

POJ. # 39884 MANA TEE COUNT GOVERNMENT

Utility Operations Department

GW

56

JUL 1 5 2002

TOIRTEID LESWHTDOS

LETCHATE

July 11, 2002

Mr. John Morris, PG Florida Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619

Re:

Semi-Annual Sample Results - First Half 2002 Lena Road Landfill and Erie Road Landfill

Dear Mr. Morris:

Please find enclosed the laboratory analytical reports and Ground Water Monitoring Report Certification Form for the Lena Road Landfill. As you are aware, PBS&J provided a summary and a review of the analytical results from this sampling event in the Biennial Report submitted to your office on December 15, 2001. A groundwater elevation contour map was also included in that report.

Also enclosed are the laboratory analytical reports, Ground Water Monitoring Report Certification Form, groundwater elevation contour map, and review of the results from PBS&J for the Erie Road Landfill. The Manatee County Solid Waste Division is currently utilizing P.E. LaMoreaux & Associates, Inc. and the County's Central Laboratory for its sampling events. Applicable pages from each of the laboratory's Quality Assurance Plan are enclosed for your records.

If you have any questions regarding these submittals, please contact Greg Mudd, P.G., Senior Geologist, PBS&J, at 800/284-5182, extension 339. Thank you.

Sincerely.

Daniel T. Grav

Director

DTG/qbp

Gus DiFonzo, Solid Waste Division Manager#4 CC: C. Michael Gore, Landfill Superintendent

Gwen Pagington, Solid Waste Program Specialist

OMITTED AWAYSIS OF NITTAFE

DAM (100 1000 BY MANATRE COUNTY LAG NOT PROVIDED IN REPORT FORM FORMAT

> ENTED MOL REJURIED FOR SOLONIUM

BEST AVAILABLE COPY



An employee-owned company

July 3, 2002

Mr. Gus Difonzo Solid Waste Division Manatee County Public Works Department 4410 66th Street West Bradenton, FL 34210

RE: Semi-Annual Water Quality Monitoring Report

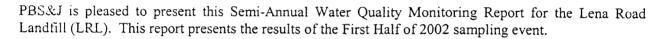
First Half 2002 Sampling Event

Lena Road Landfill

GMS ID No. 4041M02025

FDEP Permit No. 39884-001-SO

Dear Mr. Difonzo:





The water quality monitoring network at the LRL is designed to monitor the leachate, surface water of Cypress Strand, and the groundwater within both the surficial and Floridan, or artesian (deep) aquifers. The leachate samples are collected from the pump station. The surface water samples are collected from two points along Cypress Strand, one upstream that is designated SW-2, and one downstream that is designated SW-1. There are 26 wells that are used to monitor groundwater quality. They are designated CW-4, CW-5A, GC-1A through GC-6, LRII-1 through LRII-5, MW-1 through MW-6, SA-1 through SA-8, and SMR-1 and SMR-2. The wells designated SA-1 through SA-8 and SMR-2 are used to monitor the groundwater of the artesian (deep) aquifer, whereas the other wells monitor the surficial aquifer. The wells GC-6 and SMR-1 are the designated background wells for the surficial aquifer; the well SMR-2 is the designated background well for the artesian aquifer. A summary of the components that comprise the water quality network is presented in Table 1.

A Florida Department of Environmental Protection (FDEP) Ground Water Monitoring Report form for the First Half 2001 sampling event is provided in Attachment A.

Groundwater Sample Collection Methodology

The leachate and surface water samples for the First Half 2002 sampling event were collected on February 11 and 12, 2002. The groundwater samples were collected on February 13, 14, 15, 20, and 21, 2002. The samples were collected by representatives of P.E. LaMoreaux and Associates, Inc. (PELA), and were analyzed at PELA's Lakeland, Florida laboratory. The samples were collected in accordance with the FDEP's Standard Operating Procedure 001/01. Depth-to-groundwater measurements were made



Mr. Gus Difonzo July 3, 2002 Page 2

from the top-of-casing (TOC) at each monitoring well at the time of sample collection. Copies of the field data and instrument calibration sheets from the sampling event are provided in Attachment B.

In accordance with the LRL's permit, the leachate samples collected during this sampling event were analyzed for total ammonia-N, bicarbonate, chlorides, iron, mercury, nitrate, sodium, total dissolved solids (TDS), and all of the parameters listed in Appendices I and II of 40 Code of Federal Regulations (CFR) Part 258.

The surface water samples were analyzed for unionized ammonia, total hardness, biochemical oxygen demand (BOD), copper, mercury, iron, nitrate, zinc, TDS, total organic carbon (TOC), fecal coliform, total phosphorus, chlorophyll A, total nitrogen, chemical oxygen demand (COD), total suspended solids (TSS), and the Appendix I parameters.

The groundwater samples were analyzed for total ammonia-N, chlorides, iron, mercury, nitrate, sodium, TDS and Appendix I parameters.

Analytical Results

A summary of the leachate, groundwater, and surface water analytical results for the First Half 2002 sampling event is presented in Tables 2, 3, and 4, respectively. The concentration of each parameter detected in the leachate and the groundwater was compared to its respective groundwater Maximum Contaminant Level (MCL). Any MCL exceedance is shown with shading on the tables. The MCLs are promulgated by Chapter 62-550, FAC, but MCLs have not been established for every parameter. The MCLs do not apply to leachate, and were used here only as a point of reference. With regard to the surface water results, the Surface Water Cleanup Target Levels (SWCTLs), as promulgated in Chapter 62-777 of the FAC, were used as reference criteria for the laboratory results and the groundwater MCLs were used for the field measurements.

A summary of the significant detections with each media is presented below. The complete laboratory reports are provided in Attachment C.

Leachate Analytical Summary

The only analytes that were detected in the leachate at concentrations in excess of their respective test method's detection limits were inorganic compounds. The analytes that were detected were bicarbonate, chloride, iron, nitrate, sodium, total ammonia-N, TDS, arsenic, selenium, and zinc. The concentration of chloride, iron, sodium, and TDS exceeded their respective groundwater MCL. These detections are shaded in Table 2.

Surface Water Analytical Summary

The only analytes that were detected in the surface water samples at concentrations in excess of their respective test method's detection limits were inorganic compounds. The analytes that were detected were chlorophyll-A, COD, conductivity, fecal coliform, iron, sodium, total ammonia-N, TDS, TOC, total hardness, total nitrogen, total phosphorus, TSS, unionized ammonia, arsenic, barium, chromium, and vanadium. All of these analytes were detected in the samples collected at SW-1 and SW-2. The only

Mr. Gus Difonzo July 3, 2002 Page 3

field parameter that exceeded the groundwater MCL was turbidity in the samples collected at both SW-1 and SW-2. The laboratory parameters that exceeded their respective SWCTLs were iron, in both surface water samples and TDS in the SW-2 sample. These detections are shaded in Table 3.

Groundwater Analytical Summary

Detections in the groundwater monitoring well network were limited inorganic analytes. The analytes that were detected in the laboratory samples at concentrations in excess of their respective test method's detection limits were chloride, iron, nitrate, sodium, total ammonia-N, TDS, arsenic, barium, cadmium, lead, zinc, beryllium, cobalt, nickel, and vanadium. There are five parameters that were detected at one or more wells in the monitoring well network at concentrations that exceeded their respective MCLs. They are pH, turbidity (field measurement), iron, TDS, and arsenic. These analytes are shaded in Table 4. A summary of the exceedances is presented below.

- pH The pH value measured lower than the prescribed MCL range (6.5-8.5 SU) in he groundwater samples collected at every surficial aquifer well except CW-4, CW-5A, GC-1A, and GC-4. The pH value at the two background wells was lower than the MCL range. The pH value was within the prescribed MCL range in the samples collected at all of the deep (artesian) aquifer wells except SA-8.
- Turbidity The field turbidity reading at well SA-8 was higher than the MCL (20 NTU).
- Iron The concentration of iron exceeded the MCL (0.3 mg/L) in the samples collected at all of the surficial aquifer wells except one of the background wells, SMR-1. The iron concentration at all of the deep (artesian) aquifer wells was below the MCL.
- TDS The MCL for TDS (500 mg/L) was exceeded in the samples collected at one of the surficial aquifer monitoring wells, CW-4, and one of the deep (artesian) aquifer wells, SA-6. The TDS concentration in the three background wells ranged from 115 mg/L to 384 mg/L.
- Arsenic The concentration of arsenic exceeded the MCL (0.05 mg/L) in the samples collected at the shallow monitoring wells GC-2 and MW-2. The concentration of arsenic was below the test method's detection limits in one of the background wells, and measured 0.008 mg/L at the other background well.

Analytical Trends and Analysis

The detection pattern during this sampling event was consistent with the results of the 2001 sampling events. The only parameters that were detected in the monitoring network were inorganics, and the only parameters that were detected throughout the network at concentrations in excess of regulatory criteria were pH, TDS, turbidity, and iron. Sodium, chloride, and some of the trace metals, including arsenic, were detected at relatively low concentrations.

Chloride, iron, sodium, and TDS were detected in the leachate at elevated concentrations. TDS, pH, turbidity, and iron were detected at elevated concentrations in the rest of the monitoring

Mr. Gus Difonzo July 3, 2002 Page 4

network. The groundwater of the surficial aquifer had detections of pH, iron, TDS, and turbidity at concentrations in excess of their respective MCL, and several other parameters, including arsenic, cobalt, barium, lead, copper, zinc, nickel, and vanadium, were detected at lower concentrations. Most of the same parameters were detected in the deep (artesian) aquifer wells but not at concentrations in excess of their respective MCLs. Most of the same parameters were also detected in the background wells, suggesting that the elevated concentrations of these parameters reflect the local chemistry of the groundwater.

Groundwater Flow Pattern

The depth to water measurement at each monitoring well is provided on the first line of Table 3. The water level measurements were subtracted from the TOC elevations to determine the elevation of the water table at each well. The TOC elevations are referenced in feet above the National Geodetic Vertical Datum (NGVD). The water table elevation data from the shallow monitoring wells was plotted and contoured to generate the groundwater elevation contour map for the surficial aquifer presented as Figure 1. The data from the deep (artesian) wells was used to generate the deep (artesian) aquifer contour map presented in Figure 2.

The figures indicate that the groundwater within both aquifers (outside the boundary of the landfill) flowed in a west-southwesterly direction. The average horizontal gradient was 0.001 feet per foot (ft/ft). The groundwater elevation contour maps indicate that the groundwater within the artesian aquifer also flowed to the north-northwest at an average horizontal gradient was 0.006 ft/ft.

Conclusions and Recommendations

The detection pattern for this sampling event is consistent with the results of the recent sampling events, with several inorganic parameters detected throughout the monitoring network. Chloride, iron, sodium, and TDS were detected in the leachate at elevated concentrations. TDS, pH, turbidity, and iron were detected at elevated concentrations in the rest of the monitoring network. Sodium, chloride, and some of the trace metals, including arsenic, were detected throughout the monitoring network at lower concentrations. The arsenic detections should continued to be monitored for any developing trends.

Please call me at (800) 284-5182, ext. 339 if you have any questions.

Very truly yours,

Greg Mudd, P.G. Senior Geologist

C: File, 120498.05 0301

 $G: \label{lem:condition} G: \label{lem:condition} I AZARD \label{lem:condition} Manatee \label{lem:condition} Lena Road \label{lem:condition} Semi Annual \label{lem:condition} Report \label{lem:condition} Oz. \ Albert \label{lem:condition} Lena Road \label{lem:condition} Semi \label{lem:condition} Annual \label{lem:condition} Report \label{lem:condition} Semi \label{lem:condition} Annual \label{lem:condition} Report \label{lem:condition} Oz. \ Annual \label{lem:condition} Semi \label{lem:condition} Lena \label{lem:condition} Condition \label{lem:condition} Report \label{lem:condition} Semi \label{lem:condi$

Table 4

Surface Water Analytical Summary

Table 4 - Surface Water Analytical Summary, First Half, 2002

BROSESSICATION CONTRACTOR CONTRACTOR	REBERERERE ER FERE	mineranamina		eneral analysis s
			SW-1	SW-2
	DATE O	FTEST	03/14/02	03/15/02
	Maximum			
•	Contaminant	UNITS		
		CIVIIS		
	Level			
Field Data				
Temp, Field		С	18.3	21.6
pH, Field	6.5-8.5	STD	6.98	6.69
Cond, Field		umhos/cm	480	525
Dissolved Oxygen, Field		mg/l	5.07	5.92
Turbidity, Field	1.0	NTU	20.9	6.42
Laboratory	SWCTL			
BOD		mg/l	<2.00	<2.00
Chlorophyll A		mg/m3	19.9	22.6
coù		mg/l	152	261
Conductivity		umhos/cm	525	480
Fecal Coliform		col/100ml	350	60
Iron	0.3	mg/l	3.44	3:97, %
Mercury	0.002	ug/l	<1.00	<1.00
Sodium	160	mg/l	57.8	68.1
T. Ammonia-N		mg/l	0.128	0.051
TDS	500	mg/l	488	596
TOC		mg/l	28.9	90.4
Total Hardness		mg/l	46.7	46.5
Total Nitrogen		mg/l	1.22	3.28
Total Phosphorous		mg/l	0.467 5.9	0.160
TSS		mg/l		4.30
Unionized Ammonia		mg/l	0.0006	0.0001
CFR Part 258 Appendix I				
Inorganic:				
Antimony .	0.006	mg/I	<0.002	<0.002
Arsenic	0.05	mg/l	<0.007	0.026
Barium	.2	mg/I	0.012	0.012
Beryllium	0.004	mg/l	<0.0002	<0.0002
Cadmium	0.005	mg/l	<0.0005	<0.0005
Chromium	0.1	mg/l	0.002	0.003
Cobalt		mg/l	<0.001	<0.001
Соррет	1	mg/l	<0.005	<0.005
Lead	0.015	mg/l	<0.005	<0.005
Nickel	0.1	mg/l	0.002	0.003
Selenium	0.05	mg/l	<0.010	<0.010
Silver	0.1	mg/l	<0.002	<0.002
Thallium	0.002	mg/l	<0.0004	<0.0004 0.003
Vanadium Zinc	5	mg/l	0.0034 <0.010	<0.003 <0.010
		mg/l	V0.010	
Organic (1):				
Acetone	700	ug/l	<2.5	<2.5
Acrylonitrile	8	ug/l	<1.5	<1.5
Benzene	1	ug/l	<0.04	<0.04
Bromochloromethane		ug/l	<0.5	<0.5
Bromodichloromethane	0.6	ug/l	<0.08	<0.08
Bromoform	4	ug/l	<0.12	<0.12
Carbon Disulfide	700	ug/l	<4.1	<4.1
Carbon tetrachloride	3	ug/l	<0.21	<0.21
Chlorobenzene	·	ug/l	<0.04	<0.04
Chloroethane	140	ug/l	<0.1	<0.1
Chloroform	, 6	ug/l	<0.03	<0.03
Dibromochloromethane	1	ug/l	<0.05	<0.05
1,2-Dibromo-3-chloropropane	0.2	ug/l	0.01> ،	<0.01
1,2-Dibromo-3-chloropropane	0.2	ug/l	0.01> ،	<0.01

Table 4 - Surface Water Analytical Summary, First Half, 2002

			\$W-1	SW-2
	DATE O	FTFST	2/20/02	2/20/02
Ethylene dibromide	 	ug/l	< 0.01	<0.01
o-dichlorobenzene	600	ug/l	<0.03	<0.03
Para-dichloro-benzene	75	ug/l	<0.03	<0.03
trans-1.4-Dichloro-2-butene	, , ,	ug/l	<10	<10
1,1-Dichloroethane	700	ug/l	<0.03	<0.03
1.2-Dichloroethane	3	ug/l	<0.02	<0.02
1,1-Dichloroethene	7	ug/i	<0.12	<0.12
cis-1,2-Dichloroethene	70	ug/l	<0.1	<0.1
trans-1,2-Dichloroethene	100	ug/l	<0.06	<0.06
1,2-Dichloropropane	5	ug/l	<0.04	<0.04
cis-1,3-Dichloropropene	,	ug/l	<0.05	<0.05
trans-1,3-Dichloropropene		ug/l	<0.04	<0.04
Ethylbenzene	30	ug/l	<0.06	< 0.06
2-Hexanone		ug/l	<5	<5
Methyl bromide	10	ug/l	<0.11	< 0.11
Chloromethane	2.7	ug/l	< 0.13	< 0.13
Methylene bromide		ug/l	< 0.03	< 0.03
Methylene chloride	5	ug/l	< 0.03	< 0.03
2-butanone	4200	ug/l	<5	<5
Methyl iodide		ug/l	<0.5	<0.5
4-methlyl-2-pentanone	350	ug/l	<5	<5
Styrene	100	ug/l	<1	<1
1,1,1,2-tetra-chloroethane	1	ug/l	<0.1	<0.1
1,1,2,2-tetra-chloroethane	0.2	· ug/l	< 0.04	<0.04
Tetrachloroethene	3	ug/l	< 0.14	<0.14
Toluene	40	ug/l	< 0.11	< 0.11
1,1,1-trichloro-ethane	200	ug/l	< 0.04	<0.04
1,1,2-trichloro-ethane	5	ug/l	<0.1	<0.1
Trichloroethene	3	ug/l	< 0.19	< 0.19
Trichlorofluoromethane	2100	ug/l	<0.08	<0.08
1,2,3-Trichloro-propane	42	ug/l	<0.3	<0.3
Vinyl acetate	250	ug/l	<10	<10
Vinyl chloride	1	ug/l	< 0.17	< 0.17
Xylene	20	ug/l	<0.22	< 0.22

⁽¹⁾ Detection limits reported for all values described as "ND" (not detected) in analysis report

SWCTL = Surface Water Cleanup Target Leve

Shaded values exceed MCL or SWCTL

Attachment C-3

Surface Water Laboratory Analytical Report





CASE NARRATIVE

E. LaMoreaux and Associates, inc.

Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

SENT TO: MANATEE COUNTY-SWRTP

JEFF GOODWIN

5101 65TH.STREET WEST

BRADENTON FLORIDA 34210 941 792-8788

REPORT ID

: 0202053859

PROJECT NO.
PELA CONTACT

RECEIVED DATE : 2/11/02 REPORTED DATE : 4/17/02

LAB ID#

KC02441-02Y

KC02442-03S

KC02442-02X-5

KC02443-02Y

KC02444-02X-5

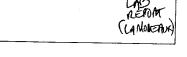
KC02444-03S

KC02445-02Y

KC02446-02X-5

KC02446-03S

KC02447-02Y



REPORT SUMMARY

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

Samples were collected by PELA according to DEP-SOP-001/01.

A duplicate sample was collected from SW-1.

SENIOR CHEMIST

LABORATORY DIRECTOR

CERTIFICATE OF RESULTS

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

Narrative Page 1 of 1



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.

Geochemistry Laboratory 4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT INFORMATION

Client : MANATEE COUNTY-SWRTP

5101 65TH.STREET WEST

BRADENTON FLORIDA 34210

Attention : JEFF GOODWIN

Report ID: 0202053859
BILLING INFORMATION

Bill To: MANATEE COUNTY-SWRTP

DARLENE P.O. BOX 1000

BRADENTON, FLORIDA 34206

Purchase Order No.:

SAMPLE IDENTIFICATION

IDENTIFICATION : S 1/LENA RD SURFACE WATER SITE : LENA RD SURFACE WATER

· TYPE : WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE: 480 MICROMHOS

pH - : 6.98 STANDARD UNITS

WATER TEMPERATURE : 18.3 DEGREES C

DISSOLVED OXYGEN : 5.07 mg/L

INITIAL WATER LEVEL

WELL ELEVATION :

FIELD TURBIDITY : 20.9 NTU

FIELD COLOR

FACILITY GMS # :

COMMENTS

UNIQUE ID # 02X VOLATILES ENV. 03S MISC2 COLOR:ORANGE SHEEN:CLEAN

0202053859 - Page 1 of 3



REPORT OF ANALYSIS

E. LaMoreaux and Associates, Inc. Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

FAX 863/646-1042

Client Name Identification

Site

: MANATEE COUNTY-SWRTP

: S I/LENA RD SURFACE WATER : LENA RD SURFACE WATER

Type : WATER Report ID: 0202053859

COLLECTION DATE : 2/11/02 COLLECTION TIME 11:35 **COLLECTED BY** PELA DATE RECEIVED IN LAB: 2/11/02

PHONE 863/646-8526

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
ORGANICS					
	APPENDIX I	VOLATILES (EP	PA 8260)		
KC02441-02Y		(21	1. 0200)		
i,2,3-TRICHLOROPROPANE	ND	0.3	ug/l	JMS	2/20/02
IODOMETHANE	ND	0.5	ug/l	JMS	2/20/02
CIS 1,2-DICHLOROETHENE	ND	0.10	ug/l	JMS	2/20/02
T-1,4-DICHLORO-2-BUTENE	ND	10.0	ug/l	JMS	2/20/02
STYRENE	ND	1.0	ug/l	JMS	2/20/02
.1,1,1,2-TETRACHLOROETHANE	ND	0.1	ug/l	JMS	2/20/02
2-HEXANONE	ND	5.0	ug/l	JMS	2/20/02
DIBROMOMETHANE	ND	0.3	ug/l	JMS	2/20/02
2-BUTANONE	ND	5.0	ug/l	JMS	2/20/02
ACETONE	ND	2.5	ug/l	JMS	2/20/02
VINYL ACETATE	ND	10.0	ug/l	JMS	2/20/02
CARBON DISULFIDE	ND	4.1	ug/l	JMS	2/20/02
4-METHYL-2-PENTANONE	ND	5.0	ug/l	JMS	2/20/02
BROMOCHLOROMETHANE	ND	0.5	ug/l	JMS	2/20/02
CHLOROMETHANE	ND	0.13	ug/l	JMS	2/20/02
DICHLOROMETHANE	ND	0.03	ug/l	JMS	2/20/02
1,1-DICHLOROETHENE	ND	0.12	ug/l	JMS	2/20/02
TRICHLOROFLUOROMETHANE	ND	0.08	ug/l	, JMS	2/20/02
CHLOROETHANE	ND	0.10	ug/l	JMS	2/20/02
VINYL CHLORIDE	ND	0.17	ug/l	JMS	2/20/02
ACRYLONITRILE	ND	1.50	ug/l	JMS	2/20/02
1,1-DICHLOROETHANE	ND	0.03	ug/l	JMS	2/20/02
BROMOMETHANE	ND	0.11	ug/l	JMS	2/20/02
TOLUENE	ND	0.11	ug/l	JMS	2/20/02
1,4-DICHLOROBENZENE	ND	0.03	ug/l	JMS	2/20/02
1,1,2,2-TETRACHLOROETHANE	ND	0.04	ug/l	JMS	2/20/02
O-XYLENE	ND	0.11	ug/l	· JMS	2/20/02
TRIBROMOMETHANE	ND	0.12	ug/l	JMS	2/20/02
M,P-XYLENES	ND	0.11	ug/l	JMS	2/20/02
ETHYLBENZENE	ND	0.06	ug/l	JMS	2/20/02
CHLOROBENZENE	ND	0.04	ug/l	JMS	2/20/02
TETRACHLOROETHENE	ND	0.14	ug/l	JMS	2/20/02
DIBROMOCHLOROMETHANE	ND	0.05	ug/l	JMS	2/20/02
TRANS-1,2-DICHLOROETHENE	ND	0.06	ug/l	JMS	2/20/02
TRANS-1,3-DICHLOROPROPENE	ND	0.04	ug/l	JMS	2/20/02



EPORT OF ANALYSI[^]

P.E. LaMoreaux and Associates, Inc. Geochemistry Laboratory PHONE 863/646-8526

4320 Old Highway 37, Lakeland, Florida 33813

Report ID: 0202053859

FAX 863/646-1042

Client Name Identification : MANATEE COUNTY-SWRTP

COLLECTION DATE : **COLLECTION TIME**

2/11/02 11:35

Site

: S 1/LENA RD SURFACE WATER : LENA RD SURFACE WATER

COLLECTED BY

PELA

Type : WATER DATE RECEIVED IN LAB: 2/11/02

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
1,2-DICHLOROBENZENE	ND	0.03	ug/l	JMS	2/20/02
CIS-1,3-DICHLOROPROPENE	ND	0.05	ug/l	JMS	2/20/02
BROMODICHLOROMETHANE	ND	0.08	ug/l	JMS	2/20/02
TRICHLOROETHENE	ND	0.19	ug/l	JMS	2/20/02
1,2-DICHLOROPROPANE	ND	0.04	ug/l	JMS	2/20/02
CARBON TETRACHLORIDE	ND	0.21	ug/l	JMS	2/20/02
BENZENE	ND	0.04	ug/l	JMS	2/20/02
1,2-DICHLOROETHANE	ND	0.02	ug/l	JMS	2/20/02
1,1,1-TRICHLOROETHANE	ND	0.04	ug/l	JMS	2/20/02
TRICHLOROMETHANE	ND	0.03	ug/l	JMS	2/20/02
1,1,2-TRICHLOROETHANE	ND	0.10	ug/l	JMS	2/20/02

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



CEPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc. Geochemistry Laboratory 4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT NAME

: MANATEE COUNTY-SWRTP

IDENTIFICATION : S I/LENA RD SURFACE WATER SITE : LENA RD SURFACE WATER

SITE TYPE

: WATER

Report ID: 0202053859

COLLECTION DATE : 2/11/02 COLLECTION TIME : 11:35

DATE RECEIVED IN LAB:

COLLECTED BY

PELA 2/11/02

DETECTION

TIME/DATE

PARAMETER METHOD LIMITS

RESULTS UNIT ANALYST STARTED

INORGANICS

KC02442-03S

CHLOROPHYLL A

10200 H

0.1

ND- NONE DETECTED.

19.9

mg/m3

RLG 16:

16:30 2/13/02

0202053859 - Page 2 of 3



EPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc. Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT NAME

: MANATEE COUNTY-SWRTP

IDENTIFICATION : S 1/LENA RD SURFACE WATER

SITE

: LENA RD SURFACE WATER

TYPE

: WATER

Report ID: 0202053859

COLLECTION DATE :

2/11/02 11:35

COLLECTION TIME COLLECTED BY

DATE RECEIVED IN LAB:

PELA 2/11/02

DETECTION

TIME/DATE

PARAMETER

METHOD

LIMITS

RESULTS UNIT

ANALYST

STARTED

ORGANICS

EDB & DBCP/ENVIRON WATER

KC02442-02X-5

ETHYLENE DIBROMIDE

EPA 504

0.01

ND

ug/L

BAM 14:13 3/8/02

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

EPA 504

0.01

ND

ug/L

BAM 14:13 3/8/02

ND- NONE DETECTED.

0202053859 - Page 3 of 3



REPORT OF ANALYSIC

Geochemistry Laboratory 4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT INFORMATION

Client : MANATEE COUNTY-SWRTP

5101 65TH.STREET WEST

BRADENTON FLORIDA 34210

Attention: JEFF GOODWIN

Report ID: 0202053859 **BILLING INFORMATION**

Bill T: MANATEE COUNTY-SWRTP

DARLENE P.O. BOX 1000

BRADENTON, FLORIDA 34206

Purchase Order No.:

Identification |

: S 2/LENA RD SURFACE WATER : LENA RD SURFACE WATER

Site Type

: WATER

FIELD PARAMETERS

SPECIFIC CONDUCTANCE: 525 **MICROMHOS**

pH -: 6.69

WATER TEMPERATURE : 21.6 **DEGREES C**

DISSOLVED OXYGEN : 5.92

INITIAL WATER LEVEL

WELL ELEVATION

FIELD TURBIDITY : 6.42

FIELD COLOR

FACILITY GMS#

STANDARD UNITS

mg/L

NTU

COMMENTS

UNIQUE ID# 02Y APPI VOLATILE COLOR:DARK AMBER SHEEN:NO SHEEN

Page 1 of 3



EPORT OF ANALYSIS

C.E. LaMoreaux and Associates, Inc. Geochemistry Laboratory

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

FAX 863/646-1042

Report ID: 0202053859

Client Name : MANATEE COUNTY-SWRTP Identification : S 2/LENA RD SURFACE WATER

: LENA RD SURFACE WATER Site

: WA [ER Type

COLLECTION DATE : 2/11/02 COLLECTION TIME : 13:05 COLLECTED BY PELA DATE RECEIVED IN LAB: 2/11/02

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
ORGANICS					
	APPENDIX I	VOLATILES (EP	A 8260)		
KC02443-02Y					•
1,2,3-TRICHLOROPROPANE	ND	0.3	ug/l	JMS	2/20/02
IODOMETHANE	ND	0.5	ug/l	JMS	2/20/02
CIS 1,2-DICHLOROETHENE	ND	0.10	ug/i	JMS	2/20/02
T-1,4-DICHLORO-2-BUTENE	ND	10.0	ug/l	JMS	2/20/02
STYRENE	, ND	1.0	ug/l	JMS	2/20/02
·1,1,1,2-TETRACHLOROETHANE	ND	0.1	ug/l	JMS	2/20/02
2-HEXANONE	ND	5.0	ug/l	JMS	2/20/02
DIBROMOMETHANE	ND	0.3	ug/l	JMS	2/20/02
2-BUTANONE	ND	5.0	ug/l	JMS	2/20/02
ACETONE	ND	2.5	ug/l	JMS	2/20/02
VINYL ACETATE	ND	10.0	ug/l	JMS	2/20/02
CARBON DISULFIDE	ND	4.1	ug/l	JMS	2/20/02
4-METHYL-2-PENTANONE	ND	5.0	ug/l	JMS	2/20/02
BROMOCHLOROMETHANE	ND	0.5	ug/l	JMS	2/20/02
CHLOROMETHANE	ND	0.13	ug/l	JMS	2/20/02
DICHLOROMETHANE	ND	0.03	ug/l	JMS	2/20/02
1,1-DICHLOROETHENE	ND	0.12	ug/l	JMS	2/20/02
TRICHLOROFLUOROMETHANE	ND	0.08	ug/l	JMS	2/20/02
CHLOROETHANE	ND	0.10	ug/l	JMS	2/20/02
VINYL CHLORIDE	ND	0.17	ug/l	JMS	2/20/02
ACRYLONITRILE	ND	1.50	ug/l	JMS	2/20/02
1,1-DICHLOROETHANE	ND	0.03	ug/l	JMS	2/20/02
BROMOMETHANE	ND	0.11	ug/l	JMS	2/20/02
TOLUENE	ND	0.11	ug/l	JMS	2/20/02
1,4-DICHLOROBENZENE	ND	0.03	ug/l	JMS	2/20/02
1,1,2,2-TETRACHLOROETHANE	ND	0.04	ug/l	JMS	2/20/02
O-XYLENE	ND	0.11	ug/l	JMS	2/20/02
TRIBROMOMETHANE	ND	0.12	ug/l	JMS	2/20/02
M,P-XYLENES	ND	0.11	ug/l	JMS	2/20/02
ETHYLBENZENE	ND	0.06	ug/l	, JMS	2/20/02
CHLOROBENZENE	ND	0.04	ug/l	JMS	2/20/02
TETRACHLOROETHENE	ND	0.14	ug/l	JMS	2/20/02
DIBROMOCHLOROMETHANE	ND	0.05	ug/l	JMS	2/20/02
TRANS-1,2-DICHLOROETHENE	ND	0.06	ug/l	JMS	2/20/02
TRANS-1,3-DICHLOROPROPENE	ND	0.04	ug/l	JMS	2/20/02



REPORT OF ANALYSIC

∠E. LaMoreaux and Associates, inc Geochemistry Laboratory

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

FAX 863/646-1042

Client Name Identification : MANATEE COUNTY-SWRTP

: LENA RD SURFACE WATER

: S 2/LENA RD SURFACE WATER

COLLECTION TIME

2/11/02 13:05

Site Type

: WATER

COLLECTED BY

Report ID: 0202053859

COLLECTION DATE :

PELA

DATE RECEIVED IN LAB: 2/11/02

PARAMETER	RESULTS	DETECTION LIMIT	UNITS	ANALYST	DATE FINISHED
1,2-DICHLOROBENZENE	ND	0.03	ug/l	JMS	2/20/02
CIS-1,3-DICHLOROPROPENE	ND	0.05	ug/l	JMS	2/20/02
BROMODICHLOROMETHANE	ND	0.08	ug/l	JMS	2/20/02
TRICHLOROETHENE	ND	0.19	ug/i	JMS	2/20/02
1,2-DICHLOROPROPANE	ND	0.04	ug/l	JMS	2/20/02
CARBON TETRACHLORIDE	ND	0.21	ug/l	JMS	2/20/02
BENZENE	ND	0.04	ug/l	JMS	2/20/02
1,2-DICHLOROETHANE	ND	0.02	ug/l	JMS	2/20/02
. 1,1,1-TRICHLOROETHANE	ND	0.04	ug/l	JMS	2/20/02
TRICHLOROMETHANE	ND	0.03	ug/l	JMS	2/20/02
1,1,2-TRICHLOROETHANE	ND	0.10	ug/l	JMS	2/20/02

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



ORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc. Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT NAME

: MANATEE COUNTY-SWRTP

Report ID: 0202053859 COLLECTION DATE :

2/11/02

SITE

IDENTIFICATION : S 2/LENA RD SURFACE WATER

13:05

: LENA RD SURFACE WATER

COLLECTION TIME **COLLECTED BY**

PELA

TYPE : WATER DATE RECEIVED IN LAB:

2/11/02

TIME/DATE

DETECTION PARAMETER METHOD LIMITS

RESULTS UNIT **ANALYST**

STARTED

INORGANICS

KC02444-03S

CHLOROPHYLL A

10200 H

0.1

ND- NONE DETECTED.

22.6

mg/m3

RLG

16:30 2/13/02

0202053859 - Page 2 of 3



EPORT OF ANALYSIS

r.d. LaMoreaux and Associates, inc. Geochemistry Laboratory 4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

CLIENT NAME

: MANATEE COUNTY-SWRTP

Report ID: 0202053859

IDENTIFICATION : S 2/LENA RD SURFACE WATER

COLLECTION DATE : 2/11/02

: LENA RD SURFACE WATER

COLLECTION TIME 13:05 **COLLECTED BY** PELA

TYPE : WATER DATE RECEIVED IN LAB:

2/11/02

PARAMETER

DETECTION LIMITS **METHOD**

TIME/DATE RESULTS UNIT **STARTED ANALYST**

ORGANICS

EDB & DBCP/ENVIRON WATER

KC02444-02X-5

ETHYLENE DIBROMIDE

EPA 504

0.01

ND

ug/L

BAM 14:42 3/8/02

DIBROMCHLORPROPANE

EPA 504

0.01

ND

ug/L

14:42 3/8/02 BAM

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

0202053859 - Page 3 of 3

LAB REPORT (COUNTY LAS)

REPORT OF ANALYSIS

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

Phone: (941) 792-8811 ext. 5285

Fax: (941) 795-3477 FDOH LAB ID: E54560 USEPA LAB CODE: FL00031 Laboratory Contact: Jeff Goodwin

PREPARED FOR: Mr. Gus Difonzo

MCUOD Solid Waste Division

4410 66th Street West Bradenton, FL 34210 SAMPLE RECEIPT DATE: February 11, 2002

REPORT DATE: March 26, 2002

PROJECT NAME: Lena Road Landfill

Semiannual Surface Water Monitoring

SWI-SWZ

Data Release Authorization:

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

Jeffrey A. Goodwin, Laboratory Supervisor

			0 "						Date /T	ime				Cost
Lab	Client	Sample	Collect		December	Mothod	Boo	sulte.	Analyz		М	DL	Analyst	per sample
ID	ID	Location	Date/T	ime	Parameter	Method	Res	sults	Allalyz					,
										44.50	0.003	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Aluminum	EPA 200.7	0.312	mg/L	02/19/02	11:59	0.003		JPN	\$6.15
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Antimony	EPA 204.2	<0.002	mg/L	02/19/02	12:32		mg/L	JPN	\$6.15
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Arsenic	EPA 200.7	<0.007	mg/L	02/19/02	11:59	0.007	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Barium	EPA 200.7	0.012	mg/L	02/19/02	11:59	0.0002	mg/L	JPN	\$6.15
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Beryllium	EPA 200.7	<0.0002	mg/L	02/19/02	11:59	0.0002	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Calcium	EPA 200.7	34.3	mg/L	02/19/02	11:59	0.010	mg/L		\$6.15
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Cadmium	EPA 200.7	<0.0005	mg/L	02/19/02	11:59	0.0005	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Chromium	EPA 200.7	0.002	mg/L	02/19/02	11:59	0.0005	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Cobalt	EPA 200.7	<0.001	mg/L	02/19/02	11:59	0.001	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Copper	EPA 200.7	<0.005	mg/L	02/19/02	11:59	0.005	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	્ર⊌iron ્ ૈ	EPA 200.7	3.44	ூள்g/Ļः ³	02/19/02	11:59	0.010	mg/L	JPN	
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Lead	EPA 200.7	<0.005	mg/L	02/19/02	11:59	0.005	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Magnesium	EPA 200.7	12.4	mg/L	02/19/02	11:59	0.005	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Manganese	EPA 200.7	0.026	mg/L_	02/19/02	11:59	0.005	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Nickel	EPA 200.7	0.002	mg/L	02/19/02	11:59	0.001	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Selenium	EPA 200.7	<0.010	mg/L	02/19/02	11:59	0.010	mg/L	JPN	\$6.15
SW - 1	SW - 1-	Lena Road	02/13/02	09:15	Silver	EPA 200.7	<0.002	mg/L	02/19/02	11:59	0.002	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	.Sodium 4	EPA 273.1	57.8	mg/L	02/25/02	09:01	0.300	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Thallium	EPA 279.2	<0.0004	mg/L	02/19/02	18:46	0.0004	mg/L	JPN	\$6.15
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Vanadium	EPA 200.7	0.0034	mg/L	02/19/02	11:59	0.0005	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Zinc	EPA 200.7	<0.010	mg/L	02/19/02	11:59	0.010	mg/L	JPN	\$3.70
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Mercury	EPA 245.1	≤0.100	∍⊇⊵ug/L ⊊	02/22/02	12:07	0.100	ug/L	WC_	\$6.15
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Unionized Ammonia	DEP SOP 10/3/83	0.0006	mg/L	03/14/02	12:17		mg/L	JAG	\$4.90
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Ammonia as N	EPA 350.1	0.128	mg/L	02/13/02	14:27	0.009	mg/L	LK	\$4.39
SW - 1	SW - 1	Lena Road	02/13/02	09:15	⊩ BOD.	SM 5210B	≤2:00 <i>:</i>	⊶ mg/L ,	02/13/02	07:30	2.00	mg/L	LB/WC	\$6.15
SW - 1	SW - 1	Lena Road	02/13/02	09:15	(COD==	EPA 410.4	1.52	عنا/mg/لعد	02/15/02	10:00	3.00	mg/L	LK	\$8.60
SW - 1	SW - 1	Lena Road	}		Fecal Coliform	SM 9222D	350	CF,U/100 ml	02/11/02	15:30	1	CFU/100 ml	LB/LK	\$4.90
SW - 1	SW - 1	Lena Road		09:15	TDS	SM 2540C	488	mg/L	02/12/02	13:45	0.500	mg/L	LK/ST	\$4.90
J	SW - 1	Lena Road	 	09:15	тос	EPA 415.1	28.9	mg/L	02/27/02	18:16	0.050	mg/L	ST	\$8.60
SW - 1	SW - 1	Lena Road		09:15	Total Hardness	SM 2340 B	46.7	mg/L	02/21/02	14:05		mg/L	DW	\$7.35
SW - 1	SW - 1	Lena Road	02/13/02	09:15	Total Nitrogen	Calculation	1.22	mg/L	02/14/02	11:21		mg/L	DW	\$8.95
SW - 1		Lena Road	02/13/02	09:15	Total Phosphorus		0.467	mg/L	02/14/02	14:25	0.002	mg/L	• LB	\$6.15
SW - 1	SW - 1	Lena Road	 	09:15	TSS	SM 2540D	5.90	mg/L	02/14/02	08:10		mg/L	ST	\$4.90
SW - 1	1 300 - 1	Lena Noau	1 02/10/02						<u></u>	Total	Cost for	Lena Ro	ad SW-1	\$168.34

Lab	Client	Sample	Collect	ion					Date /T	ime				Cost
ID	ID	Location	Date/T	ime	Parameter	Method	Res	sults	Analyz	ed	M	IDL	Analyst	per sample
									·					20.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Aluminum	EPA 200.7	0.408	mg/L	02/19/02	12:42	0.003	mg/L_	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Antimony	EPA 204.2	<0.002	mg/L	02/19/02	12:58	0.002	mg/L	JFN	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Arsenic	EPA 200.7	0.026	mg/L	02/19/02	12:42	0.007	mg/L	JPN	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Barium	EPA 200.7	0.012	mg/L	02/19/02	12:42	0.0002	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Beryllium	EPA 200.7	<0.0002	mg/L	02/19/02	12:42	0.0002	mg/L	JPN	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Calcium	EPA 200.7	30.9	mg/L	02/19/02	12:42	0.010	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Cadmium	EPA 200.7	<0.0005	mg/L	02/19/02	12:42	0.0005	mg/L	JPN	\$6.15
SW - 2	- SW - 2	Lena Road	02/13/02	09:20	Chromium	EPA 200.7	0.003	mg/L_	02/19/02	12:42	0.0005	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Cobalt	EPA 200.7	<0.001	mg/L	02/19/02	12:42	0.001	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Copper	EPA 200.7	<0.005	mg/L	02/19/02	12:42	0.005	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Iron	EPA 200.7	3.97	mg/L	02/19/02	12:42	0.010	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Lead	EPA 200.7	<0.005	mg/L	02/19/02	12:42	0.005	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Magnesium	EPA 200.7	15.6	mg/L	02/19/02	12:42	0.005	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Manganese	EPA 200.7	0.024	mg/L	02/19/02	12:42	0.005	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Nickel	EPA 200.7	0.003	mg/L	02/19/02	12:42	0.001	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Selenium	EPA 200.7	<0.010	mg/L	02/19/02	12:42	0.010	mg/L	JPN	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Silver	EPA 200.7	<0.002	mg/L	02/19/02	12:42	0.002	mg/L	JPN	\$3.70
	SW - 2	Lena Road	02/13/02	09:20	Sodium	EPA 273.1	68.1	mg/L	02/25/02	09:05	0.300	mg/L	JPN	\$3.70
SW - 2	 	Lena Road	02/13/02	09:20	Thallium	EPA 279.2	<0.0004	mg/L	02/19/02	19:13	0.0004	mg/L	JPN	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Vanadium	EPA 200.7	G 003	mg/L	02/19/02	12:42	0.0005	mg/L	JPN	\$3.70
SW - 2	SW - 2		02/13/02	09:20	Zinc	EPA 200.7	<0.010	mg/L	02/19/02	12:42	0.010	mg/L	JPN	\$3.70
SW - 2	SW - 2	Lena Road		09:20	Mercury	EPA 245.1	<0.100	ug/L	02/22/02	12:12	0.100	ug/L	wc	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Unionized Ammonia	DEP SOP 10/3/83	0.0001	mg/L	03/14/02	12:21		mg/L	JAG	\$4.90
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Ammonia as N	EPA 350.1	0.051	mg/L	02/13/02	14:29	0.009	mg/L	LK	\$4.39
SW - 2	SW - 2	Lena Roau	02/13/02		BOD	SM 5210B	<2.00	mg/L	02/13/02	07:30	2.00	mg/L	LB/WC	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20		EPA 410.4	261	mg/L	02/15/02	10:00	3.00	mg/L	LK	\$8.60
SW - 2	SW - 2	Lena Road	02/13/02	09:20	COD		 		02/11/02	15:30	1	CFU/100 ml		\$4.90
SW - 2	SW - 2	Lena Road	02/11/02	13:05	Fecal Coliform	SM 9222D	60	CFU/100 mi		13:45	0.500	rng/L	LK/ST	\$4.90
SW - 2	SW - 2	Lena Road	02/13/02	09:20	TDS	SM 2540C	596	mg/L	02/12/02		†		1	\$8.60
SW - 2	SW - 2	Lena Road	02/13/02	09:20	тос	EPA 415.1	90.4	mg/L	03/15/02	21:01	0.050	mg/L	ST	\$7.35
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Total Hardness	SM 2340 B	46.5	mg/L	02/21/02	14:09		mg/L_	D/.V	
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Total Nitrogen	Calculation	3.28	mg/L	02/14/02	11:31		mg/L	DW	\$8.95
SW - 2	SW - 2	Lena Road	02/13/02	09:20	Total Phosphorus	EPA 365.1	0.160	mg/L	02/14/02	14:27	0.002	mg/L	LB	\$6.15
SW - 2	SW - 2	Lena Road	02/13/02	09:20	TSS	SM 2540D	4.30	mg/L	02/14/02	08:10	0.500	mg/L	ST	\$4.90
					Lena	Road Surfac	e Wate	r 2 of 7	Tota	l Cost f	or Lena	a Road S	W-2	\$168.34



REPORT OF ANALYSI

P.E. LaMoreaux and Associates, Inc. Geochemistry Laboratory 4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

PART III ANALYTICAL RESULTS

FACILITY GMS #:

TEST SITE ID # : LENA RD SURFACE WATER

WELL NAME

: S I/LENA RD SURFACE WATER

CLASSIFICATION OF GROUNDWATER: G II

GROUND WATER ELEVATION (NGVD):

OR (MSL)

FEET BMP:

Report ID: 0202053859

SAMPLING DATE/TIME : 2/11/02 11:35:00

REPORT PERIOD (YR/QTR):

WELL PURGED (Y/N): Y

WELL TYPE:

COLLECTION DATE : 2/11/02 COLLECTION TIME : 11:35

COLLECTED BY: PELA

DATE RECEIVED IN LAB : 2/11/02

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
	ORGANICS						
	KC02441-		:				
	APPENDIX I VOLATILES (E	*	N			Completed	

Lagh gh Layed

(WAYER !

^{*}SUBMERSIBLE OR PERISTALIC PUMP

** BAILER

BAILER										
	ORGANICS			!				1		
	KC02441-02Y	1								
34506	1,1,1-trichloroethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.04	ug/l
34516	1,1,2,2-tetrachloroethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.04	ug/l
34511	1,1,2-trichloroethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.10	ug/l
34496	1,1-dichloroethane		N	EPA 8260	2/20/02	14:14	ND	ug/l	0.03	ug/l
34501	1,1-dichloroethene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.12	ug/l
34536	1,2-dichlorobenzene		N	EPA 8260	2/20/02	14:14	ND:	ug/l	0.03	ug/l
34531	1,2-dichloroethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.02	ug/l
34541	1,2-dichloropropane	•	N	EPA 8260	2/20/02	14:14	ND	սց/1	0.04	ug/l
34571	1,4-dichlorobenzene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.03	ug/l
34215	Acrylonitrile	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	1.50	ug/l
34030	Benzene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.04	ug/l
32101	Bromodichloromethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.08	ug/l
34413	Bromomethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.11	ug/l
32102	Carbon tetrachloride	•	N	EPA 8260	2/20/02	14:14	ND ·	ug/l	0.21	ug/l
34301	Chlorobenzene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.04	ug/l
34311	Chloroethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.10	ug/l
34418	Chloromethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.13	ug/l
34704	cis-1,3-dichloropropene	*	N	EPA 8260	2/20/02	14:14	ND .	ug/l	0.05	ug/l
32105	Dibromochloromethane	•	N	EPA 8260	2/20/02	14:14	ND }	ug/l	0.05	ug/l
34423	Dichloromethane		N	EPA 8260	2/20/02	14:14	ND	ug/l	0.03	ug/l
.34371	Ethylbenzene	•	N	EPA 8260	2/20/02	14:14	ND	սը/1	0.06	ug/l
81551	m,p-Xylenes	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.11	ug/l ;
77135	o-Xylene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.11	ug/l
34475	Tetrachloroethene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.14	ug/l
34010	Toluene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.11	ug/l
34546	trans-1,2-dichlorocthene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.06	ug/I



REPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.
Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

PART III ANALYTICAL RESULTS

FACILITY GMS #:

TEST SITE ID # : LENA RD SURFACE WATER

WELL NAME

: S I/LENA RD SURFACE WATER

CLASSIFICATION OF GROUNDWATER: GII

GROUND WATER ELEVATION (NGVD):

OR (MSL)

FEET BMP:

Report ID: 0202053859

SAMPLING DATE/TIME : 2/11/02 11:35:00

REPORT PERIOD (YR/QTR):

WELL PURGED (Y/N) : Y

WELL TYPE:

COLLECTION DATE : 2/11/02 COLLECTION TIME : 11:35 COLLECTED BY : PELA

DATE RECEIVED IN LAB : 2/11/02

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANAI DATE	YSIS TIME	ANAL' RESULTS	YSIS UNITS	DETEC LIMITS	CTION UNITS
34699	trans-1,3-dichloropropene		N	EPA 8260	2/20/02	14:14	ND	ug/l	0.04	ug/l
32104	Tribromomethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.12	ug/l
39180	Trichloroethene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.19	ug/l
34488	Trichlorofluoromethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.08	ug/l
32106	Trichloromethane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.03	ug/l
39175	Vinyl Chloride	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.17	ug/l
	KC02441-02Y									
77562	1,1,1,2-tetrachloroethane	*	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.1	ug/l
77443	1,2,3-Trichloropropane	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	0.3	ug/l
81595	2-Butanone	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	5.0	ug/l
77103	- 2-Hexanone		N -	EPA 8260	2/20/02	14:14	ND	ug/l	5.0	ug/l
78133	4-Methyl-2-pentanone	•	N -	EPA 8260	2/20/02	14:14	ND	ug/l	5.0	ug/l
81552	Acetone	•	N	EPA 8260	2/20/02	14:14	ND	ug/1	- 2.5	ug/l
73085	Bromochloromethane	•	N	EPA 8260	2/20/02	14:14	ND .	ug/l	0.5	=
81309	Carbon Disulfide	•	И	EPA 8260	2/20/02	14:14	ND	ug/l	4.1	ug/l ug/l
77093	cis 1,2-Dichloroethene	•	N	EPA 8260	2/20/02	14:14	ND_	ug/l	0.10	
34536	Dibromomethane	•	И	EPA 8260	2/20/02	14:14	ND	ug/l	0.10	ug/l
77424	Iodomethane .	•	N	EPA 8260	2/20/02	14:14	ND	- 1	0.5	ug/l
77128	Styrene	•	N.	EPA 8260	2/20/02	14:14	ND	ug/l		ug/l
49263	t-1,4-Dichloro-2-butene	•	N	EPA 8260	2/20/02	14:14	ND	ug/l	1.0	ug/l
77057	Vinyl Acetate		N	EPA 8260			_	ug/l	10.0	ug/l
	- 11,11100000	L	14	EPA 8400	2/20/02	14:14	ND	ug/l	10.0	ug/l

^{*}SUBMERSIBLE OR PERISTALIC PUMP

Page 3 of 3

^{**} BAILER



EPORT OF ANALYSIS

Geochemistry Laboratory 4320 Old Highway 37, Lakeland, Florida 33813 PHONE 863/646-8526

FAX 863/646-1042

PART III ANALYTICAL RESULTS

FACILITY GMS #:

TEST SITE ID #

LENA RD SURFACE WATER

WELL NAME

: S 1/LENA RD SURFACE WATER

CLASSIFICATION OF GROUNDWATER: GII

GROUND WATER ELEVATION (NGVD):

OR (MSL)

FEET BMP:

Report ID: 0202053859

SAMPLING DATE/TIME : 2/11/02 11:35:00

REPORT PERIOD (YR/QTR):

WELL PURGED (Y/N): Y

WELL TYPE:

COLLECTION DATE : 2/11/02 COLLECTION TIME : 11:35

COLLECTED BY: PELA

DATE RECEIVED IN LAB: 2/11/02

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANAL DATE		ANAL RESULTS	YSIS UNITS	DETEC LIMITS	CTION UNITS
	INORGANICS									
	KC02442-03S									
	CHLOROPHYLL A	*	N	10200 H	2/13/02	16:30	19.9	mg/m3	0.1	mg/m3

*SUBMERSIBLE OR PERISTALIC PUMP

" BAILER

ORGANICS		:			
KCu2442-					
EDB & DBCP/EW	•	N		Completed	

*SUBMERSIBLE OR PERISTALIC PUMP

** BAILER

	ORGANICS								1	1
	KC02442-02X-5									
38437	DIBROMCHLORPROPANE		N	EPA 504	3/8/02	14:13	ND :	ug/L	0.01	ug/L
46369	ETHYLENE DIBROMIDE	•	N	EPA 504	3/8/02	14:13	ND	ug/L	0.01	ug/L

^{*}SUBMERSIBLE OR PERISTALIC PUMP

[&]quot; BAILER



TEPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.
Geochemistry Laboratory

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

PART III ANALYTICAL RESULTS

FACILITY GMS #:

TEST 3ITE ID # : I ENA RD SURFACE WATER

WELL NAME

: S 2/LENA RD SURFACE WATER

CLASSIFICATION OF GROUNDWATER : G II

GROUND WATER ELEVATION (NGVD):

OR (MSL)

FEET BMP:

Report ID: 0202053859

SAMPLING DATE/TIME : 2.11/02 1:05:00

FAX 863/646-1042

REPORT PERIOD (YR/QTR):

WELL PURGED (Y/N) : Y

WELL TYPE:

COLLECTION DATE : 2/11/02 COLLECTION TIME : 13:05

COLLECTED BY: PELA

DATE RECEIVED IN LAB: 2/11/02

STORET	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANALYSIS DATE TIME	ANALYSIS RESULTS UNITS	DETECTION LIMITS UNITS
	ORGANICS						
	KC02443- APPENDIX I VOLATILES (E	•	N			Completed	

*SUBMERSIBLE OR PERISTALIC PUMP

_			_
_	HAII	LH	к

	ORGANICS							ļ		1
	KC02443-02Y									
34506	1,1,1-trichloroethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.04	ug/I
34516	1,1,2,2-tetrachloroethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.04	ug/l
34511	1,1,2-trichloroethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.10	ug/l
34496	1,1-dichloroethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.03	ug/l
34501	1,1-dichloroethene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.12	ug/l
34536	1,2-dichlorobenzene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.03	ug/l
34531	1,2-dichloroethane	•	N	EPA 8260	2/20/02	14:47	ND !	ug/l	0.02	ug/l
34541	1,2-dichloropropane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.04	ug/l
34571	1,4-dichlorobenzene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.03	ug/l
34215	Acrylonitrile	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	1.50	ug/1
34030	Benzene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.04	ug/l
32101	Bromodichloromethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.08	ug/l
34413	Bromomethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.11	ug/l
32102	Carbon tetrachloride	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.21	ug/l
34301	Chlorobenzene		N	EPA 8260	2/20/02	14:47	ND '	ug/l	0.04	- 1
34311	Chloroethane	•	И	EPA 8260	2/20/02	14:47	ND .	ug/l	0.04	ug/l ug/l
34418	Chloromethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.13	ug/l
34704	cis-1,3-dichloropropene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.05	ug/l
32105	Dibromochloromethane	•	N	EPA 8260	2/20/02	14:47	1	ug/l	0.05	ug/l
34423	Dichloromethane	•	N	EPA 8260	2/20/02	14:47	ND 5	ug/i	0.03	ug/l
34371	Ethylbenzene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.06	ug/l
81551	m,p-Xylenes	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.11	ug/l
77135	o-Xylene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.11	ug/l
34475	Tetrachloroethene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.14	ug/l
34010	Toluene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.14	ug/l
34546	trans-1,2-dichloroethene	•	N	EPA 8260	2/20/02	14:47	ND	ug/i	0.06	ug/l
•	•	•	1	1	1		1	~8.1	0.00	-6.



EPORT OF ANALYSIS

P.E. LaMoreaux and Associates, Inc.
Geochemistry Laboratory

4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

PART III ANALYTICAL RESULTS

FACILITY GMS #:

TEST SITE ID # : LENA RD SURFACE WATER

WELL NAME

: S 2/LENA RD SURFACE WATER

CLASSIFICATION OF GROUNDWATER: G II

GROUND WATER ELEVATION (NGVD):

OR (MSL)

FEET BMP:

Report ID: 0202053859

0202033037

SAMPLING DATE/TIME : 2/11/02 1:05:00

REPORT PERIOD (YR/QTR):

WELL PURGED (Y/N): Y

WELL TYPE:

COLLECTION DATE : 2/11/02 COLLECTION TIME : 13:05

COLLECTED BY: PELA

DATE RECEIVED IN LAB : 2/11/02

STORET CODE	PARAMETER MONITORED	SAMPLING METHOD	FIELD FILTERED Y/N	ANALYSIS METHOD	ANAI DATE		ANAL' RESULTS	YSIS UNITS	DETEC LIMITS	TION UNITS
34699	trans-1,3-dichloropropene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.04	ug/I
32104	Tribromomethane	*	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.12	ug/l
39180	Trichloroethene	•	И	EPA 8260	2/20/02	14:47	ND	ug/l	0.19	ug/l
34488	Trichlorofluoromethane		N	EPA 8260	2/20/02	14:47	ND	ug/l	0.08	ug/l
32106	Trichloromethane		N	EPA 8260	2/20/02	14:47	ND	ug/l	0.03	ug/l
39175	Vinyl Chloride	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.17	ug/l
	KC02443-02Y		i							
77562	1,1,1,2-tetrachiloroethane	*	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.1	ug/l
77443	1,2,3-Trichloropropane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.3	ug/l
81595	2-Butanone	*	N	EPA 8260	2/20/02	14:47	ND	ug/l	5.0	ug/l
77103	2-Hexanone	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	5.0	ug/l
78133	4-Methyl-2-pentanone	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	5.0	ug/l
81552	Acetone	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	2.5	ug/l
73085	Bromochloromethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.5	ug/l
81309	Carbon Disulfide	•	N	EPA 8260	2/20/02	14:47	ND	ug/I	4.1	ug/l
77093	cis 1,2-Dichloroethene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.10	ug/l
34536	Dibromomethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.3	ug/I
77424	Iodomethane	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	0.5	ug/l
77128	Styrene	•	И	EPA 8260	2/20/02	14:47	ND	ug/l	1.0	ug/l
49263	t-1,4-Dichloro-2-butene	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	10.0	ug/l
77057	Vinyl Acetate	•	N	EPA 8260	2/20/02	14:47	ND	ug/l	10.0	ug/l

^{*}SUBMERSIBLE OR PERISTALIC PUMP

Page 3 of 3

[&]quot; BAILER



PORT OF ANALYSIS

Geochemistry Laboratory 4320 Old Highway 37, Lakeland, Florida 33813

PHONE 863/646-8526

FAX 863/646-1042

0.01

ug/L

ug/L

PART III ANALYTICAL RESULTS

FACILITY GMS #:

TEST SITE ID #

: LENA-RD SURFACE WATER

WELL NAME

: S 2/LENA RD SURFACE WATER

CLASSIFICATION OF GROUNDWATER: G II

GROUND WATER ELEVATION (NGVD):

OR (MSL)

FIELD

N

FEET BMP:

Report ID: 0202053859

SAMPLING DATE/TIME : 2/11/02 1:05:00

REPORT PERIOD (YR/QTR):

WELL PURGED (Y/N) : Y

WELL TYPE:

COLLECTION DATE : 2/11/02 COLLECTION TIME : 13:05

COLLECTED BY: PELA

DATE RECEIVED IN LAB: 2/11/02

STORET	PARAMETER	SAMPLING	FILTERED	ANALYSIS	ANAL	YSIS	ANAL	YSIS	DETEC	TION	
CODE	MONITORED	METHOD	Y/N	METHOD	DATE	TIME	RESULTS	UNITS	LIMITS	UNITS	
	INORGANICS										
	KC02444-03S CHLOROPHYLL A	•	N	10 2 00 H	2/13/02	16:30	22.6	mg/m3	0.1	mg/m3	
*SUBME	RSIBLE OR PERISTALIC PUM	P							-	_	
** BAILER											
	ORGANICS										
	KC02444- EDB & DBCP/EW		N				Completed				
*SUBME	RSIBLE OR PERISTALIC PUM	P	<u> </u>		.I		<u>.</u>	<u>l</u>			
BAILER	-										
	ORGANICS		-					1			
38437	KC02444-02X-5 DIBROMCHLORPROPANE	•	N	EPA 504	3/8/02	14:42	ND !	ug/L	0.01	ug/L	

EPA 504

3/8/02

14:42

ND

ETHYLENE DIBROMIDE

46369

^{*}SUBMERSIBLE OR PERISTALIC PUMP

[&]quot; BAILER

REPORTING ADDRESS: ATTN: 100 200 100 100 100 100 100 100 100 100				43 Lal	320 kela (8	Old H and, Fl 863) 64	igh ori 6-8	z Associa iway 37 da 33813 3526 USTOD	•	INVOIC ATTN: CLIEN' ADDRE) (3 	38 58				
550 (507.)		1,121	I PROJECT LOCA	TION/ ·		-	1				REQUIRED				PAGE		OF		
	PROJECT LOCATION (i.d) PROJECT NO. PROJECT CONTACT PROJECT TEL. NO.		(S)OIL (O)THER	1717				100 AS	}		Jshe kaj	FIELD PARA			ıs	•			
SAMPLER NAME(S) SAMPLING SAMPLE IDENTIFICATION		/PE: (W)ATER	O S S		OF CONTA	AINE	ERS / CONTA	INER SIZE &	TYPE / PRE	SERVATIVE	SC (umnos/cm)	Ŧ.	TEMP (°C)	D.O.	~ '_N				
DATE	TIME	SAN	IPLE IDENT	IFICAT	TION	J F	1		CO	NITAIN	NER TYPES: (P)L/ PROXIDE (Su)LFL	ASTIC (G)LASS	(O)THER H)YDROCLORIC	(I)CED (O)THER		ļ			
2 /1. /sc	1175	5.1		1	(CT) in Calibration	~-) 132		1 5	7	\ P CU	1 - 2 - 1	1 8 20	0700016	480	6.48	13.3	5.07	20.4
	1305	5-2										1)	.) !	Post dia	-15 1 1	b. 49	21.6	5.42	6.4
	1305		1,						1	·			1						
		Dajri	<u> </u>			- -													
	2.2					\top							Transfer on the second						
		· · ·	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			+		<u></u>	200			İ							
	"	1=7	Blank			- ~		 					1						
	· ·				٦, ٤٤	+							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			· · · · · · · · · · · · · · · · · · ·			1
	in server		Gaune ?					<u> </u>		\dashv			1						
	parameter .	STOLE	Gouge	<u> </u>	3 4 .0	_		1							<u> </u>				
						-		1											1
						_		<u> </u>											
RELINQUIS	HED BY:		DATE	TIME	RECEIVED	BY:		!		REL	INQUISHED BY:	a de la composition della comp	DAT	E TIME	RECEIV	/ED BY:			1
\\\\	() .	. i	4,100	15.5											Name of the American		enis Santa Marieta	Sai Satta di Sir Sec.	
RECEIVE	101-45	PELA LA	BORATO PATE	RY US			100	LAB	ORATORY	RE	MARKS								

REPORTING ADDRESS: ATTN: CLIENT: Manager (a) ADDRESS:			P.E. LaMoreaux & Associates 4320 Old Highway 37 Lakeland, Florida 33813 (863) 646-8526 CHAIN OF CUSTODY							INVOICING ADDRESS: ATTN: CLIENT: ADDRESS:				F3859		
PROJECT NAME PROJECT LOCATION (Lan (1)	S)OII (O)THER	Τ				REQU	IRED	ANALYSIS				PAGE		OF		
ROJECT NO. PURCHASE ORDER NO. PROJECT TEL. NO.			Chroscophyll A	Iwl							Shetal:	ı	FIELD PAF	RAMETER	is	
SAMPLER NAME(S) SAMPLE IDENTIFICATION	TYPE: (W)ATER	<u>i</u>	NUMBER	OF C	IATNO				& TYPE / PRES (O)THER (H)YDROCLORIC	SERV		SC (nmnos/cm)	Hd	TEMP (°C)	D.O.	
-DATE TIME STOFF GAV	36	1,	Ab)	1	101	71 45	-با(063	1216 1216	480	6.98	18.3	5.07	2
		7	No. 1	1	Ĭ					On!	scalings Spiles	525	6.69	21.00	5.92	\int_{0}^{π}
	<u> </u>	1				1 11										
1 - A DUPLICATION	*	+									-					Ī
10490 Ton blank	^	+	<u> </u>	1	4	1 4	1									1
	-	+					<u>;</u>			_						1
		╁								-			-	-		1
ory &		- -				- -	<u> </u>			-						1
STAFF GAUGE 2 33.7		_					<u> </u>			<u> </u>		:	ļ <u></u>	-		1
STAFF GAUGE 1 34.0		\bot									.	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		<u> </u>	1	1
					_		1			_		ļ		 	-	-
							<u> </u>					<u> </u>	ļ	306	-	\downarrow
" TEMP BLOWIC										<u> </u>		l lacorii	150.5%	2.5	rili	┨.
RELINQUISHED BY: DATE TIME RECEIV	/ED BY:				·	RELINQUISHE	D BY:		DA	TE	TIME	RECEIV	ED BY:	4447 NT-4467.	a Regional and the	
RECEIVED FOR LABORATORY USE ON TRACE STATES AND		RDE	ACT AND AND ADDRESS OF	ORA	ORY:	ÎĒ/ARK										9