



An employee-owned company

Review Copy
39884
GW
SW
MANATEE

July 8, 2006

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

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JUL 14 2006
SOUTHWEST DISTRICT
TAMPA

**Re: Semi-Annual Water Quality Monitoring Report
First 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 first 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. This is a new groundwater monitoring network at the LRL. All of these wells except GW-11 were installed in the summer of

Mr. John Morris
July 8, 2006
Page 2

2005. The old well network was abandoned at that time. Installation of GW-11 was postponed until April 2006 because of construction activities.

- 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 2006 sampling event during the period between February 27 and 28, 2006. 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. Because of the delay in installing GW-11, it was sampled initially in April 2006. The sample was analyzed for the parameters listed in Specific Condition 4(b) of the LRL's permit modification. The results of the initial sampling are included in this report.

A Florida Department of Environmental Protection (FDEP) Ground Water Monitoring Report form for the first half 2006 sampling event at the LRL is provided in Attachment A.

FIRST 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).

FIRST HALF 2006 SAMPLING EVENT RESULTS

Leachate Analytical Results

The only detections in the leachate samples during this sampling event were numerous inorganic analytes, which were detected in all three leachate samples, and one pesticide/herbicide, 2,4,5-T, which was detected in one leachate sample. 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 level.

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 analytes that were detected in the groundwater during this sampling event were inorganic parameters, including all of those that were tested except for beryllium, cadmium, copper, lead, mercury, and silver. A summary of the groundwater analytical results is presented in Table 2. The complete groundwater analytical report is provided in Attachment C-2.

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. Six parameters, pH, antimony, 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 all of the wells except GW-1, GW-2, GW-6, GW-9, GW-10, GW-14, and GW-16. The pH was also outside of the prescribed range at the background well.
- Antimony - The MCL for antimony is 0.006 milligrams per liter (mg/L). The antimony concentration in the samples collected at GW-13 exceeded the MCL.
- 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-9, GW-12, GW-14, and GW-15 exceeded the MCL.

Mr. John Morris

July 8, 2006

Page 4

- 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, GW-8, and BGW-1.
- TDS - TDS has an SDWS of 500 mg/L. The concentration of TDS exceeded the SDWS in the samples collected at GW-10, GW-13, and GW-14.

GW-11 Analytical Results

The analytical results at GW-11 were similar to those of the rest of the wells in the network with exceedances of pH and iron. There were also detections of some base neutral analytes at very low concentrations.

A summary of the initial groundwater analytical results at GW-11 is presented in Table 3. The complete groundwater analytical report is provided in Attachment C-2.

Surface Water Analytical Results

There were no organic constituents detected in the surface water. However, all of the inorganic parameters except antimony, beryllium, cadmium, chromium, cobalt, copper, 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 water as a relative measure of the water quality. The SWCTLs are promulgated in Chapter 62-777, FAC. The only parameters that was detected in the surface water at a concentration in excess of its SWCTL were fecal coliform at SW-1, and arsenic, fecal coliform, and iron at SW-2. The field dissolved oxygen (DO) reading at SW-2 was also lower than the target level.

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

Groundwater Flow Pattern

The groundwater elevation data is presented in Table 5. 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

Mr. John Morris
July 8, 2006
Page 5

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 0.0025 feet per foot (ft/ft).

SUMMARY AND CONCLUSIONS

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

If you have any questions regarding this report or need any additional information then please call me at (407) 647-7275, ext. 4339.

Very truly yours,



Greg Mudd, P.G.
Senior Geologist

C: Mr. Gus DiFonzo, Manatee County Solid Waste Division
File, 120498.91 9300

U:\SO\OldG\HAZARD\Manatee\LenaRoadLandfill\SemiAnnualReportFirstHalf2006\LenaRoadSemiannualReport1stHalf2006.doc

TABLES

Table 4
Surface Water Analytical Summary
Lena Road Landfill
First Half 2006

| Analyte | Location: | | SW-1 | SW-2 |
|---------------------------------|--------------------|-----------|----------|---------|
| | Sample Identifier: | | SW-1 | SW-2 |
| | Date of Test: | | 02/27/06 | |
| | Standard(1) | Units | | |
| Field Measurements: | | | | |
| Temperature | | deg. C | 16.5 | 16.5 |
| pH | | STD | 7.5 | 6.6 |
| Conductivity | | umhos/cm | 580 | 390 |
| Dissolved Oxygen (DO) | <5 | mg/l | 6.5 | 4 |
| Turbidity | 29 | NTU | 6.8 | 45 |
| Inorganics: | | | | |
| Ammonia | | mg/l | 0.047 | 0.067 |
| Antimony | 4.3 | mg/l | ≤0.0015 | ≤0.0015 |
| Arsenic | 0.01 | mg/l | ≤0.007 | 0.027 |
| Barium | | mg/l | 0.012 | 0.016 |
| Beryllium | 0.13 | mg/l | ≤0.0002 | ≤0.0002 |
| Biochemical Oxygen Demand (BOD) | | mg/l | ≤2.00 | 2.03 |
| Cadmium | Note 2 | mg/l | ≤0.0005 | ≤0.0005 |
| Calcium | | mg/l | 45 | 28 |
| Chemical Oxygen Demand (COD) | | mg/l | 37.4 | 117 |
| Chlorophyll A | | mg/m3 | 9.3 | 11 |
| Chromium | Note 3 | mg/l | ≤0.001 | ≤0.001 |
| Cobalt | | mg/l | ≤0.001 | ≤0.001 |
| Copper | Note 4 | mg/l | ≤0.005 | ≤0.005 |
| Fecal coliforms | 800 | cfu/100ml | 1050 | 5000 |
| Iron | 1 | mg/l | 0.374 | 7.06 |
| Lead | Note 5 | mg/l | ≤0.005 | ≤0.005 |
| Magnesium | | mg/l | 12.3 | 8.91 |
| Mercury | 0.012 | ug/l | ≤0.0001 | ≤0.0001 |
| Nickel | Note 6 | mg/l | 0.002 | 0.002 |
| Nitrate as N | | mg/l | 0.024 | ≤0.006 |
| Selenium | 0.005 | mg/l | 0.001 | 0.001 |
| Silver | 0.00007 | mg/l | ≤0.002 | ≤0.002 |
| Thallium | 0.0063 | mg/l | 0.001 | ≤0.0004 |
| Total Dissolved Solids (TDS) | | mg/l | 358 | 315 |
| Total Hardness | | mg/l | 163 | 107 |
| Total Kjeldahl Nitrogen (TKN) | | mg/l | 0.833 | 1.85 |
| Total Nitrogen | | mg/l | 0.879 | 1.85 |
| Total Organic Carbon (TOC) | | mg/l | 15.4 | 18.3 |
| Total Phosphate | | mg/l | 0.199 | 0.252 |
| Total Suspended Solids (TSS) | | mg/l | 4.2 | 88 |
| Unionized ammonia | 0.02 | mg/l | 0.0005 | 0.0001 |
| Vanadium | | mg/l | 0.003 | 0.001 |
| Zinc | Note 7 | mg/l | 0.01 | 0.012 |
| Organics: | | | | |
| 1,1,1,2-Tetrachloroethane | | ug/l | <0.63 | <0.63 |
| 1,1,1-Trichloroethane | | ug/l | <0.46 | <0.46 |
| 1,1,2,2-Tetrachloroethane | 10.8 | ug/l | <0.14 | <0.14 |

| Analyte | Location: | | SW-1 | SW-2 |
|---------------------------|--------------------|------|----------|----------|
| | Sample Identifier: | | SW-1 | SW-2 |
| | Date of Test: | | 02/27/06 | 02/27/06 |
| Standard(1) | Units | | | |
| 1,1,2-Trichloroethane | | ug/l | <0.47 | <0.47 |
| 1,1-Dichloroethane | | ug/l | <0.52 | <0.52 |
| 1,1-Dichloroethene | | ug/l | <0.45 | <0.45 |
| 1,2,3-Trichloropropane | | ug/l | <0.15 | <0.15 |
| 1,2-Dichlorobenzene | | ug/l | <0.44 | <0.44 |
| 1,2-Dichloroethane | | ug/l | <0.57 | <0.57 |
| 1,2-Dichloropropane | | ug/l | <0.52 | <0.52 |
| 1,4-Dichlorobenzene | | ug/l | <0.52 | <0.52 |
| 2-Butanone | | ug/l | <8.4 | <8.4 |
| 2-Hexanone | | ug/l | <4.4 | <4.4 |
| 4-Methyl-2-pentanone | | ug/l | <2.8 | <2.8 |
| Acetone | | ug/l | <9.9 | <9.9 |
| Acrylonitrile | | ug/l | <1.2 | <1.2 |
| Benzene | | ug/l | <0.27 | <0.27 |
| Bromochloromethane | | ug/l | <0.58 | <0.58 |
| Bromodichloromethane | | ug/l | <0.35 | <0.35 |
| Bromomethane | | ug/l | <0.66 | <0.66 |
| 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 | <0.80 | <0.80 |
| Chloromethane | | ug/l | <0.64 | <0.64 |
| cis-1,2-Dichloroethene | 3.2 | ug/l | <0.65 | <0.65 |
| cis-1,3-Dichloropropene | | ug/l | <0.14 | <0.14 |
| Dibromochloromethane | | ug/l | <0.34 | <0.34 |
| Dibromochloropropane | | ug/l | <0.74 | <0.74 |
| Dibromomethane | | ug/l | <0.41 | <0.41 |
| Dichloromethane | 1580 | ug/l | <4.0 | <4.0 |
| Ethylbenzene | | ug/l | <0.44 | <0.44 |
| Ethylene dibromide | | ug/l | <0.50 | <0.50 |
| Iodomethane | | ug/l | <0.67 | <0.67 |
| Styrene | | ug/l | <0.98 | <0.98 |
| t-1,4-Dichloro-2-butene | | ug/l | <2.5 | <2.5 |
| Tetrachloroethene | | ug/l | <0.34 | <0.34 |
| Toluene | | ug/l | <0.51 | <0.51 |
| Total xylenes | | ug/l | <0.30 | <0.30 |
| trans-1,2-Dichloroethene | | ug/l | <0.44 | <0.44 |
| trans-1,3-Dichloropropene | | ug/l | <0.14 | <0.14 |
| Tribromomethane | | ug/l | <0.58 | <0.58 |
| Trichloroethene | 80.7 | ug/l | <0.28 | <0.28 |
| Trichlorofluoromethane | | ug/l | <0.98 | <0.98 |
| Trichloromethane | | ug/l | <0.90 | <0.90 |
| Vinyl acetate | | ug/l | <1.5 | <1.5 |
| Vinyl chloride | | ug/l | <0.50 | <0.50 |

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 $e(0.819(\ln H)+0.6848)$

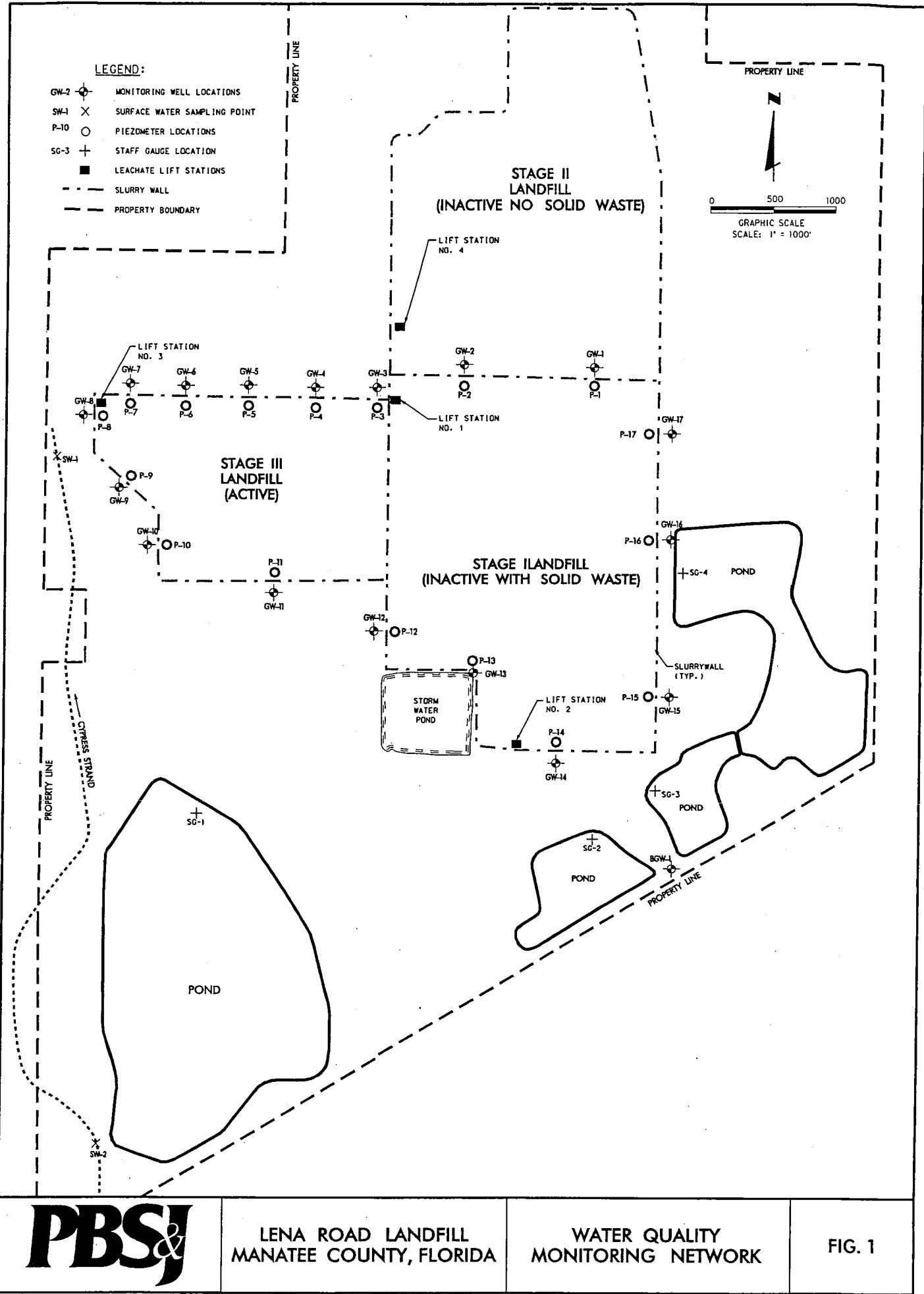
Note (4) Cu less than or equal to $e(0.845(\ln H)-1.702)$

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 $e(0.8473(\ln H)+0.884)$

FIGURES



ATTACHMENT C

Laboratory Analytical Reports

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

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: 02/27/2006
REPORT DATE: 4/18/2006
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.

Jeffrey A. Goodwin, Laboratory Supervisor



| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|-------------------------------------|--------------|---------------------------|------------------------|-----------|----------------------|--------|--------|---------|
| | Sample ID | AE09959 | Collection Date / Time | | 02/27/2006 11:15 | | | |
| | Sample Point | Lena Road Surface Water 1 | | | | | | |
| Nitrate as N by Ion Chromatography | EPA 300.0 | <MDL | mg/L | U | 02/28/2006 10:34 | 0.006 | 0.025 | IR |
| Nitrate as N by Ion Chromatography✓ | EPA 300.0 | 0.024 | mg/L | I | 02/28/2006 10:34 | 0.006 | 0.025 | IR |
| Carbonaceous BOD (5 day) | SM 5210 B | <MDL | mg/L | U | 03/06/2006 08:20 | 2.00 | | LK/EMM |
| Chemical Oxygen Demand | EPA 410.4 | 37.4 | mg/L | | 03/09/2006 08:30 | 3.00 | | IR |
| Total Organic Carbon | EPA 415.1 | 15.4 | mg/L | | 03/07/2006 12:25 | 0.100 | 0.500 | EMM |
| F _{eld} pH | FIELD | 7.5 | Std. units | C | 02/27/2006 11:15 | 0.010 | | LRW |
| Field Temperature | FIELD | 16.5 | Degrees C | C | 02/27/2006 11:15 | | | LRW |
| Metals by 200.7 | | | | | | | | |
| Beryllium | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.0002 | 0.0006 | WWC |
| Silver | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.002 | 0.006 | WWC |
| Nickel | EPA 200.7 | 0.002 | mg/L | I | 03/15/2006 11:36 | 0.001 | 0.003 | WWC |
| Magnesium | EPA 200.7 | 12.3 | mg/L | | 03/15/2006 11:36 | 0.005 | 0.015 | WWC |
| Lead | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.005 | 0.015 | WWC |
| Iron | EPA 200.7 | 0.374 | mg/L | | 03/15/2006 11:36 | 0.010 | 0.030 | WWC |
| Copper | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.005 | 0.015 | WWC |
| Co _{lalt} | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.001 | 0.003 | WWC |
| Chromium | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.001 | 0.003 | WWC |
| Vanadium | EPA 200.7 | 0.003 | mg/L | | 03/15/2006 11:36 | 0.0005 | 0.002 | WWC |
| Cadmium | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.0005 | 0.002 | WWC |
| Zinc | EPA 200.7 | 0.010 | mg/L | I | 03/15/2006 11:36 | 0.010 | 0.030 | WWC |
| Barium | EPA 200.7 | 0.012 | mg/L | | 03/15/2006 11:36 | 0.0005 | 0.002 | WWC |
| Arsenic | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:36 | 0.007 | 0.021 | WWC |
| Calcium | EPA 200.7 | 45.0 | mg/L | | 03/15/2006 11:36 | 0.010 | 0.030 | WWC |
| Total Hardness | SM 2340 B | 163 | mg/L | | 04/14/2006 16:16 | | | JAG |
| Mercury Cold Vapor | EPA 245.1 | < MDL | ug/L | U | 03/21/2006 11:20 | 0.100 | 0.300 | WWC |
| Antimony by GFAAS | EPA 204.2 | < MDL | mg/L | U | 03/10/2006 11:41 | 0.0015 | 0.006 | WC |
| Selenium by GFAAS | EPA 270.2 | 0.001 | mg/L | I | 04/07/2006 14:50 | 0.0002 | 0.001 | WWC |
| Thallium by GFAAS | EPA 279.2 | 0.001 | mg/L | I | 03/14/2006 11:03 | 0.0004 | 0.002 | WWC |
| Fecal Coliforms | SM 9222D | 1050 | cfu/100 ml | B | 03/02/2006 08:40 | 1 | | IR /LK |
| Ammonia | EPA 350.1 | 0.047 | mg/L | I | 02/28/2006 10:07 | 0.011 | 0.054 | EMM |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|------------------------------------|-----------------|---------------------------|------------------------|------------------|----------------------|--------|--------|---------|
| Total Kjeldahl Nitrogen | EPA 351.2 | 0.855 | mg/L | | 03/01/2006 13:45 | 0.075 | 0.225 | EMM |
| Total Nitrogen | EPA 351.2/300.0 | 0.879 | mg/L | | 03/03/2006 09:19 | | | JAG |
| Total Phosphate as P | EPA 365.1 | 0.199 | mg/L | | 03/08/2006 14:42 | 0.005 | 0.015 | REED |
| Unionized Ammonia | DEP SOP 10/3/83 | 0.0005 | mg/L | | 03/24/2006 10:01 | | | ECC |
| Total Dissolved Solids | SM 2540 C | 358 | mg/L | | 03/02/2006 10:30 | 2.50 | 7.50 | LK/ IR |
| Total Suspended Solids | SM 2540 D | 4.20 | mg/L | | 02/28/2006 15:40 | 5.00 | 7.50 | LK |
| Sample ID | AE09960 | | Collection Date / Time | 02/27/2006 10:35 | | | | |
| Sample Point | | Lena Road Surface Water 2 | | | | | | |
| Nitrite as N by Ion Chromatography | EPA 300.0 | <MDL | mg/L | U | 02/28/2006 10:47 | 0.006 | 0.025 | IR |
| Nitrate as N by Ion Chromatography | EPA 300.0 | <MDL | mg/L | U | 02/28/2006 10:47 | 0.006 | 0.025 | IR |
| Carbonaceous BOD (5 day) | SM 5210 B | 2.03 | mg/L | | 03/06/2006 08:20 | 2.00 | | LK/EMM |
| Chemical Oxygen Demand | EPA 410.4 | 117 | mg/L | | 03/09/2006 08:30 | 3.00 | | IR |
| Total Organic Carbon | EPA 415.1 | 18.3 | mg/L | | 03/07/2006 12:52 | 0.100 | 0.500 | EMM |
| Field pH | FIELD | 6.6 | Std. units | C | 02/27/2006 10:35 | | | LRW |
| Field Temperature | FIELD | 16.5 | Degrees C | C | 02/27/2006 10:35 | | | LRW |
| Metals by 200.7 | | | | | | | | |
| Beryllium | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:42 | 0.0002 | 0.0006 | WWC |
| Copper | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:42 | 0.005 | 0.015 | WWC |
| Magnesium | EPA 200.7 | 8.91 | mg/L | | 03/15/2006 11:42 | 0.005 | 0.015 | WWC |
| Lead | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:42 | 0.005 | 0.015 | WWC |
| Nickel | EPA 200.7 | 0.002 | mg/L | I | 03/15/2006 11:42 | 0.001 | 0.003 | WWC |
| Silver | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:42 | 0.002 | 0.006 | WWC |
| Vanadium | EPA 200.7 | 0.001 | mg/L | I | 03/15/2006 11:42 | 0.0005 | 0.002 | WWC |
| Tin | EPA 200.7 | 7.06 | mg/L | | 03/15/2006 11:42 | 0.010 | 0.030 | WWC |
| Zinc | EPA 200.7 | 0.012 | mg/L | I | 03/15/2006 11:42 | 0.010 | 0.030 | WWC |
| Chromium | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:42 | 0.001 | 0.003 | WWC |
| Cadmium | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:42 | 0.0005 | 0.002 | WWC |
| Mercury | EPA 200.7 | 0.016 | mg/L | | 03/15/2006 11:42 | 0.0005 | 0.002 | WWC |
| Arsenic | EPA 200.7 | 0.027 | mg/L | | 03/15/2006 11:42 | 0.007 | 0.021 | WWC |
| Calcium | EPA 200.7 | 28.0 | mg/L | | 03/15/2006 11:42 | 0.010 | 0.030 | WWC |
| Cobalt | EPA 200.7 | < MDL | mg/L | U | 03/15/2006 11:42 | 0.001 | 0.003 | WWC |
| Total Hardness | SM 2340 B | 107 | mg/L | | 04/14/2006 16:16 | | | JAG |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst | |
|-------------------------|-----------------|---------|------------|-----------|----------------------|-------|--------|---------|--------|
| Mercury Cold Vapor | EPA 245.1 | < MDL | ug/L | U | 03/21/2006 | 11:22 | 0.100 | 0.300 | WWC |
| Antimony by GFAAS | EPA 204.2 | < MDL | mg/L | U | 03/10/2006 | 11:49 | 0.0015 | 0.006 | WC |
| Selenium by GFAAS | EPA 270.2 | 0.001 | mg/L | I | 04/07/2006 | 14:58 | 0.0002 | 0.001 | WWC |
| Thallium by GFAAS | EPA 279.2 | < MDL | mg/L | U | 03/14/2006 | 11:11 | 0.0004 | 0.002 | WWC |
| Fecal Coliforms | SM 9222D | 5000 | cfu/100 ml | | 03/02/2006 | 08:40 | 1 | | IR /LK |
| Ammonia | EPA 350.1 | 0.067 | mg/L | | 02/28/2006 | 10:09 | 0.011 | 0.054 | EMM |
| Total Kjeldahl Nitrogen | EPA 351.2 | 1.85 | mg/L | | 03/01/2006 | 13:43 | 0.075 | 0.225 | EMM |
| Total Nitrogen | EPA 351.2/300.0 | 1.85 | mg/L | | 03/03/2006 | 09:44 | | | JAG |
| Total Phosphate as P | EPA 365.1 | 0.252 | mg/L | | 03/08/2006 | 14:42 | 0.005 | 0.015 | REED |
| Unionized Ammonia | DEP SOP 10/3/83 | 0.0001 | mg/L | | 03/24/2006 | 09:59 | | | ECC |
| Total Dissolved Solids | SM 2540 C | 315 | mg/L | | 03/02/2006 | 10:30 | 2.50 | 7.50 | LK/ IR |
| Total Suspended Solids | SM 2540 D | 88.0 | mg/L | | 02/28/2006 | 15:40 | 2.50 | 7.50 | LK |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--|-----------------|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | \$ICPWATER-6021 | QA Sample ID | AE09956 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Metals by 200.7 | | | | | | | | |
| Vanadium | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Zinc | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Sodium | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Silver | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Nickel | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Magnesium | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Lead | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Iron | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Arsenic | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Cobalt | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Chromium | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Calcium | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Chromium | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Beryllium | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Boron | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Copper | | < MDL | mg/L | U | 03/15/2006 10:18 | | | WWC |
| Continuing Cal. Blank for Metals by 200. | | | | | | | | |
| Cobalt | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Chromium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Chromium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Cadmium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Copper | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Barium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Sodium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Beryllium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Iron | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Lead | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Magnesium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Zinc | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Silver | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Vanadium | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Arsenic | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Nickel | | < MDL | mg/L | U | 03/15/2006 12:26 | | | WWC |
| Continuous Calibration for Metals by 200 | | | | | | | | |
| Sodium | | 93.1 | mg/L | | 03/15/2006 12:17 | | | WWC |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|------------|--|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | \$ICPWATER-6021 | QA Sample ID | AE09956 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| | Continuous Calibration for Metals by 200 | | | | | | | |
| Barium | | 0.953 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Zinc | | 1.94 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Arsenic | | 1.87 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Beryllium | | 0.490 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Cadmium | | 1.99 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Calcium | | 48.5 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Chromium | | 1.96 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Cobalt | | 1.98 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Manganese | | 9.92 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Lead | | 1.99 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Magnesium | | 47.7 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Nickel | | 2.00 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Silver | | 0.492 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Vanadium | | 1.96 | mg/L | | 03/15/2006 12:17 | | | WWC |
| Copper | | 1.96 | mg/L | | 03/15/2006 12:17 | | | WWC |
| | Cont Calb Rec for Metals by 200.7 | | | | | | | |
| Beryllium | | 98.0 | % | | 03/17/2006 11:16 | | | WWC |
| Vanadium | | 98.0 | % | | 03/17/2006 11:16 | | | WWC |
| Sodium | | 93.1 | % | | 03/17/2006 11:16 | | | WWC |
| Nickel | | 100 | % | | 03/17/2006 11:16 | | | WWC |
| Lanthan | | 99.5 | % | | 03/17/2006 11:16 | | | WWC |
| Iron | | 99.2 | % | | 03/17/2006 11:16 | | | WWC |
| Copper | | 98.0 | % | | 03/17/2006 11:16 | | | WWC |
| Cobalt | | 99.0 | % | | 03/17/2006 11:16 | | | WWC |
| Chromium | | 98.0 | % | | 03/17/2006 11:16 | | | WWC |
| Arsenic | | 93.5 | % | | 03/17/2006 11:16 | | | WWC |
| Cadmium | | 99.5 | % | | 03/17/2006 11:16 | | | WWC |
| Beryllium | | 95.3 | % | | 03/17/2006 11:16 | | | WWC |
| Silver | | 98.4 | % | | 03/17/2006 11:16 | | | WWC |
| Zinc | | 97.0 | % | | 03/17/2006 11:16 | | | WWC |
| Calcium | | 97.0 | % | | 03/17/2006 11:16 | | | WWC |
| Magnesium | | 95.4 | % | | 03/17/2006 11:16 | | | WWC |
| | Sample Dup for Metals by 200.7 | | | | | | | |
| Cobalt | | 0.015 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Zinc | | 0.024 | mg/L | I | 03/15/2006 10:43 | | | WWC |
| Sodium | | 371 | mg/L | | 03/15/2006 10:43 | | | WWC |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|---|-----------------|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | \$ICPWATER-6021 | QA Sample ID | AE09956 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Sample Dup for Metals by 200.7 | | | | | | | | |
| Nickel | | 0.014 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Magnesium | | 68.3 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Lead | | < MDL | mg/L | U | 03/15/2006 10:43 | | | WWC |
| Copper | | 0.007 | mg/L | I | 03/15/2006 10:43 | | | WWC |
| Vanadium | | 0.029 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Chromium | | 0.007 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Calcium | | 164 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Cadmium | | < MDL | mg/L | U | 03/15/2006 10:43 | | | WWC |
| Beryllium | | < MDL | mg/L | U | 03/15/2006 10:43 | | | WWC |
| Barium | | 0.113 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Arsenic | | 0.010 | mg/L | I | 03/15/2006 10:43 | | | WWC |
| Iron | | 15.7 | mg/L | | 03/15/2006 10:43 | | | WWC |
| Silver | | < MDL | mg/L | U | 03/15/2006 10:43 | | | WWC |
| Initial Calibration for Metals by 200.7 | | | | | | | | |
| Cobalt | | 0.996 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Arsenic | | 0.985 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Barium | | 0.489 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Beryllium | | 0.251 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Chromium | | 0.993 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Chromium | | 0.997 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Zinc | | 1.00 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Copper | | 1.00 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Sodium | | 48.8 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Calcium | | 25.1 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Vanadium | | 1.00 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Iron | | 5.14 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Silver | | 0.250 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Nickel | | 1.00 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Magnesium | | 24.4 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Lead | | 1.02 | mg/L | | 03/15/2006 10:24 | | | WWC |
| Int Calb Rec for Metals by 200.7 | | | | | | | | |
| Copper | | 100 | % | | 03/17/2006 11:16 | | | WWC |
| Sodium | | 97.6 | % | | 03/17/2006 11:16 | | | WWC |
| Silver | | 100 | % | | 03/17/2006 11:16 | | | WWC |
| Nickel | | 100 | % | | 03/17/2006 11:16 | | | WWC |
| Magnesium | | 97.6 | % | | 03/17/2006 11:16 | | | WWC |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|------------|--|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | \$ICPWATER-6021 | QA Sample ID | AE09956 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| | LCS Result for Metals by 200.7 | | | | | | | |
| Calcium | | 24.5 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Sodium | | 47.6 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Silver | | 0.246 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Nickel | | 0.965 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Copper | | 0.985 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Cobalt | | 0.966 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Pt | | 4.94 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Barium | | 0.486 | mg/L | | 03/15/2006 10:31 | | WWC | |
| Magnesium | | 23.6 | mg/L | | 03/15/2006 10:31 | | WWC | |
| | LCS Recovery for Metals by 200.7 | | | | | | | |
| Barium | | 97.2 | % | | 03/17/2006 11:16 | | WWC | |
| Zinc | | 98.8 | % | | 03/17/2006 11:16 | | WWC | |
| Vanadium | | 98.4 | % | | 03/17/2006 11:16 | | WWC | |
| Sodium | | 95.2 | % | | 03/17/2006 11:16 | | WWC | |
| Silver | | 98.4 | % | | 03/17/2006 11:16 | | WWC | |
| Nickel | | 96.5 | % | | 03/17/2006 11:16 | | WWC | |
| Magnesium | | 94.4 | % | | 03/17/2006 11:16 | | WWC | |
| Lead | | 98.5 | % | | 03/17/2006 11:16 | | WWC | |
| Iron | | 98.8 | % | | 03/17/2006 11:16 | | WWC | |
| Copper | | 98.5 | % | | 03/17/2006 11:16 | | WWC | |
| Cobalt | | 96.6 | % | | 03/17/2006 11:16 | | WWC | |
| Cadmium | | 99.3 | % | | 03/17/2006 11:16 | | WWC | |
| Antimony | | 97.9 | % | | 03/17/2006 11:16 | | WWC | |
| Calcium | | 98.0 | % | | 03/17/2006 11:16 | | WWC | |
| Chromium | | 97.4 | % | | 03/17/2006 11:16 | | WWC | |
| Beryllium | | 99.2 | % | | 03/17/2006 11:16 | | WWC | |
| | Samp Dup Precision for Metals by 200.7 | | | | | | | |
| Lead | | 0.00 | % | | 03/15/2006 10:37 | | WWC | |
| Cadmium | | 0.00 | % | | 03/15/2006 10:37 | | WWC | |
| Calcium | | 5.00 | % | | 03/15/2006 10:37 | | WWC | |
| Chromium | | 0.00 | % | | 03/15/2006 10:37 | | WWC | |
| Cobalt | | 6.90 | % | | 03/15/2006 10:37 | | WWC | |
| Beryllium | | 3.60 | % | | 03/15/2006 10:37 | | WWC | |
| Iron | | 4.56 | % | | 03/15/2006 10:37 | | WWC | |
| Antimony | | 9.52 | % | | 03/15/2006 10:37 | | WWC | |
| Magnesium | | 4.49 | % | | 03/15/2006 10:37 | | WWC | |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--|-----------------|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | \$ICPWATER-6021 | QA Sample ID | AE09956 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Iamp Dup Precision for Metals by 200.7 | | | | | | | | |
| Nickel | | 6.90 | % | | 03/15/2006 10:37 | | WWC | |
| Silver | | 0.00 | % | | 03/15/2006 10:37 | | WWC | |
| Sodium | | 4.13 | % | | 03/15/2006 10:37 | | WWC | |
| Vanadium | | 3.51 | % | | 03/15/2006 10:37 | | WWC | |
| Zinc | | 4.08 | % | | 03/15/2006 10:37 | | WWC | |
| Copper | | 13.3 | % | | 03/15/2006 10:37 | | WWC | |
| Beryllium | | 0.00 | % | | 03/15/2006 10:37 | | WWC | |
| MS Recovery for Metals by 200.7 | | | | | | | | |
| Iodine | | 106 | % | | 03/17/2006 11:16 | | WWC | |
| Barium | | 97.6 | % | | 03/17/2006 11:16 | | WWC | |
| Beryllium | | 96.0 | % | | 03/17/2006 11:16 | | WWC | |
| Cadmium | | 94.8 | % | | 03/17/2006 11:16 | | WWC | |
| Calcium | | 108 | % | | 03/17/2006 11:16 | | WWC | |
| Chromium | | 95.3 | % | | 03/17/2006 11:16 | | WWC | |
| Arsenic | | 96.9 | % | | 03/17/2006 11:16 | | WWC | |
| Copper | | 100 | % | | 03/17/2006 11:16 | | WWC | |
| Silver | | 100 | % | | 03/17/2006 11:16 | | WWC | |
| Lead | | 96.2 | % | | 03/17/2006 11:16 | | WWC | |
| Magnesium | | 95.6 | % | | 03/17/2006 11:16 | | WWC | |
| Nickel | | 93.3 | % | | 03/17/2006 11:16 | | WWC | |
| Sodium | | 102 | % | | 03/17/2006 11:16 | | WWC | |
| Zinc | | 93.2 | % | | 03/17/2006 11:16 | | WWC | |
| Co alt | | 92.8 | % | | 03/17/2006 11:16 | | WWC | |
| Vanadium | | 97.0 | % | | 03/17/2006 11:16 | | WWC | |
| MS Result for Metals by 200.7 | | | | | | | | |
| Magnesium | | 89.2 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Zinc | | 0.957 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Vanadium | | 0.998 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Sodium | | 407 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Nickel | | 0.948 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Calcium | | 183 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Lead | | 0.962 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Iron | | 20.3 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Copper | | 1.01 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Co alt | | 0.942 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Chromium | | 0.960 | mg/L | | 03/15/2006 11:00 | | WWC | |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--------------------------------------|-----------------|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | \$ICPWATER-6021 | QA Sample ID | AE09956 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| MS Result for Metals by 200.7 | | | | | | | | |
| Beryllium | | 0.240 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Strontium | | 0.597 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Arsenic | | 0.980 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Silver | | 0.250 | mg/L | | 03/15/2006 11:00 | | WWC | |
| Cadmium | | 0.948 | mg/L | | 03/15/2006 11:00 | | WWC | |
| MSD Result for Metals by 200.7 | | | | | | | | |
| Chlorine | | 0.971 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Cadmium | | 0.948 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Iron | | 20.7 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Barium | | 0.597 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Lead | | 0.957 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Calcium | | 187 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Vanadium | | 0.996 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Magnesium | | 89.9 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Nickel | | 0.947 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Beryllium | | 0.240 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Silver | | 0.248 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Zinc | | 0.958 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Cobalt | | 0.941 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Sodium | | 416 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Chromium | | 0.958 | mg/L | | 03/15/2006 11:06 | | WWC | |
| Copper | | 1.01 | mg/L | | 03/15/2006 11:06 | | WWC | |
| MS/MSD Precision for Metals by 200.7 | | | | | | | | |
| Cobalt | | 0.106 | % | | 03/15/2006 11:00 | | WWC | |
| Chromium | | 0.208 | % | | 03/15/2006 11:00 | | WWC | |
| Calcium | | 2.16 | % | | 03/15/2006 11:00 | | WWC | |
| Cadmium | | 0.00 | % | | 03/15/2006 11:00 | | WWC | |
| Nickel | | 0.106 | % | | 03/15/2006 11:00 | | WWC | |
| Beryllium | | 0.00 | % | | 03/15/2006 11:00 | | WWC | |
| Zinc | | 0.104 | % | | 03/15/2006 11:00 | | WWC | |
| Copper | | 0.00 | % | | 03/15/2006 11:00 | | WWC | |
| Vanadium | | 0.201 | % | | 03/15/2006 11:00 | | WWC | |
| Sodium | | 2.19 | % | | 03/15/2006 11:00 | | WWC | |
| Arsenic | | 0.923 | % | | 03/15/2006 11:00 | | WWC | |
| Beryllium | | 0.00 | % | | 03/15/2006 11:00 | | WWC | |
| Iron | | 1.95 | % | | 03/15/2006 11:00 | | WWC | |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|---|-----------------|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | SICPWATER-6021 | QA Sample ID | AE09956 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| S/MSD Precision for Metals by 200.7 | | | | | | | | |
| Silver | | 0.803 | % | | 03/15/2006 11:00 | | | WWC |
| Magnesium | | 0.782 | % | | 03/15/2006 11:00 | | | WWC |
| Lead | | 0.521 | % | | 03/15/2006 11:00 | | | WWC |
| Batch Name | AMM-5900 | QA Sample ID | AE09959 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Ammonia | | 0.047 | mg/L | I | 02/28/2006 10:07 | | | EMM |
| Continuing Cal. Blank for Ammonia | | <MDL | mg/L | U | 02/28/2006 10:20 | | | EMM |
| Continuous Calibration for Ammonia | | 2.98 | mg/L | | 02/28/2006 10:19 | | | EMM |
| Cont Calb Rec for Ammonia | | 99.3 | % | | 02/28/2006 10:19 | | | EMM |
| Sample Dup for Ammonia | | 0.047 | mg/L | I | 02/28/2006 10:08 | | | EMM |
| Sample Dup Precision for Ammonia | | 0.00 | % | | 02/28/2006 10:07 | | | EMM |
| Batch Name | AMM-5900A | QA Sample ID | AE09960 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Amt Spiked for Ammonia | | 0.500 | mg/L | | 02/28/2006 10:10 | | | EMM |
| Ammonia | | 0.067 | mg/L | | 02/28/2006 10:09 | | | EMM |
| MS Recovery for Ammonia | | 93.2 | % | | 02/28/2006 10:09 | | | EMM |
| MS Result for Ammonia | | 0.533 | mg/L | | 02/28/2006 10:10 | | | EMM |
| Batch Name | CBOD-5924 | QA Sample ID | AE09987 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Carbonaceous BOD (5 day) | | 0.19 | mg/L | | 03/06/2006 08:20 | | | LK/EMM |
| Carbonaceous BOD (5 day) | | 245 | mg/L | | 03/06/2006 08:20 | | | LK/EMM |
| Sample Dup for CBOD | | 240 | mg/L | | 03/06/2006 08:20 | | | LK/EMM |
| Initial Calibration for CBOD | | 174 | mg/L | | 03/06/2006 08:20 | | | LK/EMM |
| Int Calb Rec for CBOD | | 87.9 | % | | 03/06/2006 08:20 | | | LK/EMM |
| Sample Dup Precision for CBOD | | 2.06 | % | | 03/06/2006 08:20 | | | LK/EMM |
| Batch Name | COD-6011 | QA Sample ID | AE09959 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Amt Spiked for COD | | 50.0 | mg/L | | 03/09/2006 08:30 | | | IR |
| Method Blank for COD | | <MDL | mg/L | U | 03/09/2006 08:30 | | | IR |
| Continuing Cal. Blank for COD | | <MDL | mg/L | U | 03/09/2006 08:30 | | | IR |
| Cont.Calib.for COD | | 900 | mg/L | | 03/09/2006 08:30 | | | IR |
| Cont Calb Conc for COD | | 900 | mg/L | | 03/09/2006 08:30 | | | IR |
| Cont Calb Rec for COD | | 100 | % | | 03/09/2006 08:30 | | | IR |
| Chemical Oxygen Demand | | 37.4 | mg/L | | 03/09/2006 08:30 | | | IR |
| Sample Dup for COD | | 37.4 | mg/L | | 03/09/2006 08:30 | | | IR |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--|-----------------|--------------|------------|-----------|----------------------|-----|--------|---------|
| Batch Name | COD-6011 | QA Sample ID | AE09959 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Initial Calibration for COD | | 354 | mg/L | | 03/09/2006 08:30 | | IR | |
| Int Calb Conc for COD | | 343 | mg/L | | 03/09/2006 08:30 | | IR | |
| Cont. Calb Rec for COD | | 103 | % | | 03/09/2006 08:30 | | IR | |
| Samp Dup Precision for COD | | 0.00 | % | | 03/09/2006 08:30 | | IR | |
| Recovery for COD | | 97.8 | % | | 03/09/2006 08:30 | | IR | |
| MS Result for COD | | 86.3 | mg/L | | 03/09/2006 08:30 | | IR | |
| Batch Name | FC-5897 | QA Sample ID | AE09959 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Fecal Coliforms | | <MDL | cfu/100 ml | U | 02/28/2006 13:40 | | IR | |
| Cont. Cal. Blank for Fecal Coliforms | | <MDL | cfu/100 ml | U | 02/28/2006 13:40 | | IR | |
| Sample Dup for Fecal Coliforms | | 1100 | cfu/100 ml | B | 03/02/2006 08:40 | | IR /LK | |
| Fecal Coliforms | | 1050 | cfu/100 ml | B | 03/02/2006 08:40 | | IR /LK | |
| Samp Dup Precision for Fecal Coliforms | | Pass | % | | 03/02/2006 09:05 | | LSK | |
| Batch Name | HG-6113 | QA Sample ID | AE09996 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Mercury Cold Vapor | | < MDL | ug/L | U | 03/21/2006 11:00 | | WWC | |
| Continuing Cal. Blank for Mercury Cold V | | < MDL | ug/L | U | 03/21/2006 11:37 | | WWC | |
| Continuous Calibration for Mercury Cold | | 5.04 | ug/L | | 03/21/2006 11:35 | | WWC | |
| Cont Calb Rec for Mercury Cold Vapor | | 101 | % | | 03/21/2006 11:35 | | WWC | |
| Sample Dup for Mercury Cold Vapor | | < MDL | ug/L | U | 03/21/2006 11:05 | | WWC | |
| Mercury Cold Vapor | | < MDL | ug/L | U | 03/21/2006 11:03 | | WWC | |
| Initial Calibration for Mercury Cold Vap | | 2.61 | ug/L | | 03/21/2006 10:58 | | WWC | |
| Cont Calb Rec for Mercury Cold Vapor | | 104 | % | | 03/21/2006 10:58 | | WWC | |
| Samp Dup Precision for Mercury Cold Vapo | | Passed | % | | 03/21/2006 11:05 | | WWC | |
| MS Recovery for Mercury Cold Vapor | | 102 | % | | 03/21/2006 11:03 | | WWC | |
| MS Result for Mercury Cold Vapor | | 1.02 | ug/L | | 03/21/2006 11:08 | | WWC | |
| MSD Result for Mercury Cold Vapor | | 1.02 | ug/L | | 03/21/2006 11:10 | | WWC | |
| MS/MSD Precision for Mercury Cold Vapor | | 0.00 | % | | 03/21/2006 11:08 | | WWC | |
| Batch Name | NO2IC-5905 | QA Sample ID | AE09943 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Nitrite | | <MDL | mg/L | U | 02/28/2006 08:04 | | IR | |
| Cont. Blank for Nitrite | | <MDL | mg/L | U | 02/28/2006 11:24 | | IR | |
| Cont. Cal. for Nitrite | | 5.11 | mg/L | | 02/28/2006 11:12 | | IR | |
| Cont Calb Rec for Nitrite | | 102 | % | | 02/28/2006 11:12 | | IR | |
| Sample Dup for Nitrite | | <MDL | mg/L | U | 02/28/2006 08:54 | | IR | |
| Initial Cal. Std. for NO2IC | | 1.04 | mg/L | | 02/28/2006 08:29 | | IR | |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--|-----------------|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | NO2IC-5905 | QA Sample ID | AE09943 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Cal. Conc. for NO2IC | | 1.00 | mg/L | | 02/28/2006 08:29 | | IR | |
| Init. Cal. Rec. for NO2IC | | 104 | % | | 02/28/2006 08:29 | | IR | |
| Nitrite as N by Ion Chromatography | | <MDL | mg/L | U | 02/28/2006 08:42 | | IR | |
| Samp Dup Prec. for Nitrite | | ACCEPTABLE | % | | 02/28/2006 08:54 | | IR | |
| Recovery for Nitrite | | 109 | % | | 02/28/2006 09:07 | | IR | |
| MS Result for Nitrite | | 1.09 | mg/L | | 02/28/2006 09:07 | | IR | |
| Batch Name | NO3IC-5906 | QA Sample ID | AE09943 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Nitrate | | <MDL | mg/L | U | 02/28/2006 08:04 | | IR | |
| Cont. Blank for Nitrate | | <MDL | mg/L | U | 02/28/2006 11:24 | | IR | |
| Cont. Cal. for Nitrate | | 10.0 | mg/L | | 02/28/2006 11:12 | | IR | |
| Cont Calb Rec for Nitrate | | 100 | % | | 02/28/2006 11:12 | | IR | |
| Sample Dup for Nitrate | | 4.79 | mg/L | | 02/28/2006 08:54 | | IR | |
| Cal. for Nitrate | | 23.0 | mg/L | | 02/28/2006 08:17 | | IR | |
| Int Calb Conc for Nitrate | | 22.8 | mg/L | | 02/28/2006 08:17 | | IR | |
| Int Calb Rec for Nitrate | | 101 | % | | 02/28/2006 08:17 | | IR | |
| Nitrate as N by Ion Chromatography | | 4.79 | mg/L | | 02/28/2006 08:42 | | IR | |
| Samp Dup Prec. for Nitrate | | 0.00 | % | | 02/28/2006 08:54 | | IR | |
| Recovery for Nitrate | | 104 | % | | 02/28/2006 09:07 | | IR | |
| MS Result for Nitrate | | 5.83 | mg/L | | 02/28/2006 09:07 | | IR | |
| Batch Name | SBAA-5933 | QA Sample ID | AE09996 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Antimony by GFAAS | | < MDL | mg/L | U | 03/10/2006 10:31 | | WC | |
| Continuing Cal. Blank for Antimony by GF | | < MDL | mg/L | U | 03/10/2006 12:36 | | WC | |
| Continuous Calibration for Antimony by G | | 0.076 | mg/L | | 03/10/2006 12:28 | | WC | |
| Cont Calb Rec for Antimony by GFAAS | | 101 | % | | 03/10/2006 12:28 | | WC | |
| Sample Dup for Antimony by GFAAS | | < MDL | mg/L | U | 03/10/2006 10:55 | | WC | |
| Initial Calibration for Antimony by GFAA | | 0.049 | mg/L | | 03/10/2006 10:39 | | WC | |
| Int Calb Rec for Antimony by GFAAS | | 98.0 | % | | 03/10/2006 10:39 | | WC | |
| Samp Dup Precision for Antimony by GFAAS | | Passed | % | | 03/14/2006 11:02 | | WWC | |
| MS Recovery for Antimony by GFAAS | | 93.0 | % | | 03/10/2006 10:47 | | WC | |
| MS Result for Antimony by GFAAS | | 0.048 | mg/L | | 03/10/2006 11:02 | | WC | |
| Antimony by GFAAS | | 0.0015 | mg/L | I | 03/10/2006 10:47 | | WC | |
| MSD Result for Antimony by GFAAS | | 0.048 | mg/L | | 03/10/2006 11:10 | | WC | |
| MS/MSD Precision for Antimony by GFAAS | | 0.00 | mg/L | | 03/10/2006 11:02 | | WC | |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--|-----------------|--------------|---------|-----------|----------------------|-----|--------|---------|
| Batch Name | SEAA-5947 | QA Sample ID | AE09961 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Selenium | | <MDL | mg/L | U | 04/07/2006 13:40 | | WWC | |
| Cont. Cal. Blank for Selenium | | <MDL | mg/L | U | 04/07/2006 15:45 | | WWC | |
| Continuous Calibration for Selenium | | 0.103 | mg/L | | 04/07/2006 15:37 | | WWC | |
| Cont Calb Rec for Selenium | | 103 | % | | 04/07/2006 15:37 | | WWC | |
| Sample Dup for Selenium | | 0.0004 | mg/L | | 04/07/2006 14:04 | | WWC | |
| Initial Calibration for Selenium | | 0.051 | mg/L | | 04/07/2006 13:48 | | WWC | |
| Int Calb Rec for Selenium | | 102 | % | | 04/07/2006 13:48 | | WWC | |
| Sample Dup Precision for Selenium | | NO RESULT | % | | 04/07/2006 14:04 | | WWC | |
| MS Recovery for Selenium | | 100 | % | | 04/07/2006 14:12 | | WWC | |
| Method Result for Selenium | | 0.051 | mg/L | | 04/07/2006 14:12 | | WWC | |
| MSD Result for Selenium by GFAAS | | 0.050 | mg/L | | 04/07/2006 14:19 | | WWC | |
| Selenium by GFAAS | | 0.001 | mg/L | I | 04/07/2006 13:56 | | WWC | |
| MS/MSD Precision for Selenium by GFAAS | | 1.98 | % | | 04/07/2006 14:19 | | WWC | |
| Batch Name | TDS-5919 | QA Sample ID | AE09957 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for TDS | | <MDL | mg/L | U | 03/02/2006 10:30 | | LK/ IR | |
| Sample Dup for TDS | | 693 | mg/L | | 03/02/2006 10:30 | | LK/ IR | |
| Initial Calibration for TDS | | 288 | mg/L | | 03/02/2006 10:30 | | LK/ IR | |
| Int Calb Conc for TDS | | 300 | mg/L | | 03/02/2006 10:30 | | LK/ IR | |
| Int Calb Rec for TDS | | 96.0 | % | | 03/02/2006 10:30 | | LK/ IR | |
| Sample Dup Precision for TDS | | Pass | % | | 03/02/2006 10:57 | | IR | |
| Total Dissolved Solids | | 693 | mg/L | | 03/02/2006 10:30 | | LK/ IR | |
| Batch Name | TKN-5922 | QA Sample ID | AE09987 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for TKN | | <MDL | mg/L | U | 03/01/2006 13:27 | | EMM | |
| Cal B for TKN | | <MDL | mg/L | U | 03/01/2006 13:49 | | EMM | |
| CCV for TKN | | 5.38 | mg/L | | 03/01/2006 13:48 | | EMM | |
| CV Recovery for TKN | | 108 | % | | 03/01/2006 13:48 | | EMM | |
| Sample Dup for TKN | | 56.8 | mg/L | | 03/01/2006 13:31 | | EMM | |
| ICV for TKN | | 2.02 | mg/L | | 03/01/2006 13:29 | | EMM | |
| ICV Recovery for TKN | | 101 | % | | 03/01/2006 13:29 | | EMM | |
| D Precision for TKN | | 1.24 | % | | 03/01/2006 13:30 | | EMM | |
| Total Kjeldahl Nitrogen | | 56.1 | mg/L | | 03/01/2006 13:30 | | EMM | |
| Batch Name | TKN-5922A | QA Sample ID | AE09985 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Amt Spiked for TKN | | 2.00 | mg/L | | 03/01/2006 13:34 | | EMM | |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--|-----------------|--------------|---------|-----------|----------------------|-----|-----|---------|
| Batch Name | TKN-5922A | QA Sample ID | AE09985 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Recovery for TKN | | 106 | % | | 03/01/2006 13:33 | | | EMM |
| MS Result for TKN | | 3.50 | mg/L | | 03/01/2006 13:34 | | | EMM |
| Total Kjeldahl Nitrogen | | 1.38 | mg/L | | 03/01/2006 13:33 | | | EMM |
| Batch Name | TLAA-5930 | QA Sample ID | AE09996 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Thallium by GFAAS | | < MDL | mg/L | U | 03/14/2006 09:48 | | | WWC |
| Continuing Cal. Blank for Thallium by GF | | < MDL | mg/L | U | 03/14/2006 12:00 | | | WWC |
| Continuous Calibration for Thallium by G | | 0.107 | mg/L | | 03/14/2006 11:52 | | | WWC |
| Cont Calb Rec for Thallium by GFAAS | | 107 | % | | 03/14/2006 11:52 | | | WWC |
| Sample Dup for Thallium by GFAAS | | < MDL | mg/L | U | 03/14/2006 10:13 | | | WWC |
| Initial Calibration for Thallium by GFAA | | 0.051 | mg/L | | 03/14/2006 09:56 | | | WWC |
| Calb Rec for Thallium by GFAAS | | 102 | % | | 03/14/2006 09:56 | | | WWC |
| Samp Dup Precision for Thallium by GFAAS | | Passed | % | | 03/16/2006 10:13 | | | WWC |
| Recovery for Thallium by GFAAS | | 108 | % | | 03/14/2006 10:21 | | | WWC |
| MS Result for Thallium by GFAAS | | 0.054 | mg/L | | 03/14/2006 10:21 | | | WWC |
| MSD Result for Thallium by GFAAS | | 0.053 | mg/L | | 03/14/2006 10:29 | | | WWC |
| S/MSD Precision for Thallium by GFAAS | | 1.87 | % | | 03/14/2006 10:21 | | | WWC |
| Thallium by GFAAS | | < MDL | mg/L | U | 03/14/2006 10:05 | | | WWC |
| Batch Name | TOC-5988 | QA Sample ID | AE09876 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for TOC | | < MDL | mg/L | U | 03/07/2006 09:11 | | | EMM |
| Cont. Cal. Blank for TOC | | <MDL | mg/L | U | 03/07/2006 13:37 | | | EMM |
| Cont Cal TOC | | 10.2 | mg/L | | 03/07/2006 13:26 | | | EMM |
| Cont Calb Rec for TOC | | 102 | % | | 03/07/2006 13:26 | | | EMM |
| Dup for TOC | | 1.92 | mg/L | | 03/07/2006 10:21 | | | EMM |
| DV for TOC | | 5.32 | mg/L | | 03/07/2006 09:33 | | | EMM |
| ICV Rec for TOC | | 106 | % | | 03/07/2006 09:33 | | | EMM |
| Dup Precision for TOC | | 1.04 | % | | 03/07/2006 09:57 | | | EMM |
| MS Recovery for TOC | | 98.2 | % | | 03/07/2006 09:57 | | | EMM |
| MS Result for TOC | | 6.85 | mg/L | | 03/07/2006 10:47 | | | EMM |
| Total Organic Carbon | | 1.94 | mg/L | | 03/07/2006 09:57 | | | EMM |
| Batch Name | T-P-6006 | QA Sample ID | AE10089 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for Total Phosphate as P | | <MDL | mg/L | U | 03/09/2006 14:37 | | | IR |
| Continuing Cal. Blank for Total Phosphat | | <MDL | mg/L | U | 03/09/2006 14:47 | | | IR |
| Continuous Calibration for Total Phospha | | 2.03 | mg/L | | 03/09/2006 14:46 | | | IR |

| Parameter | Method | Results | Units | Qualifier | Date / Time Analyzed | MDL | PQL | Analyst |
|--|-----------------|--------------|---------|-----------|----------------------|-----|------|---------|
| Batch Name | T-P-6006 | QA Sample ID | AE10089 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Amt Calb Rec for Total Phosphate as P | | 102 | % | | 03/09/2006 14:46 | | IR | |
| Sample Dup for Total Phosphate as P | | 7.68 | mg/L | | 03/08/2006 14:39 | | REED | |
| Initial Calibration for Total Phosphate | | 1.04 | mg/L | | 03/09/2006 14:38 | | IR | |
| Int Calb Rec for Total Phosphate as P | | 104 | % | | 03/09/2006 14:38 | | IR | |
| Samp Dup Precision for Total Phosphate a | | 2.91 | % | | 03/08/2006 14:38 | | REED | |
| Total Phosphate as P | | 7.46 | mg/L | | 03/08/2006 14:38 | | REED | |
| Batch Name | T-P-6006A | QA Sample ID | AE10087 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Amt Spiked for Total Phosphate as P | | 0.500 | mg/L | | 03/08/2006 14:40 | | REED | |
| Sample Recovery for Total Phosphate as P | | 102 | % | | 03/08/2006 14:40 | | REED | |
| MS Result for Total Phosphate as P | | 0.612 | mg/L | | 03/08/2006 14:40 | | REED | |
| Total Phosphate as P | | 0.100 | mg/L | | 03/08/2006 14:40 | | REED | |
| Batch Name | TSS-5904 | QA Sample ID | AE09987 | | | | | |
| Samples | AE09959 AE09960 | | | | | | | |
| Method Blank for TSS | | <MDL | mg/L | U | 02/28/2006 15:40 | | LK | |
| Sample Dup for TSS | | 312 | mg/L | | 02/28/2006 15:40 | | LK | |
| Initial Calibration for TSS | | 97.8 | mg/L | | 02/28/2006 15:40 | | LK | |
| Int Calb Conc for TSS | | 100 | mg/L | | 02/28/2006 15:40 | | LSK | |
| Int Calb Rec for TSS | | 97.8 | % | | 02/28/2006 15:40 | | LK | |
| Samp Dup Precision for TSS | | Pass | % | | 02/28/2006 15:48 | | LSK | |
| Total Suspended Solids | | 290 | mg/L | | 02/28/2006 15:40 | | LK | |



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 lab method detection limit and the lab 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
- 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 FDEM 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 determined from the data.
- "_" no data reported

SOUTHERN ANALYTICAL LABORATORIES, INC.

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



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

March 21, 2006
Project No: 57757

Laboratory Report

| | | | | | | | |
|---------------------|---|-------|--|--|--|--|--|
| Project Name | Surface Water Analyses - Lena Road Landfill | | | | | | |
| Sample Description | SW-1 (AEO 9959) | | | | | | |
| Matrix | Surface Water | | | | | | |
| SAL Sample Number | 57757.01 | | | | | | |
| Date/Time Collected | 02/27/06 | 11:15 | | | | | |
| Date/Time Received | 02/27/06 | 13:00 | | | | | |

| 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 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,1,1-Trichloroethane | ug/l | 0.46 | U,S13 | EPA 8260 | 0.46 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,1,2,2-Tetrachloroethane | ug/l | 0.14 | U,S13 | EPA 8260 | 0.14 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,1,2-Trichloroethane | ug/l | 0.47 | U,S13 | EPA 8260 | 0.47 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,1-Dichloroethane | ug/l | 0.52 | U,S13 | EPA 8260 | 0.52 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,1-Dichloroethene | ug/l | 0.45 | U,S13 | EPA 8260 | 0.45 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,2,3-Trichloropropane | ug/l | 0.15 | U,S13 | EPA 8260 | 0.15 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,2-Dibromo-3-chloropropane | ug/l | 0.74 | U,S13 | EPA 8260 | 0.74 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,2-Dibromoethane | ug/l | 0.50 | U,S13 | EPA 8260 | 0.50 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,2-Dichlorobenzene | ug/l | 0.44 | U,S13 | EPA 8260 | 0.44 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,2-Dichloroethane | ug/l | 0.57 | U,S13 | EPA 8260 | 0.57 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,2-Dichloropropane | ug/l | 0.52 | U,S13 | EPA 8260 | 0.52 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 1,4-Dichlorobenzene | ug/l | 0.52 | U,S13 | EPA 8260 | 0.52 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| 2-Hexanone | ug/l | 4.4 | U,S13 | EPA 8260 | 4.4 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Acetone | ug/l | 9.9 | U,S13 | EPA 8260 | 9.9 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Acrylonitrile | ug/l | 1.2 | U,S13 | EPA 8260 | 1.2 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Benzene | ug/l | 0.27 | U,S13 | EPA 8260 | 0.27 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Bromochloromethane | ug/l | 0.58 | U,S13 | EPA 8260 | 0.58 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Bromodichloromethane | ug/l | 0.35 | U,S13 | EPA 8260 | 0.35 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Bromoform | ug/l | 0.58 | U,S13 | EPA 8260 | 0.58 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Bromomethane | ug/l | 0.66 | U,S13 | EPA 8260 | 0.66 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Carbon disulfide | ug/l | 0.85 | U,S13 | EPA 8260 | 0.85 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Carbon tetrachloride | ug/l | 0.42 | U,S13 | EPA 8260 | 0.42 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Chlorobenzene | ug/l | 0.63 | U,S13 | EPA 8260 | 0.63 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Chloroethane | ug/l | 0.80 | U,S13 | EPA 8260 | 0.80 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Chloroform | ug/l | 0.90 | U,S13 | EPA 8260 | 0.90 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Chloromethane | ug/l | 0.64 | U,S13 | EPA 8260 | 0.64 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| cis-1,2-Dichloroethene | ug/l | 0.65 | U,S13 | EPA 8260 | 0.65 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| cis-1,3-Dichloropropene | ug/l | 0.14 | U,S13 | EPA 8260 | 0.14 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Dibromochloromethane | ug/l | 0.34 | U,S13 | EPA 8260 | 0.34 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Dibromomethane | ug/l | 0.41 | U,S13 | EPA 8260 | 0.41 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Ethylbenzene | ug/l | 0.44 | U,S13 | EPA 8260 | 0.44 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Iodomethane | ug/l | 0.67 | U,S13 | EPA 8260 | 0.67 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| MEK (2-Butanone) | ug/l | 8.4 | U,S13 | EPA 8260 | 8.4 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Methylene chloride | ug/l | 4.0 | U,S13 | EPA 8260 | 4.0 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Dichloromethane | ug/l | 3.8 | U,S13 | EPA 8260 | 3.8 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| MIBK (4-Methyl-2-pentanone) | ug/l | 0.98 | U,S13 | EPA 8260 | 0.98 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Styrene | ug/l | 0.34 | U,S13 | EPA 8260 | 0.34 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Tetrachloroethene | ug/l | 0.51 | U,S13 | EPA 8260 | 0.51 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Toluene | ug/l | 0.44 | U,S13 | EPA 8260 | 0.44 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| trans-1,2-Dichloroethene | ug/l | | | | | | | |

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-

March 21, 2006
Project No: 57757

Laboratory Report

| | | | | | | | |
|---------------------|---|--|--|--|--|--|--|
| Project Name | Surface Water Analyses - Lena Road Landfill | | | | | | |
| Sample Description | SW-1 (AEO 9959) | | | | | | |
| Matrix | Surface Water | | | | | | |
| SAL Sample Number | 57757.01 | | | | | | |
| Date/Time Collected | 02/27/06 11:15 | | | | | | |
| Date/Time Received | 02/27/06 13:00 | | | | | | |

| 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 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| trans-1,4-Dichloro-2-butene | ug/l | 2.5 | U,S13 | EPA 8260 | 2.5 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Trichloroethene | ug/l | 0.28 | U,S13 | EPA 8260 | 0.28 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Trichlorofluoromethane | ug/l | 0.98 | U,S13 | EPA 8260 | 0.98 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Vinyl acetate | ug/l | 1.5 | U,S13 | EPA 8260 | 1.5 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Vinyl chloride | ug/l | 0.50 | U,S13 | EPA 8260 | 0.50 | 03/09/06 20:48 | 03/09/06 20:48 | JP |
| Xylenes, Total | ug/l | 0.30 | U,S13 | EPA 8260 | 0.30 | 03/09/06 20:48 | 03/09/06 20:48 | JP |

Field Parameter

| | | | | | |
|----------------------|----------|------|------------|----------------|-----|
| Specific Conductance | umhos/cm | 580 | DEP FT1200 | 02/27/06 11:15 | LRW |
| Water Temperature | C | 16.5 | DEP FT1400 | 02/27/06 11:15 | LRW |
| pH | Units | 7.5 | DEP FT1100 | 02/27/06 11:15 | LRW |
| Dissolved Oxygen | mg/l | 6.5 | DEP FT1500 | 02/27/06 11:15 | LRW |
| Turbidity | NTU | 6.8 | DEP FT1600 | 02/27/06 11:15 | LRW |

Inorganics

| | | | | | | | |
|--------------------------|-------|-----|-----------|---|----------------|----------------|-----|
| Chlorophyll a, corrected | mg/m3 | 9.3 | SM 10200H | 2 | 03/01/06 16:26 | 02/27/06 16:20 | RJT |
|--------------------------|-------|-----|-----------|---|----------------|----------------|-----|

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-

March 21, 2006
Project No: 57757

Laboratory Report

| Project Name | Surface Water Analyses - Lena Road Landfill | | | | | | | |
|-----------------------------------|---|---------|----------------|-----------------|--------------------|----------------|---------|--|
| Sample Description | SW-2 (AEO 9960) | | | | | | | |
| Matrix | Surface Water | | | | | | | |
| SAL Sample Number | 57757.02 | | | | | | | |
| Date/Time Collected | 02/27/06 | 10:35 | | | | | | |
| Date/Time Received | 02/27/06 | 13:00 | | | | | | |
| 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 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,1,1-Trichloroethane | ug/l | 0.46 | U,S13 EPA 8260 | 0.46 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,1,2,2-Tetrachloroethane | ug/l | 0.14 | U,S13 EPA 8260 | 0.14 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,1,2-Trichloroethane | ug/l | 0.47 | U,S13 EPA 8260 | 0.47 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,1-Dichloroethane | ug/l | 0.52 | U,S13 EPA 8260 | 0.52 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,1-Dichloroethene | ug/l | 0.45 | U,S13 EPA 8260 | 0.45 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,2,3-Trichloropropane | ug/l | 0.15 | U,S13 EPA 8260 | 0.15 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,2-Dibromo-3-chloropropane | ug/l | 0.74 | U,S13 EPA 8260 | 0.74 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,2-Dibromoethane | ug/l | 0.50 | U,S13 EPA 8260 | 0.50 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,2-Dichlorobenzene | ug/l | 0.44 | U,S13 EPA 8260 | 0.44 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,2-Dichloroethane | ug/l | 0.57 | U,S13 EPA 8260 | 0.57 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,2-Dichloropropane | ug/l | 0.52 | U,S13 EPA 8260 | 0.52 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 1,4-Dichlorobenzene | ug/l | 0.52 | U,S13 EPA 8260 | 0.52 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| 2-Hexanone | ug/l | 4.4 | U,S13 EPA 8260 | 4.4 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Acetone | ug/l | 9.9 | U,S13 EPA 8260 | 9.9 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Acrylonitrile | ug/l | 1.2 | U,S13 EPA 8260 | 1.2 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Benzene | ug/l | 0.27 | U,S13 EPA 8260 | 0.27 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Bromochloromethane | ug/l | 0.58 | U,S13 EPA 8260 | 0.58 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Bromodichloromethane | ug/l | 0.35 | U,S13 EPA 8260 | 0.35 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Bromoform | ug/l | 0.58 | U,S13 EPA 8260 | 0.58 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Bromomethane | ug/l | 0.66 | U,S13 EPA 8260 | 0.66 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Carbon disulfide | ug/l | 0.85 | U,S13 EPA 8260 | 0.85 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Carbon tetrachloride | ug/l | 0.42 | U,S13 EPA 8260 | 0.42 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Chlorobenzene | ug/l | 0.63 | U,S13 EPA 8260 | 0.63 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Chloroethane | ug/l | 0.80 | U,S13 EPA 8260 | 0.80 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Chloroform | ug/l | 0.90 | U,S13 EPA 8260 | 0.90 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Chloromethane | ug/l | 0.64 | U,S13 EPA 8260 | 0.64 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| cis-1,2-Dichloroethene | ug/l | 0.65 | U,S13 EPA 8260 | 0.65 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| cis-1,3-Dichloropropene | ug/l | 0.14 | U,S13 EPA 8260 | 0.14 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Dibromochloromethane | ug/l | 0.34 | U,S13 EPA 8260 | 0.34 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Dibromomethane | ug/l | 0.41 | U,S13 EPA 8260 | 0.41 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Ethylbenzene | ug/l | 0.44 | U,S13 EPA 8260 | 0.44 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Iodomethane | ug/l | 0.67 | U,S13 EPA 8260 | 0.67 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| MEK (2-Butanone) | ug/l | 8.4 | U,S13 EPA 8260 | 8.4 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Methylene chloride | ug/l | 4.0 | U,S13 EPA 8260 | 4.0 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| MIBK (4-Methyl-2-pentanone) | ug/l | 3.8 | U,S13 EPA 8260 | 3.8 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Styrene | ug/l | 0.98 | U,S13 EPA 8260 | 0.98 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Tetrachloroethene | ug/l | 0.34 | U,S13 EPA 8260 | 0.34 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| Toluene | ug/l | 0.51 | U,S13 EPA 8260 | 0.51 | 03/09/06 20:25 | 03/09/06 20:25 | JP | |
| trans-1,2-Dichloroethene | ug/l | 0.44 | U,S13 EPA 8260 | 0.44 | 03/09/06 20:25 | 03/09/06 20:25 | 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-

March 21, 2006
Project No: 57757

Laboratory Report

| | | | | | | | |
|---------------------|---|-------|--|--|--|--|--|
| Project Name | Surface Water Analyses - Lena Road Landfill | | | | | | |
| Sample Description | SW-2 (AEO 9960) | | | | | | |
| Matrix | Surface Water | | | | | | |
| SAL Sample Number | 57757.02 | | | | | | |
| Date/Time Collected | 02/27/06 | 10:35 | | | | | |
| Date/Time Received | 02/27/06 | 13:00 | | | | | |

| 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 | 03/09/06 20:25 | 03/09/06 20:25 JP |
| trans-1,4-Dichloro-2-butene | ug/l | 2.5 | U,S13 | EPA 8260 | 2.5 | 03/09/06 20:25 | 03/09/06 20:25 JP |
| Trichloroethene | ug/l | 0.28 | U,S13 | EPA 8260 | 0.28 | 03/09/06 20:25 | 03/09/06 20:25 JP |
| Trichlorofluoromethane | ug/l | 0.98 | U,S13 | EPA 8260 | 0.98 | 03/09/06 20:25 | 03/09/06 20:25 JP |
| Vinyl acetate | ug/l | 1.5 | U,S13 | EPA 8260 | 1.5 | 03/09/06 20:25 | 03/09/06 20:25 JP |
| Vinyl chloride | ug/l | 0.50 | U,S13 | EPA 8260 | 0.50 | 03/09/06 20:25 | 03/09/06 20:25 JP |
| Xylenes, Total | ug/l | 0.30 | U,S13 | EPA 8260 | 0.30 | 03/09/06 20:25 | 03/09/06 20:25 JP |
| Field Parameter | | | | | | | |
| Specific Conductance | umhos/cm | 390 | | DEP FT1200 | | | LRW |
| Water Temperature | C | 16.5 | | DEP FT1400 | | | LRW |
| pH | Units | 6.6 | | DEP FT1100 | | | LRW |
| Dissolved Oxygen | mg/l | 4.0 | | DEP FT1500 | | | LRW |
| Turbidity | NTU | 45 | | DEP FT1600 | | | LRW |
| Inorganics | | | | | | | |
| Chlorophyll a, corrected | mg/m3 | 11 | | SM 10200H | 2 | 03/01/06 16:26 | 02/27/06 16:20 RJT |

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-

March 21, 2006
Project No: 57757

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,S13 Analyte was not detected; indicated concentration is method detection limit. Analysis subcontracted to STL, FDOH Cert. No. E84282.

A handwritten signature in black ink, appearing to read "Francis I. Daniels".

SOUTHERN ANALYTICAL LABORATORIES, INC.

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

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>Loy R. Ward</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 Grab | | | | | | | | |
| SAL Use Only | Sample No. | 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 | | | | | | | | | | | | | |
| | | Sample Description | | | | | | | | | | | | | |
| 01 | SW-1 | <i>AB 89959</i> | 2/27/06 | 11:15 | SW | X | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| 02 | SW-2 | <i>AB 89960</i> | ✓ | 10:35 | SW | X | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| Samples to be delivered to MCUOD Central Laboratory. | | | | | | | | | | | | | | | |
| Containers Prepared/ Relinquished: <i>Jamal Huffin</i> | | Date/Time: <i>2-21-06 1425</i> | Received: <i>Loy Ward</i> | | Date/Time: <i>2/21/06 1520</i> | Seal intact? Y N N/A | | Instructions / Remarks <i>*40 CFR Part 258 Appendix I Metals.</i> | | | | | | | |
| Relinquished: <i>Loy Ward</i> | | Date/Time: <i>2/27/06 1120</i> | Received: <i>Bridget</i> | | Date/Time: <i>2/27/06 1120</i> | Samples intact upon arrival? Y N N/A | | | | | | | | | |
| Relinquished: <i>Bridget</i> | | Date/Time: <i>2/27/06</i> | Received: <i>Ella</i> | | Date/Time: <i>2/27/06</i> | Received on ice? Temp <i>1°C</i> (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: | Volatile rec'd w/out headspace? Y N N/A | | | | | | | | | |
| Relinquished: | | Date/Time: | Received: | | Date/Time: | Proper containers used? Y N N/A | | | | | | | | | |

SOUTHERN ANALYTICAL LABORATORIES, INC.

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

SAL Project No.

57757

| | | | | | | | | | | |
|---|---------------------------------------|-----------------------------------|---------------------------------------|--|---|-----------|--|--------------------------------|---|------------------|
| 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>Larry R. Ward</i> | | | | | | | 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 | | | | | | | | | |
| 01 | SW-1 | | <i>2/27/06</i> | <i>11:15</i> | SW | X | 1 | 3 | | See Field Sheet |
| 02 | SW-2 | | <i>↓</i> | <i>10:35</i> | SW | X | 1 | 3 | | See Field Sheet |
| 03 | Trip Blank | | <i>2-21-06</i> | <i>1510</i> | R | X | | 1 | | |
| SAL Report Page ____ of ____ | | | | | | | | | | |
| Containers Prepared/ Relinquished: <i>George Huffin</i> | Date/Time: <i>2-21-06 1510</i> | Received: <i>Larry R. Ward</i> | Date/Time: <i>2/27/06 1500</i> | Seal intact? <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A | Instructions / Remarks | | | | | |
| Relinquished: <i>Larry Ward</i> | Date/Time: <i>2/27/06 1500</i> | Received: <i>dmnj</i> | Date/Time: <i>1300 2/27/06</i> | 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: <i>dmnj</i> | 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 | | | | | | |
| 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 | | | | | | |

SOUTHERN ANALYTICAL LABORATORIES, INC.

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

SAL Project# 51757
Date: 03/07/06

Surface Water Sampling Log

| | | | | | |
|----------------------------|--------------------------------|------------|--------------------|----------|---------------------|
| Client Name: | Manatee County Utilities, Inc. | Location: | Lena Road Landfill | Contact: | Jeff Goodwin |
| Surface Water Description: | SW-1 (AEO 7056) | Sample ID: | .01 | Phone: | 941-792-8811 X 5235 |
| Date Sampled: | | | | | GPS LONG: |
| | | | | | GPS LAT: |

Sampling Data

| | | | | |
|---|---------------------------------------|--------------------|---------------------|---|
| Sampled By / Affiliation | SAL | Sampler Signature: | <i>Zeng R. W. O</i> | |
| Sampling Device: | Direct to Container | Time Collected: | 11:15 | |
| 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 | 7.5 | | | |
| Specific Conductance (umhos) | 580 | | | |
| Temperature (°C) | 16.5 | | | |
| Dissolved Oxygen (mg/L) | 6.43 mg/L | | | |
| Turbidity (NTU) | 6.82 | | | |
| Sample Appearance | Translucent | | | |
| Sample Odor | None | | | |
| Field Decontamination: | <input checked="" type="checkbox"/> N | Field Filtered: | Y | N |
| Preservation Checked in the field? | <input checked="" type="checkbox"/> Y | Initials: | <i>lme</i> | |
| Field Cleaned (List sequence and all solutions used): | | | | |
| <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> | | | | |

Site and Weather Conditions:

Cloudy

Comments (use back of form if necessary)

SOUTHERN ANALYTICAL LABORATORIES, INC.

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

SAL Project# 51157
Date: 2/27/06

Surface Water Sampling Log

| | | | | | |
|----------------------------|--------------------------------|------------|--------------------|-----------|---------------------|
| Client Name: | Manatee County Utilities, Inc. | Location: | Lena Road Landfill | Contact: | Jeff Goodwin |
| | | | | Phone: | 941-792-8811 X 5235 |
| Surface Water Description: | SW-2 (AEO 7057) | Sample ID: | .02 | GPS LONG: | |
| | | | | GPS LAT: | |
| Date Sampled: | 3/27/06 | | | | |

Sampling Data

| | | | | | |
|---|---------------------------------------|--|--------------------|---------------------------------------|---------------------------------------|
| Sampled By / Affiliation | SAL | | Sampler Signature: | <i>Jeff Goodwin</i> | |
| Sampling Device: | Direct to Container | | Time Collected: | 10:35 | |
| 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 | | | 6.60 | | |
| Specific Conductance (umhos) | | | 390.1 | | |
| Temperature (°C) | | | 16.5 | | |
| Dissolved Oxygen (mg/L) | | | 3.97 | | |
| Turbidity (NTU) | | | 45.9 | | |
| Sample Appearance | | | Tannic | | |
| Sample Odor | | | None | | |
| Field Decontamination: | <input checked="" type="checkbox"/> Y | | Field Filtered: | <input checked="" type="checkbox"/> Y | <input checked="" type="checkbox"/> N |
| Preservation Checked in the field? | <input checked="" type="checkbox"/> Y | | N | Initials: | |
| Field Cleaned (List sequence and all solutions used): <i>Wet</i> | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Site and Weather Conditions:

Cloudy

Comments (use back of form if necessary)

3/27 3/27/06