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January 10, 2007

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

*Dept. of Environmental Protection  
JAN 12 2007  
Southwest District  
SW 39884*

**Re: Semi-Annual Water Quality Monitoring Report  
Second Half 2006 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 second half 2006 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.
- 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.

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

Because leachate, is only collected annually and was collected during the first half 2006 sampling event, only groundwater and surface water samples were collected during the second half 2006 sampling event. The samples were collected by representatives of Southern Analytical Laboratories, Inc. during the period between August 21 and August 23, 2006. 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 surface water and groundwater samples were analyzed for the parameters listed in Specific Conditions 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 second half 2006 sampling event at the LRL is provided in Attachment A.

### **SECOND HALF 2006 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).

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## SECOND HALF 2006 SAMPLING EVENT RESULTS

### Groundwater Analytical Results

There were no organic parameters detected in the groundwater samples during this sampling event. All of the inorganic parameters except beryllium, cadmium, lead and mercury were detected in at least one sample.

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. Five parameters, pH, arsenic, chloride, iron, and 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 GW-11, GW-12, GW-14, GW-17, and BGW-1 (background well).
- Arsenic – The MCL for arsenic is 0.01 milligrams per liter (mg/L). The arsenic concentration in the samples collected at GW-1, GW-2, GW-9, GW-10, GW-11, GW-12, GW-14, and GW-15 exceeded the MCL.
- Chloride – Chloride has an SDWS of 250 mg/L. The concentration of chloride exceeded the SDWS in the sample collected at GW-14.
- 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 except GW-7.
- TDS - TDS has an SDWS of 500 mg/L. The concentration of TDS exceeded the SDWS in the samples collected at GW-1, GW-3, GW-6, GW-8, and GW-10 through GW-15.

A summary of the groundwater analytical results is presented in Table 1, and the complete groundwater analytical report is provided in Attachment C-1.

### Surface Water Analytical Results

There were no organic constituents detected in the surface water. All of the inorganic parameters except antimony, beryllium, cadmium, cobalt, lead, mercury, and silver were detected in at least one of the surface water samples. The concentrations of the inorganic parameters were compared to their respective Surface Water Cleanup Target Levels (SWCTLs) for Class III fresh

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water as a relative measure of the water quality. The SWCTLs are promulgated in Chapter 62-777, FAC. The only parameter that was detected in the surface water at a concentration in excess of its SWCTL was iron. The field dissolved oxygen (DO) readings at both surface water samples were also lower than the target level. It should also be noted that the minimum detection limits for the lead, mercury, and silver concentrations tests conducted on the surface water samples were higher than the regulatory standards.

A summary of the surface water analytical results for each sampling event is presented in Table 2. The complete surface water analytical report is provided in Attachment C-2.

### **Groundwater Flow Pattern**

The groundwater elevation data is presented in Table 3. 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 during this sampling event. The average horizontal gradient of the water table across the site measured 0.0012 feet per foot (ft/ft).

### **SUMMARY AND CONCLUSIONS**

The results of the second half 2006 sampling event at the LRL are similar to those of the recent sampling events, with numerous inorganic parameter detections along with a few organic detections in the groundwater and surface water. The only parameters that were detected at concentrations in excess of the State regulatory standards were inorganic parameters, including pH, arsenic, chloride, iron, and TDS in the groundwater and iron in the surface water.

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**

**Attachment C-2**

**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**

**FDOH LAB ID: E54560**

**USEPA LAB CODE: FL00031**

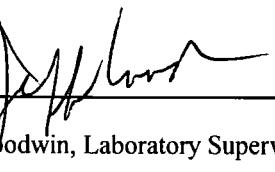
**Laboratory Contact: Jeff Goodwin**

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

**SAMPLE RECEIPT DATE:** 08/23/2006  
**REPORT DATE:** 9/25/2006  
**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.

  
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Jeffrey A. Goodwin, Laboratory Supervisor



Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Sample ID	AE12448				Collection Date / Time	08/23/2006	11:00	
Sample Point		Lena Road Surface Water 1						
ANIONS								
Nitrite as N by Ion Chromatography	EPA 300.0	<MDL	mg/L	U	08/24/2006	11:08	0.006	0.025 EMM
Sulfate as N by Ion Chromatography	EPA 300.0	0.032	mg/L		08/24/2006	11:08	0.006	0.025 EMM
DEMANDS								
Carbonaceous BOD (5 day)	SM 5210 B	<MDL	mg/L	U	08/28/2006	08:20	2.00	IR/EMM
Chemical Oxygen Demand	EPA 410.4	84.3	mg/L		08/28/2006	13:30	3.00	IR
Total Organic Carbon	EPA 415.1	30.8	mg/L		09/01/2006	14:22	0.100	0.500 EMM
FIELD								
Field pH	FIELD	6.6	Std. units	C	08/23/2006	11:00	0.010	LRW
Field Temperature	FIELD	25.6	Degrees C	C	08/23/2006	11:00		LRW
METALS								
Metals by 200.7								
Arsenic	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.007	0.021 WWC
Boron	EPA 200.7	0.010	mg/L	I	08/30/2006	12:17	0.0005	0.002 WWC
Beryllium	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.0002	0.0006WWC
Cadmium	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.0005	0.002 WWC
Calcium	EPA 200.7	24.2	mg/L		08/30/2006	12:17	0.010	0.030 WWC
Chromium	EPA 200.7	0.002	mg/L	I	08/30/2006	12:17	0.001	0.003 WWC
Cobalt	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.001	0.003 WWC
Copper	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.005	0.015 WWC
Iron	EPA 200.7	2.48	mg/L		08/30/2006	12:17	0.010	0.030 WWC
Lead	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.005	0.015 WWC
Magnesium	EPA 200.7	7.84	mg/L		08/30/2006	12:17	0.005	0.015 WWC
Nickel	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.001	0.003 WWC
Pewter	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:17	0.002	0.006 WWC
Vanadium	EPA 200.7	0.002	mg/L		08/30/2006	12:17	0.0005	0.002 WWC
Zinc	EPA 200.7	0.014	mg/L	I	08/30/2006	12:17	0.010	0.030 WWC
Total Hardness	SM 2340 B	92.7	mg/L		09/11/2006	13:25		JAG
Mercury Cold Vapor	EPA 245.1	< MDL	ug/L	U	09/13/2006	11:49	0.100	0.300 WWC
Thallium by GFAAS	EPA 204.2	< MDL	mg/L	U	08/29/2006	13:19	0.0015	0.006 WC
Selenium by GFAAS	EPA 270.2	0.001	mg/L		09/07/2006	16:36	0.0002	0.001 WWC
Thallium by GFAAS	EPA 279.2	< MDL	mg/L	U	08/25/2006	13:05	0.0004	0.002 WC
MICROBIOLOGY								
Fecal Coliforms	SM 9222D	480	cfu/100 ml	JS	08/26/2006	07:45	1	IR /WC /LK
NUTRIENTS								
Ammonia	EPA 350.1	0.106	mg/L		09/01/2006	14:24	0.011	0.054 REED
Total Kjeldahl Nitrogen	EPA 351.2	1.42	mg/L		08/29/2006	14:51	0.075	0.225 KLINE
Total Nitrogen	EPA 351.2/300.0	1.45	mg/L		08/30/2006	16:19		JAG
Total Phosphate as P	EPA 365.1	0.859	mg/L		08/30/2006	14:06	0.005	0.015 REED
Unionized Ammonia	DEP SOP 10/3/83	0.0003	mg/L		09/12/2006	10:38		
SOLIDS								
Total Dissolved Solids	SM 2540 C	241	mg/L		08/28/2006	10:30	2.50	7.50 EMM/ LK/ IR

Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Sample ID	AE12457	Collection Date / Time	08/23/2006 13:55				
Sample Point	Lena Road Surface Water 1						
ids	SM 2540 D	7.17	mg/L	08/24/2006 15:30	2.50	7.50	EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Sample ID		AE12449	Collection Date / Time		08/23/2006 10:28			
Sample Point		Lena Road Surface Water 2						
<b>ANIONS</b>								
Nitrite as N by Ion Chromatography	EPA 300.0	<MDL	mg/L	U	08/24/2006	11:21	0.006	0.025 EMM
Ammonium as N by Ion Chromatography	EPA 300.0	0.019	mg/L	I	08/24/2006	11:21	0.006	0.025 EMM
<b>DEMANDS</b>								
Carbonaceous BOD (5 day)	SM 5210 B	3.85	mg/L		08/28/2006	08:20	2.00	IR/EMM
Chemical Oxygen Demand	EPA 410.4	182	mg/L		08/28/2006	13:30	3.00	IR
Total Organic Carbon	EPA 415.1	38.7	mg/L		09/01/2006	17:15	0.100	0.500 EMM
<b>FIELD</b>								
Field pH	FIELD	6.6	Std. units	C	08/23/2006	10:28	0.010	LRW
Field Temperature	FIELD	27.3	Degrees C	C	08/23/2006	10:28		LRW
<b>METALS</b>								
Metals by 200.7								
Arsenic	EPA 200.7	0.010	mg/L	I	08/30/2006	12:23	0.007	0.021 WWC
Boron	EPA 200.7	0.014	mg/L		08/30/2006	12:23	0.0005	0.002 WWC
Beryllium	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:23	0.0002	0.0006 WWC
Cadmium	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:23	0.0005	0.002 WWC
Calcium	EPA 200.7	17.5	mg/L		08/30/2006	12:23	0.010	0.030 WWC
Chromium	EPA 200.7	0.002	mg/L	I	08/30/2006	12:23	0.001	0.003 WWC
Cobalt	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:23	0.001	0.003 WWC
Copper	EPA 200.7	0.006	mg/L	I	08/30/2006	12:23	0.005	0.015 WWC
Iron	EPA 200.7	4.87	mg/L		08/30/2006	12:23	0.010	0.030 WWC
Lead	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:23	0.005	0.015 WWC
Magnesium	EPA 200.7	5.85	mg/L		08/30/2006	12:23	0.005	0.015 WWC
Nickel	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:23	0.001	0.003 WWC
Pewter	EPA 200.7	< MDL	mg/L	U	08/30/2006	12:23	0.002	0.006 WWC
Vanadium	EPA 200.7	0.003	mg/L		08/30/2006	12:23	0.0005	0.002 WWC
Zinc	EPA 200.7	0.027	mg/L	I	08/30/2006	12:23	0.010	0.030 WWC
Total Hardness	SM 2340 B	67.8	mg/L		09/11/2006	13:25		JAG
Mercury Cold Vapor	EPA 245.1	< MDL	ug/L	U	09/13/2006	11:51	0.100	0.300 WWC
Antimony by GFAAS	EPA 204.2	< MDL	mg/L	U	08/29/2006	13:12	0.0015	0.006 WC
Selenium by GFAAS	EPA 270.2	0.001	mg/L		09/07/2006	16:43	0.0002	0.001 WWC
Thallium by GFAAS	EPA 279.2	< MDL	mg/L	U	08/25/2006	12:57	0.0004	0.002 WC
<b>MICROBIOLOGY</b>								
Fecal Coliforms	SM 9222D	300	cfu/100 ml	JS	08/26/2006	07:45	1	IR /WC /LK
<b>NUTRIENTS</b>								
Ammonia	EPA 350.1	0.060	mg/L		09/01/2006	14:25	0.011	0.054 REED
Total Kjeldahl Nitrogen	EPA 351.2	3.64	mg/L		09/08/2006	15:02	0.075	0.225 KLINE
Total Nitrogen	EPA 351.2/300.0	3.66	mg/L		09/12/2006	16:11		JAG
Total Phosphate as P	EPA 365.1	1.97	mg/L		08/30/2006	14:07	0.005	0.015 REED
Unionized Ammonia	DEP SOP 10/3/83	0.0002	mg/L		09/12/2006	10:40		
<b>SOLIDS</b>								
Total Dissolved Solids	SM 2540 C	183	mg/L		08/28/2006	10:30	2.50	7.50 EMM/ LK/ IR

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Sample ID	AE12458	Collection Date / Time	08/23/2006	14:20				
Sample Point	Lena Road Surface Water 2							

SOLIDWORKS

Total Suspended Solids SM 2540 D **6.13** mg/L 08/24/2006 15:30 2.50 7.50 EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-7544	QA Sample ID	AE12451					
Samples	AE12448 AE12449							
MSD Result for Metals by 200.7								
Arsenic		1.07	mg/L		08/30/2006 11:45			WWC
Arsenic		0.939	%		08/30/2006 11:36			WWC
Arsenic		4.65	%		08/30/2006 11:12			WWC
Arsenic		1.99	mg/L		08/30/2006 13:04			WWC
Arsenic		0.985	mg/L		08/30/2006 10:43			WWC
Arsenic		0.042	mg/L		08/30/2006 11:18			WWC
Arsenic		0.044	mg/L		08/30/2006 11:12			WWC
Arsenic		1.06	mg/L		08/30/2006 11:36			WWC
Arsenic		102	%		08/31/2006 12:55			WWC
Arsenic		< MDL	mg/L	U	08/30/2006 10:37			WWC
Arsenic		101	%		08/31/2006 12:55			WWC
Arsenic		1.01	mg/L		08/30/2006 11:01			WWC
Arsenic		99.5	%		08/31/2006 12:55			WWC
Arsenic		< MDL	mg/L	U	08/30/2006 13:31			WWC
Arsenic		98.5	%		08/31/2006 12:55			WWC
Barium		2.35	%		08/30/2006 11:36			WWC
Barium		0.00	%		08/30/2006 11:12			WWC
Barium		0.560	mg/L		08/30/2006 11:45			WWC
Barium		1.02	mg/L		08/30/2006 13:04			WWC
Barium		0.505	mg/L		08/30/2006 10:43			WWC
Barium		0.036	mg/L		08/30/2006 11:18			WWC
Barium		0.036	mg/L		08/30/2006 11:12			WWC
Barium		0.547	mg/L		08/30/2006 11:36			WWC
Barium		102	%		08/31/2006 12:55			WWC
Barium		< MDL	mg/L	U	08/30/2006 10:37			WWC
Barium		103	%		08/31/2006 12:55			WWC
Barium		0.5165	mg/L		08/30/2006 11:01			WWC
Barium		102	%		08/31/2006 12:55			WWC
Barium		< MDL	mg/L	U	08/30/2006 13:31			WWC
Barium		101	%		08/31/2006 12:55			WWC
Beryllium		0.763	%		08/30/2006 11:36			WWC
Beryllium		0.00	%		08/30/2006 11:12			WWC
Beryllium		0.261	mg/L		08/30/2006 11:45			WWC
Beryllium		0.512	mg/L		08/30/2006 13:04			WWC
Beryllium		0.253	mg/L		08/30/2006 10:43			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-7544	QA Sample ID	AE12451					
Samples	AE12448 AE12449							
Beryllium		0.263	mg/L		08/30/2006 11:36			WWC
Beryllium		< MDL	mg/L	U	08/30/2006 11:18			WWC
Beryllium		< MDL	mg/L	U	08/30/2006 11:12			WWC
Beryllium		105	%		08/31/2006 12:55			WWC
Beryllium		< MDL	mg/L	U	08/30/2006 10:37			WWC
Beryllium		104	%		08/31/2006 12:55			WWC
Beryllium		0.259	mg/L		08/30/2006 11:01			WWC
Beryllium		102	%		08/31/2006 12:55			WWC
Beryllium		< MDL	mg/L	U	08/30/2006 13:31			WWC
Beryllium		101	%		08/31/2006 12:55			WWC
Cadmium		0.991	mg/L		08/30/2006 11:45			WWC
Cadmium		0.810	%		08/30/2006 11:36			WWC
Cadmium		0.00	%		08/30/2006 11:12			WWC
Cadmium		1.99	mg/L		08/30/2006 13:04			WWC
Cadmium		0.970	mg/L		08/30/2006 10:43			WWC
Cadmium		0.983	mg/L		08/30/2006 11:36			WWC
Cadmium		< MDL	mg/L	U	08/30/2006 11:18			WWC
Cadmium		< MDL	mg/L	U	08/30/2006 11:12			WWC
Cadmium		98.3	%		08/31/2006 12:55			WWC
Cadmium		< MDL	mg/L	U	08/30/2006 10:37			WWC
V Cadmium		101	%		08/31/2006 12:55			WWC
Cadmium		1.01	mg/L		08/30/2006 11:01			WWC
Cadmium		99.5	%		08/31/2006 12:55			WWC
Cadmium		< MDL	mg/L	U	08/30/2006 13:31			WWC
Cadmium		97.0	%		08/31/2006 12:55			WWC
Calcium		181	mg/L		08/30/2006 11:45			WWC
Calcium		0.00	%		08/30/2006 11:12			WWC
Calcium		47.7	mg/L		08/30/2006 13:04			WWC
Calcium		24.8	mg/L		08/30/2006 10:43			WWC
Calcium		151	mg/L		08/30/2006 11:18			WWC
Calcium		151	mg/L		08/30/2006 11:12			WWC
Calcium		175	mg/L		08/30/2006 11:36			WWC
Calcium		96.0	%		08/31/2006 12:55			WWC
Calcium		< MDL	mg/L	U	08/30/2006 10:37			WWC
Calcium		99.2	%		08/31/2006 12:55			WWC
Calcium		3.37	%		08/30/2006 11:36			WWC



Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-7544	QA Sample ID	AE12451					
Samples	AE12448 AE12449							
	Continuous Calibration for Metals by 200							
Copper		2.04	mg/L		08/30/2006 13:04			WWC
Copper		0.957	%		08/30/2006 11:36			WWC
Copper		1.02	mg/L		08/30/2006 10:43			WWC
Copper		1.04	mg/L		08/30/2006 11:36			WWC
Copper		< MDL	mg/L	U	08/30/2006 11:12			WWC
Copper		< MDL	mg/L	U	08/30/2006 11:18			WWC
Copper		104	%		08/31/2006 12:55			WWC
Copper		< MDL	mg/L	U	08/30/2006 10:37			WWC
Copper		102	%		08/31/2006 12:55			WWC
Copper		102	%		08/31/2006 12:55			WWC
Copper		1.02	mg/L		08/30/2006 11:01			WWC
Copper		< MDL	mg/L	U	08/30/2006 13:31			WWC
Copper		102	%		08/31/2006 12:55			WWC
Iron		7.96	mg/L		08/30/2006 11:45			WWC
Iron		0.00	%		08/30/2006 11:12			WWC
Iron		0.630	%		08/30/2006 11:36			WWC
Iron		10.1	mg/L		08/30/2006 13:04			WWC
Iron		4.96	mg/L		08/30/2006 10:43			WWC
Iron		7.91	mg/L		08/30/2006 11:36			WWC
Iron		2.88	mg/L		08/30/2006 11:12			WWC
Nickel		101	%		08/31/2006 12:55			WWC
Iron		2.88	mg/L		08/30/2006 11:18			WWC
Iron		< MDL	mg/L	U	08/30/2006 10:37			WWC
Iron		99.2	%		08/31/2006 12:55			WWC
Iron		99.2	%		08/31/2006 12:55			WWC
Iron		4.96	mg/L		08/30/2006 11:01			WWC
Iron		< MDL	mg/L	U	08/30/2006 13:31			WWC
Iron		101	%		08/31/2006 12:55			WWC
Lead		0.997	mg/L		08/30/2006 11:45			WWC
Lead		0.00	%		08/30/2006 11:12			WWC
Lead		2.01	mg/L		08/30/2006 13:04			WWC
Lead		0.503	%		08/30/2006 11:36			WWC
Lead		0.997	mg/L		08/30/2006 10:43			WWC
Lead		0.992	mg/L		08/30/2006 11:36			WWC
Lead		< MDL	mg/L	U	08/30/2006 11:12			WWC
Lead		99.2	%		08/31/2006 12:55			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-7544	QA Sample ID	AE12451					
Samples	AE12448 AE12449							
	Sample Dup for Metals by 200.7							
Lead		< MDL	mg/L	U	08/30/2006 11:18			WWC
Lead		< MDL	mg/L	U	08/30/2006 10:37			WWC
Lead		100	%		08/31/2006 12:55			WWC
Lead		99.7	%		08/31/2006 12:55			WWC
Lead		1.00	mg/L		08/30/2006 11:01			WWC
Lead		< MDL	mg/L	U	08/30/2006 13:31			WWC
Lead		100	%		08/31/2006 12:55			WWC
Magnesium		91.6	mg/L		08/30/2006 11:45			WWC
Magnesium		0.787	%		08/30/2006 11:12			WWC
Magnesium		24.5	mg/L		08/30/2006 10:43			WWC
Magnesium		49.0	mg/L		08/30/2006 13:04			WWC
Magnesium		3.22	%		08/30/2006 11:36			WWC
Magnesium		88.7	mg/L		08/30/2006 11:36			WWC
Magnesium		63.8	mg/L		08/30/2006 11:12			WWC
Magnesium		< MDL	mg/L	U	08/30/2006 10:37			WWC
Magnesium		99.6	%		08/31/2006 12:55			WWC
Magnesium		63.3	mg/L		08/30/2006 11:18			WWC
Magnesium		94.8	%		08/31/2006 12:55			WWC
Magnesium		98.0	%		08/31/2006 12:55			WWC
Magnesium		23.7	mg/L		08/30/2006 11:01			WWC
Magnesium		< MDL	mg/L	U	08/30/2006 13:31			WWC
Magnesium		98.0	%		08/31/2006 12:55			WWC
Manganese		1.12	mg/L		08/30/2006 11:45			WWC
Manganese		0.00	%		08/30/2006 11:12			WWC
Manganese		1.04	mg/L		08/30/2006 10:43			WWC
Manganese		2.07	mg/L		08/30/2006 13:04			WWC
Manganese		1.80	%		08/30/2006 11:36			WWC
Manganese		1.10	mg/L		08/30/2006 11:36			WWC
Manganese		0.067	mg/L		08/30/2006 11:12			WWC
Manganese		< MDL	mg/L	U	08/30/2006 10:37			WWC
Manganese		103	%		08/31/2006 12:55			WWC
Manganese		0.067	mg/L		08/30/2006 11:18			WWC
Manganese		104	%		08/31/2006 12:55			WWC
Manganese		1.04	mg/L		08/30/2006 11:01			WWC
Manganese		104	%		08/31/2006 12:55			WWC
Manganese		< MDL	mg/L	U	08/30/2006 13:31			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-7544	QA Sample ID	AE12451					
Samples	AE12448 AE12449							
Manganese		104	%		08/31/2006 12:55			WWC
Nickel		1.03	mg/L		08/30/2006 11:45			WWC
Nickel		5.40	%		08/30/2006 11:12			WWC
Nickel		2.04	mg/L		08/30/2006 13:04			WWC
Nickel		0.976	%		08/30/2006 11:36			WWC
Nickel		1.02	mg/L		08/30/2006 10:43			WWC
Nickel		1.02	mg/L		08/30/2006 11:36			WWC
Nickel		0.018	mg/L		08/30/2006 11:12			WWC
Nickel		100	%		08/31/2006 12:55			WWC
Nickel		0.019	mg/L		08/30/2006 11:18			WWC
Nickel		< MDL	mg/L	U	08/30/2006 10:37			WWC
Nickel		102	%		08/31/2006 12:55			WWC
Nickel		1.01	mg/L		08/30/2006 11:01			WWC
Nickel		101	%		08/31/2006 12:55			WWC
Nickel		< MDL	mg/L	U	08/30/2006 13:31			WWC
Nickel		102	%		08/31/2006 12:55			WWC
Silver		0.262	mg/L		08/30/2006 11:45			WWC
Silver		NO RESULT	%		08/30/2006 11:12			WWC
Silver		0.249	mg/L		08/30/2006 10:43			WWC
Silver		0.504	mg/L		08/30/2006 13:04			WWC
Silver		102	%		08/31/2006 12:55			WWC
Silver		2.32	%		08/30/2006 11:36			WWC
Silver		0.256	mg/L		08/30/2006 11:36			WWC
Silver		< MDL	mg/L	U	08/30/2006 11:12			WWC
Silver		< MDL	mg/L	U	08/30/2006 10:37			WWC
Silver		0.002	mg/L	I	08/30/2006 11:18			WWC
Silver		99.6	%		08/31/2006 12:55			WWC
Silver		0.254	mg/L		08/30/2006 11:01			WWC
Silver		< MDL	mg/L	U	08/30/2006 13:31			WWC
Silver		102	%		08/31/2006 12:55			WWC
Silver		101	%		08/31/2006 12:55			WWC
Sodium		96.8	mg/L		08/30/2006 13:04			WWC
Sodium		118	mg/L		08/30/2006 11:45			WWC
Sodium		0.406	%		08/30/2006 11:12			WWC
Sodium		51.0	mg/L		08/30/2006 10:43			WWC
Sodium		2.58	%		08/30/2006 11:36			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-7544	QA Sample ID	AE12451					
Samples	AE12448 AE12449							
		S Result for Metals by 200.7						
Sodium		115	mg/L		08/30/2006 11:36			WWC
Sodium		73.7	mg/L		08/30/2006 11:12			WWC
Sodium		< MDL	mg/L	U	08/30/2006 10:37			WWC
Sodium		74.0	mg/L		08/30/2006 11:18			WWC
Sodium		82.6	%		08/31/2006 12:55			WWC
Sodium		102	%		08/31/2006 12:55			WWC
Sodium		47.0	mg/L		08/30/2006 11:01			WWC
Sodium		94.0	%		08/31/2006 12:55			WWC
Sodium		< MDL	mg/L	U	08/30/2006 13:31			WWC
Sodium		96.8	%		08/31/2006 12:55			WWC
Nickel		1.05	mg/L		08/30/2006 11:45			WWC
Vanadium		0.00	%		08/30/2006 11:12			WWC
Vanadium		0.986	mg/L		08/30/2006 10:43			WWC
Vanadium		0.957	%		08/30/2006 11:36			WWC
Vanadium		1.04	mg/L		08/30/2006 11:36			WWC
Nickel		104	%		08/31/2006 12:55			WWC
Vanadium		0.001	mg/L	I	08/30/2006 11:12			WWC
Nickel		< MDL	mg/L	U	08/30/2006 10:37			WWC
Vanadium		0.001	mg/L	I	08/30/2006 11:18			WWC
Nickel		104	%		08/31/2006 12:55			WWC
Vanadium		98.6	%		08/31/2006 12:55			WWC
Vanadium		2.08	mg/L		08/30/2006 13:04			WWC
Nickel		1.04	mg/L		08/30/2006 11:01			WWC
Vanadium		< MDL	mg/L	U	08/30/2006 13:31			WWC
Nickel		104	%		08/31/2006 12:55			WWC
Zinc		0.989	mg/L		08/30/2006 11:45			WWC
Zinc		96.8	%		08/31/2006 12:55			WWC
Zinc		4.88	%		08/30/2006 11:12			WWC
Zinc		0.984	mg/L		08/30/2006 10:43			WWC
Zinc		0.101	%		08/30/2006 11:36			WWC
Zinc		0.988	mg/L		08/30/2006 11:36			WWC
Zinc		0.020	mg/L	I	08/30/2006 11:12			WWC
Zinc		< MDL	mg/L	U	08/30/2006 10:37			WWC
Zinc		0.021	mg/L	I	08/30/2006 11:18			WWC
Zinc		98.4	%		08/31/2006 12:55			WWC
Zinc		1.00	mg/L		08/30/2006 11:01			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	\$ICPWATER-7544	QA Sample ID	AE12451					
Samples	AE12448 AE12449							
CS Recovery for Metals by 200.7								
Zinc		100	%		08/31/2006 12:55			WWC
Zinc		< MDL	mg/L	U	08/30/2006 13:31			WWC
Zinc		1.98	mg/L		08/30/2006 13:04			WWC
Zinc		99.0	%		08/31/2006 12:55			WWC
Batch Name	AMM-7611	QA Sample ID	AE12536					
Samples	AE12448 AE12449							
Ammonia		16.9	mg/L		09/01/2006 14:20			REED
Sample Dup for Ammonia		16.8	mg/L		09/01/2006 14:21			REED
Samp Dup Precision for Ammonia		0.593	%		09/01/2006 14:20			REED
Continuous Calibration for Ammonia		2.96	mg/L		09/01/2006 14:33			IR
Cont Calb Rec for Ammonia		98.7	%		09/01/2006 14:33			IR
Continuing Cal. Blank for Ammonia		<MDL	mg/L	U	09/01/2006 14:34			IR
Batch Name	AMM-7611A	QA Sample ID	AE12532					
Samples	AE12448 AE12449							
Ammonia		0.086	mg/L		09/01/2006 14:22			REED
Res Result for Ammonia		0.587	mg/L		09/01/2006 14:23			REED
Amt Spiked for Ammonia		0.500	mg/L		09/01/2006 14:23			REED
Recovery for Ammonia		100	%		09/01/2006 14:22			REED
Batch Name	CBOD-7520	QA Sample ID	AE12414					
Samples	AE12448 AE12449							
Carbonaceous BOD (5 day)		161	mg/L		08/28/2006 08:20			IR/EM
Samp Dup Precision for CBOD		1.25	%		08/28/2006 08:20			IR/EM
Sample Dup for CBOD		159	mg/L		08/28/2006 08:20			IR/EM
Batch Name	COD-7561	QA Sample ID	AE12448					
Samples	AE12448 AE12449							
Chemical Oxygen Demand		84.3	mg/L		08/28/2006 13:30			IR
Cont Calb Conc for COD		900	mg/L		08/28/2006 13:30			IR
Cont Calb Rec for COD		101	%		08/28/2006 13:30			IR
Cont.Calib.for COD		906	mg/L		08/28/2006 13:30			IR
Continuing Cal. Blank for COD		<MDL	mg/L		08/28/2006 13:30			IR
Initial Calibration for COD		349	mg/L		08/28/2006 13:30			IR
Int Calb Conc for COD		343	mg/L		08/28/2006 13:30			IR
Initial Calb Rec for COD		102	%		08/28/2006 13:30			IR
Method Blank for COD		<MDL	mg/L		08/28/2006 13:30			IR
Samp Dup Precision for COD		0.00	%		08/28/2006 13:30			IR

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	COD-7561	QA Sample ID	AE12448					
Samples	AE12448 AE12449							
Sample Dup for COD		84.3	mg/L		08/28/2006 13:30			IR
Batch Name	COD-7561A	QA Sample ID	AE12449					
Samples	AE12448 AE12449							
Amt Spiked for COD		100	mg/L		08/28/2006 13:30			IR
Chemical Oxygen Demand		182	mg/L		08/28/2006 13:30			IR
MS Recovery for COD		98.0	%		08/28/2006 13:30			IR
Result for COD		280	mg/L		08/28/2006 13:30			IR
Batch Name	FC-7522	QA Sample ID	AE12448					
Samples	AE12448 AE12449							
Method Blank for Fecal Coliforms		<MDL	cfu/100 ml	U	08/24/2006 14:05			IR
Fecal Coliforms		480	cfu/100 ml	J5	08/26/2006 07:45			IR / W
Sample Dup for Fecal Coliforms		420	cfu/100 ml	J5	08/26/2006 07:45			IR / W
Samp Dup Precision for Fecal Coliforms		Pass	%		08/26/2006 10:00			LSK
Cont. Cal. Blank for Fecal Coliforms		<MDL	cfu/100 ml	U	08/24/2006 14:05			IR
Batch Name	FC-7556	QA Sample ID	AE12449					
Samples	AE12449							
Fecal Coliforms		300	cfu/100 ml	J5	08/26/2006 07:45			IR / W
Cont. Cal. Blank for Fecal Coliforms		<MDL	cfu/100 ml	U	08/24/2006 14:05			IR
Batch Name	HG-7683	QA Sample ID	AE12427					
Samples	AE12448 AE12449							
Cont Calb Rec for Mercury Cold Vapor		101	%		09/13/2006 11:54			WWC
Continuing Cal. Blank for Mercury Cold V		< MDL	ug/L	U	09/13/2006 11:56			WWC
Continuous Calibration for Mercury Cold		5.04	ug/L		09/13/2006 11:54			WWC
Mercury Cold Vapor		< MDL	ug/L	U	09/13/2006 11:22			WWC
MS Recovery for Mercury Cold Vapor		101	%		09/13/2006 11:27			WWC
MS Result for Mercury Cold Vapor		1.01	ug/L		09/13/2006 11:27			WWC
MS/MSD Precision for Mercury Cold Vapor		0.00	%		09/13/2006 11:29			WWC
MSD Result for Mercury Cold Vapor		1.01	ug/L		09/13/2006 11:29			WWC
Samp Dup Precision for Mercury Cold Vapo		Passed	%		09/13/2006 11:24			WWC
Sample Dup for Mercury Cold Vapor		< MDL	ug/L	U	09/13/2006 11:24			WWC
Batch Name	NO2IC-7525	QA Sample ID	AE12434					
Samples	AE12448 AE12449							
Method Blank for Nitrite		<MDL	mg/L	U	08/24/2006 09:40			EMM
Nitrite as N by Ion Chromatography		<MDL	mg/L	U	08/24/2006 10:18			EMM
Sample Dup for Nitrite		<MDL	mg/L	U	08/24/2006 10:30			EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	NO2IC-7525	QA Sample ID	AE12434					
Samples	AE12448 AE12449							
Sample Dup Prec. for Nitrite		Passed	%		08/24/2006 10:30			EMM
MS Result for Nitrite		0.962	mg/L		08/24/2006 10:43			EMM
Alt Spiked for Nitrite		1.00	mg/L		08/24/2006 10:43			EMM
MS Recovery for Nitrite		96.2	%		08/24/2006 10:43			EMM
Cont. Cal. for Nitrite		5.01	mg/L		08/24/2006 12:49			EMM
Cont Calb Rec for Nitrite		100	%		08/24/2006 12:49			EMM
Cont. Blank for Nitrite		<MDL	mg/L	U	08/24/2006 13:01			EMM
Init. Cal. Conc. for NO2IC		1.00	mg/L		08/24/2006 09:53			EMM
Init. Cal. Rec. for NO2IC		105	%		08/24/2006 09:53			EMM
Initial Cal. Std. for NO2IC		1.05	mg/L		08/24/2006 09:53			EMM
Batch Name	NO3IC-7523	QA Sample ID	AE12434					
Samples	AE12448 AE12449							
Method Blank for Nitrate		<MDL	mg/L	U	08/24/2006 09:40			EMM
Init. Cal. for Nitrate		23.1	mg/L		08/24/2006 10:05			EMM
Int Calb Conc for Nitrate		22.8	mg/L		08/24/2006 10:05			EMM
Int Calb Rec for Nitrate		101	%		08/24/2006 10:05			EMM
Nitrate as N by Ion Chromatography		7.48	mg/L		08/24/2006 10:18			EMM
Sample Dup for Nitrate		7.50	mg/L		08/24/2006 10:30			EMM
Sample Dup Prec. for Nitrate		0.267	%		08/24/2006 10:30			EMM
MS Result for Nitrate		8.49	mg/L		08/24/2006 10:43			EMM
Alt Spiked for Nitrate		1.00	mg/L		08/24/2006 10:43			EMM
MS Recovery for Nitrate		101	%		08/24/2006 10:43			EMM
Cont. Cal. for Nitrate		10.1	mg/L		08/24/2006 12:49			EMM
Cont Calb Rec for Nitrate		101	%		08/24/2006 12:49			EMM
Cont. Blank for Nitrate		<MDL	mg/L	U	08/24/2006 13:01			EMM
Batch Name	SBAA-7532	QA Sample ID	AE12450					
Samples	AE12448 AE12449							
Antimony by GFAAS		< MDL	mg/L	U	08/29/2006 12:41			WC
Cont Calb Rec for Antimony by GFAAS		100	%		08/29/2006 14:05			WC
Continuing Cal. Blank for Antimony by GF		< MDL	mg/L	U	08/29/2006 14:13			WC
Continuous Calibration for Antimony by G		0.075	mg/L		08/29/2006 14:05			WC
Recovery for Antimony by GFAAS		106	%		08/29/2006 12:56			WC
Result for Antimony by GFAAS		0.053	mg/L		08/29/2006 12:56			WC
MS/MSD Precision for Antimony by GFAAS		1.87	mg/L		08/29/2006 13:04			WC
SD Result for Antimony by GFAAS		0.054	mg/L		08/29/2006 13:04			WC
Samp Dup Precision for Antimony by GFAAS		Passed	%		08/30/2006 12:49			WWC

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	SBAA-7532	QA Sample ID	AE12450					
Samples	AE12448 AE12449							
Sample Dup for Antimony by GFAAS		< MDL	mg/L	U	08/29/2006 12:49			WC
Batch Name	SEAA-7595	QA Sample ID	AE12431					
Samples	AE12448 AE12449							
Cont Calb Rec for Selenium		104	%		09/07/2006 16:51			WWC
Cont. Cal. Blank for Selenium		< MDL	mg/L	U	09/07/2006 16:59			WWC
Continuous Calibration for Selenium		0.104	mg/L		09/07/2006 16:51			WWC
Initial Calibration for Selenium		0.050	mg/L		09/07/2006 15:03			WWC
Int Calb Rec for Selenium		100	%		09/07/2006 15:03			WWC
Method Blank for Selenium		< MDL	mg/L	U	09/07/2006 14:55			WWC
Recovery for Selenium		104	%		09/07/2006 15:26			WWC
MS Result for Selenium		0.053	mg/L		09/07/2006 15:26			WWC
/MSD Precision for Selenium by GFAAS		0.00	%		09/07/2006 15:26			WWC
MSD Result for Selenium by GFAAS		0.053	mg/L		09/07/2006 15:34			WWC
Sample Dup Precision for Selenium		0.00	%		09/07/2006 15:18			WWC
Sample Dup for Selenium		0.001	mg/L		09/07/2006 15:18			WWC
Selenium by GFAAS		0.001	mg/L		09/07/2006 15:11			WWC
Batch Name	TDS-7542	QA Sample ID	AE12430					
Samples	AE12448 AE12449							
Method Blank for TDS		<MDL	mg/L	U	08/28/2006 10:30			EMM/
Initial Calibration for TDS		286	mg/L		08/28/2006 10:30			EMM/
Calb Conc for TDS		300	mg/L		08/28/2006 10:30			EMM/
Int Calb Rec for TDS		95.3	%		08/28/2006 10:30			EMM/
Total Dissolved Solids		558	mg/L		08/28/2006 10:30			EMM/
Sample Dup for TDS		549	mg/L		08/28/2006 10:30			EMM/
Dup Precision for TDS		Pass	%		08/28/2006 11:22			IR
Batch Name	TKN-7570	QA Sample ID	AE12355					
Samples	AE12448							
Method Blank for TKN		<MDL	mg/L	U	08/29/2006 14:32			LSK
ICV for TKN		1.99	mg/L		08/29/2006 14:33			LSK
CV Recovery for TKN		99.5	%		08/29/2006 14:32			LSK
Total Kjeldahl Nitrogen		13.4	mg/L		08/29/2006 14:35			KLINI
Sample Dup for TKN		13.1	mg/L		08/29/2006 14:36			KLINI
Dup Precision for TKN		2.26	%		08/29/2006 14:35			KLINI
CV for TKN		5.19	mg/L		08/29/2006 14:52			LSK
CV Recovery for TKN		104	%		08/29/2006 14:33			LSK
CCB for TKN		<MDL	mg/L	U	08/29/2006 14:54			LSK

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	TKN-7570A	QA Sample ID	AE12339					
Samples	AE12448							
Total Kjeldahl Nitrogen		17.3	mg/L		08/29/2006 14:38			KLINI
MS Result for TKN		37.4	mg/L		08/29/2006 14:39			KLINI
Amt Spiked for TKN		20.0	mg/L		08/29/2006 14:39			KLINI
MS Recovery for TKN		100	%		08/29/2006 14:38			KLINI
Batch Name	TKN-7664	QA Sample ID	AE12536					
Samples	AE12449							
Total Kjeldahl Nitrogen		25.4	mg/L		09/08/2006 14:49			KLINI
Sample Dup for TKN		25.1	mg/L		09/08/2006 14:51			KLINI
Dup Precision for TKN		1.19	%		09/08/2006 14:49			KLINI
CCV for TKN		5.06	mg/L		09/08/2006 15:07			LSK
CCV Recovery for TKN		101	%		09/08/2006 14:48			LSK
CB for TKN		<MDL	mg/L	U	09/08/2006 15:08			LSK
Batch Name	TKN-7664A	QA Sample ID	AE12529					
Samples	AE12449							
Total Kjeldahl Nitrogen		1.29	mg/L		09/08/2006 14:52			KLINI
MS Result for TKN		3.15	mg/L		09/08/2006 14:54			KLINI
Amt Spiked for TKN		2.00	mg/L		09/08/2006 14:54			KLINI
MS Recovery for TKN		93.0	%		09/08/2006 14:52			KLINI
Batch Name	TLAA-7530	QA Sample ID	AE12450					
Samples	AE12448 AE12449							
Cont Calb Rec for Thallium by GFAAS		102	%		08/25/2006 13:54			WC
Continuing Cal. Blank for Thallium by GF		< MDL	mg/L	U	08/25/2006 14:03			WC
Continuous Calibration for Thallium by G		0.102	mg/L		08/25/2006 13:54			WC
MS Recovery for Thallium by GFAAS		106	%		08/25/2006 12:41			WC
MS Result for Thallium by GFAAS		0.053	mg/L		08/25/2006 12:41			WC
MS/MSD Precision for Thallium by GFAAS		5.82	%		08/25/2006 12:49			WC
MSD Result for Thallium by GFAAS		0.050	mg/L		08/25/2006 12:49			WC
Sample Dup Precision for Thallium by GFAAS		Passed	%		08/28/2006 12:32			WWC
Sample Dup for Thallium by GFAAS		< MDL	mg/L	U	08/25/2006 12:32			WC
Thallium by GFAAS		< MDL	mg/L	U	08/25/2006 12:24			WC
Batch Name	TOC-7603	QA Sample ID	AE12448					
Samples	AE12448 AE12449							
Method Blank for TOC		< MDL	mg/L	U	09/01/2006 12:57			EMM
CV for TOC		4.61	mg/L		09/01/2006 13:17			EMM
ICV Rec for TOC		92.2	%		09/01/2006 13:17			EMM
Total Organic Carbon		30.8	mg/L		09/01/2006 14:22			EMM

Parameter	Method	Results	Units	Qualifier	Date / Time Analyzed	MDL	PQL	Analyst
Batch Name	TOC-7603	QA Sample ID	AE12448					
Samples	AE12448 AE12449							
Dup for TOC		31.9	mg/L		09/01/2006 14:48			EMM
Dup Precision for TOC		3.51	%		09/01/2006 14:22			EMM
Result for TOC		84.1	mg/L		09/01/2006 15:26			EMM
MS Recovery for TOC		107	%		09/01/2006 15:14			EMM
Cont Cal TOC		10.3	mg/L		09/01/2006 18:11			EMM
Cont Calb Rec for TOC		103	%		09/01/2006 17:58			EMM
Cont. Cal. Blank for TOC		<MDL	mg/L	U	09/04/2006 18:21			EMM
Batch Name	T-P-7586	QA Sample ID	AE12414					
Samples	AE12448 AE12449							
Int Calb Rec for Total Phosphate as P		101	%		08/30/2006 14:08			IR
Continuing Cal. Blank for Total Phosphat		<MDL	mg/L	U	08/30/2006 14:09			IR
Continuous Calibration for Total Phospha		2.02	mg/L		08/30/2006 14:08			IR
Initial Calibration for Total Phosphate		1.03	mg/L		08/30/2006 14:00			IR
Calb Rec for Total Phosphate as P		103	%		08/30/2006 14:00			IR
Method Blank for Total Phosphate as P		<MDL	mg/L	U	08/30/2006 14:00			IR
Samp Dup Precision for Total Phosphate a		1.65	%		08/30/2006 14:02			REED
Sample Dup for Total Phosphate as P		6.62	mg/L		08/30/2006 14:02			REED
Total Phosphate as P		6.73	mg/L		08/30/2006 14:01			REED
Batch Name	T-P-7586A	QA Sample ID	AE12412					
Samples	AE12448 AE12449							
Int Spiked for Total Phosphate as P		0.500	mg/L		08/30/2006 14:03			REED
MS Recovery for Total Phosphate as P		102	%		08/30/2006 14:02			REED
Result for Total Phosphate as P		0.733	mg/L		08/30/2006 14:03			REED
Total Phosphate as P		0.221	mg/L		08/30/2006 14:02			REED
Batch Name	TSS-7535	QA Sample ID	AE12457					
Samples	AE12457 AE12458							
Initial Calibration for TSS		98.7	mg/L		08/24/2006 15:30			EMM
Calb Conc for TSS		100	mg/L		08/24/2006 15:30			EMM
Int Calb Rec for TSS		98.7	%		08/24/2006 15:30			EMM
Method Blank for TSS		<MDL	mg/L	U	08/24/2006 15:30			EMM
Samp Dup Precision for TSS		Pass	%		08/24/2006 15:30			EMM
Sample Dup for TSS		7.83	mg/L		08/24/2006 15:30			EMM
Total Suspended Solids		7.17	mg/L		08/24/2006 15:30			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 exceeds 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.
- \*
- # 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.

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



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

September 7, 2006  
Project No: 62663

## Laboratory Report

Project Name	Surface Water Analyses - Lena Road Landfill						
Sample Description	SW-1						
Matrix	Surface Water						
SAL Sample Number	62663.01						
Date/Time Collected	08/23/06	11:00					
Date/Time Received	08/23/06	13:18					

Parameters	Units	Results	Method	Detection Limit	Date/Time Analyzed	Date/Time Prep	Analyst
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### Volatile Organic Compounds

1,1,1,2-Tetrachloroethane	ug/l	0.63 U,S13	EPA 8260	0.63	08/30/06 20:31	08/30/06 20:31	JP
1,1,1-Trichloroethane	ug/l	0.46 U,S13	EPA 8260	0.46	08/30/06 20:31	08/30/06 20:31	JP
1,1,2,2-Tetrachloroethane	ug/l	0.14 U,S13	EPA 8260	0.14	08/30/06 20:31	08/30/06 20:31	JP
1,1,2-Trichloroethane	ug/l	0.47 U,S13	EPA 8260	0.47	08/30/06 20:31	08/30/06 20:31	JP
1,1-Dichloroethane	ug/l	0.52 U,S13	EPA 8260	0.52	08/30/06 20:31	08/30/06 20:31	JP
1,1-Dichloroethene	ug/l	0.45 U,S13	EPA 8260	0.45	08/30/06 20:31	08/30/06 20:31	JP
1,2,3-Trichloropropane	ug/l	0.15 U,S13	EPA 8260	0.15	08/30/06 20:31	08/30/06 20:31	JP
1,2-Dibromo-3-chloropropane	ug/l	2.5 U,S13	EPA 8260	2.5	08/30/06 20:31	08/30/06 20:31	JP
1,2-Dibromoethane	ug/l	0.50 U,S13	EPA 8260	0.50	08/30/06 20:31	08/30/06 20:31	JP
1,2-Dichlorobenzene	ug/l	0.44 U,S13	EPA 8260	0.44	08/30/06 20:31	08/30/06 20:31	JP
1,2-Dichloroethane	ug/l	0.57 U,S13	EPA 8260	0.57	08/30/06 20:31	08/30/06 20:31	JP
1,2-Dichloropropane	ug/l	0.52 U,S13	EPA 8260	0.52	08/30/06 20:31	08/30/06 20:31	JP
1,4-Dichlorobenzene	ug/l	0.52 U,S13	EPA 8260	0.52	08/30/06 20:31	08/30/06 20:31	JP
2-Hexanone	ug/l	4.4 U,S13	EPA 8260	4.4	08/30/06 20:31	08/30/06 20:31	JP
Acetone	ug/l	9.9 U,S13	EPA 8260	9.9	08/30/06 20:31	08/30/06 20:31	JP
Acrylonitrile	ug/l	1.2 U,S13	EPA 8260	1.2	08/30/06 20:31	08/30/06 20:31	JP
Benzene	ug/l	0.50 U,S13	EPA 8260	0.50	08/30/06 20:31	08/30/06 20:31	JP
Bromochloromethane	ug/l	0.58 U,S13	EPA 8260	0.58	08/30/06 20:31	08/30/06 20:31	JP
Bromodichloromethane	ug/l	0.35 U,S13	EPA 8260	0.35	08/30/06 20:31	08/30/06 20:31	JP
Bromoform	ug/l	0.58 U,S13	EPA 8260	0.58	08/30/06 20:31	08/30/06 20:31	JP
Bromomethane	ug/l	2.5 U,S13	EPA 8260	2.5	08/30/06 20:31	08/30/06 20:31	JP
Carbon disulfide	ug/l	0.85 U,S13	EPA 8260	0.85	08/30/06 20:31	08/30/06 20:31	JP
Carbon tetrachloride	ug/l	0.42 U,S13	EPA 8260	0.42	08/30/06 20:31	08/30/06 20:31	JP
Chlorobenzene	ug/l	0.63 U,S13	EPA 8260	0.63	08/30/06 20:31	08/30/06 20:31	JP
Chloroethane	ug/l	2.5 U,S13	EPA 8260	2.5	08/30/06 20:31	08/30/06 20:31	JP
Chloroform	ug/l	0.90 U,S13	EPA 8260	0.90	08/30/06 20:31	08/30/06 20:31	JP
Chloromethane	ug/l	1.0 U,S13	EPA 8260	1.0	08/30/06 20:31	08/30/06 20:31	JP
cis-1,2-Dichloroethene	ug/l	0.65 U,S13	EPA 8260	0.65	08/30/06 20:31	08/30/06 20:31	JP
cis-1,3-Dichloropropene	ug/l	0.14 U,S13	EPA 8260	0.14	08/30/06 20:31	08/30/06 20:31	JP
Dibromochloromethane	ug/l	0.34 U,S13	EPA 8260	0.34	08/30/06 20:31	08/30/06 20:31	JP
Dibromomethane	ug/l	0.41 U,S13	EPA 8260	0.41	08/30/06 20:31	08/30/06 20:31	JP
Ethylbenzene	ug/l	0.44 U,S13	EPA 8260	0.44	08/30/06 20:31	08/30/06 20:31	JP
Iodomethane	ug/l	2.5 U,S13	EPA 8260	2.5	08/30/06 20:31	08/30/06 20:31	JP
MEK (2-Butanone)	ug/l	8.4 U,S13	EPA 8260	8.4	08/30/06 20:31	08/30/06 20:31	JP
Methylene chloride	ug/l	4.0 U,S13	EPA 8260	4.0	08/30/06 20:31	08/30/06 20:31	JP
MIBK (4-Methyl-2-pentanone)	ug/l	3.8 U,S13	EPA 8260	3.8	08/30/06 20:31	08/30/06 20:31	JP
Styrene	ug/l	0.98 U,S13	EPA 8260	0.98	08/30/06 20:31	08/30/06 20:31	JP
Tetrachloroethene	ug/l	0.50 U,S13	EPA 8260	0.50	08/30/06 20:31	08/30/06 20:31	JP
Toluene	ug/l	0.51 U,S13	EPA 8260	0.51	08/30/06 20:31	08/30/06 20:31	JP

# SOUTHERN ANALYTICAL LABORATORIES, INC.

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



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

September 7, 2006  
Project No: 62663

## Laboratory Report

Project Name	Surface Water Analyses - Lena Road Landfill						
Sample Description	SW-1						
Matrix	Surface Water						
SAL Sample Number	62663.01						
Date/Time Collected	08/23/06	11:00					
Date/Time Received	08/23/06	13:18					

Parameters	Units	Results	Method	Detection Limit	Date/Time Analyzed	Date/Time Prep	Analyst
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### Volatile Organic Compounds

trans-1,2-Dichloroethene	ug/l	0.44	U,S13	EPA 8260	0.44	08/30/06 20:31	08/30/06 20:31	JP
trans-1,3-Dichloropropene	ug/l	0.14	U,S13	EPA 8260	0.14	08/30/06 20:31	08/30/06 20:31	JP
trans-1,4-Dichloro-2-butene	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:31	08/30/06 20:31	JP
Trichloroethene	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:31	08/30/06 20:31	JP
Trichlorofluoromethane	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:31	08/30/06 20:31	JP
Vinyl acetate	ug/l	1.5	U,S13	EPA 8260	1.5	08/30/06 20:31	08/30/06 20:31	JP
Vinyl chloride	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:31	08/30/06 20:31	JP
Xylenes, Total	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:31	08/30/06 20:31	JP

### Field Parameter

Specific Conductance	umhos/cm	305	DEP FT1200		08/23/06 11:00		LRW
Water Temperature	C	25.6	DEP FT1400		08/23/06 11:00		LRW
pH	Units	6.6	DEP FT1100		08/23/06 11:00		LRW
Dissolved Oxygen	mg/l	4.4	DEP FT1500		08/23/06 11:00		LRW
Turbidity	NTU	12	DEP FT1600		08/23/06 11:00		LRW

### Inorganics

Chlorophyll a, corrected	mg/m3	6.9	SM 10200H	2	09/05/06 16:00	08/25/06 09:49	SMD
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Compliance  
5101 65th Street West  
Bradenton, FL 34210-

September 7, 2006  
Project No: 62663

## Laboratory Report

Project Name	Surface Water Analyses - Lena Road Landfill						
Sample Description	SW-2						
Matrix	Surface Water						
SAL Sample Number	62663.02						
Date/Time Collected	08/23/06	10:28					
Date/Time Received	08/23/06	13:18					

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	08/30/06 20:11	08/30/06 20:11	JP
1,1,1-Trichloroethane	ug/l	0.46	U,S13	EPA 8260	0.46	08/30/06 20:11	08/30/06 20:11	JP
1,1,2,2-Tetrachloroethane	ug/l	0.14	U,S13	EPA 8260	0.14	08/30/06 20:11	08/30/06 20:11	JP
1,1,2-Trichloroethane	ug/l	0.47	U,S13	EPA 8260	0.47	08/30/06 20:11	08/30/06 20:11	JP
1,1-Dichloroethane	ug/l	0.52	U,S13	EPA 8260	0.52	08/30/06 20:11	08/30/06 20:11	JP
1,1-Dichloroethene	ug/l	0.45	U,S13	EPA 8260	0.45	08/30/06 20:11	08/30/06 20:11	JP
1,2,3-Trichloropropane	ug/l	0.15	U,S13	EPA 8260	0.15	08/30/06 20:11	08/30/06 20:11	JP
1,2-Dibromo-3-chloropropane	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:11	08/30/06 20:11	JP
1,2-Dibromoethane	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:11	08/30/06 20:11	JP
1,2-Dichlorobenzene	ug/l	0.44	U,S13	EPA 8260	0.44	08/30/06 20:11	08/30/06 20:11	JP
1,2-Dichloroethane	ug/l	0.57	U,S13	EPA 8260	0.57	08/30/06 20:11	08/30/06 20:11	JP
1,2-Dichloropropane	ug/l	0.52	U,S13	EPA 8260	0.52	08/30/06 20:11	08/30/06 20:11	JP
1,4-Dichlorobenzene	ug/l	0.52	U,S13	EPA 8260	0.52	08/30/06 20:11	08/30/06 20:11	JP
2-Hexanone	ug/l	4.4	U,S13	EPA 8260	4.4	08/30/06 20:11	08/30/06 20:11	JP
Acetone	ug/l	9.9	U,S13	EPA 8260	9.9	08/30/06 20:11	08/30/06 20:11	JP
Acrylonitrile	ug/l	1.2	U,S13	EPA 8260	1.2	08/30/06 20:11	08/30/06 20:11	JP
Benzene	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:11	08/30/06 20:11	JP
Bromochloromethane	ug/l	0.58	U,S13	EPA 8260	0.58	08/30/06 20:11	08/30/06 20:11	JP
Bromodichloromethane	ug/l	0.35	U,S13	EPA 8260	0.35	08/30/06 20:11	08/30/06 20:11	JP
Bromoform	ug/l	0.58	U,S13	EPA 8260	0.58	08/30/06 20:11	08/30/06 20:11	JP
Bromomethane	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:11	08/30/06 20:11	JP
Carbon disulfide	ug/l	0.85	U,S13	EPA 8260	0.85	08/30/06 20:11	08/30/06 20:11	JP
Carbon tetrachloride	ug/l	0.42	U,S13	EPA 8260	0.42	08/30/06 20:11	08/30/06 20:11	JP
Chlorobenzene	ug/l	0.63	U,S13	EPA 8260	0.63	08/30/06 20:11	08/30/06 20:11	JP
Chloroethane	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:11	08/30/06 20:11	JP
Chloroform	ug/l	0.90	U,S13	EPA 8260	0.90	08/30/06 20:11	08/30/06 20:11	JP
Chloromethane	ug/l	1.0	U,S13	EPA 8260	1.0	08/30/06 20:11	08/30/06 20:11	JP
cis-1,2-Dichloroethene	ug/l	0.65	U,S13	EPA 8260	0.65	08/30/06 20:11	08/30/06 20:11	JP
cis-1,3-Dichloropropene	ug/l	0.14	U,S13	EPA 8260	0.14	08/30/06 20:11	08/30/06 20:11	JP
Dibromochloromethane	ug/l	0.34	U,S13	EPA 8260	0.34	08/30/06 20:11	08/30/06 20:11	JP
Dibromomethane	ug/l	0.41	U,S13	EPA 8260	0.41	08/30/06 20:11	08/30/06 20:11	JP
Ethylbenzene	ug/l	0.44	U,S13	EPA 8260	0.44	08/30/06 20:11	08/30/06 20:11	JP
Iodomethane	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:11	08/30/06 20:11	JP
MEK (2-Butanone)	ug/l	8.4	U,S13	EPA 8260	8.4	08/30/06 20:11	08/30/06 20:11	JP
Methylene chloride	ug/l	4.0	U,S13	EPA 8260	4.0	08/30/06 20:11	08/30/06 20:11	JP
MIBK (4-Methyl-2-pentanone)	ug/l	3.8	U,S13	EPA 8260	3.8	08/30/06 20:11	08/30/06 20:11	JP
Styrene	ug/l	0.98	U,S13	EPA 8260	0.98	08/30/06 20:11	08/30/06 20:11	JP
Tetrachloroethene	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:11	08/30/06 20:11	JP
Toluene	ug/l	0.51	U,S13	EPA 8260	0.51	08/30/06 20:11	08/30/06 20:11	JP

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

September 7, 2006  
Project No: 62663

## Laboratory Report

Project Name	Surface Water Analyses - Lena Road Landfill						
Sample Description	SW-2						
Matrix	Surface Water						
SAL Sample Number	62663.02						
Date/Time Collected	08/23/06	10:28					
Date/Time Received	08/23/06	13:18					

Parameters	Units	Results	Method	Detection Limit	Date/Time Analyzed	Date/Time Prep	Analyst
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### Volatile Organic Compounds

trans-1,2-Dichloroethene	ug/l	0.44	U,S13	EPA 8260	0.44	08/30/06 20:11	08/30/06 20:11	JP
trans-1,3-Dichloropropene	ug/l	0.14	U,S13	EPA 8260	0.14	08/30/06 20:11	08/30/06 20:11	JP
trans-1,4-Dichloro-2-butene	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:11	08/30/06 20:11	JP
Trichloroethene	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:11	08/30/06 20:11	JP
Trichlorofluoromethane	ug/l	2.5	U,S13	EPA 8260	2.5	08/30/06 20:11	08/30/06 20:11	JP
Vinyl acetate	ug/l	1.5	U,S13	EPA 8260	1.5	08/30/06 20:11	08/30/06 20:11	JP
Vinyl chloride	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:11	08/30/06 20:11	JP
Xylenes, Total	ug/l	0.50	U,S13	EPA 8260	0.50	08/30/06 20:11	08/30/06 20:11	JP

### Field Parameter

Specific Conductance	umhos/cm	212	DEP FT1200	08/23/06 10:28	LRW
Water Temperature	C	27.3	DEP FT1400	08/23/06 10:28	LRW
pH	Units	6.6	DEP FT1100	08/23/06 10:28	LRW
Dissolved Oxygen	mg/l	4.3	DEP FT1500	08/23/06 10:28	LRW
Turbidity	NTU	6.5	DEP FT1600	08/23/06 10:28	LRW

### Inorganics

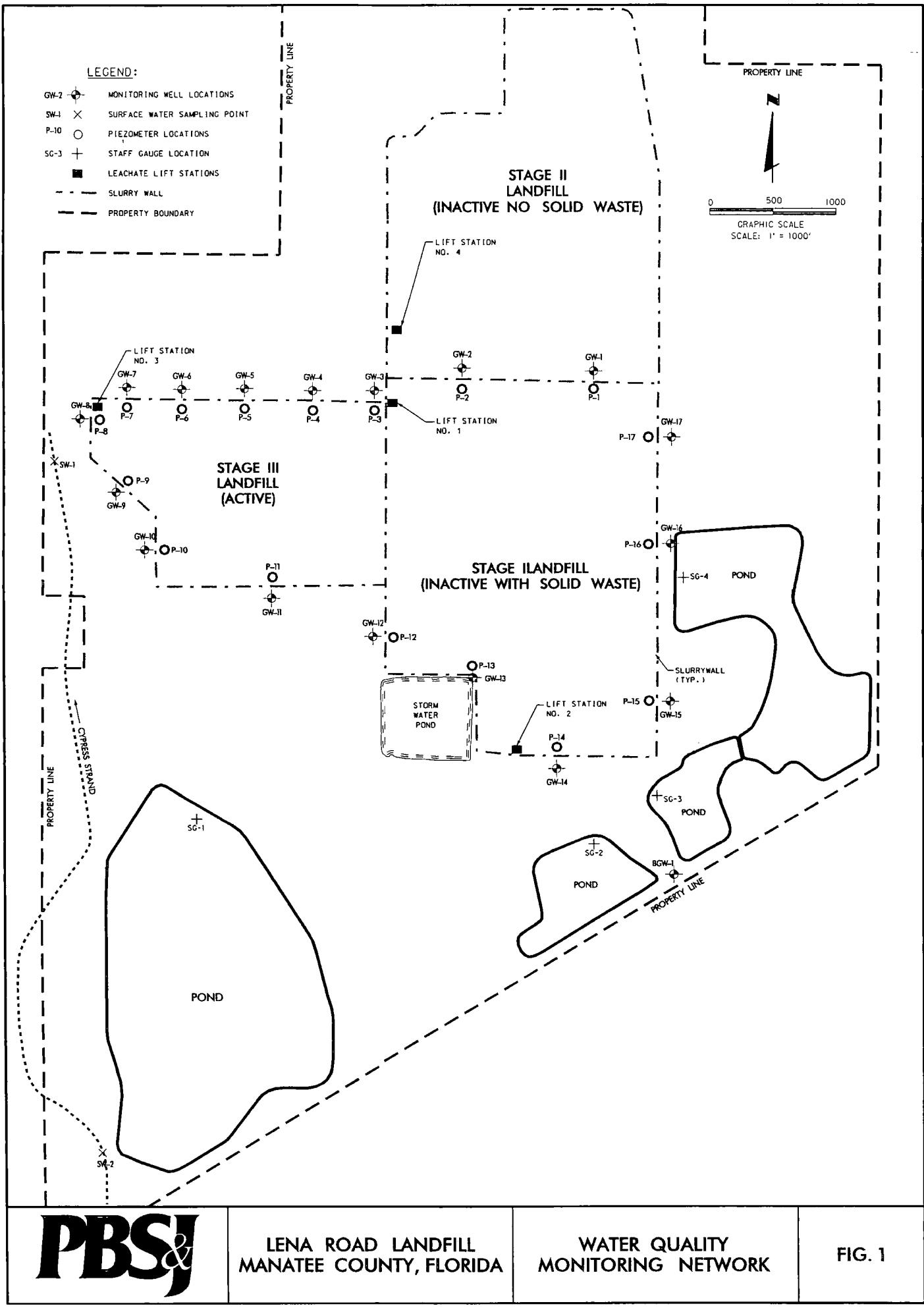
Chlorophyll a, corrected	mg/m3	29	SM 10200H	2	09/05/06 16:00	08/25/06 09:49	SMD
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## SOUTHERN ANALYTICAL LABORATORIES, INC.

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

SAL Project No. 6021A23

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) <u>Ray R. Wurd</u>							PARAMETER / CONTAINER DESCRIPTION									
Matrix Codes: DW-Drinking Water WW-Wastewater SW-Surface Water SL-Sludge SO-Soil GW-Groundwater SA-Saline Water O-Other R-Reagent Water			Date	Time	Matrix	Composite	Grab	1LG, Cool 4°C Chlorophyll a	40mL V, HCl 40 CFR Part 258 Appendix I Organics							Field Parameters
SAL Use Only	Sample Description															
Sample No.																
01	SW-1		8/23/06	1100	SW	X	1	3								See Field Sheet
02	SW-2		V	1028	SW	X	1	3								See Field Sheet
03	Trip Blank		8/18/06	0940	R	X		1								
Containers Prepared/ Relinquished:		Date/Time:	Received:	Date/Time:	Seal intact? Y N N/A Samples intact upon arrival? Y N N/A Received on ice? Temp _____ Proper preservatives indicated? Y N N/A Rec'd w/in holding time? Y N N/A Volatile rec'd w/out headspace? Y N N/A Proper containers used? Y N N/A										Instructions / Remarks Field Parameters: Specific Conductance, pH, Dissolved Oxygen, Turbidity, Colors & Sheens, Temperature	
<u>K. Wurdack</u>		8/18/06 0940	<u>Ray Wurd</u>	8/20/06 1300												
Relinquished: <u>Ray Wurd</u>		Date/Time: 8/23/06 1318	Received: <u>K. Wurdack</u>	Date/Time: 8/23/06 1318												
Relinquished: <u>Ray Wurd</u>		Date/Time:	Received:	Date/Time:												
Relinquished:		Date/Time:	Received:	Date/Time:												
Relinquished:		Date/Time:	Received:	Date/Time:												



**Table 2 - Lena Road Surface Water Analytical Summary  
Second Half 2006**

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		8/23/2006	8/23/2006
	Standard(1)	Units		
<b>Field Measurements</b>				
Temperatruue		deg. C	25.6	27.3
pH	6-8.5	STD	6.6	6.6
Conductivity	1275	umhos/cm	305	212
Dissolved Oxygen (DO)	>5	mg/l	4.4	4.3
Turbidity	29+	NTU	12	6.5
<b>Inorganics</b>				
Antimony	4300	ug/l	<1.5	<1.5
Arsenic	50	ug/l	<7.0	10
Barium		ug/l	10	14
Beryllium	0.13	ug/l	<0.2	<0.2
Carbonaceous BOD		ug/l	<2000	3850
Cadmium	0.836 <sup>(2)</sup>	ug/l	<0.5	<0.5
Chemical Oxygen Demand (COD)		ug/l	84300	182000
Chlorophyll A		mg/m3	6.9	29
Chromium	62.688 <sup>(3)</sup>	ug/l	2.0	2.0
Cobalt		ug/l	<1.0	<1.0
Copper	6.693 <sup>(4)</sup>	ug/l	<5.0	6
Fecal coliform	800	cfu/ml	480	300
Iron	1000	ug/l	2480	4870
Lead	1.94 <sup>(5)</sup>	ug/l	<5.0	<5.0
Mercury	0.012	ug/l	<100	<100
Nickel	37.548 <sup>(6)</sup>	ug/l	<1.0	<1.0
Nitrate		ug/l	32	19
Selenium	5	ug/l	1	1
Silver	0.07	ug/l	<2.0	<2.0
Thallium	6.3	ug/l	<0.4	<0.4
Total Dissolved Solids (TDS)		ug/l	241000	183000
Total Hardness		mg/l	92.7	67.8
Total Nitrogen		ug/l	1450	3660
Total Organic Carbon (TOC)		ug/l	30800	38700
Total phosphate		ug/l	859	1970
Total Suspended Solids (TSS)		mg/l	7.17	6.13
Unionized ammonia	20	ug/l	0.3	0.2
Vanadium		ug/l	2.0	3.0
Zinc	86.202 <sup>(7)</sup>	ug/l	14	27
<b>Organics</b>				
Acetone		ug/l	<9.9	<9.9
Acrylonitrile		ug/l	<1.2	<1.2
Benzene	71.28	ug/l	<0.50	<0.50

Analyte	Location:		SW-1	SW-2
	Sample Identifier:		SW-1	SW-2
	Date of Test:		8/23/2006	8/23/2006
	Standard(1)	Units		
Bromochloromethane		ug/l	<0.58	<0.58
Bromodichloromethane	22	ug/l	<0.35	<0.35
Carbon disulfide		ug/l	<0.85	<0.85
Carbon tetrachloride	4.42	ug/l	<0.42	<0.42
Chlorobenzene		ug/l	<0.63	<0.63
Chloroethane		ug/l	<2.5	<2.5
Dibromomethane		ug/l	<0.41	<0.41
Dibromochloromethane	34	ug/l	<0.34	<.34
1,2-Dichlorobenzene		ug/l	<0.44	<0.44
1,4-Dichlorobenzene		ug/l	<0.52	<0.52
Dichloromethane	1580	ug/l	<4.0	<4.0
1,2-Dibromo-3-chloropropane		ug/l	<2.5	<2.5
1,1-Dichloroethane		ug/l	<0.52	<0.52
1,2-Dichloroethane		ug/l	<0.57	<0.57
1,1-Dichloroethene	3.2	ug/l	<0.45	<0.45
cis-1,2-Dichloroethene		ug/l	<0.65	<0.65
trans-1,2-Dichloroethene		ug/l	<0.44	<0.44
1,2-Dichloropropane		ug/l	<0.52	<0.52
cis-1,3-Dichloropropene		ug/l	<0.14	<0.14
trans-1,3-Dichloropropene		ug/l	<0.14	<0.14
Ethylbenzene		ug/l	<0.44	<0.44
2-Hexanone		ug/l	<4.4	<4.4
Iodomethane		ug/l	<2.5	<2.5
Methyl bromide		ug/l	<2.5	<2.5
Chloromethane	470.8	ug/l	<1.0	<1.0
2-Butanone		ug/l	<8.4	<8.4
4-Methyl-2-pentanone		ug/l	<3.8	<3.8
Styrene		ug/l	<0.98	<0.98
1,1,1,2-Tetrachloroethane		ug/l	<0.63	<0.63
1,1,2,2-Tetrachloroethane	10.8	ug/l	<0.14	<0.14
t-1,4-Dichloro-2-butene		ug/l	<2.5	<2.5
Tetrachloroethylene		ug/l	<0.50	<0.50
Toluene		ug/l	<0.51	<0.51
1,1,1-Trichloroethane		ug/l	<0.46	<0.46
1,1,2-Trichloroethane		ug/l	<0.47	<0.47
Tribromomethane	360	ug/l	0.58	0.58
Trichloroethylene	80.7	ug/l	<0.50	<0.50
Trichloromethane	470.8	ug/l	<0.90	<0.90
Trichlorofluoromethane		ug/l	<2.5	<2.5
1,2,3-Trichloropropane		ug/l	<0.15	<0.15
Vinyl acetate		ug/l	<1.5	<1.5

Analyte	Location:	SW-1	SW-2
	Sample Identifier:	SW-1	SW-2
	Date of Test:	8/23/2006	8/23/2006
	Standard(1)	Units	
Vinyl chloride		ug/l	<0.50
Total xylenes		ug/l	<0.50

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

(1) Surface water standards presented in Chapter 62-302, FAC. Analyte concentrations shown with shading represent an exceedance of the regulatory level. The lowest hardness value was used to calculate standards below.

(2) Cd less than or equal to  $e(0.7852(\ln H)-3.49)$

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

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

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

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

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