

# PBS& TRANSMITTAL

TO: Solid Waste Section  
Florida Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, FL 33619-1352

DATE: January 9, 2007

JOB NO.: 071893.00 1010

Phone: (407) 806-4339

From: Greg Mudd, P.G.

RE: Hardee County Landfill  
GMS ID# 4025C30001

Address/Office: 482 Keller Road  
Orlando, FL 32810

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via \_\_\_\_\_  
the following items:

- ☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples  
☐ Copy of Letter ☐ Change Order ☐ Specifications ☐

COPIES	DATE	NO.	DESCRIPTION
2	1/8/07		Second Half 2006 Water Quality Monitoring Report

THESE ARE TRANSMITTED As Checked Below:

- ☐ For approval ☐ Reviewed as submitted ☐ Resubmit \_\_\_\_\_ copies for approval  
☒ For your use ☐ Reviewed as noted ☐ Submit \_\_\_\_\_ copies for distribution  
☐ As requested ☐ Returned for corrections ☐ Return \_\_\_\_\_ corrected prints  
☐ For review and comment ☐ \_\_\_\_\_ ☐ \_\_\_\_\_  
☐ For bids due \_\_\_\_\_ 20\_\_\_\_  
☐ Prints returned after loan to us

REMARKS:

*[Signature]*

SIGNED \_\_\_\_\_

DISTRIBUTION Teresa Carver, Hardee County Landfill, 685 Airport Road, Wauchula, FL 3387308663; File

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
JAN 11 2007  
SOUTHWEST DISTRICT  
TAMPA



An employee-owned company

38414 NG

SW  
EW

January 8, 2007

Solid Waste Section  
Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, FL 33619-1352

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
JAN 11 2007  
SOUTHWEST DISTRICT  
TAMPA

**Re: Review of Semi-Annual Sampling Results  
Second Half 2006 Sampling Event  
Hardee County Solid Waste Disposal Facility  
GMS ID No. 4025C30001  
Long-term Care Permit No. 38414-007-SO**

Dear Sir or Madam:

On behalf of the Hardee County Solid Waste Department, PBS&J would like to present this review of the results of the second half 2006 sampling event at for the facility referenced above. This document is designed to comply with the requirements of Specific Condition 33 of the facility's permit, and was compiled in general accordance with the guidelines promulgated in Chapter 62-701.510(9) (a) of the Florida Administrative Code (FAC).

### BACKGROUND

The Hardee County Solid Waste Disposal Facility is an active Class I landfill which encompasses approximately 100 acres of land at 685 Airport Road in Hardee County, Florida. According to the facility's permit, the facility's water quality monitoring network is designed to monitor the groundwater in the surficial aquifer, surface water, and leachate. The groundwater monitoring network is designed to include seven monitoring wells, which are designated MW-1, MW-2, MW-4, MW-5, MW-8, MW-9, and MW-10. The facility's permit designates MW-1 MW-4 as background wells and the other wells as detection wells. Two wells are not currently active, MW-9, which was recently damaged by heavy equipment, and MW-10, which has not yet been installed. There are three other monitoring wells, MW-3, MW-6, and MW-7, which are designated by the permit as piezometers. The layout of the site illustrating the well locations is presented in Figure 1.

Specific Condition 29 of the facility's permit specifies that groundwater samples be collected from monitoring wells MW-1, MW-2, MW-4, MW-5, MW-8, MW-9, and MW-10 on a semiannual basis. The groundwater samples are analyzed for the parameters listed on the 40

Code of Federal Regulations (CFR) Part 258, Appendix I excluding the volatile organic compounds, as well as for total ammonia, iron, chlorides, mercury, nitrate, sodium, and total dissolved solids (TDS). These parameters are also listed in Specific Condition No. 29(c) of the facility's permit.

In addition, surface water is collected at one location, designated SW-2, during both semi-annual sampling events. The surface water sample is analyzed for the laboratory parameters listed in Specific Condition 27(c) of the permit.

According to Specific Condition 26 (a) of the permit, leachate is collected once per year, during the first semiannual sampling event, at Manhole 9. The leachate sample is analyzed for the laboratory parameters listed in the referenced specific condition.

## **SECOND HALF 2006 SAMPLING EVENT**

Samples of the groundwater and surface water were collected for laboratory analysis during the second half 2006 sampling. Leachate samples were not collected because they were sampled during the first half 2006 event. Descriptions of the results and findings of the second half 2006 sampling event are presented below. A Florida Department of Environmental Protection (FDEP) Ground Water Monitoring Report form for the sampling event is provided in Attachment A.

### **Sample Collection Methodology**

The second half 2006 sampling event was conducted on November 15, 2006 by PBS&J representatives. Groundwater samples were collected from wells MW-1, MW-2, MW-4, MW-5, and MW-8. The samples were collected in general accordance with the FDEP's Standard Operating Procedure for Field Activities (SOP 001/01). Prior to sample collection, the monitoring wells 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 elevations are referenced in feet above the National Geodetic Vertical Datum (NGVD). The groundwater elevation data is presented in Table 1.



The groundwater samples were carried to Environmental Conservation Laboratories, Inc. (ENCO) for analysis of the parameters listed in Specific Condition No. 29 of the facility's permit.

### **Groundwater Flow Pattern**

The groundwater level elevation data were plotted and contoured to generate the groundwater elevation contour map presented in Figure 1. The data indicated that the groundwater in the surficial aquifer beneath the landfill was flowing in a south-southeasterly direction at the time of this sampling event. The water table gradient measured 0.003 feet per foot beneath the site.

### **Groundwater Analytical Results**

The only organic parameter detected in the groundwater samples was acetone, in the sample collected at well MW-1. Conversely, the only inorganic parameters that were not detected in the groundwater samples were beryllium and thallium. A summary of the analytical results is presented in Table 2, and the complete laboratory analytical data package is provided in Attachment C-1.

The concentration of every parameter that was detected in the monitoring well network was compared to its Maximum Contaminant Level (MCL) or Secondary Drinking Water Standard (SDWS) in accordance with the Florida statutes. 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. Three parameters, pH, arsenic, and iron were detected in at least one well location at concentrations in excess of the regulatory criteria. The detection patterns with these analytes were as follows:

- pH – The pH was measured in the field during the well purging process. The pH reading was lower than the prescribed MCL range of 6.5 to 8.5 at all of the wells except MW-2, including the two background wells, MW-1 and MW-4.
- Iron - Iron has an SDWS of 300 micrograms per liter. ( $\mu\text{g/l}$ ). The iron concentration exceeded the standard in the samples collected at all of the wells in the network.
- Arsenic – Arsenic has an MCL of 10  $\mu\text{g/l}$ . Arsenic was detected at all of the wells in the network except MW-8, and the concentration at MW-4 exceeded the MCL.

### Surface Water Analytical Results

The only organic parameter detected in the surface water sample was carbon disulfide, and, as with the groundwater, there were numerous inorganic detections. The only inorganic parameters that were not detected in the surface water were antimony, beryllium, cadmium, chromium, lead, silver, thallium, and unionized ammonia. A summary of the surface water analytical results is presented in Table 3. The complete surface water analytical report is provided in Attachment C-2.

The concentrations of the inorganic parameters were compared to their respective Surface Water Cleanup Target Levels (SWCTLs) for Class III fresh water as a relative measure of the water quality. The SWCTLs are promulgated in Chapter 62-777, FAC. The only parameters that were detected in the surface water at a concentration in excess of its SWCTL or outside of its prescribed range were fecal coliform and dissolved oxygen (DO). The field DO reading was also lower than the target range.

It should be noted, too, that, although not detected, the minimum detection level for mercury was higher than the regulatory standard.

### SUMMARY AND CONCLUSIONS

The results of the second half 2006 sampling event at the Hardee County Solid Waste Disposal Facility were consistent with those of the recent sampling events. Most of the parameters in the analytical program were detected in the groundwater and surface water, but the only parameters that were detected at concentrations in excess of the regulatory standards were pH, arsenic, and iron in the groundwater, and DO and fecal coliform in the surface water.

If you have any questions regarding the information presented in this report, please call me at (407) 806-4339.

Very truly yours,



Greg Mudd, P.G.  
Senior Geologist

CC: Ms. Teresa Carver, Hardee County Solid Waste Department, 685 Airport Road,  
Wauchula, FL 33873 (2 copies)  
File, 071893.00 0100

**Table 3 - Hardee County Landfill Surface Water Analytical Summary  
Second Half 2006**

Analyte	Location:		SW-2
	Sample Identifier:		SW-2
	Date of Test:		11/18/2006
	Standard(1)	Units	
<b>Field Measurements</b>			
Temperature		deg. C	25.1
pH	6-8.5	STD	6.7
Conductivity	1275.00000	umhos/cm	235
Dissolved Oxygen (DO)	>5	mg/l	4
Turbidity	29+	NTU	9.3
<b>Inorganics</b>			
Antimony	4300	ug/l	<2.10
Arsenic	50	ug/l	3.35
Barium		ug/l	15.7
Beryllium	0.13	ug/l	<0.050
Carbonaceous BOD		ug/l	3.5
Cadmium	2.329 <sup>(2)</sup>	ug/l	<0.170
Chemical Oxygen Demand (COD)		ug/l	85
Chlorophyll A		mg/m <sup>3</sup>	7.90
Chromium	182.523 <sup>(3)</sup>	ug/l	<0.620
Cobalt		ug/l	0.273
Copper	20.411 <sup>(4)</sup>	ug/l	0.323
Fecal coliform	800	cfu/100ml	10000
Iron	1000	ug/l	947
Lead	10.215 <sup>(5)</sup>	ug/l	<0.280
Mercury	0.012	ug/l	<0.11
Nickel	113.245 <sup>(6)</sup>	ug/l	1.53
Nitrate		ug/l	0.102
Selenium	5	ug/l	0.197
Silver	0.07	ug/l	<0.033
Thallium	6.3	ug/l	<0.022
Total Dissolved Solids (TDS)		ug/l	346
Total Hardness		ug/l	250
Total Nitrogen		ug/l	1.77
Total Organic Carbon (TOC)		ug/l	13
Total Phosphorous		ug/l	0.750
Total Suspended Solids (TSS)		ug/l	6
Unionized Ammonia	20	ug/l	<0.003
Vanadium		ug/l	0.274
Zinc	260.430 <sup>(7)</sup>	ug/l	17.6
<b>Organics</b>			
Acetone		ug/l	<2.6
Acrylonitrile		ug/l	<1.7
Benzene	71.28	ug/l	<0.48
Bromochloromethane		ug/l	<0.93
Bromodichloromethane	22	ug/l	<0.22
Carbon disulfide		ug/l	60
Carbon tetrachloride	4.42	ug/l	<0.85
Chlorobenzene		ug/l	<0.21
Chloroethane		ug/l	<0.66
Dibromomethane		ug/l	<0.42
Dibromochloromethane	34	ug/l	<0.20

Analyte	Location:		SW-2
	Sample Identifier:		SW-2
	Date of Test:		11/18/2006
	Standard(1)	Units	
1,2-Dichlorobenzene		ug/l	<0.27
1,4-Dichlorobenzene		ug/l	<0.24
Dichloromethane	1580	ug/l	<1.0
1,2-Dibromo-3-chloropropane		ug/l	<0.0150
1,1-Dichloroethane		ug/l	<0.60
1,2-Dichloroethane		ug/l	<0.94
1,1-Dichloroethene	3.2	ug/l	<0.83
cis-1,2-Dichloroethene		ug/l	<0.75
trans-1,2-Dichloroethene		ug/l	<0.83
1,2-Dichloropropane		ug/l	<0.97
cis-1,3-Dichloropropene		ug/l	<0.20
trans-1,3-Dichloropropene		ug/l	<0.20
Ethylbenzene		ug/l	<0.99
Ethylene Dibromide		ug/l	<0.0120
2-Hexanone		ug/l	<2.1
Iodomethane		ug/l	<0.81
Methyl bromide		ug/l	<0.80
Chloromethane	470.8	ug/l	<0.82
2-Butanone		ug/l	<1.0
4-Methyl-2-pentanone		ug/l	<1.6
Styrene		ug/l	<0.19
1,1,1,2-Tetrachloroethane		ug/l	<0.24
1,1,2,2-Tetrachloroethane	10.8	ug/l	<0.20
t-1,4-Dichloro-2-butene		ug/l	<0.61
Tetrachloroethene		ug/l	<0.65
Toluene		ug/l	<0.25
1,1,1-Trichloroethane		ug/l	<0.88
1,1,2-Trichloroethane		ug/l	<0.44
Tribromomethane	360	ug/l	<0.48
Trichloroethene	80.7	ug/l	<0.71
Trichloromethane	470.8	ug/l	<0.89
Trichlorofluoromethane		ug/l	<0.70
1,2,3-Trichloropropane		ug/l	<0.34
Vinyl acetate		ug/l	<0.20
Vinyl chloride		ug/l	<0.52
Total xylenes		ug/l	<0.60

Abbreviations: mg/l = milligrams per liter; ug/l = micrograms per liter, NTU = nephelometric turbidity units;  
mg/m<sup>3</sup> = milligrams per cubic meter.

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

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

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

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

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

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

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

**ATTACHMENT C**

**Laboratory Analytical Reports**



**Attachment C-2**

**Surface Water Analytical Report**

**Environmental Conservation Laboratories, Inc.**

10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6946



www.encolabs.com

Wednesday, November 29, 2006

PBS&J (PB003)

Attn: Greg Mudd

482 South Keller Road

Orlando, FL 32810

**RE: Project Number: [none], Project Name/Desc: Hardee Co. Landfill  
ENCO Workorder: A605749**

Dear Greg Mudd,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, November 16, 2006.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

This data has been produced in accordance with NELAC standards (June, 2003). This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Ronald Wambles", is written over a horizontal line.

Ronald Wambles

Project Manager

Enclosure(s)

**Environmental Conservation Laboratories, Inc.**

10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6945



www.encolabs.com

Wednesday, November 29, 2006

PBS&J (PB003)

Attn: Greg Mudd

482 South Keller Road

Orlando, FL 32810

**RE: Project Number: [none], Project Name/Desc: Hardee Co. Landfill  
ENCO Workorder: A605749**

Dear Greg Mudd,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, November 16, 2006.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

This data has been produced in accordance with NELAC standards (June, 2003). This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Wambles", is written over a horizontal line.

Ronald Wambles

Project Manager

Enclosure(s)

### SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: SW2

Lab ID: A605749-01

Sampled: 11/16/06 09:30

Received: 11/16/06 12:25

Parameter	Hold Date/Time(s)	Prep Date/Time(s)	Analysis Date/Time(s)
[CALC]	11/18/06 09:30	11/18/06 11:41	11/17/2006 06:58
EPA 130.2	05/15/07	11/16/06 12:09	11/16/2006 12:20
EPA 160.1	11/23/06	11/20/06 19:30	11/21/2006 19:36
EPA 160.2	11/23/06	11/21/06 17:00	11/22/2006 09:53
EPA 300.0	11/18/06 09:30	11/16/06 09:54	11/17/2006 06:58
EPA 300.0	12/14/06	11/16/06 09:54	11/17/2006 06:58
EPA 350.1	12/14/06	11/21/06 10:09	11/28/2006 12:20
EPA 350.1	12/14/06	11/28/06 13:36	11/28/2006 14:55
EPA 351.2	12/14/06	11/18/06 11:41	11/22/2006 12:04
EPA 365.4	12/14/06	11/18/06 11:41	11/22/2006 14:27
EPA 405.1	11/18/06 09:30 11/21/06	11/16/06 14:59	11/21/2006 07:31
EPA 410.4	12/14/06	11/22/06 11:00	11/22/2006 18:00
EPA 415.1	12/14/06	11/21/06 09:34	11/22/2006 09:21
EPA 6020	05/15/07	11/17/06 12:00	11/19/2006 09:34
EPA 6020	05/15/07	11/17/06 12:00	11/20/2006 00:30
EPA 6020	05/15/07	11/17/06 12:00	11/20/2006 22:51
EPA 7470A	12/14/06	11/18/06 12:11	11/22/2006 06:41
EPA 8011	11/30/06	11/20/06 10:00	11/21/2006 19:48
EPA 8260B	11/30/06	11/17/06 12:32	11/18/2006 00:20





www.encolabs.com

### SAMPLE DETECTION SUMMARY

Client ID: SW2

Lab ID: A605749-01

Analyte	Results/Qual	MRL	Units	Method
Ammonia as N	0.18	0.020	mg/L	EPA 350.1
Arsenic	3.35	1.00	ug/L	EPA 6020
Barium	15.7	10.0	ug/L	EPA 6020
Biochemical Oxygen Demand	3.5	2.0	mg/L	EPA 405.1
Carbon disulfide	60	5.0	ug/L	EPA 8260B
Chemical Oxygen Demand	85	10	mg/L	EPA 410.4
Chloride	19	1.0	mg/L	EPA 300.0
Cobalt	0.273 I	1.00	ug/L	EPA 6020
Copper	0.323 I	0.500	ug/L	EPA 6020
Hardness	250	2.0	mg/L	EPA 130.2
Iron	947	10.0	ug/L	EPA 6020
Nickel	1.53	1.00	ug/L	EPA 6020
Nitrate as N	0.102	0.050	mg/L	EPA 300.0
Nitrate/Nitrite as N	0.102	0.050	mg/L	[CALC]
Nitrogen Total	1.77	0.050	mg/L	[CALC]
Phosphorus	0.750	0.030	mg/L	EPA 365.4
Selenium	0.197 I	1.00	ug/L	EPA 6020
Sodium	16400 D	500	ug/L	EPA 6020
Total Dissolved Solids	346	10	mg/L	EPA 160.1
Total Kjeldahl Nitrogen	1.66	0.05	mg/L	EPA 351.2
Total Organic Carbon	13	1.0	mg/L	EPA 415.1
Total Suspended Solids	6	3	mg/L	EPA 160.2
Vanadium	0.274 I	1.00	ug/L	EPA 6020
Zinc	17.6	10.0	ug/L	EPA 6020

# ANALYTICAL REPORT

Sample ID: SW2  
Lab #: A605749-01  
Prep. Method: EPA 5030B\_MS  
Analyzed: 11/18/06 By: kdm  
Anal. Method: EPA 8260B  
Anal. Batch:  
QC Batch: 6K17011

Project: Hardee Co. Landfill  
Work Order #: A605749  
Matrix: Surface Water  
Unit: ug/L  
Dilution Factor: 1

## Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,1,1,2-Tetrachloroethane	630-20-6	0.24 U	0.24	1.0	ug/L
1,1,1-Trichloroethane	71-55-6	0.88 U	0.88	1.0	ug/L
1,1,2,2-Tetrachloroethane	79-34-5	0.20 U	0.20	0.20	ug/L
1,1,2-Trichloroethane	79-00-5	0.44 U	0.44	1.0	ug/L
1,1-Dichloroethane	75-34-3	0.60 U	0.60	1.0	ug/L
1,1-Dichloroethene	75-35-4	0.83 U	0.83	1.0	ug/L
1,2,3-Trichloropropane	96-18-4	0.34 U	0.34	1.0	ug/L
1,2-Dichlorobenzene	95-50-1	0.27 U	0.27	1.0	ug/L
1,2-Dichloroethane	107-06-2	0.94 U	0.94	1.0	ug/L
1,2-Dichloropropane	78-87-5	0.97 U	0.97	1.0	ug/L
1,4-Dichlorobenzene	106-46-7	0.24 U	0.24	1.0	ug/L
2-Butanone	78-93-3	1.0 U	1.0	5.0	ug/L
2-Hexanone	591-78-6	2.1 U	2.1	5.0	ug/L
4-Methyl-2-pentanone	108-10-1	1.6 U	1.6	5.0	ug/L
Acetone	67-64-1	2.6 U	2.6	5.0	ug/L
Acrylonitrile	107-13-1	1.7 U	1.7	2.0	ug/L
Benzene	71-43-2	0.48 U	0.48	1.0	ug/L
Bromochloromethane	74-97-5	0.93 U	0.93	1.0	ug/L
Bromodichloromethane	75-27-4	0.22 U	0.22	0.40	ug/L
Bromoform	75-25-2	0.48 U	0.48	1.0	ug/L
Bromomethane	74-83-9	0.80 U	0.80	1.0	ug/L
Carbon disulfide	75-15-0	60	0.97	5.0	ug/L
Carbon tetrachloride	56-23-5	0.85 U	0.85	1.0	ug/L
Chlorobenzene	108-90-7	0.21 U	0.21	1.0	ug/L
Chloroethane	75-00-3	0.66 U	0.66	1.0	ug/L
Chloroform	67-66-3	0.89 U	0.89	1.0	ug/L
Chloromethane	74-87-3	0.82 U	0.82	1.0	ug/L
cis-1,2-Dichloroethene	156-59-2	0.75 U	0.75	1.0	ug/L
cis-1,3-Dichloropropene	10061-01-5	0.20 U	0.20	0.20	ug/L
Dibromochloromethane	124-48-1	0.20 U	0.20	0.20	ug/L
Dibromomethane	74-95-3	0.42 U	0.42	1.0	ug/L
Ethylbenzene	100-41-4	0.99 U	0.99	1.0	ug/L
Iodomethane	74-88-4	0.81 U	0.81	3.0	ug/L
m,p-Xylenes	108-38-3/106-42-3	0.55 U	0.55	2.0	ug/L
Methylene chloride	75-09-2	1.0 U	1.0	2.0	ug/L
o-Xylene	95-47-6	0.60 U	0.60	1.0	ug/L



www.encolabs.com

## ANALYTICAL REPORT

Sample ID: SW2  
Lab #: A605749-01  
Prep. Method: EPA 5030B\_MS  
Analyzed: 11/18/06 By: kdm  
Anal. Method: EPA 8260B  
Anal. Batch:  
QC Batch: 6K17011

Project: Hardee Co. Landfill  
Work Order #: A605749  
Matrix: Surface Water  
Unit: ug/L  
Dilution Factor: 1

### Volatile Organic Compounds by GCMS

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Styrene	100-42-5	0.19 U	0.19	1.0	ug/L
Tetrachloroethene	127-18-4	0.65 U	0.65	1.0	ug/L
Toluene	108-88-3	0.25 U	0.25	1.0	ug/L
trans-1,2-Dichloroethene	156-60-5	0.83 U	0.83	1.0	ug/L
trans-1,3-Dichloropropene	10061-02-6	0.20 U	0.20	0.20	ug/L
trans-1,4-Dichloro-2-butene	110-57-6	0.61 U	0.61	1.0	ug/L
Trichloroethene	79-01-6	0.71 U	0.71	1.0	ug/L
Trichlorofluoromethane	75-69-4	0.70 U	0.70	1.0	ug/L
Vinyl acetate	108-05-4	0.20 U	0.20	1.0	ug/L
Vinyl chloride	75-01-4	0.52 U	0.52	1.0	ug/L
Xylenes (Total)	1330-20-7	0.60 U	0.60	1.0	ug/L

Surrogate Recovery		Result	Spike Level	% Recovery	% Recovery Limits
4-Bromofluorobenzene	460-00-4	52	50.0	105 %	57.1-125
Dibromofluoromethane	1868-53-7	60	50.0	120 %	49.8-137
Toluene-d8	2037-26-5	45	50.0	91 %	87.6-125



www.encolabs.com

## ANALYTICAL REPORT

Sample ID: SW2  
Lab #: A605749-01  
Prep. Method: EPA 504/8011  
Analyzed: 11/21/06 By: RC  
Anal. Method: EPA 8011  
Anal. Batch:  
QC Batch: 6K20006

Project: Hardee Co. Landfill  
Work Order #: A605749  
Matrix: Surface Water  
Unit: ug/L  
Dilution Factor: 1

### Semivolatile Organic Compounds by GC

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
1,2-Dibromo-3-chloropropane	96-12-8	0.0150 U	0.0150	0.0200	ug/L
1,2-Dibromoethane	106-93-4	0.0120 U	0.0120	0.0200	ug/L
<u>Surrogate Recovery</u>					
1,3-Dichlorobenzene	541-73-1	0.295	0.250	118 %	53.3-127





www.encolabs.com

### ANALYTICAL REPORT

Sample ID: SW2  
Lab #: A605749-01

Project: Hardee Co. Landfill  
Work Order #: A605749  
Matrix: Surface Water

#### Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Mercury	7439-97-6	0.11 U	0.11	0.20	ug/L	EPA 7470A	EPA 7470A	6K17015

#### Metals by EPA 6000/7000 Series Methods

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Antimony	7440-36-0	2.10 U, D	2.10	5.00	ug/L
Arsenic	7440-38-2	3.35	0.200	1.00	ug/L
Barium	7440-39-3	15.7	1.17	10.0	ug/L
Beryllium	7440-41-7	0.050 U	0.050	0.050	ug/L
Cadmium	7440-43-9	0.170 U	0.170	0.500	ug/L
Chromium	7440-47-3	0.620 U	0.620	1.00	ug/L
Cobalt	7440-48-4	0.273 I	0.041	1.00	ug/L
Copper	7440-50-8	0.323 I	0.310	0.500	ug/L
Iron	7439-89-6	947	3.58	10.0	ug/L
Lead	7439-92-1	0.280 U	0.280	1.00	ug/L
Nickel	7440-02-0	1.53	0.260	1.00	ug/L
Selenium	7782-49-2	0.197 I	0.150	1.00	ug/L
Silver	7440-22-4	0.033 U	0.033	0.050	ug/L
Sodium	7440-23-5	16400 D	192	500	ug/L
Thallium	7440-28-0	0.022 U	0.022	0.050	ug/L
Vanadium	7440-62-2	0.274 I	0.260	1.00	ug/L
Zinc	7440-66-6	17.6	10.0	10.0	ug/L



www.encolabs.com

## ANALYTICAL REPORT

Sample ID: SW2  
Lab #: A605749-01

Project: Hardee Co. Landfill  
Work Order #: A605749  
Matrix: Surface Water

### Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	MDL	MRL	Units	Analysis Method	Prep Method	Analytical Batch
Ammonia as N	7664-41-7	0.18	0.003	0.020	mg/L	EPA 350.1	Same	6K21004
Biochemical Oxygen Demand	NA	3.5	1.4	2.0	mg/L	EPA 405.1	NO PREP	6K16009
Chemical Oxygen Demand	NA	85	7.0	10	mg/L	EPA 410.4	NO PREP	6K22003
Chloride	16887-00-6	19	0.05	1.0	mg/L	EPA 300.0	NA	6K16003
Hardness	NA	250	1.9	2.0	mg/L	EPA 130.2	NO PREP	6K16011
Nitrate as N	NA	0.102	0.008	0.050	mg/L	EPA 300.0	NA	6K16003
Nitrite as N	NA	0.007 U	0.007	0.050	mg/L	EPA 300.0	NA	6K16003
Phosphorus	7723-14-0	0.750	0.020	0.030	mg/L	EPA 365.4	Same	6K18002
Total Dissolved Solids	NA	346	10	10	mg/L	EPA 160.1	NO PREP	6K20018
Total Kjeldahl Nitrogen	NA	1.66	0.04	0.05	mg/L	EPA 351.2	Same	6K18001
Total Organic Carbon	NA	13	0.30	1.0	mg/L	EPA 415.1	NO PREP	6K21002
Total Suspended Solids	NA	6	3	3	mg/L	EPA 160.2	NO PREP	6K21025
Unionized ammonia as N	NA	0.003 U	0.003	0.020	mg/L	EPA 350.1	NO PREP	6K28012

### Classical Chemistry Parameters

Parameter	CAS Number	Analytical Results	MDL	MRL	Units
Nitrate/Nitrite as N		0.102	0.007	0.050	mg/L
Nitrogen Total		1.77	0.007	0.050	mg/L



www.encolabs.com

**QUALITY CONTROL**

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	--------------

**Volatile Organic Compounds by GCMS - Quality Control**

Batch 6K17011 - EPA 5030B\_MS

Blank (6K17011-BLK1)

Prepared: 11/17/2006 12:32 Analyzed: 11/17/2006 15:05

1,1,1,2-Tetrachloroethane	0.24 U	1.0	ug/L
1,1,1-Trichloroethane	0.88 U	1.0	ug/L
1,1,2,2-Tetrachloroethane	0.20 U	0.20	ug/L
1,1,2-Trichloroethane	0.44 U	1.0	ug/L
1,1-Dichloroethane	0.60 U	1.0	ug/L
1,1-Dichloroethene	0.83 U	1.0	ug/L
1,2,3-Trichloropropane	0.34 U	1.0	ug/L
1,2-Dichlorobenzene	0.27 U	1.0	ug/L
1,2-Dichloroethane	0.94 U	1.0	ug/L
1,2-Dichloropropane	0.97 U	1.0	ug/L
1,4-Dichlorobenzene	0.24 U	1.0	ug/L
2-Butanone	1.0 U	5.0	ug/L
2-Hexanone	2.1 U	5.0	ug/L
4-Methyl-2-pentanone	1.6 U	5.0	ug/L
Acetone	2.6 U	5.0	ug/L
Acrylonitrile	1.7 U	2.0	ug/L
Benzene	0.48 U	1.0	ug/L
Bromochloromethane	0.93 U	1.0	ug/L
Bromodichloromethane	0.22 U	0.40	ug/L
Bromoform	0.48 U	1.0	ug/L
Bromomethane	0.80 U	1.0	ug/L
Carbon disulfide	0.97 U	5.0	ug/L
Carbon tetrachloride	0.85 U	1.0	ug/L
Chlorobenzene	0.21 U	1.0	ug/L
Chloroethane	0.66 U	1.0	ug/L
Chloroform	0.89 U	1.0	ug/L
Chloromethane	0.82 U	1.0	ug/L
cis-1,2-Dichloroethene	0.75 U	1.0	ug/L
cis-1,3-Dichloropropene	0.20 U	0.20	ug/L
Dibromochloromethane	0.20 U	0.20	ug/L
Dibromomethane	0.42 U	1.0	ug/L
Ethylbenzene	0.99 U	1.0	ug/L
Iodomethane	0.81 U	3.0	ug/L
m,p-Xylenes	0.55 U	2.0	ug/L
Methylene chloride	1.0 U	2.0	ug/L
o-Xylene	0.60 U	1.0	ug/L
Styrene	0.19 U	1.0	ug/L
Tetrachloroethene	0.65 U	1.0	ug/L
Toluene	0.25 U	1.0	ug/L
trans-1,2-Dichloroethene	0.83 U	1.0	ug/L
trans-1,3-Dichloropropene	0.20 U	0.20	ug/L
trans-1,4-Dichloro-2-butene	0.61 U	1.0	ug/L
Trichloroethene	0.71 U	1.0	ug/L
Trichlorofluoromethane	0.70 U	1.0	ug/L
Vinyl acetate	0.20 U	1.0	ug/L

### QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	--------------

#### Volatile Organic Compounds by GCMS - Quality Control

Batch 6K17011 - EPA 5030B\_MS

Blank (6K17011-BLK1) Continued

Prepared: 11/17/2006 12:32 Analyzed: 11/17/2006 15:05

Vinyl chloride	0.52 U	1.0	ug/L							
Xylenes (Total)	0.60 U	1.0	ug/L							
Surrogate: Toluene-d8	45		ug/L	50.0		91	87.6-125			
Surrogate: 4-Bromofluorobenzene	50		ug/L	50.0		99	57.1-125			
Surrogate: Dibromofluoromethane	59		ug/L	50.0		117	49.8-137			

LCS (6K17011-BS1)

Prepared: 11/17/2006 12:32 Analyzed: 11/17/2006 14:36

1,1-Dichloroethene	15	1.0	ug/L	20.0		76	55.1-177			
Benzene	16	1.0	ug/L	20.0		82	64.9-144			
Chlorobenzene	15	1.0	ug/L	20.0		77	63.5-136			
Toluene	16	1.0	ug/L	20.0		82	68.4-128			
Trichloroethene	15	1.0	ug/L	20.0		77	70.2-128			
Surrogate: Toluene-d8	46		ug/L	50.0		92	87.6-125			
Surrogate: 4-Bromofluorobenzene	51		ug/L	50.0		103	57.1-125			
Surrogate: Dibromofluoromethane	63		ug/L	50.0		126	49.8-137			

Matrix Spike (6K17011-MS1)

Source: A605752-01

Prepared: 11/17/2006 12:32 Analyzed: 11/17/2006 15:34

1,1-Dichloroethene	16	1.0	ug/L	20.0	0.83 U	78	55.1-177			
Benzene	17	1.0	ug/L	20.0	0.48 U	83	65-143			
Chlorobenzene	15	1.0	ug/L	20.0	0.21 U	73	63.5-136			
Toluene	16	1.0	ug/L	20.0	0.25 U	81	68.4-128			
Trichloroethene	15	1.0	ug/L	20.0	0.71 U	74	70.2-128			
Surrogate: Toluene-d8	46		ug/L	50.0		91	87.6-125			
Surrogate: 4-Bromofluorobenzene	50		ug/L	50.0		100	57.1-125			
Surrogate: Dibromofluoromethane	60		ug/L	50.0		121	49.8-137			

Matrix Spike Dup (6K17011-MSD1)

Source: A605752-01

Prepared: 11/17/2006 12:32 Analyzed: 11/17/2006 16:03

1,1-Dichloroethene	15	1.0	ug/L	20.0	0.83 U	77	55.1-177	0.7	15.6	
Benzene	17	1.0	ug/L	20.0	0.48 U	83	65-143	0.3	11.8	
Chlorobenzene	14	1.0	ug/L	20.0	0.21 U	71	63.5-136	2	18.9	
Toluene	16	1.0	ug/L	20.0	0.25 U	82	68.4-128	1	12.4	
Trichloroethene	14	1.0	ug/L	20.0	0.71 U	72	70.2-128	4	13.3	
Surrogate: Toluene-d8	46		ug/L	50.0		91	87.6-125			
Surrogate: 4-Bromofluorobenzene	50		ug/L	50.0		99	57.1-125			
Surrogate: Dibromofluoromethane	61		ug/L	50.0		122	49.8-137			

#### Semivolatile Organic Compounds by GC - Quality Control

Batch 6K20006 - EPA 504/8011

Blank (6K20006-BLK1)

Prepared: 11/20/2006 09:59 Analyzed: 11/21/2006 16:44

1,2-Dibromoethane	0.0120 U	0.0200	ug/L							
1,2-Dibromo-3-chloropropane	0.0150 U	0.0200	ug/L							
Surrogate: 1,3-Dichlorobenzene	0.292		ug/L	0.250		117	53.3-127			

LCS (6K20006-BS1)

Prepared: 11/20/2006 09:59 Analyzed: 11/21/2006 16:55

1,2-Dibromoethane	0.236	0.0200	ug/L	0.250		94	56.3-121			
1,2-Dibromo-3-chloropropane	0.281	0.0200	ug/L	0.250		113	65.7-152			



### QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	--------------

#### Semivolatile Organic Compounds by GC - Quality Control

Batch 6K20006 - EPA 504/8011

##### LCS (6K20006-BS1) Continued

Prepared: 11/20/2006 09:59 Analyzed: 11/21/2006 16:55

Surrogate: 1,3-Dichlorobenzene	0.240		ug/L	0.250		96	53.3-127			
Matrix Spike (6K20006-MS1)		Source: A605791-01								
Prepared: 11/20/2006 09:59 Analyzed: 11/21/2006 17:06										
1,2-Dibromoethane	0.227	0.0200	ug/L	0.250	0.0120 U	91	56.3-121			
1,2-Dibromo-3-chloropropane	0.291	0.0200	ug/L	0.250	0.0150 U	117	65.7-152			
Surrogate: 1,3-Dichlorobenzene	0.188		ug/L	0.250		75	53.3-127			
Matrix Spike Dup (6K20006-MSD1)		Source: A605791-01								
Prepared: 11/20/2006 09:59 Analyzed: 11/21/2006 17:16										
1,2-Dibromoethane	0.232	0.0200	ug/L	0.250	0.0120 U	93	56.3-121	2	18.6	
1,2-Dibromo-3-chloropropane	0.293	0.0200	ug/L	0.250	0.0150 U	117	65.7-152	0.4	25.3	
Surrogate: 1,3-Dichlorobenzene	0.224		ug/L	0.250		90	53.3-127			

#### Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 6K16021 - EPA 3005A

##### Blank (6K16021-BLK1)

Prepared: 11/17/2006 12:00 Analyzed: 11/20/2006 18:52

Antimony	0.298 I	0.500	ug/L							
Arsenic	0.200 U	1.00	ug/L							
Barium	1.17 U	10.0	ug/L							
Beryllium	0.050 U	0.050	ug/L							
Cadmium	0.170 U	0.500	ug/L							
Chromium	0.620 U	1.00	ug/L							
Cobalt	0.051 I	1.00	ug/L							
Copper	0.310 U	0.500	ug/L							
Iron	3.58 U	10.0	ug/L							
Lead	0.280 U	1.00	ug/L							
Nickel	0.260 U	1.00	ug/L							
Selenium	0.150 U	1.00	ug/L							
Silver	0.033 U	0.050	ug/L							
Sodium	19.2 U	50.0	ug/L							
Thallium	0.022 U	0.050	ug/L							
Vanadium	0.260 U	1.00	ug/L							
Zinc	10.0 U	10.0	ug/L							

##### LCS (6K16021-BS1)

Prepared: 11/17/2006 12:00 Analyzed: 11/20/2006 20:02

Antimony	52.6	0.500	ug/L	50.0		105	85-115			
Arsenic	44.0	1.00	ug/L	50.0		88	85-115			
Barium	49.9	10.0	ug/L	50.0		100	85-115			
Beryllium	50.5	0.050	ug/L	50.0		101	85-115			
Cadmium	48.8	0.500	ug/L	50.0		98	85-115			
Chromium	49.3	1.00	ug/L	50.0		99	85-115			
Cobalt	50.9	1.00	ug/L	50.0		102	85-115			
Copper	51.1	0.500	ug/L	50.0		102	85-115			
Iron	51.7	10.0	ug/L	50.0		103	85-115			
Lead	50.9	1.00	ug/L	50.0		102	85-115			
Nickel	50.9	1.00	ug/L	50.0		102	85-115			
Selenium	45.0	1.00	ug/L	50.0		90	85-115			

# QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
<b>Metals by EPA 6000/7000 Series Methods - Quality Control</b>										
<i>Batch 6K16021 - EPA 3005A</i>										
<b>LCS (6K16021-BS1) Continued</b>				Prepared: 11/17/2006 12:00 Analyzed: 11/19/2006 01:10						
Silver	5.07	0.050	ug/L	5.00		101	85-115			
Sodium	522	50.0	ug/L	500		104	85-115			
Thallium	51.8	0.050	ug/L	50.0		104	85-115			
Vanadium	49.8	1.00	ug/L	50.0		100	85-115			
Zinc	49.8	10.0	ug/L	50.0		100	85-115			
<b>Matrix Spike (6K16021-MS1)</b>				Source: A605747-02	Prepared: 11/17/2006 12:00 Analyzed: 11/20/2006 20:10					
Antimony	552	5.00	ug/L	500	2.92	110	70-130			
Arsenic	451	10.0	ug/L	500	2.00 U	90	70-130			
Barium	512	100	ug/L	500	11.7 U	102	70-130			
Beryllium	501	0.500	ug/L	500	0.500 U	100	70-130			
Cadmium	490	5.00	ug/L	500	1.70 U	98	70-130			
Chromium	502	10.0	ug/L	500	6.20 U	100	70-130			
Cobalt	506	10.0	ug/L	500	0.473	101	70-130			
Copper	515	5.00	ug/L	500	3.10 U	103	70-130			
Iron	528	100	ug/L	500	35.8 U	106	70-130			
Lead	499	10.0	ug/L	500	2.80 U	100	70-130			
Nickel	517	10.0	ug/L	500	2.60 U	103	70-130			
Selenium	467	10.0	ug/L	500	1.50 U	93	70-130			
Silver	51.1	0.500	ug/L	50.0	0.330 U	102	70-130			
Sodium	5320	500	ug/L	5000	192 U	106	70-130			
Thallium	507	0.500	ug/L	500	0.220 U	101	70-130			
Vanadium	504	10.0	ug/L	500	2.60 U	101	70-130			
Zinc	497	100	ug/L	500	100 U	99	70-130			
<b>Matrix Spike Dup (6K16021-MSD1)</b>				Source: A605747-02	Prepared: 11/17/2006 12:00 Analyzed: 11/20/2006 20:19					
Antimony	552	5.00	ug/L	500	2.92	110	70-130	0.01	20	
Arsenic	458	10.0	ug/L	500	2.00 U	92	70-130	2	20	
Barium	505	100	ug/L	500	11.7 U	101	70-130	1	20	
Beryllium	491	0.500	ug/L	500	0.500 U	98	70-130	2	20	
Cadmium	490	5.00	ug/L	500	1.70 U	98	70-130	0.009	20	
Chromium	500	10.0	ug/L	500	6.20 U	100	70-130	0.4	20	
Cobalt	509	10.0	ug/L	500	0.473	102	70-130	0.7	20	
Copper	510	5.00	ug/L	500	3.10 U	102	70-130	0.9	20	
Iron	537	100	ug/L	500	35.8 U	107	70-130	2	20	
Lead	505	10.0	ug/L	500	2.80 U	101	70-130	1	20	
Nickel	515	10.0	ug/L	500	2.60 U	103	70-130	0.3	20	
Selenium	473	10.0	ug/L	500	1.50 U	95	70-130	1	20	
Silver	51.5	0.500	ug/L	50.0	0.330 U	103	70-130	0.6	20	
Sodium	5470	500	ug/L	5000	192 U	109	70-130	3	20	
Thallium	517	0.500	ug/L	500	0.220 U	103	70-130	2	20	
Vanadium	498	10.0	ug/L	500	2.60 U	100	70-130	1	20	
Zinc	493	100	ug/L	500	100 U	99	70-130	0.9	20	
<b>Post Spike (6K16021-PS1)</b>				Source: A605747-02	Prepared: 11/18/2006 13:55 Analyzed: 11/19/2006 01:35					
Arsenic	41.8	1.00	ug/L	49.5	0.047	84	75-125			
Barium	47.4	10.0	ug/L	49.5	0.007	96	75-125			

### QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	--------------

#### Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 6K16021 - EPA 3005A

Post Spike (6K16021-PS1) Continued Source: A605747-02 Prepared: 11/18/2006 13:55 Analyzed: 11/19/2006 01:35

Beryllium	47.6	0.050	ug/L	49.5	-0.030	96	75-125
Cadmium	46.8	0.500	ug/L	49.5	-0.010	95	75-125
Chromium	46.9	1.00	ug/L	49.5	0.148	94	75-125
Cobalt	49.1	1.00	ug/L	49.5	0.047	99	75-125
Copper	47.8	0.500	ug/L	49.5	-0.082	97	75-125
Iron	49.5	10.0	ug/L	49.5	0.717	98	75-125
Lead	48.0	1.00	ug/L	49.5	-0.063	97	75-125
Nickel	48.5	1.00	ug/L	49.5	-0.045	98	75-125
Selenium	45.3	1.00	ug/L	49.5	0.056	91	75-125
Silver	4.94	0.050	ug/L	4.95	0.025	99	75-125
Sodium	509	50.0	ug/L	495	-16.8	106	75-125
Thallium	48.9	0.050	ug/L	49.5	-0.109	99	75-125
Vanadium	47.6	1.00	ug/L	49.5	-0.215	97	75-125
Zinc	47.3	10.0	ug/L	49.5	0.963	94	75-125

Post Spike (6K16021-PS2) Source: A605747-02 Prepared: 11/19/2006 15:55 Analyzed: 11/19/2006 22:05

Arsenic	42.4	1.00	ug/L	49.5	0.047	86	75-125
Barium	48.5	10.0	ug/L	49.5	0.007	98	75-125
Beryllium	46.5	0.050	ug/L	49.5	-0.030	94	75-125
Cadmium	46.5	0.500	ug/L	49.5	-0.010	94	75-125
Chromium	47.4	1.00	ug/L	49.5	0.148	96	75-125
Cobalt	47.9	1.00	ug/L	49.5	0.047	97	75-125
Copper	48.0	0.500	ug/L	49.5	-0.082	97	75-125
Iron	49.4	10.0	ug/L	49.5	0.717	98	75-125
Lead	47.2	1.00	ug/L	49.5	-0.063	95	75-125
Nickel	47.3	1.00	ug/L	49.5	-0.045	96	75-125
Selenium	44.3	1.00	ug/L	49.5	0.056	89	75-125
Silver	4.89	0.050	ug/L	4.95	0.025	98	75-125
Sodium	498	50.0	ug/L	495	-16.8	104	75-125
Thallium	47.4	0.050	ug/L	49.5	-0.109	96	75-125
Vanadium	49.4	1.00	ug/L	49.5	-0.215	100	75-125
Zinc	46.4	10.0	ug/L	49.5	0.963	92	75-125

Post Spike (6K16021-PS3) Source: A605747-01 Prepared: 11/20/2006 06:00 Analyzed: 11/20/2006 20:27

Antimony	51.8	0.500	ug/L	49.5	0.665	103	75-125
----------	------	-------	------	------	-------	-----	--------

Batch 6K17015 - EPA 7470A

Blank (6K17015-BLK1) Prepared: 11/18/2006 12:11 Analyzed: 11/22/2006 05:07

Mercury	0.11 U	0.20	ug/L
---------	--------	------	------

LCS (6K17015-BS1) Prepared: 11/18/2006 12:11 Analyzed: 11/22/2006 05:10

Mercury	4.9	0.20	ug/L	5.00	98	93-111
---------	-----	------	------	------	----	--------

Matrix Spike (6K17015-MS1) Source: A605173-05 Prepared: 11/18/2006 12:11 Analyzed: 11/22/2006 05:17

Mercury	5.2	0.20	ug/L	5.00	0.11 U	104	85-115
---------	-----	------	------	------	--------	-----	--------

Matrix Spike Dup (6K17015-MSD1) Source: A605173-05 Prepared: 11/18/2006 12:11 Analyzed: 11/22/2006 05:20

Mercury	5.2	0.20	ug/L	5.00	0.11 U	105	85-115	0.3	12
---------	-----	------	------	------	--------	-----	--------	-----	----

#### Classical Chemistry Parameters - Quality Control

# QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
<b>Classical Chemistry Parameters - Quality Control</b>										
<i>Batch 6K16003 - NA</i>										
<b>Blank (6K16003-BLK1)</b>				Prepared: 11/16/2006 09:54 Analyzed: 11/16/2006 11:46						
Nitrate as N	0.008 U	0.050	mg/L							
Nitrite as N	0.007 U	0.050	mg/L							
Chloride	0.05 U	1.0	mg/L							
<b>LCS (6K16003-BS1)</b>				Prepared: 11/16/2006 09:54 Analyzed: 11/16/2006 12:06						
Nitrate as N	5.28	0.050	mg/L	5.00		106	90-110			
Nitrite as N	5.28	0.050	mg/L	5.00		106	90-110			
Chloride	250	1.0	mg/L	250		98	90-110			
<b>Matrix Spike (6K16003-MS1)</b>				Source: A605641-05		Prepared: 11/16/2006 09:54 Analyzed: 11/16/2006 12:27				
Nitrate as N	5.34	0.050	mg/L	5.10	0.252	100	90-110			
Nitrite as N	5.02	0.050	mg/L	5.10	0.007 U	98	90-110			
Chloride	240	1.0	mg/L	255	5.7	91	90-110			
<b>Matrix Spike Dup (6K16003-MSD1)</b>				Source: A605641-05		Prepared: 11/16/2006 09:54 Analyzed: 11/16/2006 12:47				
Nitrate as N	4.94	0.050	mg/L	5.10	0.252	92	90-110	8	23	
Nitrite as N	4.62	0.050	mg/L	5.10	0.007 U	91	90-110	8	22	
Chloride	220 QM-07	1.0	mg/L	255	5.7	84	90-110	8	26	QM-07
<i>Batch 6K16009 - NO PREP</i>										
<b>Blank (6K16009-BLK1)</b>				Prepared: 11/16/2006 09:10 Analyzed: 11/21/2006 07:31						
Biochemical Oxygen Demand	1.4 B-04, U	2.0	mg/L							B-04
<b>LCS (6K16009-BS1)</b>				Prepared: 11/16/2006 09:10 Analyzed: 11/21/2006 07:31						
Biochemical Oxygen Demand	220	2.0	mg/L	198		111	85-115			
<b>Duplicate (6K16009-DUP1)</b>				Source: A605391-01		Prepared: 11/16/2006 09:10 Analyzed: 11/21/2006 07:31				
Biochemical Oxygen Demand	2.9	2.0	mg/L	3.3				12	25	
<i>Batch 6K16011 - NO PREP</i>										
<b>Blank (6K16011-BLK1)</b>				Prepared: 11/16/2006 12:09 Analyzed: 11/16/2006 12:20						
Hardness	1.9 U	2.0	mg/L							
<b>LCS (6K16011-BS1)</b>				Prepared: 11/16/2006 12:09 Analyzed: 11/16/2006 12:20						
Hardness	210	2.0	mg/L	200		103	85-113			
<b>Matrix Spike (6K16011-MS1)</b>				Source: A605668-01		Prepared: 11/16/2006 12:09 Analyzed: 11/16/2006 12:20				
Hardness	280	2.0	mg/L	167	140	88	85-113			
<b>Matrix Spike Dup (6K16011-MSD1)</b>				Source: A605668-01		Prepared: 11/16/2006 12:09 Analyzed: 11/16/2006 12:20				
Hardness	280	2.0	mg/L	167	140	88	85-113	0.2	17	
<i>Batch 6K18001 - Same</i>										
<b>Blank (6K18001-BLK1)</b>				Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 11:55						
Total Kjeldahl Nitrogen	0.04 U	0.05	mg/L							
<b>LCS (6K18001-BS1)</b>				Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 11:56						
Total Kjeldahl Nitrogen	2.50	0.05	mg/L	2.50		100	88.7-113			
<b>Matrix Spike (6K18001-MS1)</b>				Source: A605749-01		Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 12:05				
Total Kjeldahl Nitrogen	4.07	0.05	mg/L	2.50	1.66	96	88.7-113			
<b>Matrix Spike Dup (6K18001-MSD1)</b>				Source: A605749-01		Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 12:06				
Total Kjeldahl Nitrogen	4.05	0.05	mg/L	2.50	1.66	95	88.7-113	0.5	10	
<i>Batch 6K18002 - Same</i>										

### QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	--------------

#### Classical Chemistry Parameters - Quality Control

##### Batch 6K18002 - Same

Blank (6K18002-BLK1) Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 14:16

Phosphorus 0.020 U 0.030 mg/L

LCS (6K18002-BS1) Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 14:17

Phosphorus 2.50 0.030 mg/L 2.50 100 87-114

Matrix Spike (6K18002-MS1) Source: A605749-01 Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 14:28

Phosphorus 3.18 0.030 mg/L 2.50 0.750 97 74-121

Matrix Spike Dup (6K18002-MSD1) Source: A605749-01 Prepared: 11/18/2006 11:41 Analyzed: 11/22/2006 14:29

Phosphorus 3.20 0.030 mg/L 2.50 0.750 98 74-121 0.8 11

##### Batch 6K20018 - NO PREP

Blank (6K20018-BLK1) Prepared: 11/20/2006 19:30 Analyzed: 11/21/2006 19:36

Total Dissolved Solids 10 U 10 mg/L

LCS (6K20018-BS1) Prepared: 11/20/2006 19:30 Analyzed: 11/21/2006 19:36

Total Dissolved Solids 288 10 mg/L 300 96 86-118

Duplicate (6K20018-DUP1) Source: A605173-06 Prepared: 11/20/2006 19:30 Analyzed: 11/21/2006 19:36

Total Dissolved Solids 422 10 mg/L 418 1 10

##### Batch 6K21002 - NO PREP

Blank (6K21002-BLK1) Prepared: 11/21/2006 09:34 Analyzed: 11/22/2006 09:21

Total Organic Carbon 0.30 U 1.0 mg/L

LCS (6K21002-BS1) Prepared: 11/21/2006 09:34 Analyzed: 11/22/2006 09:21

Total Organic Carbon 43 1.0 mg/L 40.0 107 63-142

Matrix Spike (6K21002-MS1) Source: A603659-01 Prepared: 11/21/2006 09:34 Analyzed: 11/22/2006 09:21

Total Organic Carbon 44 1.0 mg/L 40.0 4.9 99 69-132

Matrix Spike Dup (6K21002-MSD1) Source: A603659-01 Prepared: 11/21/2006 09:34 Analyzed: 11/22/2006 09:21

Total Organic Carbon 50 1.0 mg/L 40.0 4.9 113 69-132 11 16

##### Batch 6K21004 - Same

Blank (6K21004-BLK1) Prepared: 11/21/2006 10:09 Analyzed: 11/27/2006 11:46

Ammonia as N 0.003 U 0.020 mg/L

Blank (6K21004-BLK2) Prepared: 11/21/2006 10:09 Analyzed: 11/28/2006 12:15

Ammonia as N 0.003 U 0.020 mg/L

LCS (6K21004-BS1) Prepared: 11/21/2006 10:09 Analyzed: 11/27/2006 11:47

Ammonia as N 1.0 0.020 mg/L 1.00 103 90-110

LCS (6K21004-BS2) Prepared: 11/21/2006 10:09 Analyzed: 11/28/2006 12:16

Ammonia as N 0.96 0.020 mg/L 1.00 96 90-110

Matrix Spike (6K21004-MS1) Source: A605242-01 Prepared: 11/21/2006 10:09 Analyzed: 11/27/2006 11:50

Ammonia as N 0.96 0.020 mg/L 1.00 0.041 92 90-110

Matrix Spike Dup (6K21004-MSD1) Source: A605242-01 Prepared: 11/21/2006 10:09 Analyzed: 11/27/2006 11:51

Ammonia as N 1.2 QM-07 0.020 mg/L 1.00 0.041 118 90-110 24 10 QM-07

##### Batch 6K21025 - NO PREP

Blank (6K21025-BLK1) Prepared: 11/21/2006 17:00 Analyzed: 11/22/2006 09:53

Total Suspended Solids 3 U 3 mg/L

LCS (6K21025-BS1) Prepared: 11/21/2006 17:00 Analyzed: 11/22/2006 09:53

# QUALITY CONTROL

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Sample Notes
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	--------------

## Classical Chemistry Parameters - Quality Control

### Batch 6K21025 - NO PREP

#### LCS (6K21025-BS1) Continued

Prepared: 11/21/2006 17:00 Analyzed: 11/22/2006 09:53

Total Suspended Solids	83.0	3	mg/L	80.0	104	82-119
------------------------	------	---	------	------	-----	--------

#### Duplicate (6K21025-DUP1)

Source: A605759-03

Prepared: 11/21/2006 17:00 Analyzed: 11/22/2006 09:53

Total Suspended Solids	3.00	3	mg/L	3.00	0	10
------------------------	------	---	------	------	---	----

### Batch 6K22003 - NO PREP

#### Blank (6K22003-BLK1)

Prepared: 11/22/2006 11:00 Analyzed: 11/22/2006 18:00

Chemical Oxygen Demand	7.0 U	10	mg/L			
------------------------	-------	----	------	--	--	--

#### LCS (6K22003-BS1)

Prepared: 11/22/2006 11:00 Analyzed: 11/22/2006 18:00

Chemical Oxygen Demand	500	10	mg/L	500	101	90-110
------------------------	-----	----	------	-----	-----	--------

#### Matrix Spike (6K22003-MS1)

Source: A603659-01

Prepared: 11/22/2006 11:00 Analyzed: 11/22/2006 18:00

Chemical Oxygen Demand	590	10	mg/L	500	81	102	90-110
------------------------	-----	----	------	-----	----	-----	--------

#### Matrix Spike Dup (6K22003-MSD1)

Source: A603659-01

Prepared: 11/22/2006 11:00 Analyzed: 11/22/2006 18:00

Chemical Oxygen Demand	580	10	mg/L	500	81	99	90-110	2	20
------------------------	-----	----	------	-----	----	----	--------	---	----

**NOTES AND DEFINITIONS**

B-04	The average DO update of the seeded controls does not meet the method required 0.6 - 1.0 mg/L.
D	Data reported from a dilution
I	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
U	Analyte included in the analysis, but not detected

### LABORATORY CERTIFICATION SUMMARY

Analysis	Matrix	Cert ID	Cert Number
8011	Water	NELAC	E83182
8260B Appendix 1	Water	NELAC	E83182
Ammonia 350.1	Water	NELAC	E83182
Antimony Total EPA 6020	Water	NELAC	E83182
Arsenic Total EPA 6020	Water	NELAC	E83182
Barium Total EPA 6020	Water	NELAC	E83182
Beryllium Total EPA 6020	Water	NELAC	E83182
BOD 405.1	Water	NELAC	E83182
Cadmium Total EPA 6020	Water	NELAC	E83182
Chloride 300	Water	NELAC	E83182
Chromium Total EPA 6020	Water	NELAC	E83182
Cobalt Total EPA 6020	Water	NELAC	E83182
COD 410.4	Water	NELAC	E83182
Copper Total EPA 6020	Water	NELAC	E83182
Hardness 130.2	Water	NELAC	E83182
Iron Total EPA 6020	Water	NELAC	E83182
Lead Total EPA 6020	Water	NELAC	E83182
Mercury Total EPA 7470A	Water	NELAC	E83182
Nickel Total EPA 6020	Water	NELAC	E83182
Nitrate as N 300	Water	NELAC	E83182
Nitrite as N 300	Water	NELAC	E83182
Phosphorus 365.4	Water	NELAC	E83182
Selenium Total EPA 6020	Water	NELAC	E83182
Silver Total EPA 6020	Water	NELAC	E83182
Sodium Total EPA 6020	Water	NELAC	E83182
TDS 160.1	Water	NELAC	E83182
Thallium Total EPA 6020	Water	NELAC	E83182
TKN 351.2	Water	NELAC	E83182
TOC 415.1	Water	NELAC	E83182
TSS 160.2	Water	NELAC	E83182
Vanadium Total EPA 6020	Water	NELAC	E83182
Zinc Total EPA 6020	Water	NELAC	E83182



November 22, 2006

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824

Work Order: OPK0288  
Project Name: GENERAL SUBCONTRACT  
Project Number: A605749  
Date Received: 11/16/06

Attn: RONALD WAMBLES

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
SW2	OPK0288-01	11/16/06 09:30

Samples were received into laboratory at a temperature of 3.60 °C.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately.

Results are reported on a wet weight basis unless otherwise noted

The reported results were obtained in compliance with 2003 NELAC standards unless otherwise noted.

Florida Certification Number: E83012

Approved By:



TestAmerica - Orlando, FL  
Shali Brown For Holli Raffington  
Project Manager

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn: RONALD WAMBLES

Work Order: OPK0288  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/16/06

## LABORATORY REPORT

Sample ID: SW2 - Lab Number: OPK0288-01 - Matrix: Water - NonPotable

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
<b>Microbiology</b>											
E761792	Fecal Coliform	10000	B	CFU/100 ml	1	1	1	11/17/06 14:05	MXN	SM 9222D	6K17017

Prep Date: 11/16/06 15:17

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn: RONALD WAMBLES

Work Order: OPK0288  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/16/06

## PROJECT QUALITY CONTROL DATA

### Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
<b>Microbiology</b>					
Fecal Coliform	1	U	CFU/100 ml	6K17017	6K17017-BLK1

## PROJECT QUALITY CONTROL DATA

### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
<b>Microbiology</b>								
Fecal Coliform	<1	1	U	CFU/100 ml		0.7	6K17017	OPK0282-02

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn: RONALD WAMBLES

Work Order: OPK0288  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/16/06

## CERTIFICATION SUMMARY

TestAmerica - Orlando, FL

Method	Matrix	Nelac	Florida
SM 9222D	Water - NonPotable	X	X

## DATA QUALIFIERS AND DEFINITIONS

B Results based upon colony counts outside the acceptable range.  
U The compound was analyzed for but not detected

## ADDITIONAL COMMENTS

When insufficient sample volume is received for Matrix Spike and Matrix Spike Duplicate, Laboratory Control Spike and Laboratory Control Spike Duplicate data is used for batch QC.

# TestAmerica

ANALYTICAL TESTING CORPORATION

4310 East Anderson Road • Orlando, FL 32812 • 407-851-2560 • Fax 407-856-0886 • 800-851-

Client: ENVIRONMENTAL CONSERVATION LABS

Project: OPK0288

Shipped By: Walk-in

Tracking Number:

Cooler Received On: 11/16/06 15:12

And Opened On (Date/time):

11/16 15:15

Received By: Jessica Batura

Logged in by: Jessica Batura

Were custody seals on the outside of cooler? YES ☐ NO ☒ If Yes # ☐ Location ☐

Were custody seals intact? YES ☐ NO ☐ N/A ☒ (no seals present)

Chain of Custody Complete? YES ☒ NO ☐ If No Discrepancy ☐

Cooler Temparture When Opened: 3.60 Degrees Celsius

Temparture Blank Included: YES ☐ NO ☒

Packing Material: Bubblewrap ☒ NONE ☒ Other ☐

Received on Ice: YES ☒ NO ☐ Other: ☐ Total # Of Containers: 1 # Vials ☐

Any Bottles Broken? YES ☐ NO ☒ If Yes Which One(s)? ☐

Any Missing Samples? YES ☐ NO ☒ If Yes Which One(s)? ☐

pH Levels: H2SO4 <=2? ☐ HNO3 <=2? ☐ HCL <=2? ☐ NaOH >=10? ☐

# Of Containers Unpreserved between 6 and 8? 1

Any Air Bubbles in VOA Vials? YES ☐ NO ☐ N/A ☒ (no VOA vials received)

Was there enough sample shipped in each container? YES ☒ NO ☐

Correct Preservatives Used? YES ☒ NO ☐ If No, please explain: ☐

Project Manager: Holli Raffington

Corrective Actions Taken

## SUBCONTRACT ORDER

ENCO Orlando

A605749

OP/LD288

SENDING LABORATORY:

ENCO Orlando  
10775 Central Port Drive  
Orlando, FL 32824  
Phone: 407.826.5314  
Fax: 407.850.6945  
Project Manager: Ronald Wambles

RECEIVING LABORATORY:

Test America  
4310 Anderson Road  
Orlando, FL 32812  
Phone : (407) 851-2560  
Fax: -0  
Project State of Origin: FL

Analysis	Due	Expires	Laboratory ID	Comments
----------	-----	---------	---------------	----------

SW2	Surface Water	16-Nov-06 09:30		
-----	---------------	-----------------	--	--

A605749-01

01

Coliform, Fecal	27-Nov-06 15:00	16-Nov-06 15:30
-----------------	-----------------	-----------------

Chlorophyll A	27-Nov-06 15:00	16-Dec-06 09:30
---------------	-----------------	-----------------

Containers Supplied:

ILA (A)	SterileBacteriaCup (G)
---------	------------------------

Chlorophyll A will come at a later time.

Released By

Date

Received By

Date

Released By

Date

Received By

Date

December 13, 2006

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824

Work Order: OPK0304  
Project Name: GENERAL SUBCONTRACT  
Project Number: A605749  
Date Received: 11/17/06

Attn: RONALD WAMBLES

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
SW2	OPK0304-01	11/16/06 09:30

Samples were received into laboratory at a temperature of 2.60 °C.

Comments: Chlorophyll-a- Client filtered sample within hold time.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

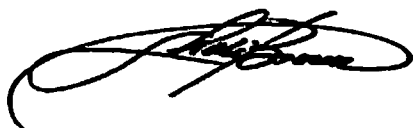
This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have recieved this material in error, please notify us immediately.

Results are reported on a wet weight basis unless otherwise noted

The reported results were obtained in compliance with 2003 NELAC standards unless otherwise noted.

Florida Certification Number: E83012

Approved By:



TestAmerica - Orlando, FL  
Shali Brown For Holli Raffington  
Project Manager

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn: RONALD WAMBLES

Work Order: OPK0304  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/17/06

## LABORATORY REPORT

Sample ID: SW2 - Lab Number: OPK0304-01 - Matrix: Water - NonPotable

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
179-61-8	Chlorophyll-a	7.90		mg/m3	0.500	0.500	1	12/08/06 15:00	AKA	SM 10200H	6K17050



Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn: RONALD WAMBLES

Work Order: OPK0304  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/17/06

## PROJECT QUALITY CONTROL DATA

### Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
<b>General Chemistry Parameters</b>					
Chlorophyll-a	0.500	U	mg/m3	6K17050	6K17050-BLK1

## PROJECT QUALITY CONTROL DATA

### Duplicate

Analyte	Orig. Val	Duplicate	Q	Units	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
<b>General Chemistry Parameters</b>								
Chlorophyll-a	5.10	5.10		mg/m3	0	50	6K17050	OPK0312-09

Client ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn RONALD WAMBLES

Work Order: OPK0304  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled 11/16/06  
Received 11/17/06

## CERTIFICATION SUMMARY

TestAmerica - Orlando, FL

Method	Matrix	Nelac	Florida
SM 10200H	Water - NonPotable	X	X

## DATA QUALIFIERS AND DEFINITIONS

U The compound was analyzed for but not detected

## ADDITIONAL COMMENTS

When insufficient sample volume is received for Matrix Spike and Matrix Spike Duplicate, Laboratory Control Spike and Laboratory Control Spike Duplicate data is used for batch QC.

# TestAmerica

ANALYTICAL TESTING CORPORATION

4310 East Anderson Road • Orlando, FL 32812 • 407-851-2560 • Fax 407-856-0886 • 800-851-

Client: ENVIRONMENTAL CONSERVATION LABS

Project: OPK0304

Shipped By: Walk-in

Tracking Number:

Cooler Received On: 11/17/06 09:15

And Opened On (Date/time): 11/17 9:16

Received By: Anaris Crespo

Logged in by: Jessica Batura

Were custody seals on the outside of cooler? YES ☐ NO ☒ If Yes #  Location

Were custody seals intact? YES ☐ NO ☐ N/A ☒ (no seals present)

Chain of Custody Complete? YES ☒ NO ☐ If No Discrepancy

Cooler Temperature When Opened: 2.60 Degrees Celsius

Temperature Blank Included: YES ☒ NO ☐

Packing Material: Bubblewrap ☐ NONE ☐ Other: plastic

Received on Ice: YES ☒ NO ☐ Other:  Total # Of Containers: 1 # Vials

Any Bottles Broken? YES ☐ NO ☒ If Yes Which One(s)?

Any Missing Samples? YES ☐ NO ☒ If Yes Which One(s)?

pH Levels: H2SO4 <=2? ☐ HNO3 <=2? ☐ HCL <=2? ☐ NaOH >=10? ☐

# Of Containers Unpreserved between 6 and 8? 1

Any Air Bubbles in VOA Vials? YES ☐ NO ☐ N/A ☒ (no VOA vials received)

Was there enough sample shipped in each container? YES ☒ NO ☐

Correct Preservatives Used? YES ☒ NO ☐ If No, please explain:

Project Manager: Holli Raffington

Corrective Actions Taken

**SUBCONTRACT ORDER**

**ENCO Orlando**

**A605749**

DPK0304

**SENDING LABORATORY:**

ENCO Orlando  
10775 Central Port Drive  
Orlando, FL 32824  
Phone: 407.826.5314  
Fax: 407.850.6945  
Project Manager: Ronald Wambles

**RECEIVING LABORATORY:**

Test America  
4310 Anderson Road  
Orlando, FL 32812  
Phone : (407) 851-2560  
Fax: -0  
Project State of Origin: FL

Temp  
2.6 °C

Analysis	Due	Expires	Laboratory ID	Comments
SW2	Surface Water	16-Nov-06 09:30	4605749-01	01
Coliform, Fecal	27-Nov-06 15:00	16-Nov-06 15:30		
Chlorophyll A	27-Nov-06 15:00	16-Dec-06 09:30		
Containers Supplied:				
ILA (A)	Sterile Bacteria Cup (G)		330 mL	

Released By	Received By
11/16/06	11/16/06 9:15
Date	Date

Released By	Date	Received By	Date
-------------	------	-------------	------



1015 Passport Way  
Cary, NC 27513

(919) 677-1669 Fax (919) 677-9846

Page \_\_\_\_ of \_\_\_\_

[illegible]

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments) Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

**Environmental Conservation Laboratories, Inc.**

10775 Central Port Drive

Orlando FL, 32824

Phone: 407.826.5314 FAX: 407.850.6945



www.encolabs.com

Wednesday, November 29, 2006

PBS&J (PB003)

Attn: Greg Mudd

482 South Keller Road

Orlando, FL 32810

**RE: Project Number: [none], Project Name/Desc: Hardee Co. Landfill  
ENCO Workorder: A605749**

Dear Greg Mudd,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Thursday, November 16, 2006.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

This data has been produced in accordance with NELAC standards (June, 2003). This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Wambles", is written over a light blue horizontal line.

Ronald Wambles  
Project Manager

Enclosure(s)

December 13, 2006

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824

Work Order: OPK0304  
Project Name: GENERAL SUBCONTRACT  
Project Number: A605749  
Date Received: 11/17/06

Attn: RONALD WAMBLES

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
SW2	OPK0304-01	11/16/06 09:30

Samples were received into laboratory at a temperature of 2.60 °C.

Comments: Chlorophyll-a- Client filtered sample within hold time.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

This material is intended only for the use of the individual(s) or entity to whom it is addressed, and may contain information that is privileged and confidential. If you are not the intended recipient, or the employee or agent responsible for delivering this material to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this material is strictly prohibited. If you have received this material in error, please notify us immediately.

Results are reported on a wet weight basis unless otherwise noted

The reported results were obtained in compliance with 2003 NELAC standards unless otherwise noted.

Florida Certification Number: E83012

Approved By:



TestAmerica - Orlando, FL  
Shali Brown For Holli Raffington  
Project Manager

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn: RONALD WAMBLES

Work Order: OPK0304  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/17/06

## LABORATORY REPORT

Sample ID: SW2 - Lab Number: OPK0304-01 - Matrix: Water - NonPotable

CAS #	Analyte	Result	Q	Units	MDL	PQL	Dil Factor	Analyzed Date/Time	By	Method	Batch
General Chemistry Parameters											
479-61-8	Chlorophyll-a	7.90		mg/m3	0.500	0.500	1	12/08/06 15:00	AKA	SM 10200H	6K17050



Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824  
Attn: RONALD WAMBLES

Work Order: OPK0304  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/17/06

## PROJECT QUALITY CONTROL DATA

### Blank

Analyte	Blank Value	Q	Units	Q.C. Batch	Lab Number
<b>General Chemistry Parameters</b>					
Chlorophyll-a	0.500	U	mg/m3	6K17050	6K17050-BLK1

## PROJECT QUALITY CONTROL DATA

### Duplicate

Analyte	Orig. Val.	Duplicate	Q	Units	RPD	RPD Limit	Q.C. Batch	Sample Duplicated
<b>General Chemistry Parameters</b>								
Chlorophyll-a	5.10	5.10		mg/m3	0	50	6K17050	OPK0312-09

Client: ENVIRONMENTAL CONSERVATION LABS  
10775 CENTRAL PORT DRIVE  
ORLANDO, FL 32824

Work Order: OPK0304  
Project: GENERAL SUBCONTRACT  
Project Number: A605749

Sampled: 11/16/06  
Received: 11/17/06

Attn: RONALD WAMBLES

## CERTIFICATION SUMMARY

TestAmerica - Orlando, FL

Method	Matrix	Nelac	Florida
SM 10200H	Water - NonPotable	X	X

## DATA QUALIFIERS AND DEFINITIONS

U The compound was analyzed for but not detected

## ADDITIONAL COMMENTS

When insufficient sample volume is received for Matrix Spike and Matrix Spike Duplicate, Laboratory Control Spike and Laboratory Control Spike Duplicate data is used for batch QC.

# TestAmerica

ANALYTICAL TESTING CORPORATION

4310 East Anderson Road \* Orlando, FL 32812 \* 407-851-2560 \* Fax 407-856-0886 \* 800-851-

Client: ENVIRONMENTAL CONSERVATION LABS

Project: OPK0304

Shipped By: Walk-in

Tracking Number:

Cooler Received On: 11/17/06 09:15

And Opened On (Date/time): 11/17 9:16

Received By: Anaris Crespo

Logged in by: Jessica Batura

Were custody seals on the outside of cooler? YES ☐ NO ☒ If Yes #        Location       

Were custody seals intact? YES ☐ NO ☐ N/A ☒ (no seals present)

Chain of Custody Complete? YES ☒ NO ☐ If No Discrepancy       

Cooler Tempature When Opened: 2.60 Degrees Celsius

Tempature Blank Included: YES ☒ NO ☐

Packing Material: Bubblewrap ☐ NONE ☐ Other: plastic

Received on Ice: YES ☒ NO ☐ Other:        Total # Of Containers: 1 # Vials       

Any Bottles Broken? YES ☐ NO ☒ If Yes Which One(s)?       

Any Missing Samples? YES ☐ NO ☒ If Yes Which One(s)?       

pH Levels: H2SO4 <=2?        HNO3 <=2?        HCL <=2?        NaOH >=10?       

# Of Containers Unpreserved between 6 and 8? 1

Any Air Bubbles in VOA Vials? YES ☐ NO ☐ N/A ☒ (no VOA vials received)

Was there enough sample shipped in each container? YES ☒ NO ☐

Correct Preservatives Used? YES ☒ NO ☐ If No, please explain:       

Project Manager: Holli Raffington

Corrective Actions Taken

## SUBCONTRACT ORDER

ENCO Orlando

A605749

DPK0304

SENDING LABORATORY:

ENCO Orlando  
10775 Central Port Drive  
Orlando, FL 32824  
Phone: 407.826.5314  
Fax: 407.850.6945  
Project Manager: Ronald Wambles

RECEIVING LABORATORY:

Test America  
4310 Anderson Road  
Orlando, FL 32812  
Phone : (407) 851-2560  
Fax: -0  
Project State of Origin: FL

Temp  
2.6 °C

Analysis	Due	Expires	Laboratory ID	Comments
----------	-----	---------	---------------	----------

SW2	Surface Water	16-Nov-06 09:30	A605749-01	01
-----	---------------	-----------------	------------	----

Coliform, Fecal	27-Nov-06 15:00	16-Nov-06 15:30		
-----------------	-----------------	-----------------	--	--

Chlorophyll A	27-Nov-06 15:00	16-Dec-06 09:30		
---------------	-----------------	-----------------	--	--

Containers Supplied:

ILA (A)	Sterile Bacteria Cup (G)			
---------	--------------------------	--	--	--

330 mL  
JF  
11/16/06

Released By

Date

Received By

Date

Released By

Date

Received By

Date