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54884
GW
SW
LEACHATE

July 12, 2007

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUL 16 2007

SOUTHWEST DISTRICT
TAMPA

Mr. John Morris, P.G.
Southwest District Office
Florida Department of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

**Re: Semi-Annual Water Quality Monitoring Report
First Half 2007 Sampling Event
Lena Road Landfill
GMS ID No. 4041M02025
Modification #39884-012-SO/MM to existing FDEP Permit No. 39884-010-SO/01**

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 first half 2007 sampling event at the Lena Road Landfill (LRL) in Manatee County. This document is designed to meet the requirements of Specific Condition 11 of the modification referenced above to 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 39884-010-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.

The water quality monitoring network at the LRL consists of the following components:

- The leachate samples are collected from the lift stations.
- Groundwater samples are collected from 18 monitoring wells, which are designated GW-1 through GW-17, and BGW-1. All of the wells are used to monitor the quality of the groundwater of the surficial aquifer. GW-1 through GW-17 are detection wells, and BGW-1 is the designated background well.

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- 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.

The layout of the water quality monitoring network is presented in Figure 1.

Leachate, groundwater and surface water samples were collected from the LRL network for the first half 2007 sampling event during the period between March 22nd and 23rd, 2007. The samples were collected by representatives of Southern Analytical Laboratories, Inc. The samples were analyzed for the inorganic parameters by Manatee County Utility Operations' Central Wastewater Laboratory, and were analyzed for the other parameters by Southern Analytical Laboratories, Inc. The leachate, surface water and groundwater samples were analyzed for the parameters listed in Specific Conditions 8(a), 9(c) and 4 (c), respectively, of the LRL's permit modification.

A Florida Department of Environmental Protection (FDEP) Ground Water Monitoring Report form for the first half 2007 sampling event at the LRL is provided in Attachment A.

FIRST HALF 2007 SAMPLING EVENT 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).

FIRST HALF 2007 SAMPLING EVENT RESULTS

Leachate Analytical Results

The following analytes were detected in the leachate samples collected during this sampling event:

- Numerous inorganic analytes were detected in all three leachate samples.
- One pesticide/herbicide, 3&4 methylphenol, was detected in one of the samples.
- Several volatile organics, including 1,1-dichloroethene (DCE), 1,2-DCE, 1,4-dichlorobenzene, benzene, chlorobenzene, cis-1,2-DCE, ethylbenzene, iodomethane, toluene, and vinyl chloride, were detected in both samples.

The concentration of every parameter that was detected in the leachate was compared to the regulatory levels listed in 40 CFR Part 261.24, as required 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 standard.

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

Groundwater Analytical Results

The only analyte group that was detected in the groundwater during this sampling event was the inorganics. All of the inorganics included in the sampling program were detected in the groundwater except for cadmium, copper, lead, and mercury. All of the parameters detected in the groundwater samples 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 FAC. Not every parameter has an MCL or SDWS.

Four parameters, pH, arsenic, iron and Total Dissolved Solids (TDS) were detected in at least one well location at a concentration that exceeds the standards. 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 wells except GW-9 and GW-11. The pH was also outside of the prescribed range at the background well.

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- Arsenic – The MCL for arsenic is 0.01 mg/L. The arsenic concentration in the samples collected at GW-1, GW-2, GW-5, GW-6, GW-9, GW-10, GW-11, GW-14, and GW-15 exceeded the MCL.
- Iron – Iron has an SDWS of 0.3 mg/L. The concentration of iron exceeded the SDWS in the samples collected at all of the wells, including the background well, except GW-7 and GW-8.
- TDS - TDS has an SDWS of 500 mg/L. The concentration of TDS exceeded the SDWS in the samples collected at GW-8, and GW-12 through GW-14.

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

Surface Water Analytical Results

There was only one surface water sample collected during this sampling event, that at SW-1, because the Cypress Strand at sampling point SW-2 was dry at the time of sample collection.

The only analyte group detected in the sample collected at SW-1 was the inorganics, and there were numerous inorganics detected in the sample. 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, and the only parameters that were detected in excess of the standards were fecal coliform and iron. The field dissolved oxygen (DO) reading was also lower than the target level. The SWCTLs are promulgated in Chapter 62-777, FAC.

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

Groundwater Flow Pattern

The groundwater elevation data collected at the monitoring wells during this sampling event is presented in Table 4. The water level elevation data was plotted and contoured to generate the water table elevation contour map presented as 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 at the time of this sampling event. The average horizontal gradient of the water table across the site measured 0.0025 feet per foot (ft/ft). The flow direction and gradient are consistent with that observed during previous sampling events.

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SUMMARY AND CONCLUSIONS

During the first half 2007 sampling event at the LRL there were a few organic detections in the leachate, and numerous inorganic parameters detected in the leachate, groundwater and surface water. The only parameters that were detected at concentrations in excess of the State regulatory standards were inorganic parameters in the groundwater and surface water, and included pH, arsenic, iron, and TDS in the groundwater, and fecal coliform and iron in the surface water. 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. These results are consistent with those of the recent sampling events at this facility.

If you have any questions regarding this report or need any additional information then please call me at (407) 806-4339.

Very truly yours,



Greg Mudd, P.G.
Senior Geologist

cc: Mr. Gus DiFonzo, Manatee County Solid Waste Division
File, 100931.01 0300

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUL 16 2007

SOUTHWEST DISTRICT
TAMPA

TABLES

Table 3
Surface Water Analytical Summary
Lena Road Landfill
First Half 2007

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:	03/22/07	DRY	
Standard(1)	Units			
Field Measurements				
Temperature	deg. C	18.5	NA	
pH	STD	6.7	NA	
Conductivity	umhos/cm	643	NA	
Dissolved Oxygen (DO)	<5 mg/l	3.7	NA	
Turbidity	NTU	9.4	NA	
Inorganics				
Ammonia	mg/l	0.097	NA	
Antimony	4.3 mg/l	<0.0015	NA	
Arsenic	0.01 mg/l	<0.007	NA	
Barium	mg/l	0.012	NA	
Beryllium	0.13 mg/l	<0.0002	NA	
Biochemical Oxygen Demand (BOD)	mg/l	<2.00	NA	
Cadmium	Note 2 mg/l	<0.0005	NA	
Calcium	mg/l	39.9	NA	
Chemical Oxygen Demand (COD)	mg/l	45.7	NA	
Chlorophyll A	mg/m3	2.1	NA	
Chromium	Note 3 mg/l	0.001	NA	
Cobalt	mg/l	<0.001	NA	
Copper	Note 4 mg/l	<0.005	NA	
Fecal coliforms	800 cfu/100ml	12600	NA	
Iron	1 mg/l	1.18	NA	
Lead	Note 5 mg/l	<0.005	NA	
Magnesium	mg/l	13.2	NA	
Mercury	0.012 ug/l	<0.100	NA	
Nickel	Note 6 mg/l	0.005	NA	
Nitrate as N	mg/l	0.112	NA	
Selenium	0.005 mg/l	<0.0002	NA	
Silver	0.00007 mg/l	<0.002	NA	
Thallium	0.0063 mg/l	<0.0004	NA	
Total Dissolved Solids (TDS)	mg/l	399	NA	
Total Hardness	mg/l	154	NA	
Total Kjeldahl Nitrogen (TKN)	mg/l	0.84	NA	
Total Nitrogen	mg/l	0.952	NA	
Total Organic Carbon (TOC)	mg/l	16.2	NA	
Total Phosphate	mg/l	0.377	NA	
Total Suspended Solids (TSS)	mg/l	3.4	NA	
Unionized ammonia	0.02 mg/l	0.0002	NA	
Vanadium	mg/l	0.002	NA	
Zinc	Note 7 mg/l	0.015	NA	
Organics				
1,1,1,2-Tetrachloroethane	ug/l	<0.63	NA	
1,1,1-Trichloroethane	ug/l	<0.46	NA	
1,1,2,2-Tetrachloroethane	10.8 ug/l	<0.15	NA	

Analyte	Location:		SW-1	
	Sample Identifier:		SW-1	
	Date of Test:		03/23/07	
	Standard(1)	Units		
1,1,2-Trichloroethane		ug/l	<0.47	NA
1,1-Dichloroethane		ug/l	<0.52	NA
1,1-Dichloroethene		ug/l	<0.45	NA
1,2,3-Trichloropropane		ug/l	<0.18	NA
1,2-Dichlorobenzene		ug/l	<0.44	NA
1,2-Dichloroethane		ug/l	<0.57	NA
1,2-Dichloropropane		ug/l	<0.52	NA
1,4-Dichlorobenzene		ug/l	<0.52	NA
2-Butanone		ug/l	<8.4	NA
2-Hexanone		ug/l	<4.4	NA
4-Methyl-2-pentanone		ug/l	<3.8	NA
Acetone		ug/l	<9.9	NA
Acrylonitrile		ug/l	<1.2	NA
Benzene		ug/l	<0.50	NA
Bromochloromethane		ug/l	<0.58	NA
Bromodichloromethane		ug/l	<0.35	NA
Bromomethane		ug/l	<2.5	NA
Carbon disulfide		ug/l	<0.85	NA
Carbon tetrachloride	4.42	ug/l	<0.42	NA
Chlorobenzene		ug/l	<0.63	NA
Chloroethane		ug/l	<2.5	NA
Chloromethane		ug/l	<1.0	NA
cis-1,2-Dichloroethene	3.2	ug/l	<0.65	NA
cis-1,3-Dichloropropene		ug/l	<0.14	NA
Dibromochloromethane		ug/l	<0.34	NA
Dibromochloropropane		ug/l	<2.5	NA
Dibromomethane		ug/l	<0.41	NA
Dichloromethane	1580	ug/l	<4.0	NA
Ethylbenzene		ug/l	<0.44	NA
Ethylene dibromide		ug/l	<0.50	NA
Iodomethane		ug/l	<2.5	NA
Styrene		ug/l	<0.98	NA
t-1,4-Dichloro-2-butene		ug/l	<2.5	NA
Tetrachloroethene		ug/l	<0.50	NA
Toluene		ug/l	<0.51	NA
Total xylenes		ug/l	<0.5	NA
trans-1,2-Dichloroethene		ug/l	<0.44	NA
trans-1,3-Dichloropropene		ug/l	<0.14	NA
Tribromomethane		ug/l	<0.58	NA
Trichloroethene	80.7	ug/l	<0.5	NA
Trichlorofluoromethane		ug/l	<2.5	NA
Trichloromethane		ug/l	<0.90	NA
Vinyl acetate		ug/l	<1.5	NA
Vinyl chloride		ug/l	<0.5	NA

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

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

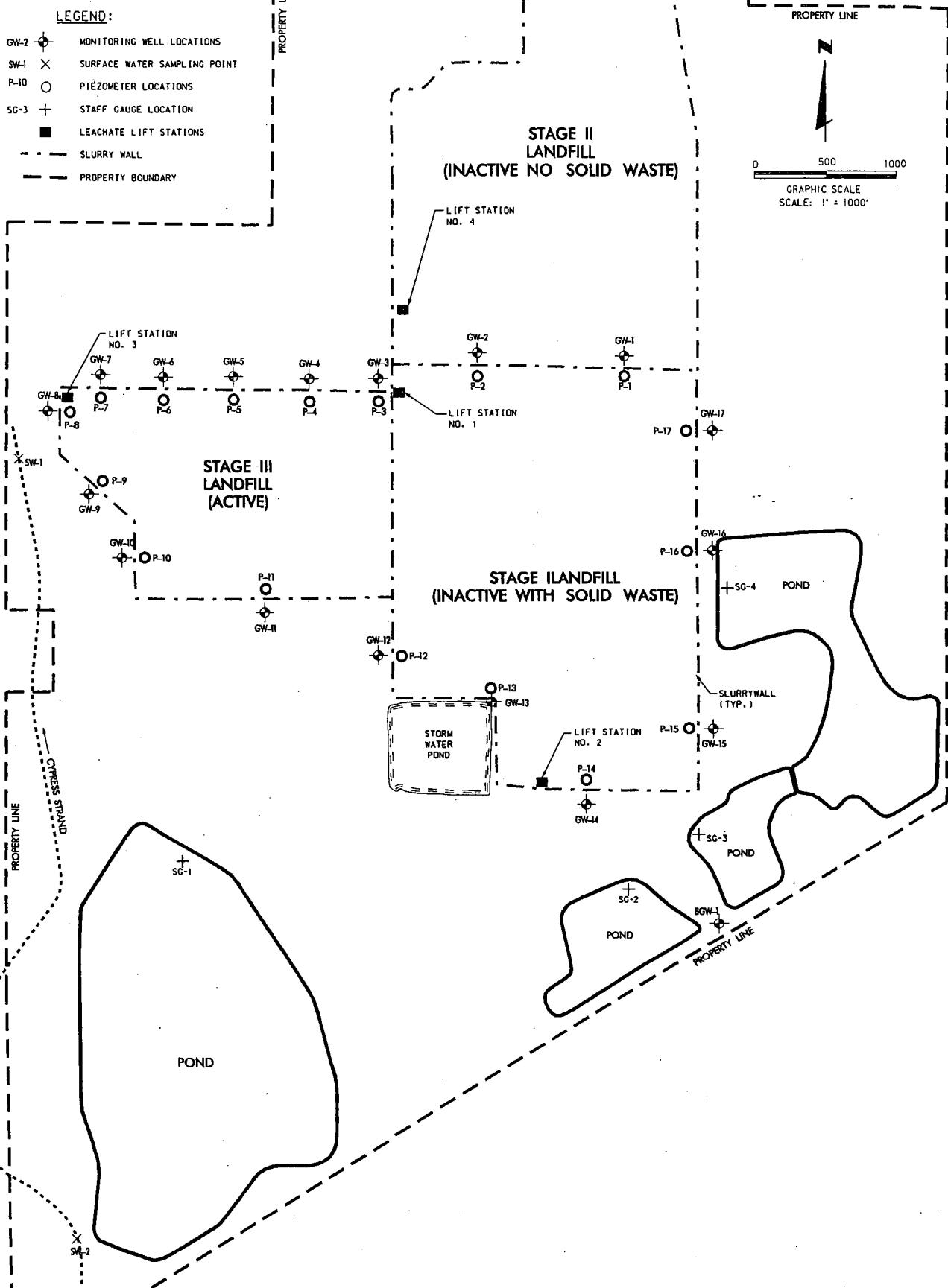
Note (3) Cr less than or equal to $e(0.819(\ln H)+0.6848)$

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

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

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

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



SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-855-1844 fax 813-855-2218

SAL Project# _____

Date: _____

Surface Water Sampling Log

Client Name:	Manatee County Utilities, Inc.	Location:	Lena Road Landfill	Contact:	Jeff Goodwin	
Surface Water Description:	SW-1 (AEO 7057)	Sample ID:	69255	Phone:	941-792-8811 X 5235	
Date Sampled:					GPS LONG:	
					GPS LAT:	

Sampling Data

Sampled By / Affiliation	SAL		Sampler Signature:	<i>[Signature]</i>	
Sampling Device:	Direct to Container		Time Collected:	1:05 PM	
Sampling location relative to shore		From Shore			
Method of approach (wading, boat, overhang, etc.)		From Shore			
Depth of sample (ft.)					
Est. Flow Rate (if applicable)					
pH	6.7				
Specific Conductance (umhos)	643				
Temperature (°C)	18.5				
Dissolved Oxygen (mg/L)	3.72				
Turbidity (NTU)	7.44				
Sample Appearance					
Sample Odor					
Field Decontamination:	Y	N	Field Filtered:	Y	N
Preservation Checked in the field?	Y		N	Initials:	
Field Cleaned (List sequence and all solutions used): 					

Site and Weather Conditions:

Very little flow

Comments (use back of form if necessary)

SOUTHERN ANALYTICAL LABORATORIES, INC.
110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 813-655-1844 fax 813-655-2218

SAL Project No. 69155

Client Name Manatee County Utility Operations								Contact / Phone: Jeff Goodwin 941/792-8811 ext. 5235		
Project Name / Location Surface Water Analyses - Lena Road Landfill								Turn Around Time Requested (*Surcharges may apply) 24 Hour <input type="checkbox"/> 48 Hour <input type="checkbox"/> 5 Bus. Days* <input type="checkbox"/> 10 Bus. Days <input checked="" type="checkbox"/>		
Samplers: (Signature) <i>Lay Ward</i>								PARAMETER / CONTAINER DESCRIPTION		
Matrix Codes: DW-Drinking Water WV-Wastewater SW-Surface Water SL-Sludge SO-Soil GW-Groundwater SA-Saline Water O-Other R-Reagent Water										
SAL Use Only Sample No.	Sample Description		Date	Time	Matrix	Composite Grab	1LG, Cool 4°C Chlorophyll a	40mL V. HCl 40 CFR Part 258 Appendix I Organics	250mL P, HNO ₃ Ag	Field Parameters
01	SW-1 AE 15078		3/23/07	1435	SW	X	1	3	1	See Field Sheet
02	SW-2				SW	X	→	0	→	See Field Sheet
03	Trip Blank		3/13/07	1400	R	X		1		
Containers Prepared/ Relinquished: <i>Lay Ward</i>		Date/Time: 3/13/07 1405	Received: <i>Lay Ward</i>	Date/Time: 3/23/07 0940	Seal intact?	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> N/A	Instructions / Remarks	
Relinquished: <i>Lay Ward</i>		Date/Time: 3/23/07 12:08	Received: <i>JMason</i>	Date/Time: 1205 3/23/07	Samples intact upon arrival?	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> N/A	Field Parameters: Specific Conductance, pH, Dissolved Oxygen, Turbidity, Colors & Sheens, Temperature	
Relinquished:		Date/Time:	Received:	Date/Time:	Received on ice? Temp _____	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> N/A		
Relinquished:		Date/Time:	Received:	Date/Time:	Proper preservatives indicated?	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> N/A		
Relinquished:		Date/Time:	Received:	Date/Time:	Rec'd w/in holding time?	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> N/A	#2 Dry.	
Relinquished:		Date/Time:	Received:	Date/Time:	Volatiles rec'd w/out headspace?	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> N/A		
Relinquished:		Date/Time:	Received:	Date/Time:	Proper containers used?	<input checked="" type="radio"/> Y	<input type="radio"/> N	<input type="radio"/> N/A		

Attachment C-3

Surface Water Analytical Report



REPORT OF ANALYSIS
MANATEE COUNTY UTILITY OPERATIONS
CENTRAL WASTEWATER LABORATORY
5101 65 TH STREET WEST
BRADENTON, FL 34210

Phone: (941) 792-8811 ext. 5285

Fax: (941) 795-3452

FDOHLAB 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: 03/23/2007

REPORT DATE: 6/1/2007

PROJECT NAME: Lena Road Semi-Annual
Surface Water Monitoring
Report

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 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



Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
	Sample ID	AE15078	Collection Date / Time		03/23/2007 09:55			
	Sample Point	Lena Road Surface Water 1						
ANIONS								
Chloride by Ion Chromatography	EPA 300.0	95.2	mg/L		04/10/2007 14:53	1.00	3.00	EMM
Nitrite as N by Ion Chromatography	EPA 300.0	<MDL	mg/L	U	03/23/2007 13:11	0.006	0.025	JPNEL
Nitrate as N by Ion Chromatography	EPA 300.0	0.112	mg/L		03/23/2007 13:11	0.006	0.025	JPNEL
DEMANDS								
Carbonaceous BOD (5 day)	SM 5210 B	<MDL	mg/L	U	03/28/2007 12:00	2.00	2.00	LSK
Chemical Oxygen Demand	EPA 410.4	45.7	mg/L		04/17/2007 13:00	5.00	20.0	IR
Total Organic Carbon	EPA 415.1	16.2	mg/L		04/16/2007 20:58	0.100	0.500	EMM
FIELD								
Field pH	FIELD	6.7	Std. units		03/23/2007 09:55	0.010		L WOOD
Field Temperature	FIELD	18.5	Degrees C		03/23/2007 09:55			L WOOD
METALS								
Metals by 200.7								
Arsenic	EPA 200.7	<MDL	mg/L	U	04/03/2007 14:26	0.007	0.021	WWC
Barium	EPA 200.7	0.012	mg/L		04/03/2007 14:26	0.0005	0.002	WWC
Beryllium	EPA 200.7	<MDL	mg/L	U	04/03/2007 14:26	0.0002	0.0006	WWC
Cadmium	EPA 200.7	<MDL	mg/L	U	04/03/2007 14:26	0.0005	0.002	WWC
Calcium	EPA 200.7	39.9	mg/L		04/03/2007 14:26	0.010	0.030	WWC
Chromium	EPA 200.7	0.001	mg/L	I	04/03/2007 14:26	0.001	0.003	WWC
Cobalt	EPA 200.7	<MDL	mg/L	U	04/03/2007 14:26	0.001	0.003	WWC
Copper	EPA 200.7	<MDL	mg/L	U	04/03/2007 14:26	0.005	0.015	WWC
Iron	EPA 200.7	1.18	mg/L		04/03/2007 14:26	0.010	0.030	WWC
Lead	EPA 200.7	<MDL	mg/L	U	04/03/2007 14:26	0.005	0.015	WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed		MDL	PQL	Analyst
Magnesium	EPA 200.7	13.2	mg/L		04/03/2007	14:26	0.005	0.015	WWC
Nickel	EPA 200.7	0.005	mg/L		04/03/2007	14:26	0.001	0.003	WWC
Silver	EPA 200.7	< MDL	mg/L	U	04/03/2007	14:26	0.002	0.006	WWC
Vanadium	EPA 200.7	0.002	mg/L		04/03/2007	14:26	0.0005	0.002	WWC
Zinc	EPA 200.7	0.015	mg/L	I	04/03/2007	14:26	0.010	0.030	WWC
Total Hardness	SM 2340 B	154	mg/L		04/11/2007	10:38			ECC
Mercury Cold Vapor	EPA 245.1	< MDL	ug/L	U	04/12/2007	12:46	0.100	0.300	WWC
Antimony by GFAAS	EPA 204.2	< MDL	mg/L	U	04/24/2007	15:08	0.0015	0.006	WWC
Selenium by GFAAS	EPA 270.2	< MDL	mg/L	U	05/11/2007	15:54	0.0002	0.001	WWC
Gallium by GFAAS	EPA 279.2	< MDL	mg/L	U	04/25/2007	16:36	0.0004	0.002	WWC
MICROBIOLOGY									
Fecal Coliforms	SM 9222D	12600	cfu/100 ml		03/26/2007	10:05	I		IR/ LK/ JPN
NUTRIENTS									
Amonia	EPA 350.1	0.097	mg/L		04/02/2007	13:31	0.011	0.054	REED
Total Kjeldahl Nitrogen	EPA 351.2	0.840	mg/L		04/04/2007	13:41	0.075	0.225	EMM
Total Nitrogen	EPA 351.2/300.0	0.952	mg/L		04/06/2007	11:04			JAG
Total Phosphate as P	EPA 365.1	0.377	mg/L		04/03/2007	14:55	0.005	0.015	LSK
Unionized Ammonia	DEP SOP 10/3/83	0.0002	mg/L		04/24/2007	14:34			
SOLIDS									
Total Dissolved Solids	SM 2540 C	399	mg/L		03/31/2007	10:45	10.0	10.0	LK/ IR
Total Suspended Solids	SM 2540 D	3.40	mg/L		03/23/2007	15:35	1.00	1.00	EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-9406	QA Sample ID	AE15028					
Samples	AE15078							
	Method Blank for Metals by 200.7							
Arsenic		< MDL	mg/L	U	04/03/2007 12:35			WWC
Barium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Beryllium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Bismuth		< MDL	mg/L	U	04/03/2007 12:35			WWC
Calcium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Chromium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Cobalt		< MDL	mg/L	U	04/03/2007 12:35			WWC
Copper		< MDL	mg/L	U	04/03/2007 12:35			WWC
Iron		< MDL	mg/L	U	04/03/2007 12:35			WWC
Lead		< MDL	mg/L	U	04/03/2007 12:35			WWC
Magnesium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Nickel		< MDL	mg/L	U	04/03/2007 12:35			WWC
Potassium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Sodium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Vanadium		< MDL	mg/L	U	04/03/2007 12:35			WWC
Zinc		< MDL	mg/L	U	04/03/2007 12:35			WWC
	Int Calb Rec for Metals by 200.7							
Arsenic		103	%		04/09/2007 11:51			WWC
Barium		102	%		04/09/2007 11:51			WWC
Beryllium		104	%		04/09/2007 11:51			WWC
Bismuth		101	%		04/09/2007 11:51			WWC
Calcium		103	%		04/09/2007 11:51			WWC
Chromium		103	%		04/09/2007 11:51			WWC
Cobalt		102	%		04/09/2007 11:51			WWC
Copper		104	%		04/09/2007 11:51			WWC
Iron		102	%		04/09/2007 11:51			WWC
Lead		98.7	%		04/09/2007 11:51			WWC
Magnesium		98.4	%		04/09/2007 11:51			WWC
Nickel		101	%		04/09/2007 11:51			WWC
Potassium		101	%		04/09/2007 11:51			WWC
Sodium		103	%		04/09/2007 11:51			WWC
Vanadium		104	%		04/09/2007 11:51			WWC
Zinc		103	%		04/09/2007 11:51			WWC
	CS Recovery for Metals by 200.7							

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-9406	QA Sample ID	AE15028					
Samples	AE15078							
	CS Recovery for Metals by 200.7							
Arsenic		101	%		04/09/2007 11:51			WWC
Chromium		101	%		04/09/2007 11:51			WWC
Beryllium		100	%		04/09/2007 11:51			WWC
Cadmium		104	%		04/09/2007 11:51			WWC
Calcium		104	%		04/09/2007 11:51			WWC
Chromium		104	%		04/09/2007 11:51			WWC
Boron		103	%		04/09/2007 11:51			WWC
Copper		102	%		04/09/2007 11:51			WWC
Iron		102	%		04/09/2007 11:51			WWC
Lead		99.8	%		04/09/2007 11:51			WWC
Magnesium		96.4	%		04/09/2007 11:51			WWC
Nickel		102	%		04/09/2007 11:51			WWC
Silver		101	%		04/09/2007 11:51			WWC
Platinum		92.0	%		04/09/2007 11:51			WWC
Vanadium		105	%		04/09/2007 11:51			WWC
Uranium		101	%		04/09/2007 11:51			WWC
	Sample Dup for Metals by 200.7							
Arsenic		< MDL	mg/L		04/03/2007 13:00			WWC
Chromium		0.005	mg/L		04/03/2007 13:00			WWC
Beryllium		< MDL	mg/L		04/03/2007 13:00			WWC
Cadmium		< MDL	mg/L	U	04/03/2007 13:00			WWC
Calcium		27.9	mg/L		04/03/2007 13:00			WWC
Chromium		0.002	mg/L	I	04/03/2007 13:00			WWC
Cobalt		< MDL	mg/L	U	04/03/2007 13:00			WWC
Copper		< MDL	mg/L	U	04/03/2007 13:00			WWC
Iron		4.44	mg/L		04/03/2007 13:00			WWC
Lead		< MDL	mg/L	U	04/03/2007 13:00			WWC
Magnesium		9.86	mg/L		04/03/2007 13:00			WWC
Nickel		0.001	mg/L	I	04/03/2007 13:00			WWC
Silver		< MDL	mg/L	U	04/03/2007 13:00			WWC
Sodium		9.59	mg/L		04/03/2007 13:00			WWC
Vanadium		0.016	mg/L		04/03/2007 13:00			WWC
Uranium		0.013	mg/L	I	04/03/2007 13:00			WWC
	Samp Dup Precision for Metals by 200.7							
Arsenic		Passed	%		04/03/2007 12:54			WWC
Barium		0.00	%		04/03/2007 12:54			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-9406	QA Sample ID	AE15028					
Samples	AE15078							
	Camp Dup Precision for Metals by 200.7							
Beryllium		Passed	%		04/03/2007 12:54			WWC
Cadmium		Passed	%		04/03/2007 12:54			WWC
Calcium		0.00	%		04/03/2007 12:54			WWC
Chromium		0.00	%		04/03/2007 12:54			WWC
Cobalt		Passed	%		04/03/2007 12:54			WWC
Copper		Passed	%		04/03/2007 12:54			WWC
Iron		0.00	%		04/03/2007 12:54			WWC
Lead		Passed	%		04/03/2007 12:54			WWC
Magnesium		0.101	%		04/03/2007 12:54			WWC
Nickel		NO RESULT	%		04/03/2007 12:54			WWC
Silver		Passed	%		04/03/2007 12:54			WWC
Thodium		1.76	%		04/03/2007 12:54			WWC
Vanadium		0.00	%		04/03/2007 12:54			WWC
Zinc		7.41	%		04/03/2007 12:54			WWC
	MS Result for Metals by 200.7							
Asenic		1.01	mg/L		04/03/2007 13:06			WWC
Barium		0.507	mg/L		04/03/2007 13:06			WWC
Beryllium		0.255	mg/L		04/03/2007 13:06			WWC
Cadmium		1.04	mg/L		04/03/2007 13:06			WWC
Calcium		53.7	mg/L		04/03/2007 13:06			WWC
Chromium		1.04	mg/L		04/03/2007 13:06			WWC
Cobalt		1.03	mg/L		04/03/2007 13:06			WWC
Copper		1.03	mg/L		04/03/2007 13:06			WWC
Iron		9.42	mg/L		04/03/2007 13:06			WWC
Lead		0.994	mg/L		04/03/2007 13:06			WWC
Magnesium		33.8	mg/L		04/03/2007 13:06			WWC
Nickel		1.02	mg/L		04/03/2007 13:06			WWC
Silver		0.253	mg/L		04/03/2007 13:06			WWC
Sodium		56.8	mg/L		04/03/2007 13:06			WWC
Thodium		1.07	mg/L		04/03/2007 13:06			WWC
Zinc		1.02	mg/L		04/03/2007 13:06			WWC
	MS Recovery for Metals by 200.7							
Asenic		101	%		04/09/2007 11:50			WWC
Barium		100	%		04/09/2007 11:50			WWC
Beryllium		102	%		04/09/2007 11:50			WWC
Cadmium		104	%		04/09/2007 11:50			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-9406	QA Sample ID	AE15028					
Samples	AE15078							
Initial Calb Rec for Metals by 200.7								
Cobalt		106	%		04/09/2007 11:51			WWC
Copper		107	%		04/09/2007 11:51			WWC
Iron		101	%		04/09/2007 11:51			WWC
Lead		104	%		04/09/2007 11:51			WWC
Magnesium		101	%		04/09/2007 11:51			WWC
Nickel		104	%		04/09/2007 11:51			WWC
Silver		102	%		04/09/2007 11:51			WWC
Sodium		97.4	%		04/09/2007 11:51			WWC
Vanadium		108	%		04/09/2007 11:51			WWC
Zinc		102	%		04/09/2007 11:51			WWC
Continuing Cal. Blank for Metals by 200.								
Arsenic		< MDL	mg/L	U	04/03/2007 14:44			WWC
Barium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Beryllium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Cadmium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Chlorium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Chromium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Cobalt		< MDL	mg/L	U	04/03/2007 14:44			WWC
Copper		< MDL	mg/L	U	04/03/2007 14:44			WWC
Iron		< MDL	mg/L	U	04/03/2007 14:44			WWC
Lead		< MDL	mg/L	U	04/03/2007 14:44			WWC
Magnesium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Nickel		< MDL	mg/L	U	04/03/2007 14:44			WWC
Silver		< MDL	mg/L	U	04/03/2007 14:44			WWC
Sodium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Vanadium		< MDL	mg/L	U	04/03/2007 14:44			WWC
Zinc		< MDL	mg/L	U	04/03/2007 14:44			WWC
Continuous Calibration for Metals by 200								
Arsenic		2.15	mg/L		04/03/2007 14:32			WWC
Barium		1.04	mg/L		04/03/2007 14:32			WWC
Beryllium		0.523	mg/L		04/03/2007 14:32			WWC
Cadmium		2.10	mg/L		04/03/2007 14:32			WWC
Chlorium		52.2	mg/L		04/03/2007 14:32			WWC
Chromium		2.10	mg/L		04/03/2007 14:32			WWC
Cobalt		2.11	mg/L		04/03/2007 14:32			WWC
Copper		2.14	mg/L		04/03/2007 14:32			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-9406	QA Sample ID	AE15028					
Samples	AE15078							
	Continuous Calibration for Metals by 200							
Iron		10.1	mg/L		04/03/2007 14:32			WWC
Lead		2.07	mg/L		04/03/2007 14:32			WWC
Magnesium		50.4	mg/L		04/03/2007 14:32			WWC
Nickel		2.09	mg/L		04/03/2007 14:32			WWC
Silver		0.510	mg/L		04/03/2007 14:32			WWC
Sodium		97.4	mg/L		04/03/2007 14:32			WWC
Vanadium		2.16	mg/L		04/03/2007 14:32			WWC
Zinc		2.04	mg/L		04/03/2007 14:32			WWC
	Initial Calibration for Metals by 200.7							
Arsenic		1.03	mg/L		04/03/2007 12:41			WWC
Barium		0.509	mg/L		04/03/2007 12:41			WWC
Beryllium		0.260	mg/L		04/03/2007 12:41			WWC
Cadmium		1.01	mg/L		04/03/2007 12:41			WWC
Calcium		25.7	mg/L		04/03/2007 12:41			WWC
Chromium		1.03	mg/L		04/03/2007 12:41			WWC
Cobalt		1.02	mg/L		04/03/2007 12:41			WWC
Copper		1.04	mg/L		04/03/2007 12:41			WWC
Iron		5.10	mg/L		04/03/2007 12:41			WWC
Lead		0.987	mg/L		04/03/2007 12:41			WWC
Magnesium		24.6	mg/L		04/03/2007 12:41			WWC
Nickel		1.01	mg/L		04/03/2007 12:41			WWC
Silver		0.253	mg/L		04/03/2007 12:41			WWC
Vanadium		51.3	mg/L		04/03/2007 12:41			WWC
Zinc		1.04	mg/L		04/03/2007 12:41			WWC
	Metals by 200.7							
Arsenic		< MDL	mg/L	U	04/03/2007 12:54			WWC
Barium		0.005	mg/L		04/03/2007 12:54			WWC
Beryllium		< MDL	mg/L	U	04/03/2007 12:54			WWC
Cadmium		< MDL	mg/L	U	04/03/2007 12:54			WWC
Calcium		27.9	mg/L		04/03/2007 12:54			WWC
Chromium		0.002	mg/L	I	04/03/2007 12:54			WWC
Cobalt		< MDL	mg/L	U	04/03/2007 12:54			WWC
Copper		< MDL	mg/L	U	04/03/2007 12:54			WWC
Iron		4.44	mg/L		04/03/2007 12:54			WWC
Lead		< MDL	mg/L	U	04/03/2007 12:54			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-9406	QA Sample ID	AE15028					
Samples	AE15078							
Metals by 200.7								
Magnesium		9.87	mg/L		04/03/2007 12:54			WWC
Nickel		0.002	mg/L	I	04/03/2007 12:54			WWC
Silver		< MDL	mg/L	U	04/03/2007 12:54			WWC
Sodium		9.76	mg/L		04/03/2007 12:54			WWC
Vanadium		0.016	mg/L		04/03/2007 12:54			WWC
Zinc		0.014	mg/L	I	04/03/2007 12:54			WWC
CS Result for Metals by 200.7								
Arsenic		1.01	mg/L		04/03/2007 12:48			WWC
Boron		0.503	mg/L		04/03/2007 12:48			WWC
Beryllium		0.251	mg/L		04/03/2007 12:48			WWC
Cadmium		1.04	mg/L		04/03/2007 12:48			WWC
Calcium		26.0	mg/L		04/03/2007 12:48			WWC
Chromium		1.04	mg/L		04/03/2007 12:48			WWC
Cobalt		1.03	mg/L		04/03/2007 12:48			WWC
Copper		1.02	mg/L		04/03/2007 12:48			WWC
Iron		5.10	mg/L		04/03/2007 12:48			WWC
Lead		0.998	mg/L		04/03/2007 12:48			WWC
Magnesium		24.1	mg/L		04/03/2007 12:48			WWC
Nickel		1.02	mg/L		04/03/2007 12:48			WWC
Silver		0.253	mg/L		04/03/2007 12:48			WWC
Sodium		46.0	mg/L		04/03/2007 12:48			WWC
Vanadium		1.05	mg/L		04/03/2007 12:48			WWC
Zinc		1.01	mg/L		04/03/2007 12:48			WWC
MSD Result for Metals by 200.7								
Arsenic		1.01	mg/L		04/03/2007 13:13			WWC
Boron		0.506	mg/L		04/03/2007 13:13			WWC
Beryllium		0.252	mg/L		04/03/2007 13:13			WWC
Cadmium		1.02	mg/L		04/03/2007 13:13			WWC
Calcium		53.9	mg/L		04/03/2007 13:13			WWC
Chromium		1.03	mg/L		04/03/2007 13:13			WWC
Cobalt		1.02	mg/L		04/03/2007 13:13			WWC
Copper		1.02	mg/L		04/03/2007 13:13			WWC
Iron		9.32	mg/L		04/03/2007 13:13			WWC
Lead		0.991	mg/L		04/03/2007 13:13			WWC
Magnesium		33.4	mg/L		04/03/2007 13:13			WWC
Nickel		1.01	mg/L		04/03/2007 13:13			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-9406	QA Sample ID	AE15028					
Samples	AE15078							
	ISD Result for Metals by 200.7							
Silver		0.250	mg/L		04/03/2007 13:13			WWC
Cadmium		56.2	mg/L		04/03/2007 13:13			WWC
Vanadium		1.05	mg/L		04/03/2007 13:13			WWC
Tin		1.01	mg/L		04/03/2007 13:13			WWC
Batch Name	AMM-9429	QA Sample ID	AE15075					
Samples	AE15078							
Ammonia		1.27	mg/L		04/02/2007 13:26			REED
Sample Dup for Ammonia		1.33	mg/L		04/02/2007 13:27			REED
Samp Dup Precision for Ammonia		4.62	%		04/02/2007 13:27			REED
Cont Calb Rec for Ammonia		107	%		04/02/2007 13:39			IR
Continuing Cal. Blank for Ammonia		<MDL	mg/L	U	04/02/2007 13:40			IR
Continuous Calibration for Ammonia		3.20	mg/L		04/02/2007 13:39			IR
Batch Name	AMM-9429A	QA Sample ID	AE15076					
Samples	AE15078							
Ammonia		2.05	mg/L		04/02/2007 13:28			REED
amt Spiked for Ammonia		0.500	mg/L		04/02/2007 13:29			REED
MS Result for Ammonia		2.57	mg/L		04/02/2007 13:29			REED
S Recovery for Ammonia		104	%		04/02/2007 13:29			REED
Batch Name	CBOD-9362	QA Sample ID	AE15064					
Samples	AE15078							
Carbonaceous BOD (5 day)		93.0	mg/L		03/28/2007 12:00			LSK
Sample Dup for CBOD		95.3	mg/L		03/28/2007 12:00			LSK
Samp Dup Precision for CBOD		2.44	%		03/28/2007 12:00			LSK
Batch Name	CLIC-9536	QA Sample ID	AE15274					
Samples	AE15078							
Amt Spiked for Chloride		40.0	mg/L		04/10/2007 13:33			EMM
Method Blank for Chloride		<MDL	mg/L	U	04/10/2007 12:47			EMM
Cont. Blank for Chloride		<MDL	mg/L	U	04/10/2007 15:39			EMM
Cont. Cal. for Chloride		205	mg/L		04/10/2007 15:27			EMM
Cont Calb Rec for Chloride		102	%		04/10/2007 15:27			EMM
Chloride by Ion Chromatography		89.2	mg/L		04/10/2007 13:10			EMM
Sample Dup for Chloride		89.4	mg/L		04/10/2007 13:21			EMM
Cont. Cal. for Chloride		28.4	mg/L		04/10/2007 12:58			EMM
Cont Calb Conc for Chloride		29.5	mg/L		04/10/2007 12:58			EMM
Int Calb Rec for Chloride		96.3	%		04/10/2007 12:58			EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	CLIC-9536	QA Sample ID	AE15274					
Samples	AE15078							
Amt Dup Prec for Chloride		0.224	%		04/10/2007 13:21			EMM
MS Recovery for Chloride		97.0	%		04/10/2007 13:33			EMM
MS Result for Chloride		128	mg/L		04/10/2007 13:33			EMM
Batch Name	COD-9580	QA Sample ID	AE15078					
Samples	AE15078							
Amt Spiked for COD		100	mg/L		04/17/2007 13:00			IR
Method Blank for COD		<MDL	mg/L	U	04/17/2007 13:00			IR
Continuing Cal. Blank for COD		<MDL	mg/L	U	04/17/2007 13:00			IR
Cont.Calib.for COD		888	mg/L		04/17/2007 13:00			IR
Cont Calb Conc for COD		900	mg/L		04/17/2007 13:00			IR
Cont Calb Rec for COD		98.7	%		04/17/2007 13:00			IR
Chemical Oxygen Demand		45.7	mg/L		04/17/2007 13:00			IR
Sample Dup for COD		48.3	mg/L		04/17/2007 13:00			IR
Initial Calibration for COD		349	mg/L		04/17/2007 13:00			IR
Int Calb Conc for COD		343	mg/L		04/17/2007 13:00			IR
Int Calb Rec for COD		102	%		04/17/2007 13:00			IR
Amt Dup Precision for COD		5.53	%		04/17/2007 13:00			IR
MS Recovery for COD		101	%		04/17/2007 13:00			IR
MS Result for COD		147	mg/L		04/17/2007 13:00			IR
Batch Name	FC-9370	QA Sample ID	AE15078					
Samples	AE15078							
Method Blank for Fecal Coliforms		<MDL	cfu/100 ml	U	03/24/2007 10:50			IR/ LK
Cont. Cal. Blank for Fecal Coliforms		<MDL	cfu/100 ml	U	03/24/2007 10:50			IR/ LK
Sample Dup for Fecal Coliforms		14500	cfu/100 ml		03/26/2007 10:05			IR/ LK
Fecal Coliforms		12600	cfu/100 ml		03/26/2007 10:05			IR/ LK
Amt Dup Precision for Fecal Coliforms		Pass	%		03/26/2007 10:20			IR
Batch Name	HG-9535	QA Sample ID	AE15029					
Samples	AE15078							
Continuing Cal. Blank for Mercury Cold V		< MDL	ug/L	U	04/12/2007 13:06			WWC
Continuous Calibration for Mercury Cold		2.45	ug/L		04/12/2007 13:03			WWC
Cont Calb Rec for Mercury Cold Vapor		98.0	%		04/12/2007 13:03			WWC
Sample Dup for Mercury Cold Vapor		< MDL	ug/L	U	04/12/2007 12:33			WWC
Mercury Cold Vapor		< MDL	ug/L	U	04/12/2007 12:30			WWC
Samp Dup Precision for Mercury Cold Vapo		Passed	%		04/12/2007 12:33			WWC
MS Recovery for Mercury Cold Vapor		96.1	%		04/12/2007 12:39			WWC
MS Result for Mercury Cold Vapor		0.961	ug/L		04/12/2007 12:39			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	HG-9535	QA Sample ID	AE15029					
Samples	AE15078							
SD Result for Mercury Cold Vapor		0.957	ug/L		04/12/2007 12:41			WWC
MS/MSD Precision for Mercury Cold Vapor		0.417	%		04/12/2007 12:41			WWC
Batch Name	NO2IC-9371	QA Sample ID	AE15069					
Samples	AE15078							
Amt Spiked for Nitrite		1.00	mg/L		03/23/2007 12:46			JPNEI
Method Blank for Nitrite		<MDL	mg/L	U	03/23/2007 11:43			JPNEI
Cont. Blank for Nitrite		<MDL	mg/L	U	03/23/2007 14:52			JPNEI
Cont. Cal. for Nitrite		5.02	mg/L		03/23/2007 14:39			JPNEI
Cont Calb Rec for Nitrite		100	%		03/23/2007 14:39			JPNEI
Sample Dup for Nitrite		<MDL	mg/L	U	03/23/2007 12:33			JPNEI
Initial Cal. Std. for NO2IC		1.05	mg/L		03/23/2007 12:08			JPNEI
Int. Cal. Conc. for NO2IC		1.00	mg/L		03/23/2007 12:08			JPNEI
Init. Cal. Rec. for NO2IC		105	%		03/23/2007 12:08			JPNEI
Nitrite as N by Ion Chromatography		<MDL	mg/L	U	03/23/2007 12:21			JPNEI
Sample Dup Prec. for Nitrite		PASSED	%		03/23/2007 12:21			JPNEI
MS Recovery for Nitrite		105	%		03/23/2007 12:21			JPNEI
MS Result for Nitrite		1.05	mg/L		03/23/2007 12:46			JPNEI
Batch Name	NO3IC-9372	QA Sample ID	AE15069					
Samples	AE15078							
Amt Spiked for Nitrate		1.00	mg/L		03/23/2007 12:46			JPNEI
Method Blank for Nitrate		<MDL	mg/L	U	03/23/2007 11:43			JPNEI
Cont. Blank for Nitrate		<MDL	mg/L	U	03/23/2007 14:52			JPNEI
Cont. Cal. for Nitrate		10.0	mg/L		03/23/2007 14:39			JPNEI
Cont Calb Rec for Nitrate		100	%		03/23/2007 14:39			JPNEI
Sample Dup for Nitrate		7.71	mg/L		03/23/2007 12:33			JPNEI
Int. Cal. for Nitrate		22.2	mg/L		03/23/2007 11:55			JPNEI
Int Calb Conc for Nitrate		22.6	mg/L		03/23/2007 11:55			JPNEI
Int Calb Rec for Nitrate		98.2	%		03/23/2007 11:55			JPNEI
Nitrate as N by Ion Chromatography		7.69	mg/L		03/23/2007 12:21			JPNEI
Sample Dup Prec. for Nitrate		0.260	%		03/23/2007 12:21			JPNEI
MS Recovery for Nitrate		103	%		03/23/2007 12:21			JPNEI
MS Result for Nitrate		8.72	mg/L		03/23/2007 12:46			JPNEI
Batch Name	SBAA-9629	QA Sample ID	AE15199					
Samples	AE15078							
Method Blank for Antimony by GFAAS		< MDL	mg/L	U	04/24/2007 13:19			WWC
Continuing Cal. Blank for Antimony by GF		< MDL	mg/L	U	04/24/2007 15:24			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	SBAA-9629	QA Sample ID	AE15199					
Samples	AE15078							
Continuous Calibration for Antimony by GFAAS		0.071	mg/L		04/24/2007 15:16			WWC
Cont Calb Rec for Antimony by GFAAS		94.7	%		04/24/2007 15:16			WWC
Sample Dup for Antimony by GFAAS		< MDL	mg/L	U	04/24/2007 13:43			WWC
Initial Calibration for Antimony by GFAAS		0.047	mg/L		04/24/2007 13:27			WWC
Calb Rec for Antimony by GFAAS		94.0	%		04/24/2007 13:27			WWC
Camp Dup Precision for Antimony by GFAAS		Passed	%		04/24/2007 13:43			WWC
MS Recovery for Antimony by GFAAS		96.0	%		04/24/2007 13:50			WWC
MS Result for Antimony by GFAAS		0.0480	mg/L		04/24/2007 13:50			WWC
Antimony by GFAAS		< MDL	mg/L	U	04/24/2007 13:35			WWC
SD Result for Antimony by GFAAS		0.049	mg/L		04/24/2007 13:58			WWC
MS/MSD Precision for Antimony by GFAAS		2.06	mg/L		04/24/2007 13:58			WWC
Batch Name	SEAA-9714	QA Sample ID	AE15073					
Samples	AE15078							
Method Blank for Selenium		< MDL	mg/L	U	05/11/2007 14:36			WWC
Cont. Cal. Blank for Selenium		< MDL	mg/L	U	05/11/2007 16:40			WWC
Continuous Calibration for Selenium		0.107	mg/L		05/11/2007 16:32			WWC
Cont Calb Rec for Selenium		107	%		05/11/2007 16:32			WWC
Sample Dup for Selenium		0.001	mg/L		05/11/2007 14:59			WWC
Initial Calibration for Selenium		0.052	mg/L		05/11/2007 14:44			WWC
Int Calb Rec for Selenium		104	%		05/11/2007 14:44			WWC
Camp Dup Precision for Selenium		0.00	%		05/11/2007 14:59			WWC
MS Recovery for Selenium		106	%		05/11/2007 15:07			WWC
MS Result for Selenium		0.054	mg/L		05/11/2007 15:07			WWC
SD Result for Selenium by GFAAS		0.054	mg/L		05/11/2007 15:14			WWC
Selenium by GFAAS		0.001	mg/L		05/11/2007 14:51			WWC
MS/MSD Precision for Selenium by GFAAS		0.00	%		05/11/2007 15:14			WWC
Batch Name	TDS-9389	QA Sample ID	AE15078					
Samples	AE15078							
Sample Dup for TDS		409	mg/L		03/31/2007 10:45			LK/IF
Camp Dup Precision for TDS		Pass	%		03/31/2007 14:24			LSK
Total Dissolved Solids		399	mg/L		03/31/2007 10:45			LK/IF
Batch Name	TKN-9469	QA Sample ID	AE15105					
Samples	AE15078							
Method Blank for TKN		<MDL	mg/L	U	04/04/2007 13:33			EMM
CB for TKN		<MDL	mg/L	U	04/04/2007 13:55			EMM
CCV for TKN		5.05	mg/L		04/04/2007 13:53			EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	TKN-9469	QA Sample ID	AE15105					
Samples	AE15078							
CV Recovery for TKN		101	%		04/04/2007 13:53			EMM
Sample Dup for TKN		53.4	mg/L		04/04/2007 13:37			EMM
CV for TKN		1.93	mg/L		04/04/2007 13:34			EMM
ICV Recovery for TKN		96.5	%		04/04/2007 13:34			EMM
Dup Precision for TKN		1.12	%		04/04/2007 13:37			EMM
Total Kjeldahl Nitrogen		54.0	mg/L		04/04/2007 13:36			EMM
Batch Name	TKN-9469A	QA Sample ID	AE15106					
Samples	AE15078							
Amt Spiked for TKN		2.00	mg/L		04/04/2007 13:40			EMM
CV Recovery for TKN		96.5	%		04/04/2007 13:39			EMM
MS Result for TKN		3.30	mg/L		04/04/2007 13:40			EMM
Total Kjeldahl Nitrogen		1.37	mg/L		04/04/2007 13:39			EMM
Batch Name	TLAA-9630	QA Sample ID	AE15199					
Samples	AE15078							
Method Blank for Thallium by GFAAS		< MDL	mg/L	U	04/25/2007 14:41			WWC
Continuing Cal. Blank for Thallium by GF		< MDL	mg/L	U	04/25/2007 16:53			WWC
Continuous Calibration for Thallium by G		0.099	mg/L		04/25/2007 16:44			WWC
Cont Calb Rec for Thallium by GFAAS		99.0	%		04/25/2007 16:44			WWC
Sample Dup for Thallium by GFAAS		< MDL	mg/L	U	04/25/2007 15:05			WWC
Initial Calibration for Thallium by GFAA		0.053	mg/L		04/25/2007 14:49			WWC
Calb Rec for Thallium by GFAAS		106	%		04/25/2007 14:49			WWC
Samp Dup Precision for Thallium by GFAAS		Passed	%		04/25/2007 15:05			WWC
CV Recovery for Thallium by GFAAS		102	%		04/25/2007 14:57			WWC
MS Result for Thallium by GFAAS		0.051	mg/L		04/25/2007 15:14			WWC
MSD Result for Thallium by GFAAS		0.051	mg/L		04/25/2007 15:22			WWC
S/MSD Precision for Thallium by GFAAS		0.00	%		04/25/2007 15:22			WWC
Thallium by GFAAS		< MDL	mg/L	U	04/25/2007 14:57			WWC
Batch Name	TOC-9572	QA Sample ID	AE15201					
Samples	AE15078							
Method Blank for TOC		< MDL	mg/L	U	04/16/2007 16:44			EMM
Cont. Cal. Blank for TOC		<MDL	mg/L	U	04/17/2007 22:01			EMM
Cont Cal TOC		9.97	mg/L		04/16/2007 21:40			EMM
Cont Calb Rec for TOC		99.7	%		04/16/2007 21:40			EMM
Dup for TOC		2.11	mg/L		04/16/2007 17:44			EMM
CV for TOC		4.68	mg/L		04/16/2007 17:02			EMM
ICV Rec for TOC		93.6	%		04/16/2007 17:02			EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	TOC-9572	QA Sample ID	AE15201					
Samples	AE15078							
No Precision for TOC		0.475	%		04/16/2007 17:44			EMM
MS Recovery for TOC		93.8	%		04/16/2007 18:07			EMM
Result for TOC		6.79	mg/L		04/16/2007 18:07			EMM
Total Organic Carbon		2.10	mg/L		04/16/2007 17:23			EMM
Batch Name	T-P-9448	QA Sample ID	AE15112					
Samples	AE15078							
Method Blank for Total Phosphate as P		<MDL	mg/L	U	04/03/2007 14:51			LSK
Continuing Cal. Blank for Total Phosphat		0.006	mg/L	V	04/03/2007 15:00			LSK
Continuous Calibration for Total Phospha		2.01	mg/L		04/03/2007 15:00			LSK
Int Calb Rec for Total Phosphate as P		100	%		04/03/2007 15:00			LSK
Sample Dup for Total Phosphate as P		5.60	mg/L		04/03/2007 14:53			LSK
Initial Calibration for Total Phosphate		1.01	mg/L		04/03/2007 14:51			LSK
Int Calb Rec for Total Phosphate as P		101	%		04/03/2007 14:51			LSK
Samp Dup Precision for Total Phosphate a		0.712	%		04/03/2007 14:52			LSK
Total Phosphate as P		5.64	mg/L		04/03/2007 14:52			LSK
Batch Name	T-P-9448A	QA Sample ID	AE15185					
Samples	AE15078							
Amt Spiked for Total Phosphate as P		2.00	mg/L		04/03/2007 14:54			LSK
MS Recovery for Total Phosphate as P		93.0	%		04/03/2007 14:53			LSK
MS Result for Total Phosphate as P		4.43	mg/L		04/03/2007 14:54			LSK
Total Phosphate as P		2.57	mg/L		04/03/2007 14:53			LSK
Batch Name	TSS-9361	QA Sample ID	AE15062					
Samples	AE15078							
Method Blank for TSS		<MDL	mg/L	U	03/23/2007 15:35			EMM
Sample Dup for TSS		70.0	mg/L		03/23/2007 15:35			EMM
Initial Calibration for TSS		86.0	mg/L		03/23/2007 15:35			EMM
Int Calb Conc for TSS		85.9	mg/L		03/23/2007 15:35			EMM
Int Calb Rec for TSS		100	%		03/23/2007 15:35			EMM
Samp Dup Precision for TSS		Pass	%		03/23/2007 15:35			EMM
Total Suspended Solids		76.0	mg/L		03/23/2007 15:35			EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL Analyst
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DATA QUALIFIER CODES

A	Value reported is the mean (average) of two or more determinations
B	Results based upon colony counts outside the acceptable range. This code applies to microbiological tests, specifically to membrane filter colony counts, and is used only if the colony count is generated from a plate in which the total number of coliform colonies <u>exceeds</u> the method indicated ideal ranges.
C	Analysis performed by contract laboratory
F	When reporting species, this code indicates the female sex.
H	Holiday
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J	Estimated value, may not be accurate. Use of this code requires justification for its use and is used in the following situations: 1. Exceeding of surrogate recovery limits 2. Existence of no quality control criteria for a component 3. Failure to meet established precision and accuracy criteria 4. Matrix interference 5. Questionable data due to improper field or lab protocols
"J"	Values are exclusive and are not used in conjunction with other codes
K	Indicates off scale low and the actual value is known to be less than the value listed. Used if the value is less than the lowest calibration standard when the calibration curve is known to be non-linear. Can also be used if the actual value is known to be less than the reported value based on sample size,dilution.
L	Off scale high and the actual value is known to be greater than the reported value. Used when the sample concentration of the analyte exceeds the linear range or highest calibration standard and the calibration curve is known to exhibit a negative deflection.
M	To be used for chemical analysis: the presence of the analyte is verified but not quantified and the actual value is less than the value reported.
N	Presumptive evidence of presence of compound. To be used when the compound has been determined by TIC (mass spectral library search) or if presence of the compound cannot be confirmed using alternate procedures.
O	Indicates analysis was lost or not performed
Q	Analyzed after holding time expired
R	Re-sample
T	Reported value is less than the laboratory method detection limit. The value is reported for informational purposes only and is not used in statistical analysis.
U	Less than the method detection limit
U1	Analyte was not detected; indicated concentration is method detection limit. Radiochemistry MDL is sample specific and matrix dependent.
V	Blank contamination. Results are valid and can be reported
X	Time of collection not provided
Y	Laboratory analysis was performed on sample, which was unpreserved or improperly preserved, therefore, the data may be inaccurate.
Z	Too many colonies present. (TNTC)
%	Below FDEP limits.
*	Analysis was not performed due to interference
#	No sample received
?	Indicates that the data should not be used since some or all quality control data for the analyte fall outside limits and the presence or absence of the analyte cannot be determined from the data
"_"	no data reported

SOUTHERN ANALYTICAL LABORATORIES, INC.

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Manatee County Utility Operations Central Laboratory/ Industrial
Compliance
5101 65th Street West
Bradenton, FL 34210-

April 23, 2007
Project No: 69255

Laboratory Report

Project Name	Surface Water Analyses - Lena Road Landfill						
Sample Description	SW-1						
Matrix	Surface Water						
SAL Sample Number	69255.01						
Date/Time Collected	03/23/07 09:55						
Date/Time Received	03/23/07 12:08						

Parameters	Units	Results	Method	Detection Limit	Date/Time Analyzed	Date/Time Prep	Analyst
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/l	0.63	U,S13 EPA 8260	0.63	04/05/07 13:02	04/05/07 13:02	JP
1,1,1-Trichloroethane	ug/l	0.46	U,S13 EPA 8260	0.46	04/05/07 13:02	04/05/07 13:02	JP
1,1,2,2-Tetrachloroethane	ug/l	0.15	U,S13 EPA 8260	0.15	04/05/07 13:02	04/05/07 13:02	JP
1,1,2-Trichloroethane	ug/l	0.47	U,S13 EPA 8260	0.47	04/05/07 13:02	04/05/07 13:02	JP
1,1-Dichloroethane	ug/l	0.52	U,S13 EPA 8260	0.52	04/05/07 13:02	04/05/07 13:02	JP
1,1-Dichloroethene	ug/l	0.45	U,S13 EPA 8260	0.45	04/05/07 13:02	04/05/07 13:02	JP
1,2,3-Trichloropropane	ug/l	0.18	U,S13 EPA 8260	0.18	04/05/07 13:02	04/05/07 13:02	JP
1,2-Dibromo-3-chloropropane	ug/l	2.5	U,S13 EPA 8260	2.5	04/05/07 13:02	04/05/07 13:02	JP
1,2-Dibromoethane	ug/l	0.50	U,S13 EPA 8260	0.50	04/05/07 13:02	04/05/07 13:02	JP
1,2-Dichlorobenzene	ug/l	0.44	U,S13 EPA 8260	0.44	04/05/07 13:02	04/05/07 13:02	JP
1,2-Dichloroethane	ug/l	0.57	U,S13 EPA 8260	0.57	04/05/07 13:02	04/05/07 13:02	JP
1,2-Dichloropropane	ug/l	0.52	U,S13 EPA 8260	0.52	04/05/07 13:02	04/05/07 13:02	JP
1,4-Dichlorobenzene	ug/l	0.52	U,S13 EPA 8260	0.52	04/05/07 13:02	04/05/07 13:02	JP
2-Hexanone	ug/l	4.4	U,S13 EPA 8260	4.4	04/05/07 13:02	04/05/07 13:02	JP
Acetone	ug/l	9.9	U,S13 EPA 8260	9.9	04/05/07 13:02	04/05/07 13:02	JP
Acrylonitrile	ug/l	1.2	U,S13 EPA 8260	1.2	04/05/07 13:02	04/05/07 13:02	JP
Benzene	ug/l	0.50	U,S13 EPA 8260	0.50	04/05/07 13:02	04/05/07 13:02	JP
Bromochloromethane	ug/l	0.58	U,S13 EPA 8260	0.58	04/05/07 13:02	04/05/07 13:02	JP
Bromodichloromethane	ug/l	0.35	U,S13 EPA 8260	0.35	04/05/07 13:02	04/05/07 13:02	JP
Bromoform	ug/l	0.58	U,S13 EPA 8260	0.58	04/05/07 13:02	04/05/07 13:02	JP
Bromomethane	ug/l	2.5	U,S13 EPA 8260	2.5	04/05/07 13:02	04/05/07 13:02	JP
Carbon disulfide	ug/l	0.85	U,S13 EPA 8260	0.85	04/05/07 13:02	04/05/07 13:02	JP
Carbon tetrachloride	ug/l	0.42	U,S13 EPA 8260	0.42	04/05/07 13:02	04/05/07 13:02	JP
Chlorobenzene	ug/l	0.63	U,S13 EPA 8260	0.63	04/05/07 13:02	04/05/07 13:02	JP
Chloroethane	ug/l	2.5	U,S13 EPA 8260	2.5	04/05/07 13:02	04/05/07 13:02	JP
Chloroform	ug/l	0.90	U,S13 EPA 8260	0.90	04/05/07 13:02	04/05/07 13:02	JP
Chloromethane	ug/l	1.0	U,S13 EPA 8260	1.0	04/05/07 13:02	04/05/07 13:02	JP
cis-1,2-Dichloroethene	ug/l	0.65	U,S13 EPA 8260	0.65	04/05/07 13:02	04/05/07 13:02	JP
cis-1,3-Dichloropropene	ug/l	0.14	U,S13 EPA 8260	0.14	04/05/07 13:02	04/05/07 13:02	JP
Dibromochloromethane	ug/l	0.34	U,S13 EPA 8260	0.34	04/05/07 13:02	04/05/07 13:02	JP
Dibromomethane	ug/l	0.41	U,S13 EPA 8260	0.41	04/05/07 13:02	04/05/07 13:02	JP
Ethylbenzene	ug/l	0.44	U,S13 EPA 8260	0.44	04/05/07 13:02	04/05/07 13:02	JP
Iodomethane	ug/l	2.5	U,S13 EPA 8260	2.5	04/05/07 13:02	04/05/07 13:02	JP
MEK (2-Butanone)	ug/l	8.4	U,S13 EPA 8260	8.4	04/05/07 13:02	04/05/07 13:02	JP
Methylene chloride	ug/l	4.0	U,S13 EPA 8260	4.0	04/05/07 13:02	04/05/07 13:02	JP
MIBK (4-Methyl-2-pentanone)	ug/l	3.8	U,S13 EPA 8260	3.8	04/05/07 13:02	04/05/07 13:02	JP
Styrene	ug/l	0.98	U,S13 EPA 8260	0.98	04/05/07 13:02	04/05/07 13:02	JP
Tetrachloroethene	ug/l	0.50	U,S13 EPA 8260	0.50	04/05/07 13:02	04/05/07 13:02	JP
Toluene	ug/l	0.51	U,S13 EPA 8260	0.51	04/05/07 13:02	04/05/07 13:02	JP
trans-1,2-Dichloroethene	ug/l	0.44	U,S13 EPA 8260	0.44	04/05/07 13:02	04/05/07 13:02	JP

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Manatee County Utility Operations Central Laboratory/ Industrial
Compliance
5101 65th Street West
Bradenton, FL 34210-

April 23, 2007
Project No: 69255

Laboratory Report

Project Name	Surface Water Analyses - Lena Road Landfill						
Sample Description	SW-1						
Matrix	Surface Water						
SAL Sample Number	69255.01						
Date/Time Collected	03/23/07	09:55					
Date/Time Received	03/23/07	12:08					

Parameters	Units	Results	Method	Detection Limit	Date/Time Analyzed	Date/Time Prep	Analyst
Volatile Organic Compounds							
trans-1,3-Dichloropropene	ug/l	0.14	U,S13	EPA 8260	0.14	04/05/07 13:02	04/05/07 13:02 JP
trans-1,4-Dichloro-2-butene	ug/l	2.5	U,S13	EPA 8260	2.5	04/05/07 13:02	04/05/07 13:02 JP
Trichloroethene	ug/l	0.50	U,S13	EPA 8260	0.50	04/05/07 13:02	04/05/07 13:02 JP
Trichlorofluoromethane	ug/l	2.5	U,S13	EPA 8260	2.5	04/05/07 13:02	04/05/07 13:02 JP
Vinyl acetate	ug/l	1.5	U,S13	EPA 8260	1.5	04/05/07 13:02	04/05/07 13:02 JP
Vinyl chloride	ug/l	0.50	U,S13	EPA 8260	0.50	04/05/07 13:02	04/05/07 13:02 JP
Xylenes, Total	ug/l	0.50	U,S13	EPA 8260	0.50	04/05/07 13:02	04/05/07 13:02 JP
Field Parameter							
Specific Conductance	umhos/cm	643		DEP FT1200			LRW
Water Temperature	C	18.5		DEP FT1400			LRW
pH	Units	6.7		DEP FT1100			LRW
Dissolved Oxygen	mg/l	3.7		DEP FT1500			LRW
Turbidity	NTU	9.4		DEP FT1600			LRW
Inorganics							
Chlorophyll a, corrected	mg/m3	2.1		SM 10200H	2	04/06/07 15:09	03/23/07 15:42 VWC
Metals							
Silver	mg/l	0.0002	U	EPA 272.2	0.0002	04/19/07 13:46	04/18/07 10:07 BMD

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Manatee County Utility Operations Central Laboratory/ Industrial Compliance
5101 65th Street West
Bradenton, FL 34210

April 24, 2007
Project No: 69255

Laboratory Report Detection Limits are MDLs
Associated MDL and PQL Table

Category	Parameter	Units	Method	MDL	PQL
Inorganics	Chlorophyll a corrected	mg/m3	SM 10200H	2	2
Metals	Silver	mg/l	EPA 272.2	0.0002	0.0008
Volatile Organic Compounds	1,1,1,2-Tetrachloroethane	ug/l	EPA 8260	0.63	2.52
	1,1,1-Trichloroethane	ug/l	EPA 8260	0.46	1.84
	1,1,2,2-Tetrachloroethane	ug/l	EPA 8260	0.14	0.56
	1,1,2-Trichloroethane	ug/l	EPA 8260	0.47	1.88
	1,1-Dichloroethane	ug/l	EPA 8260	0.52	2.08
	1,1-Dichloroethene	ug/l	EPA 8260	0.45	1.8
	1,2,3-Trichloropropane	ug/l	EPA 8260	0.15	0.6
	1,2-Dibromo-3-chloropropane	ug/l	EPA 8260	0.74	2.96
	1,2-Dibromoethane	ug/l	EPA 8260	0.50	2
	1,2-Dichlorobenzene	ug/l	EPA 8260	0.44	1.76
	1,2-Dichloroethane	ug/l	EPA 8260	0.57	2.28
	1,2-Dichloropropane	ug/l	EPA 8260	0.52	2.08
	1,4-Dichlorobenzene	ug/l	EPA 8260	0.52	2.08
	2-Hexanone	ug/l	EPA 8260	4.4	17.6
	Acetone	ug/l	EPA 8260	9.9	39.6
	Acrylonitrile	ug/l	EPA 8260	1.2	4.8
	Benzene	ug/l	EPA 8260	0.27	1.08
	Bromochloromethane	ug/l	EPA 8260	0.58	2.32
	Bromodichloromethane	ug/l	EPA 8260	0.35	1.4
	Bromoform	ug/l	EPA 8260	0.58	2.32
	Bromomethane	ug/l	EPA 8260	0.66	2.64
	Carbon disulfide	ug/l	EPA 8260	0.85	3.4
	Carbon tetrachloride	ug/l	EPA 8260	0.42	1.68
	Chlorobenzene	ug/l	EPA 8260	0.63	2.52
	Chloroethane	ug/l	EPA 8260	0.80	3.2
	Chloroform	ug/l	EPA 8260	0.90	3.6
	Chloromethane	ug/l	EPA 8260	0.64	2.56
	cis-1,2-Dichloroethene	ug/l	EPA 8260	0.65	2.6
	cis-1,3-Dichloropropene	ug/l	EPA 8260	0.14	0.56
	Dibromochloromethane	ug/l	EPA 8260	0.34	1.36
	Dibromomethane	ug/l	EPA 8260	0.41	1.64
	Ethylbenzene	ug/l	EPA 8260	0.44	1.76
	Iodomethane	ug/l	EPA 8260	0.67	2.68
	MEK (2-Butanone)	ug/l	EPA 8260	8.4	33.6
	Methylene chloride	ug/l	EPA 8260	4.0	16

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Manatee County Utility Operations Central Laboratory/ Industrial Compliance
5101 65th Street West
Bradenton, FL 34210

April 24, 2007
Project No: 69255

Laboratory Report Detection Limits are MDLs
Associated MDL and PQL Table

Category	Parameter	Units	Method	MDL	PQL
	MIBK (4-Methyl-2-pentanone)	ug/l	EPA 8260	3.8	15.2
	Styrene	ug/l	EPA 8260	0.98	3.92
	Tetrachloroethene	ug/l	EPA 8260	0.34	1.36
	Toluene	ug/l	EPA 8260	0.51	2.04
	trans-1,2-Dichloroethene	ug/l	EPA 8260	0.44	1.76
	trans-1,3-Dichloropropene	ug/l	EPA 8260	0.14	0.56
	trans-1,4-Dichloro-2-butene	ug/l	EPA 8260	2.5	10
	Trichloroethene	ug/l	EPA 8260	0.28	1.12
	Trichlorofluoromethane	ug/l	EPA 8260	0.98	3.92
	Vinyl acetate	ug/l	EPA 8260	1.5	6
	Vinyl chloride	ug/l	EPA 8260	0.50	2

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April 23, 2007
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Laboratory Report

Footnotes

- * Test results presented in this report meet all the requirements of the NELAC standards.
- ** A statement of estimated uncertainty of test results is available upon request.
- U Analyte was undetected. Indicated concentration is method detection limit.
- U,S13 Analyte was not detected; indicated concentration is method detection limit. Analysis subcontracted to STL, FDOH Cert. No. E84282.

SOUTHERN ANALYTICAL LABORATORIES, INC.

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SAL Project No. _____

Client Name Manatee County Utility Operations								Contact / Phone: Jeff Goodwin 941/792-8811 ext. 5235								
Project Name / Location Surface Water Analyses - Lena Road Landfill								Turn Around Time Requested (*Surcharges may apply) 24 Hour* <input type="checkbox"/> 48 Hour* <input type="checkbox"/> 5 Bus. Days* <input type="checkbox"/> 10 Bus. Days <input checked="" type="checkbox"/>								
Samplers: (Signature) <i>Log Wind</i>								PARAMETER / CONTAINER DESCRIPTION								
Matrix Codes: DW-Drinking Water WW-Wastewater SW-SurfaceWater SL-Sludge SO-Soil GW-Groundwater SA-Saline Water O-Other R-Reagent Water				Date	Time	Matrix	Composite	1LP, Cool 4°C CBOD, TSS	250mL P, Cool 4°C TDS	250mL P, Cool 4°C Nitrate, Nitrite	250mL P, H ₂ SO ₄ , Ammonia, TKN	250mL P, H ₂ SO ₄ , Total Phosphorus	250mL P, H ₂ SO ₄ , COD	40mL Amber V. H ₂ SO ₄ TOC	250mL P, HNO ₃ , Metals*, Ca, Mg, Fe, Hg	100mL P, Cool 4°C Fecal Coliform
SAL Use Only	Sample Description															
Sample No.	01	SW-1	AE 15078	3/28/07	0955	SW	X	1	1	1	1	1	2	2	2	
	02	SW-2				SW	X	1	1	1	1	1	2	2	2	
Samples to be delivered to MCUOD Central Laboratory.																
Containers Prepared/ Relinquished:	<i>LSH</i>	Date/Time: 3/13/07 1415	Received: <i>Log Wind</i>	Date/Time: 3/22/07 1400	Seal intact? Y N N/A	Instructions / Remarks *40 CFR Part 258 Appendix I Metals. <i>Sw-2 Pr</i> .										
Relinquished:	<i>Log Wind</i>	Date/Time: 3/23/07 1055	Received: <i>Elan</i>	Date/Time: 3/23/07 10:57	Samples intact upon arrival? Y N N/A											
Relinquished:		Date/Time:	Received:	Date/Time:	Received on ice? Temp _____ Y N N/A											
Relinquished:		Date/Time:	Received:	Date/Time:	Proper preservatives indicated? Y N N/A											
Relinquished:		Date/Time:	Received:	Date/Time:	Rec'd w/in holding time? Y N N/A											
Relinquished:		Date/Time:	Received:	Date/Time:	Volatiles rec'd w/out headspace? Y N N/A											
					Proper containers used? Y N N/A											

2007-03-27-AK