE	EPA 8270	7.5	U	ug/L	JMS	19:11 09/23/04
1,3-DINITROBENZENE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
5-NITRO-O-TOLUIDINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
METHAPYRILENE	EPA 8270	30.0	U	ug/L	JMS	19:11 09/23/04
1,3,5-TRINITROBENZENE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
ISODRIN	EPA 8270	6.0	U	ug/L	JMS	19:11 09/23/04
2-ACETYLAMINOFLUORENE	EPA 8270	7.5	U	ug/L	JMS	19:11 09/23/04
3,3'-DIMETHYLBENZIDINE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04



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 : PHASE 1 LECHATE
SITE : LENA RD/LECHATE
TYPE : WATER

Report ID: 0408067746
COLLECTION DATE : 08/11/04
COLLECTION TIME : 12:10
COLLECTED BY : PELA
DATE RECEIVED IN LAB : 08/12/04

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

ORGANICS**APPEND II Volatiles-H₂O 8260**

KE12598-03A						
IODOMETHANE	EPA 8260	0.5	U	ug/L	JMS	10:41 08/20/04
ACETONE	EPA 8260	2.5	U	ug/L	JMS	10:41 08/20/04
ACETONITRILE	EPA 8260	10.0	U	ug/L	JMS	10:41 08/20/04
ALLYL CHLORIDE	EPA 8260	0.5	U	ug/L	JMS	10:41 08/20/04
CARBON DISULFIDE	EPA 8260	4.1	U	ug/L	JMS	10:41 08/20/04
VINYL ACETATE	EPA 8260	10.0	U	ug/L	JMS	10:41 08/20/04
PROPIONITRILE	EPA 8260	10.0	U	ug/L	JMS	10:41 08/20/04
2-BUTANONE	EPA 8260	2.5	U	ug/L	JMS	10:41 08/20/04
METHACRYLONITRILE	EPA 8260	10.0	U	ug/L	JMS	10:41 08/20/04
DIBROMOMETHANE	EPA 8260	0.3	U	ug/L	JMS	10:41 08/20/04
METHYL METHACRYLATE	EPA 8260	0.5	U	ug/L	JMS	10:41 08/20/04
4-METHYL-2-PENTANONE	EPA 8260	2.5	U	ug/L	JMS	10:41 08/20/04
ETHYL METHACRYLATE	EPA 8260	0.5	U	ug/L	JMS	10:41 08/20/04
2-HEXANONE	EPA 8260	2.5	U	ug/L	JMS	10:41 08/20/04
1,1,1,2-TETRACHLOROETHANE	EPA 8260	0.1	U	ug/L	JMS	10:41 08/20/04
STYRENE	EPA 8260	1.0	U	ug/L	JMS	10:41 08/20/04
1,2,3-TRICHLOROPROPANE	EPA 8260	0.3	U	ug/L	JMS	10:41 08/20/04
T-1,4-DICHLORO-2-BUTENE	EPA 8260	10.0	U	ug/L	JMS	10:41 08/20/04
ISOBUTYL ALCOHOL	EPA 8260	10.0	U	ug/L	JMS	10:41 08/20/04
BROMOCHLOROMETHANE	EPA 8260	0.5	U	ug/L	JMS	10:41 08/20/04
CIS 1,2-DICHLOROETHENE	EPA 8260	0.10	U	ug/L	JMS	10:41 08/20/04
1,3-DICHLOROPROPANE	EPA 8260	1.0	U	ug/L	JMS	10:41 08/20/04
2,2-DICHLOROPROPANE	EPA 8260	1.0	U	ug/L	JMS	10:41 08/20/04
1,1-DICHLOROPROPENE	EPA 8260	1.0	U	ug/L	JMS	10:41 08/20/04



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 : PHASE 1 LECHATE
 SITE : LENA RD/LECHATE
 TYPE : WATER

Report ID: 0408067746
 COLLECTION DATE : 08/11/04
 COLLECTION TIME : 12:10
 COLLECTED BY : PELA
 DATE RECEIVED IN LAB : 08/12/04

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

APPENDIX II Volatiles-H2O 8260

KE12598-						
DICHLORODIFLUOROMETHANE	EPA 8260	0.10	U	ug/L	JMS	10:41 08/20/04
CHLOROMETHANE	EPA 8260	0.13	U	ug/L	JMS	10:41 08/20/04
VINYL CHLORIDE	EPA 8260	0.17	U	ug/L	JMS	10:41 08/20/04
BROMOMETHANE	EPA 8260	0.11	U	ug/L	JMS	10:41 08/20/04
CHLOROETHANE	EPA 8260	0.10	U	ug/L	JMS	10:41 08/20/04
TRICHLOROFLUOROMETHANE	EPA 8260	0.08	U	ug/L	JMS	10:41 08/20/04
ACROLEIN	EPA 8260	1.70	U	ug/L	JMS	10:41 08/20/04
1,1-DICHLOROETHENE	EPA 8260	0.12	U	ug/L	JMS	10:41 08/20/04
DICHLOROMETHANE	EPA 8260	0.03	U	ug/L	JMS	10:41 08/20/04
TRANS-1,2-DICHLOROETHENE	EPA 8260	0.06	U	ug/L	JMS	10:41 08/20/04
ACRYLONITRILE	EPA 8260	1.50	U	ug/L	JMS	10:41 08/20/04
1,1-DICHLOROETHANE	EPA 8260	0.03	0.16	ug/L	JMS	10:41 08/20/04
TRICHLOROMETHANE	EPA 8260	0.03	U	ug/L	JMS	10:41 08/20/04
1,1,1-TRICHLOROETHANE	EPA 8260	0.04	U	ug/L	JMS	10:41 08/20/04
1,2-DICHLOROETHANE	EPA 8260	0.02	U	ug/L	JMS	10:41 08/20/04
BENZENE	EPA 8260	0.04	1.23	ug/L	JMS	10:41 08/20/04
CARBON TETRACHLORIDE	EPA 8260	0.21	U	ug/L	JMS	10:41 08/20/04
1,2-DICHLOROPROPANE	EPA 8260	0.04	U	ug/L	JMS	10:41 08/20/04
TRICHLOROETHENE	EPA 8260	0.19	U	ug/L	JMS	10:41 08/20/04
BROMODICHLOROMETHANE	EPA 8260	0.08	U	ug/L	JMS	10:41 08/20/04
CHLOROPRENE	EPA 8260	0.03	U	ug/L	JMS	10:41 08/20/04
CIS-1,3-DICHLOROPROPENE	EPA 8260	0.05	U	ug/L	JMS	10:41 08/20/04
TOLUENE	EPA 8260	0.11	U	ug/L	JMS	10:41 08/20/04
TRANS-1,3-DICHLOROPROPENE	EPA 8260	0.04	U	ug/L	JMS	10:41 08/20/04
1,1,2-TRICHLOROETHANE	EPA 8260	0.10	U	ug/L	JMS	10:41 08/20/04
DIBROMOCHLOROMETHANE	EPA 8260	0.05	U	ug/L	JMS	10:41 08/20/04
TETRACHLOROETHENE	EPA 8260	0.14	U	ug/L	JMS	10:41 08/20/04
CHLOROBENZENE	EPA 8260	0.04	6.43	ug/L	JMS	10:41 08/20/04
ETHYLBENZENE	EPA 8260	0.06	0.77	ug/L	JMS	10:41 08/20/04
M,P-XYLENES	EPA 8260	0.11	2.64	ug/L	JMS	10:41 08/20/04
TRIBROMOMETHANE	EPA 8260	0.12	U	ug/L	JMS	10:41 08/20/04
O-XYLENE	EPA 8260	0.11	1.55	ug/L	JMS	10:41 08/20/04
1,1,2,2-TETRACHLOROETHANE	EPA 8260	0.04	U	ug/L	JMS	10:41 08/20/04
1,3-DICHLOROBENZENE	EPA 8260	0.12	U	ug/L	JMS	10:41 08/20/04
1,4-DICHLOROBENZENE	EPA 8260	0.03	4.27	ug/L	JMS	10:41 08/20/04
1,2-DICHLOROBENZENE	EPA 8260	0.03	U	ug/L	JMS	10:41 08/20/04



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 : PHASE 1 LECHATE
 SITE : LENA RD/LECHATE
 TYPE : WATER

Report ID: 0408067746
 COLLECTION DATE : 08/11/04
 COLLECTION TIME : 12:10
 COLLECTED BY : PELA
 DATE RECEIVED IN LAB : 08/12/04

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

ORGANICS**BASENEUTRAL EXTBLS IN H₂O 8270**

KE12598-02T-4						
N-NITROSODIMETHYLAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
METHYLMETHANESULFONATE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
ETHYLMETHANESULFONATE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
BIS(2-CHLOROETHYL)ETHER	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
BENZYL ALCOHOL	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
BIS(2-CHLOROISOPROPYL)ETHER	EPA 8270	5.7	U	ug/L	JMS	19:11 09/23/04
ACETOPHENONE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
HEXACHLOROETHANE	EPA 8270	1.6	U	ug/L	JMS	19:11 09/23/04
N-NITROSO-DI-N-PROPYLAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
NITROBENZENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
N-NITROSOPIPERIDINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
ISOPHORONE	EPA 8270	2.2	U	ug/L	JMS	19:11 09/23/04
BIS(2-CHLOROETHOXY)METHANE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
1,2,4-TRICHLOROBENZENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
NAPHTHALENE	EPA 8270	1.6	U	ug/L	JMS	19:11 09/23/04
4-CHLOROANILINE	EPA 8270	6.0	U	ug/L	JMS	19:11 09/23/04
HEXACHLOROBUTADIENE	EPA 8270	0.9	U	ug/L	JMS	19:11 09/23/04
N-NITROSO-DI-N-BUTYLAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
2-METHYLNAPHTHALENE	EPA 8270	2.0	U	ug/L	JMS	19:11 09/23/04
1,2,4,5-TETRACHLOROBENZENE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
HEXACHLOROCYCLOPENTADIENE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
2-CHLORONAPHTHALENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
2-NITROANILINE	EPA 8270	20.0	U	ug/L	JMS	19:11 09/23/04
DIMETHYLPHthalate	EPA 8270	1.6	U	ug/L	JMS	19:11 09/23/04
ACENAPHTHYLENE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
2,6-DINITROTOLUENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
ACENAPHTHENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
3-NITROANILINE	EPA 8270	20.0	U	ug/L	JMS	19:11 09/23/04
DIBENZOFURAN	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
PENTACHLOROBENZENE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
2,4-DINITROTOLUENE	EPA 8270	2.2	U	ug/L	JMS	19:11 09/23/04
1-NAPHTHYLAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
2-NAPHTHYLAMINE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
DIETHYLPHthalate	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
FLUORENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
4-CHLOROPHENYL-PHENYLETHER	EPA 8270	4.2	U	ug/L	JMS	19:11 09/23/04



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 : PHASE 1 LECHATE
 SITE : LENA RD/LECHATE
 TYPE : WATER

Report ID: 0408067746
 COLLECTION DATE : 08/11/04
 COLLECTION TIME : 12:10
 COLLECTED BY : PELA
 DATE RECEIVED IN LAB : 08/12/04

PARAMETER	METHOD	DETECTION LIMITS	RESULT	UNIT	ANALYST	TIME/DATE STARTED
<u>ORGANICS</u>						
N-NITROSODIPHENYLAMINE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
DIPHENYLAMINE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
4-NITROANILINE	EPA 8270	20.0	U	ug/L	JMS	19:11 09/23/04
4-BROMOPHENYL-PHENYLETHER	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
PHENACETIN	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
HEXACHLOROBENZENE	EPA 8270	1.0	U	ug/L	JMS	19:11 09/23/04
4-AMINOBIPHENYL	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
PENTACHLORONITROBENZENE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
PRONAMIDE	EPA 8270	10.0	U	ug/L	JMS	19:11 09/23/04
PHENANTHRENE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
ANTHRACENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
DI-N-BUTYLPHTHALATE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
FLUORANTHENE	EPA 8270	2.2	U	ug/L	JMS	19:11 09/23/04
PYRENE	EPA 8270	1.9	U	ug/L	JMS	19:11 09/23/04
P-DIMETHYLAMINOAZOBENZENE	EPA 8270	6.0	U	ug/L	JMS	19:11 09/23/04
BUTYLBENZYLPHthalate	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
BENZO[A]ANTHRACENE	EPA 8270	3.1	U	ug/L	JMS	19:11 09/23/04
3,3'-DICHLOROBENZIDINE	EPA 8270	3.2	U	ug/L	JMS	19:11 09/23/04
CHRYSENE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
BIS(2-ETHYLHEXYL)PHTHALATE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
DI-N-OCTYLPHTHALATE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
BENZO[B]FLUORANTHENE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
7,12-DIMETHYLBenz(A)ANTHRACEN	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
BENZO[K]FLUORANTHENE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
BENZO[A]PYRENE	EPA 8270	0.1	U	ug/L	JMS	19:11 09/23/04
3-METHYLCHOLANTHRENE	EPA 8270	5.0	U	ug/L	JMS	19:11 09/23/04
INDENO[1,2,3-CD]PYRENE	EPA 8270	3.7	U	ug/L	JMS	19:11 09/23/04
DIBENZ[A,H]ANTHRACENE	EPA 8270	2.5	U	ug/L	JMS	19:11 09/23/04
BENZO[G,H,I]PERYLENE	EPA 8270	4.1	U	ug/L	JMS	19:11 09/23/04
CHLORDANE 8081						
KE12598-02R-1						
CHLORDANE	EPA 8081	0.02	U	ug/L	JPT	6:59 08/28/04



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 : PHASE 1 LECHATE
 SITE : LENA RD/LECHATE
 TYPE : WATER

Report ID: 0408067746

COLLECTION DATE : 08/11/04
 COLLECTION TIME : 12:10
 COLLECTED BY : PELA
 DATE RECEIVED IN LAB : 08/12/04

PARAMETER	METHOD	DETECTION LIMITS	RESULT	UNIT	ANALYST	TIME/DATE STARTED
ORGANICS						
CHLORINATED PEST IN H₂O 8081						
KE12598-02R-1						
A-BHC	EPA 8081	0.003	U	ug/L	JPT	6:59 08/28/04
B-BHC	EPA 8081	0.006	U	ug/L	JPT	6:59 08/28/04
G-BHC (LINDANE)	EPA 8081	0.004	U	ug/L	JPT	6:59 08/28/04
D-BHC	EPA 8081	0.009	U	ug/L	JPT	6:59 08/28/04
HEPTACHLOR	EPA 8081	0.003	U	ug/L	JPT	6:59 08/28/04
ALDRIN	EPA 8081	0.004	U	ug/L	JPT	6:59 08/28/04
HEPTACHLOR EPOXIDE	EPA 8081	0.01	U	ug/L	JPT	6:59 08/28/04
ENDOSULFAN-I	EPA 8081	0.014	U	ug/L	JPT	6:59 08/28/04
PP-DDE/DIELDRIN	EPA 8081	0.004	U	ug/L	JPT	6:59 08/28/04
ENDRIN	EPA 8081	0.006	U	ug/L	JPT	6:59 08/28/04
ENDOSULFAN-II	EPA 8081	0.004	U	ug/L	JPT	6:59 08/28/04
P,P-DDD	EPA 8081	0.011	U	ug/L	JPT	6:59 08/28/04
ENDRIN ALDEHYDE	EPA 8081	0.023	U	ug/L	JPT	6:59 08/28/04
ENDOSULFAN SULFATE	EPA 8081	0.030	U	ug/L	JPT	6:59 08/28/04
PP-DDT	EPA 8081	0.012	U	ug/L	JPT	6:59 08/28/04
METHOXYCHLOR	EPA 8081	0.050	U	ug/L	JPT	6:59 08/28/04
HERBICIDES APP II H₂O 8151						
KE12598-02R-2						
2,4-D	EPA 8151	0.2	U	ug/L	JPT	12:14 08/31/04
SILVEX	EPA 8151	0.1	U	ug/L	JPT	12:14 08/31/04
DINOSEB	EPA 8151	0.2	U	ug/L	JPT	12:14 08/31/04
2,4,5-T	EPA 8151	0.2	U	ug/L	JPT	12:14 08/31/04
PCB'S IN ENV H₂O 8082						
KE12598-02R-1						
PCB-1016	EPA 8082	0.04	U	ug/L	JPT	6:59 08/28/04
PCB-1221	EPA 8082	0.07	U	ug/L	JPT	6:59 08/28/04
PCB-1232	EPA 8082	0.09	U	ug/L	JPT	6:59 08/28/04
PCB-1242	EPA 8082	0.06	U	ug/L	JPT	6:59 08/28/04
PCB-1248	EPA 8082	0.04	U	ug/L	JPT	6:59 08/28/04
PCB-1254	EPA 8082	0.04	U	ug/L	JPT	6:59 08/28/04
PCB-1260	EPA 8082	0.07	U	ug/L	JPT	6:59 08/28/04
TOXAPHENE 8081						
KE12598-02R-1						
TOXAPHENE	EPA 8081	0.2	U	ug/L	JPT	6:59 08/28/04



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: 0408067746

BILLING INFORMATION

Bill To : MANATEE COUNTY-SWRTP

P.O. BOX 1000
BRADENTON, FLORIDA 34206

Purchase Order No. :

SAMPLE IDENTIFICATION

IDENTIFICATION : PHASE 1 LECHATE
SITE : LENA RD/LECHATE
TYPE : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE : 3871 MICROMHOS
pH : 6.70 STANDARD UNITS
WATER TEMPERATURE : 29.08 DEGREES C
DISSOLVED OXYGEN : 1.14 mg/L
INITIAL WATER LEVEL :
WELL ELEVATION :
FIELD TURBIDITY : 91.5 NTU
FIELD COLOR :
FACILITY GMS # :

COMMENTS

UNIQUE ID#
01C-3,4 EDB
01P METALS
03R PHENOL TOS
01I CN

REPORTING ADDRESS:
ATTN: Jeff Goodwin
CLIENT: Manatee Co.
ADDRESS:

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

INVOICING ADDRESS:
ATTN: _____
CLIENT: _____
ADDRESS: _____

67746

PROJECT NAME		PROJECT LOCATION		TYPE: (W)ATER (S)OIL (O)OTHER	REQUIRED ANALYSIS						PAGE / OF						
2nd Annual Sampling		Lena Rd Landfill			App II Vol.	EDB	Chlor. Pest.	Semi-volatile	Hab.	Cn	FIELD PARAMETERS						
PROJECT NO.		PURCHASE ORDER NO.								SC (mmhos/cm)	pH	TEMP (°C)	DO				
PROJECT CONTACT		PROJECT TEL. NO.		T. Goodwin													
SAMPLER NAME(S)		SAMPLE IDENTIFICATION		S. Helms													
SAMPLING DATE	TIME																
NUMBER OF CONTAINERS / CONTAINER SIZE & TYPE / PRESERVATIVE CONTAINER TYPES: (P)LASTIC (G)LASS (O)THER PRESERVATIVES: (S)ODIUM HYDROXIDE (Su)LFURIC (N)ITRIC (H)YDROCLORIC (I)CED (O)THER																	
8/11/04	12:30	Phase I 1E12598-14600		4	2	6	4	1 G.I	1 G.I	1 G.I	1 G.I	1 P.S	3871	6.70	29.08	1.14	91.5
	12:43	Phase II 1E12598-14601		4	3	6	4	2 G.I	3 G.I	3 G.I	3 G.I	1 P.S	4745	6.64	29.57	0.59	3.36
RELINQUISHED BY:		DATE	TIME	RECEIVED BY:		RELINQUISHED BY:		DATE	TIME	RECEIVED BY:							
<i>[Signature]</i>		8/11/04	18:30														

FOR PELA LABORATORY USE ONLY				LABORATORY REMARKS			
RECEIVED FOR LAB	DATE	TIME	WORK ORDER #	26			
<i>[Signature]</i>	10:00	10:30	640861114				

REPORTING ADDRESS:
ATTN: Jct-F-Goodwill
CLIENT: Munatco
ADDRESS: _____

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

INVOICING ADDRESS: **07746**
ATTN: _____
CLIENT: _____
ADDRESS: _____

67748

CHAIN OF CUSTODY

PROJECT NAME 2nd Annual Sampling	PROJECT LOCATION Leachate Lene Rd Landfill	REQUIRED ANALYSIS						PAGE 2	OF 2			
PROJECT NO.	PURCHASE ORDER NO.	TYPE: (W)ATER (S)OIL (O)OTHER	phenol	TOS	Metals	(C/S)	Sheen	FIELD PARAMETERS				
PROJECT CONTACT J. Goodwin	PROJECT TEL. NO.							SC (umhos/cm)	pH	TEMP (°C)	D.O. mg/L	
NUMBER OF CONTAINERS / CONTAINER SIZE & TYPE / PRESERVATIVE CONTAINER TYPES: (P)LASTIC (G)LASS (O)OTHER PRESERVATIVES: (S)ODIUM HYDROXIDE (Su)LFURIC (N)ITRIC (H)YDROCLORIC (I)CED (O)OTHER												
DATE 8/16/01	TIME 12:10	SAMPLE IDENTIFICATION Phase I 1612598+1612599	1	15 S	160	1 P N	Buoyant	none	3871	6.70	29.08	1.14
"	12:13	Phase II 1612600+1612601	1	11	360	"	Light yellow	none	4745	6.64	29.57	0.59
RELINQUISHED BY:	DATE: 8/16/01	TIME: 1830	RECEIVED BY:	RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:					

~~RELINQUISHED BY~~

DATE

TIME

RECEIVED BY:

RELINQUISHED BY:

DAT

11

RECEIVED BY:

FOR PELLA LABORATORY USE ONLY

LABORATORY REMARKS

RECEIVED FOR LAB

卷之三

第10章

WORK ORDER

MANATEE COUNTY UTILITY OPERATIONS
CENTRAL WASTEWATER LABORATORY
5101 65TH STREET WEST, BRADENTON FL 34210
DOH LABORATORY No. E54560

Unionized Ammonia

LIMS #	Temp °C	Tk	pKa	pH	pKa-pH	f	NH ₃ as mg/L	NH ₃ as N mg/L	UNNH3 as NH3 mg/L
AEO1828	32.16	305.36	9.03018734	6.42	2.61018734	0.002447645	0.026	0.000063638	0.000772747

273.2

LIMS #	Temp °C	Tk	pKa	pH	pKa-pH	f	NH ₃	NH ₃ as N mg/L	UNNH3 as NH3 mg/L
AEO1827	28.96	302.16	9.124865711	6.93	2.194865711	0.006344104	0.054	0.000342582	0.000415992

273.2

LIMS #	Temp °C	Tk	pKa	pH	pKa-pH	f	NH ₃	NH ₃ as N mg/L	UNNH3 as NH3 mg/L
AEO1847	28.96	302.16	9.124865711	6.93	2.194865711	0.006344104	0.106	0.000672475	0.000816577

273.2