

SCS ENGINEERS

April 2, 2009
File No. 09208040.02

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

Subject: Citrus County Central Landfill
Quarterly Leachate Sampling – First Quarter 2009
Permit No. 21375-008-SO/01

Dear Mr. Morris:

SCS Engineers (SCS) is providing the First Quarter Leachate Effluent monitoring results on behalf of the Citrus County Solid Waste Management Division (County) for the Central Landfill located in Citrus County, Florida (the site). This report provides copies of the final laboratory reports, field forms, and a CD containing an electronic copy of this report and the electronic data deliverable (EDD) in the “validator” format provided by Pace Analytical Services, Inc. (Pace).

The leachate effluent sample was analyzed in compliance with the permit and for the quarterly parameters listed in Specific Condition Part E.9.b.2 (quarterly) of the permit. The resulting data from the quarterly sampling event are included in Attachment 1 (Effluent data is located on page 5 of 17 of the laboratory analytical report.) and Table 1, Attachment 3. These concentrations are similar to historic concentrations (Table 1, Attachment 3). With the exception of sodium, chloride, and total dissolved solids (TDS), the leachate effluent sample complied with the groundwater standards and minimum criteria referenced in Florida Administrative Code (FAC) Chapters 62-520.420 and 62-520.400, respectively. As per Specific Condition Part E.9.b, sodium, chloride, and TDS are not required to meet the groundwater standards and minimum criteria at the discharge point; however they must comply at the edge of the zone of discharge along the western boundary.

First Quarter 2009 leachate quality sampling and physical readings and measurements were performed by SCS. First Quarter 2009 leachate quality analyses were performed by Pace. Field work, sampling methodologies, data evaluation, and data Quality Assurance/Quality Control (QA/QC) were conducted in accordance with FAC Chapter 62-160 Standard Operating Procedures (DEP-SOP-001/01) and the SCS quality manual. Laboratory analyses were performed in accordance with Chapter 62-160, FAC DEP-SOP-001/01. Pace is certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP).

Mr. John Morris, P.G.
April 2, 2009
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SCS mobilized to the site on January 27, 2009, to collect leachate samples following the FDEP Standard Operating Procedures (SOPs) as guidance for the collection of these samples. Copies of the laboratory report and field forms are presented in Attachment 1.

Monthly samples of the leachate effluent were analyzed for the parameters listed in Specific Condition Part E.9.b.2 (monthly) of the Permit. The monthly samples are collected by the site and analyzed by their contract laboratory. The analytical laboratory reports from the monthly sampling events for January, February, and March of 2009 are included in Attachment 2 and Table 2, Attachment 3.

If you have any questions regarding this report, please contact the undersigned at (813) 621-0080.

Sincerely,



Ken Guilbeault, LEP
Senior Project Professional



John A. Banks, P.E.
Project Director
SCS ENGINEERS

KEG/JAB:keg

cc: Susan Metcalfe – Citrus County

Attachments

DEP Form # 62-522.900(2)
Form Title <u>Ground Water Monitoring Report</u>
Effective Date _____
DEP Application No. _____

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

PART I GENERAL INFORMATION

- (1) Facility Name Citrus County Central Landfill
- Address PO BOX 340
- City Lecanto Zip 34460
- Telephone Number (352) 527-7670
- (2) Facility WACS Number SWD/09/39859
- (3) DEP Permit Number 21375-008-SO/01
- (4) Authorized Representative Name Susan Metcalfe, P.G., Director of Solid Waste
- Address PO BOX 340
- City Lecanto Zip 34460
- Telephone Number (352) 527-7670
- (5) Type of Discharge Treated Class 1 Landfill Leachate
- (6) Method of Discharge Groundwater via Percolation

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date: 4/1/09

Susan Metcalfe
Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sample Organization Comp QAP # NA

Analytical Lab Comp QAP # /HRS Certification # NELAP Certification E83079

Lab Name Pace Analytical Services, Inc.

Address 8 East Tower Circle, Ormond Beach, FL 32174

Phone Number (386) 672-5668

ATTACHMENT 1

LABORATORY ANALYTICAL RESULTS
AND FIELD FORMS

February 12, 2009

Mr. Mark Tumlin
SCS Engineers
4041 Park Oaks Blvd.
Suite100
Tampa, FL 33610

RE: Citrus County Landfill

Order No.: F09011065

Dear Mr. Mark Tumlin:

PAS, Inc. received 2 samples on 1/28/2009 1:48:00 PM for the analyses presented in the following report.

Analyses are performed with method-required calibration and QA/QC samples whenever applicable. Method performance, which is based on the calibration and QA/QC samples, establishes the validity and certainty of the reported sample results. This data is provided along with the sample results when requested.

Thank you for this opportunity to be of service. If you have any questions regarding this data, please feel free to call me at (386) 672-5668, extension 327.

Sincerely,
Jeff Baylor



Project Manager
PAS, Inc.
P.O. Box 468
Ormond Beach, FL 32175-0468

THIS DOCUMENT MEETS NELAC
STANDARDS NELAC Certification #E83079

The following acronyms may be utilized within this report:

%REC	Percent Recovery
A	Absent
ABLK	Analytical Method Blank
CG	Confluent Growth
CGB	Confluent Growth Without Coliforms
CGC	Confluent Growth With Coliforms
DUP	Sample Duplicate
LCS	Laboratory Control Spike (may also be appended with an abbreviation indicating spiking level)
MBLK	Preparation Method Blank
MDL	Laboratory Method Detection Limit
MS	Matrix Spike (may also be appended with an abbreviation indicating spiking level)
MSD	Matrix Spike Duplicate (may also be appended with an abbreviation indicating spiking level)
P	Present
PQL	Practical Quantitation Limit
QCS	Alternate source Calibration Verification Standard (may also be reported as analytical LCS in some a
RL	Reporting Limit
RPD	Relative Percent Difference
SPK	Spike
TIC	Tentatively Identified Compound
TNTC	Too Numerous To Count

The following notes may apply to analytical results within this report:

Residue (solids) analysis may employ a single, heated drying process of at least 12 hours duration in lieu of employing short, repeated drying cycles, which represents a deviation from the methodology.

Because the EPA-recommended holding time for pH, residual chlorine, chloramines and chlorine dioxide is 15 minutes from time of collection, these analyses are routinely performed outside of their EPA-recommended holding time when performed in the laboratory.

Analytical results for ammonia analysis, or calculated analytical results depending on ammonia analysis, do not include a sample distillation procedure. A study comparing distilled versus non-distilled analytical results has been performed to document the validity of the analysis without prior distillation, and represents equivalent results for the represented project matrices.

Since N-nitrosodiphenylamine decomposes in the GC inlet and cannot be chromatographically resolved from diphenylamine, these compounds are reported as a single analyte in the report.

Since m-cresol and p-cresol cannot be chromatographically resolved, these compounds are reported as a single analyte in the report.

The following certifications may apply to analytical results within this report:

Alabama	DEM	41320
Arizona	DHS	AZ0640
Colorado	DPHE	FL NELAC Reciprocity
Connecticut	DPH	PH-0216
Florida	DOH	E83079
Georgia	DNR	955
Kentucky	DEP	90050
Maine	LCP	2006032
Massachusetts	DEP	M-FL020
Michigan	DEQ	9911
Mississippi	DOH	FL NELAC Reciprocity
Nevada	EP	ELAB FL-00020
New Hampshire	DES	295805
New Jersey	DEP	FL765
New York	DOH	11608
Pennsylvania	DEP	68-00547
Puerto Rico	DOH	FL 00020
South Carolina	DHEC	96027001
Tennessee	DOH	02974
Texas	CEQ	T104704184-05-TX

Case Narrative

CLIENT: SCS Engineers
Project: Citrus County Landfill
Lab Order: F09011065

I. SAMPLE RECEIVING/ CUSTODY

The samples were received and processed by the Sample Custody section of the laboratory. There were no significant logistics or quality problems unless noted below.

II. ANALYTICAL DATA

The samples were analyzed according to the laboratory's Standard Operating Procedures for the methodologies requested. There were no significant logistics or quality problems unless noted below or in the text of the report.

SW8260: Sample F09011065-001 required a dilution due to matrix interference, which resulted in elevated reporting limits for the target compounds.

III. QUALITY CONTROL

There were no significant quality control problems unless noted below or in the text of the report.

EPA300.0: MS/MSD recovery for Chloride exceeded method guidance criteria (low bias) for batch R75824c. Although LCS recovery for the batch was within guidance criteria for the method, sample F09011065-002 was employed in the preparation of the MS/MSD, and therefore results for this sample may also be biased low.

Analytical Report

CLIENT:	SCS Engineers	Client Sample ID:	Leechate Effluent
Lab Order:	F09011065	Collection Date:	1/27/2009 12:00:00 PM
Project:	Citrus County Landfill	Sample Description:	
Lab ID:	F09011065-001	Matrix:	Waste Water

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ICP METALS								
		SW6010	PrepDate: 1/30/2009 8:50:00 A				Analyst: TPI	
Sodium	800000		5000	10000	µg/L	10	02/07/09 22:38	59072
8011: EDB AND DBCP								
		SW8011	PrepDate: 2/3/2009 2:00:00 PM				Analyst: LMA	
Ethylene Dibromide	0.0064	U	0.0064	0.010	µg/L	1	02/03/09 21:19	59122
8260: VOLATILE ORGANIC COMPOUNDS								
		SW8260	PrepDate: 1/30/2009 8:00:00 A				Analyst: ALA	
Benzene	1.0	U	1.0	2.0	µg/L	2	01/30/09 15:06	59106
Bromodichloromethane	14		0.60	1.2	µg/L	2	01/30/09 15:06	59106
Bromoform	2.9		1.0	2.0	µg/L	2	01/30/09 15:06	59106
Chloroform	11		1.0	2.0	µg/L	2	01/30/09 15:06	59106
Dibromochloromethane	6.9		0.50	1.0	µg/L	2	01/30/09 15:06	59106
Ethylbenzene	1.0	U	1.0	2.0	µg/L	2	01/30/09 15:06	59106
Toluene	1.0	U	1.0	2.0	µg/L	2	01/30/09 15:06	59106
Vinyl chloride	1.1	U	1.1	2.0	µg/L	2	01/30/09 15:06	59106
Xylenes, Total	2.1	I	2.0	6.0	µg/L	2	01/30/09 15:06	59106
Surr: 4-Bromofluorobenzene	96.2		0	70-114	%REC	2	01/30/09 15:06	59106
Surr: 1,2-Dichloroethane-d4	101		0	86-125	%REC	2	01/30/09 15:06	59106
Surr: Toluene-d8	108		0	87-113	%REC	2	01/30/09 15:06	59106
ANIONS BY ION CHROMATOGRAPHY								
		E300.0	PrepDate:				Analyst: AMD	
Chloride	1300	x	0.43	10	mg/L	20	01/30/09 03:04	R75824c
NITROGEN, AMMONIA								
		E350.1	PrepDate:				Analyst: HMA	
Nitrogen, Ammonia (As N)	1.1		0.020	0.050	mg/L	1	02/02/09 15:59	R75868A
SOLIDS, TOTAL DISSOLVED								
		SM2540 C	PrepDate: 1/30/2009 8:23:07 A				Analyst: JPE	
Solids, Total Dissolved	2800	x	5.0	5.0	mg/L	1	01/30/09 09:02	59076

Data I Analyte detected below quantitation limits
Qualifier x Value exceeds Maximum Contaminant Level
Code Key:

U Not Detected Above the MDL

Analytical Report

CLIENT:	SCS Engineers	Client Sample ID:	EQ Blank
Lab Order:	F09011065	Collection Date:	1/27/2009 12:10:00 PM
Project:	Citrus County Landfill	Sample Description:	
Lab ID:	F09011065-002	Matrix:	Drinking Water

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ICP METALS								
		SW6010	PrepDate:	1/30/2009 8:50:00 A			Analyst: TPI	
Sodium	500	U	500	1000	µg/L	1	02/02/09 20:14	59072
8011: EDB AND DBCP								
		SW8011	PrepDate:	2/3/2009 2:00:00 PM			Analyst: LMA	
Ethylene Dibromide	0.0063	U	0.0063	0.010	µg/L	1	02/03/09 21:34	59122
8260: VOLATILE ORGANIC COMPOUNDS								
		SW8260	PrepDate:	1/29/2009 8:00:00 A			Analyst: ALA	
Benzene	0.50	U	0.50	1.0	µg/L	1	01/29/09 16:26	59089
Bromodichloromethane	0.30	U	0.30	0.60	µg/L	1	01/29/09 16:26	59089
Bromoform	0.50	U	0.50	1.0	µg/L	1	01/29/09 16:26	59089
Chloroform	0.50	U	0.50	1.0	µg/L	1	01/29/09 16:26	59089
Dibromochloromethane	0.25	U	0.25	0.50	µg/L	1	01/29/09 16:26	59089
Ethylbenzene	0.90	I	0.50	1.0	µg/L	1	01/29/09 16:26	59089
Toluene	1.9		0.50	1.0	µg/L	1	01/29/09 16:26	59089
Vinyl chloride	0.53	U	0.53	1.0	µg/L	1	01/29/09 16:26	59089
Xylenes, Total	2.4	I	1.0	3.0	µg/L	1	01/29/09 16:26	59089
Surr: 4-Bromofluorobenzene	97.6		0	70-114	%REC	1	01/29/09 16:26	59089
Surr: Dibromofluoromethane	103		0	88-117	%REC	1	01/29/09 16:26	59089
Surr: 1,2-Dichloroethane-d4	102		0	86-125	%REC	1	01/29/09 16:26	59089
Surr: Toluene-d8	105		0	87-113	%REC	1	01/29/09 16:26	59089
ANIONS BY ION CHROMATOGRAPHY								
		E300.0	PrepDate:				Analyst: AMD	
Chloride	0.42	I	0.021	0.50	mg/L	1	01/30/09 03:20	R75824c
NITROGEN, AMMONIA								
		E350.1	PrepDate:				Analyst: HMA	
Nitrogen, Ammonia (As N)	0.024	I	0.020	0.050	mg/L	1	02/02/09 12:12	R75868A
SOLIDS, TOTAL DISSOLVED								
		SM2540 C	PrepDate:	1/30/2009 8:23:07 A			Analyst: JPE	
Solids, Total Dissolved	5.0	U	5.0	5.0	mg/L	1	01/30/09 09:03	59076

Data I Analyte detected below quantitation limits
Qualifier x Value exceeds Maximum Contaminant Level
Code Key:

U Not Detected Above the MDL

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT**TestCode: 8011_W**

Sample ID: MB-59122		SampType: MBLK		TestCode: 8011_W		Units: µg/L		Prep Date: 2/3/2009			RunNo: 75988	
Client ID: MB-59122		Batch ID: 59122		TestNo: SW8011		SW8011		Analysis Date: 2/3/2009			SeqNo: 2305295	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Ethylene Dibromide	0.0062	U	0.0062								
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Sample ID: LCS-59122		SampType: LCS		TestCode: 8011_W		Units: µg/L		Prep Date: 2/3/2009			RunNo: 75988	
Client ID: LCS-59122		Batch ID: 59122		TestNo: SW8011		SW8011		Analysis Date: 2/3/2009			SeqNo: 2305296	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Ethylene Dibromide	0.22		0.0062	0.25	0	86.8	60	140			
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Sample ID: F09011065-002EMS		SampType: MS		TestCode: 8011_W		Units: µg/L		Prep Date: 2/3/2009			RunNo: 75988	
Client ID: EQ Blank MS		Batch ID: 59122		TestNo: SW8011		SW8011		Analysis Date: 2/3/2009			SeqNo: 2305299	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Ethylene Dibromide	0.47		0.011	0.43	0	109	60	140			
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Sample ID: F09011065-002EMSD SampType: MSD TestCode: 8011_W Units: µg/L Prep Date: 2/3/2009 RunNo: 75988												
Client ID: EQ Blank MSD		Batch ID: 59122		TestNo: SW8011		SW8011		Analysis Date: 2/3/2009			SeqNo: 2305300	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Ethylene Dibromide	0.40		0.010	0.42	0	94.0	60	140	0.47	17.0	40
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Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT**TestCode: 8260_W**

Sample ID: MB-59089	SampType: MBLK	TestCode: 8260_W	Units: µg/L	Prep Date: 1/29/2009	RunNo: 75845						
Client ID: MB-59089	Batch ID: 59089	TestNo: SW8260	SW5030A	Analysis Date: 1/29/2009	SeqNo: 2300174						
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Benzene	0.50	U	0.50								
Bromodichloromethane	0.30	U	0.30								
Bromoform	0.50	U	0.50								
Chloroform	0.50	U	0.50								
Dibromochloromethane	0.25	U	0.25								
Ethylbenzene	0.50	U	0.50								
Toluene	0.50	U	0.50								
Vinyl chloride	0.53	U	0.53								
Xylenes, Total	1.0	U	1.0								
Surr: 4-Bromofluorobenzene	40		0	40	0	99.2	70	114			
Surr: Dibromofluoromethane	44		0	40	0	110	88	117			
Surr: 1,2-Dichloroethane-d4	46		0	40	0	114	86	125			
Surr: Toluene-d8	44		0	40	0	109	87	113			

Sample ID: LCS-59089	SampType: LCS	TestCode: 8260_W	Units: µg/L	Prep Date: 1/29/2009	RunNo: 75845						
Client ID: LCS-59089	Batch ID: 59089	TestNo: SW8260	SW5030A	Analysis Date: 1/29/2009	SeqNo: 2300176						
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloroform	23		0.50	20	0	117	61	146			
Ethylbenzene	20		0.50	20	0	98.4	79	140			
Toluene	23		0.50	20	0	116	69	140			
Vinyl chloride	23		0.53	20	0	116	62	140			
Surr: 4-Bromofluorobenzene	40		0	40	0	101	70	114			
Surr: Dibromofluoromethane	42		0	40	0	106	88	117			
Surr: 1,2-Dichloroethane-d4	43		0	40	0	108	86	125			
Surr: Toluene-d8	42		0	40	0	106	87	113			

Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
 Work Order: F09011065
 Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: F09010924-003AMS		SampType: MS		TestCode: 8260_W		Units: µg/L		Prep Date: 1/29/2009			RunNo: 75845	
		Batch ID: 59089		TestNo: SW8260		SW5030A		Analysis Date: 1/29/2009			SeqNo: 2300197	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloroform	470		10	400	0	118	61	146			
Ethylbenzene	450		10	400	33	104	79	140			
Toluene	510		10	400	14	124	69	140			
Vinyl chloride	450		11	400	0	113	62	140			
Surr: 4-Bromofluorobenzene	810		0	800	0	101	70	114			
Surr: Dibromofluoromethane	800		0	800	0	100	88	117			
Surr: 1,2-Dichloroethane-d4	790		0	800	0	99.0	86	125			
Surr: Toluene-d8	830		0	800	0	103	87	113			

Sample ID: F09010924-003AMSD													SampType: MSD		TestCode: 8260_W		Units: µg/L		Prep Date: 1/29/2009			RunNo: 75845	
													Batch ID: 59089		TestNo: SW8260		SW5030A		Analysis Date: 1/29/2009			SeqNo: 2300198	
Analyte													Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloroform	360		10	400	0	90.3	61	146	470	26.3	40
Ethylbenzene	340	S	10	400	33	77.0	79	140	450	27.5	40
Toluene	390		10	400	14	93.8	69	140	510	26.5	40
Vinyl chloride	390		11	400	0	97.7	62	140	450	14.3	40
Surr: 4-Bromofluorobenzene	790		0	800	0	98.7	70	114	810	0	0
Surr: Dibromofluoromethane	810		0	800	0	102	88	117	800	0	0
Surr: 1,2-Dichloroethane-d4	800		0	800	0	99.7	86	125	790	0	0
Surr: Toluene-d8	840		0	800	0	105	87	113	830	0	0

Sample ID: MB-59106		SampType: MBLK		TestCode: 8260_W		Units: µg/L		Prep Date: 1/30/2009			RunNo: 75899	
Client ID: MB-59106		Batch ID: 59106		TestNo: SW8260		SW5030A		Analysis Date: 1/30/2009			SeqNo: 2301816	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Benzene	0.50	U	0.50								
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Data I Analyte detected below quantitation limits S Spike Recovery outside accepted recovery limits
Qualifier U Not Detected Above the MDL
Code Key:

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT**TestCode: 8260_W**

Sample ID: MB-59106	SampType: MBLK	TestCode: 8260_W	Units: µg/L	Prep Date: 1/30/2009	RunNo: 75899						
Client ID: MB-59106	Batch ID: 59106	TestNo: SW8260	SW5030A	Analysis Date: 1/30/2009	SeqNo: 2301816						
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Bromodichloromethane	0.30	U	0.30								
Bromoform	0.50	U	0.50								
Chloroform	0.50	U	0.50								
Dibromochloromethane	0.25	U	0.25								
Ethylbenzene	0.50	U	0.50								
Toluene	0.50	U	0.50								
Vinyl chloride	0.53	U	0.53								
Xylenes, Total	1.0	U	1.0								
Surr: 4-Bromofluorobenzene	40		0	40	0	99.7	70	114			
Surr: Dibromofluoromethane	45		0	40	0	112	88	117			
Surr: 1,2-Dichloroethane-d4	47		0	40	0	117	86	125			
Surr: Toluene-d8	44		0	40	0	110	87	113			

Sample ID: LCS-59106	SampType: LCS	TestCode: 8260_W	Units: µg/L	Prep Date: 1/30/2009	RunNo: 75899						
Client ID: LCS-59106	Batch ID: 59106	TestNo: SW8260	SW5030A	Analysis Date: 1/30/2009	SeqNo: 2301815						
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloroform	22		0.50	20	0	109	61	146			
Ethylbenzene	19		0.50	20	0	92.6	79	140			
Toluene	22		0.50	20	0	112	69	140			
Vinyl chloride	20		0.53	20	0	98.6	62	140			
Surr: 4-Bromofluorobenzene	41		0	40	0	102	70	114			
Surr: Dibromofluoromethane	42		0	40	0	105	88	117			
Surr: 1,2-Dichloroethane-d4	42		0	40	0	106	86	125			
Surr: Toluene-d8	43		0	40	0	108	87	113			

Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
 Work Order: F09011065
 Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: F09010909-010AMS		SampType: MS		TestCode: 8260_W		Units: µg/L		Prep Date: 1/30/2009			RunNo: 75899	
		Batch ID: 59106		TestNo: SW8260		SW5030A		Analysis Date: 1/30/2009			SeqNo: 2301831	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloroform	380		10	400	0	95.6	61	146			
Ethylbenzene	800	S	10	400	600	50.5	79	140			
Toluene	430		10	400	37	98.4	69	140			
Vinyl chloride	420		11	400	0	105	62	140			
Surr: 4-Bromofluorobenzene	790		0	800	0	98.9	70	114			
Surr: Dibromofluoromethane	810		0	800	0	101	88	117			
Surr: 1,2-Dichloroethane-d4	780		0	800	0	97.5	86	125			
Surr: Toluene-d8	840		0	800	0	105	87	113			

Sample ID: F09010909-010AMSD													SampType: MSD		TestCode: 8260_W		Units: µg/L		Prep Date: 1/30/2009			RunNo: 75899	
													Batch ID: 59106		TestNo: SW8260		SW5030A		Analysis Date: 1/30/2009			SeqNo: 2301832	
Analyte													Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloroform	430		10	400	0	107	61	146	380	11.1	40
Ethylbenzene	890	S	10	400	600	72.8	79	140	800	10.6	40
Toluene	490		10	400	37	112	69	140	430	12.2	40
Vinyl chloride	460		11	400	0	116	62	140	420	9.61	40
Surr: 4-Bromofluorobenzene	790		0	800	0	98.5	70	114	790	0	0
Surr: Dibromofluoromethane	810		0	800	0	102	88	117	810	0	0
Surr: 1,2-Dichloroethane-d4	780		0	800	0	97.4	86	125	780	0	0
Surr: Toluene-d8	850		0	800	0	106	87	113	840	0	0

Data I Analyte detected below quantitation limits
 Qualifier U Not Detected Above the MDL
 Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT

TestCode: IC300_W

Sample ID: MB		SampType: MBLK		TestCode: IC300_W		Units: mg/L		Prep Date:			RunNo: 75824	
Client ID: MB		Batch ID: R75824c		TestNo: E300.0		Analysis Date: 1/30/2009			SeqNo: 2299514			
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloride 0.028 U 0.028

Sample ID: LCS		SampType: LCS		TestCode: IC300_W		Units: mg/L		Prep Date:			RunNo: 75824	
Client ID: LCS		Batch ID: R75824c		TestNo: E300.0		Analysis Date: 1/30/2009			SeqNo: 2299515			
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloride 24 0.028 25 0 97.6 90 110

Sample ID: F09011065-002AMS		SampType: MS		TestCode: IC300_W		Units: mg/L		Prep Date:			RunNo: 75824	
Client ID: EQ Blank MS		Batch ID: R75824c		TestNo: E300.0		Analysis Date: 1/30/2009			SeqNo: 2299523			
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloride 9.0 S 0.028 10 0.42 **85.4** 90 110

Sample ID: F09011083-004AMS		SampType: MS		TestCode: IC300_W		Units: mg/L		Prep Date:			RunNo: 75824	
		Batch ID: R75824c		TestNo: E300.0				Analysis Date: 1/30/2009			SeqNo: 2299532	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloride 16 0.028 10 6.7 93.7 90 110

Sample ID: F09011065-002AMSD		SampType: MSD		TestCode: IC300_W		Units: mg/L		Prep Date:			RunNo: 75824	
Client ID: EQ Blank MSD		Batch ID: R75824c		TestNo: E300.0		Analysis Date: 1/30/2009			SeqNo: 2299524			
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Chloride 9.1 S 0.028 10 0.42 **86.9** 90 110 9.0 1.66 20

Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT**TestCode: IC300_W**

Sample ID: F09011083-004AMSD		SampType: MSD		TestCode: IC300_W		Units: mg/L		Prep Date:		RunNo: 75824		
		Batch ID: R75824c		TestNo: E300.0				Analysis Date: 1/30/2009		SeqNo: 2299533		
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride		16		0.028	10	6.7	95.0	90	110	16	0.774	20

Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
 Work Order: F09011065
 Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT

TestCode: ICP-6010_W

Sample ID: MB-59072	SampType: MBLK	TestCode: ICP-6010_W	Units: µg/L	Prep Date: 1/30/2009	RunNo: 75880						
Client ID: MB-59072	Batch ID: 59072	TestNo: SW6010	SW3005A	Analysis Date: 2/2/2009	SeqNo: 2303217						
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Sodium	500	U	500								
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Sample ID: LCS-59072	SampType: LCS	TestCode: ICP-6010_W	Units: µg/L	Prep Date: 1/30/2009	RunNo: 75880						
Client ID: LCS-59072	Batch ID: 59072	TestNo: SW6010	SW3005A	Analysis Date: 2/2/2009	SeqNo: 2303221						
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Sodium	13000		500	12000	0	102	80	120			
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Sample ID: F09011146-006BMS		SampType: MS		TestCode: ICP-6010_W		Units: µg/L		Prep Date: 1/30/2009			RunNo: 76114	
		Batch ID: 59072		TestNo: SW6010		SW3005A		Analysis Date: 2/7/2009			SeqNo: 2309818	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Sodium	18000		500	12000	5100	108	75	125			
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Sample ID: F09011146-006BMSD SampType: MSD TestCode: ICP-6010_W Units: µg/L Prep Date: 1/30/2009 RunNo: 76114												
Batch ID: 59072 TestNo: SW6010 SW3005A Analysis Date: 2/7/2009 SeqNo: 2309819												
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	

Sodium	18000		500	12000	5100	108	75	125	500 U	0	20
--------	-------	--	-----	-------	------	-----	----	-----	-------	---	----

Data
 Qualifier
 Code Key:

I Analyte detected below quantitation limits
 U Not Detected Above the MDL

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT**TestCode:** N-NH3_W

Sample ID: QCS		SampType: QCS		TestCode: N-NH3_W		Units: mg/L		Prep Date:			RunNo: 75868		
Client ID: QCS		Batch ID: R75868		TestNo: E350.1					Analysis Date: 2/2/2009			SeqNo: 2301859	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	

Nitrogen, Ammonia (As N) 9.3 0.020 10 0 93.3 90 110

Sample ID: MB-R75868A	SampType: MBLK	TestCode: N-NH3_W	Units: mg/L	Prep Date:				RunNo: 75868			
Client ID: MB-R75868A	Batch ID: R75868A	TestNo: E350.1	Analysis Date: 2/2/2009				SeqNo: 2301861				
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Nitrogen, Ammonia (As N) 0.020 U 0.020

Sample ID: LCS-R75868A		SampType: LCS		TestCode: N-NH3_W		Units: mg/L		Prep Date:			RunNo: 75868	
Client ID: LCS-R75868A		Batch ID: R75868A		TestNo: E350.1		Analysis Date: 2/2/2009			SeqNo: 2301862			
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Nitrogen, Ammonia (As N) 0.93 0.020 1.0 0 93.0 90 110

Sample ID: F09011009-001BMS		SampType: MS		TestCode: N-NH3_W		Units: mg/L		Prep Date:			RunNo: 75868	
		Batch ID: R75868A		TestNo: E350.1				Analysis Date: 2/2/2009			SeqNo: 2301865	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Nitrogen, Ammonia (As N) 0.99 0.020 1.0 0.076 91.3 90 110

Sample ID: F09011009-001BDUP SampType: DUP TestCode: N-NH3_W Units: mg/L Prep Date: RunNo: 75868												
Batch ID: R75868A TestNo: E350.1 Analysis Date: 2/2/2009 SeqNo: 2301864												
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	

Nitrogen, Ammonia (As N) 0.072 0.020 0.076 5.41 20

Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT**TestCode: N-NH3_W**

Sample ID: QCS	SampType: QCS	TestCode: N-NH3_W	Units: mg/L	Prep Date:	RunNo: 75904						
Client ID: QCS	Batch ID: R75904	TestNo: E350.1		Analysis Date: 2/2/2009	SeqNo: 2302334						
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Nitrogen, Ammonia (As N)	10		0.020	10	0	101	90	110			

Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

CLIENT: SCS Engineers
Work Order: F09011065
Project: Citrus County Landfill

ANALYTICAL QC SUMMARY REPORT**TestCode: SOLIDS-TDS**

Sample ID: MB-59076		SampType: MBLK		TestCode: SOLIDS-TDS		Units: mg/L		Prep Date: 1/30/2009			RunNo: 75819	
Client ID: MB-59076		Batch ID: 59076		TestNo: SM2540 C		SM2540 C		Analysis Date: 1/30/2009			SeqNo: 2306576	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Solids, Total Dissolved 5.0 U 5.0

Sample ID: LCS-59076		SampType: LCS		TestCode: SOLIDS-TDS		Units: mg/L		Prep Date: 1/30/2009			RunNo: 75819	
Client ID: LCS-59076		Batch ID: 59076		TestNo: SM2540 C		SM2540 C		Analysis Date: 1/30/2009			SeqNo: 2306577	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Solids, Total Dissolved 280 5.0 300 0 93.3 90 110

Sample ID: F09011018-018CDUP		SampType: DUP		TestCode: SOLIDS-TDS		Units: mg/L		Prep Date: 1/30/2009			RunNo: 75819	
		Batch ID: 59076		TestNo: SM2540 C		SM2540 C		Analysis Date: 1/30/2009			SeqNo: 2306579	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Solids, Total Dissolved 160 5.0 5.0 U 0 20

Sample ID: F09011076-004ADUP		SampType: DUP		TestCode: SOLIDS-TDS		Units: mg/L		Prep Date: 1/30/2009			RunNo: 75819	
		Batch ID: 59076		TestNo: SM2540 C		SM2540 C		Analysis Date: 1/30/2009			SeqNo: 2306607	
Analyte		Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit

Solids, Total Dissolved 790 x 5.0 780 1.27 20

Data I Analyte detected below quantitation limits
Qualifier U Not Detected Above the MDL
Code Key:

S Spike Recovery outside accepted recovery limits

3012 U.S. Highway 301 North
Suite 700, Tampa, FL 33619
(813) 621-0080 - Ph; (813) 623-6757 - Fax

LAB NUMBER:

FD9011065
SCSENG

Page 1 of 1

CLIENT:		PROJECT NAME		BOTTLE SIZE & TYPE								
SCS Engineers		Citrus County			A R E Q U I R E D							L A B N U M B E R
ADDRESS: 4041 Park Oaks Blvd #100 Tampa FL 33610		P.O. NUMBER/PROJECT NUMBER: 09208040.02										
PHONE: (813) 624-0080 FAX: (813) 623-6757		PROJECT LOCATION: Citrus County Landfill										
CONTACT: Ken Grubbe		SAMPLED BY: Scott Walby										
TURNAROUND TIME: ☒ STANDARD Due Date		REMARKS / SPECIAL INSTRUCTIONS:										
☐ RUSH Due Date												
WW=wastewater SW=surface water GW=groundwater DW=drinking water OIL A=air SO=soil SL=sludge Preserv												
SAMPLE ID	SAMPLE DESCRIPTION	Grab/ Composite	SAMPLING		MATRIX	NUMBER OF CONTAINERS						
			DATE	TIME								
Lecate Effluent		grab	1-27-09	12 ⁰⁰	ww	8						
Equip Blank		grab	1-27-09	12 ¹⁰	DW	8						
I=Ice H=(HCl) S=(H2SO4) N=(HNO3) NaT=(Sodium Thiosulfate) Laboratory:			Relinquished by:		Date	Time	Received by:		Date	Time		
			1 Scott Walby		1-27-09	1500	[Signature]		1-27-09	1350		
			2 [Signature]				[Signature]		1/28/09	1348		
			3									
			4									

SITE NAME: <u>Hereros Chemicals</u> <u>Citrus City Landfill</u>		SITE LOCATION: <u>5132 Tronion Ct., Tampa, FL</u> <u>230 Gunk to Lake Blvd</u>	
WELL NO:	SAMPLE ID: <u>Equip Blank</u>	DATE: <u>1/26/09</u> <u>1/27/09</u>	

[illegible]

SAMPLED BY (PRINT) / AFFILIATION: <i>SES / Scott Walz</i>				SAMPLER(S) SIGNATURES: <i>Scott Walz</i>			SAMPLING INITIATED AT: <i>12/10</i>		SAMPLING ENDED AT:	
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (mL per minute):			TUBING MATERIAL CODE:			
FIELD DECONTAMINATION: Y N				FIELD-FILTERED: Y N FILTER SIZE: _____ µm			DUPLICATE: Y ☒ N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH				
	1	PE	500	1cc		2	inorganics ICP metals As, Fe, Zn, Ammonia VOL'S 8011 / EDB + DBCP			
	1	PE	150	HNO3		2				
	1	PE	150	H2SO4	1cc	2				
	3	CG	400ml	HCl		2				
	2	CG	400ml	1cc		2				
REMARKS:										
MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify) SAMPLING/PURGING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailor; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); VT = Vacuum Trap; O = Other (Specify)										

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: $\pm 5\%$ Dissolved Oxygen: all readings $\leq 20\%$ saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or $\pm 10\%$ (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or $\pm 10\%$ (whichever is greater)

Form FD 9000-8: FIELD INSTRUMENT CALIBRATION RECORDS

Pine Rentals

INSTRUMENT (MAKE/MODEL#)

451 556

INSTRUMENT #

05F2275 At

PARAMETER: *[check only one]*

☐ TEMPERATURE

☒ CONDUCTIVITY

☐ SALINITY

☒ pH

☒ ORP

☐ TURBIDITY

☐ RESIDUAL CI☒ DO☐ OTHER

STANDARDS: [Specify the type(s) of standards used for calibration, the origin of the standards, the standard values, and the date the standards were prepared or purchased]

Standard A 7.00

Standard B 7.00

Standard C 1000

[illegible]

3012 U.S. Highway 301 North
Suite 700, Tampa, FL 33619
(813) 621-0080 - Ph; (813) 623-6757 - Fax

CHAIN OF CUSTODY RECORD

LAB NUMBER:

Page 1 of 1

CLIENT: <i>SCS Engineers</i>		PROJECT NAME <i>Citrus County</i>		BOTTLE SIZE & TYPE														LAB NUMBER
ADDRESS: <i>4341 Park Lakes Blvd #110 Tampa FL 33619</i>		P.O. NUMBER/PROJECT NUMBER: <i>0920804032</i>		A R N E A Q U I S R I E D														
PHONE: <i>(813) 621-0080</i>		FAX: <i>(813) 623-6757</i>		PROJECT LOCATION: <i>Citrus County, Florida</i>														
CONTACT: <i>Ken G. Gant</i>		SAMPLED BY: <i>Smallwood</i>																
TURNAROUND TIME: ☒ STANDARD Due Date		REMARKS / SPECIAL INSTRUCTIONS:																
☐ RUSH Due Date																		
WW=wastewater SW=surface water GW=groundwater DW=drinking water OIL A=air SO=soil SL=sludge Preserv																		
SAMPLE ID	SAMPLE DESCRIPTION	Grab/Composite	SAMPLING DATE TIME		MATRIX	NUMBER OF CONTAINERS												
<i>Lab 1</i>	<i>EFF</i>	<i>Grab</i>	<i>1-27-09</i>	<i>12⁰⁰</i>	<i>W</i>	<i>8</i>												
<i>Lab 2</i>	<i>EFF</i>	<i>Grab</i>	<i>1-27-09</i>	<i>12¹⁰</i>	<i>DW</i>	<i>8</i>												
I=Ice H=(HCl) S=(H2SO4) N=(HNO3) NaT=(Sodium Thiosulfate)			Relinquished by:		Date Time		Received by:		Date Time									
Laboratory:			1 <i>Smallwood</i>		1-27-09 1550		<i>Boo</i>		1-27-09 1550									
			2															
			3															
			4															

ATTACHMENT 2

MONTHLY LEACHATE QUALITY
ANALYTICAL RESULTS FOR
JANUARY, FEBRUARY, AND MARCH 2009

S.A.C. ENVIRONMENTAL LABORATORY INC
FLDOH CERTIFICATION #84492
ANALYTICAL REPORT

SOLID WASTE MANAGEMENT
PO BOX 340
LECANTO FL 34460

Invoice Number 10146

Client CITRUS COUNTY UTILITIES Sample Number E090030
Project LANDFILL LEACHATE PLANT Date/Time Sampled 1/7/09 0835 HRS
Sample Description WWTP/EFF Date/Time Received 1/7/09 0943 HRS

Method	Analytes	Units	Results	MDL mg/L	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	1.38	1.4 mg/L	SJL	1/7/09 1130 HRS
SM2540-D	TSS	mg/L	<1	1.0 mg/L	SJL	1/9/09 1055 HRS
SM4500-NO3-E	NITRATE	mg/L	5.00	0.10 mg/L	CK	1/7/09 0730 HRS

Sally Ann Canillo
Laboratory Manager

These results relate only to this sample.
For all results qualified with an I, the PQL is defined to be 4 times the MDL

5376 S SUNCOAST BOULEVARD HOMOSASSA FL 34446 352.621.3513 FAX 352.621.3514

1 OF 1

S.A.C. ENVIRONMENTAL LABORATORY INC
FLDOH CERTIFICATION #84492
ANALYTICAL REPORT

SOLID WASTE MANAGEMENT
PO BOX 340
LECANTO FL 34460

Invoice Number 10188

Client CITRUS COUNTY UTILITIES **Sample Number** E090264
Project LANDFILL LEACHATE PLANT **Date/Time Sampled** 2/4/09 0905 HRS
Sample Description WWTP/EFF **Date/Time Received** 2/4/09 1145 HRS

Method	Analytes	Units	Results	MDL mg/L	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	4.56	1.4 mg/L	SJL	2/5/09 1048 HRS
SM2540-D	TSS	mg/L	3.00	1.0 mg/L	SJL	2/6/09 1020 HRS
SM4500-NO3-E	NITRATE	mg/L	6.03	0.10 mg/L	CK	2/4/09 1200 HRS


Laboratory Manager

These results relate only to this sample.
For all results qualified with an I, the PQL is defined to be 4 times the MDL

S.A.C. ENVIRONMENTAL LABORATORY INC
FLDOH CERTIFICATION #84492
ANALYTICAL REPORT

SOLID WASTE MANAGEMENT
PO BOX 340
LECANTO FL 34460

Invoice Number 10231

Client CITRUS COUNTY UTILITIES Sample Number E090484
Project LANDFILL LEACHATE PLANT Date/Time Sampled 3/4/09 0850 HRS
Sample Description WWTP/EFF Date/Time Received 3/4/09 1007 HRS

Method	Analytes	Units	Results	MDL mg/L	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	4.40	1.4 mg/L	SJL	3/4/09 1430 HRS
SM2540-D	TSS	mg/L	7.50	1.0 mg/L	SJL	3/6/09 0930 HRS
SM4500-NO3-E	NITRATE	mg/L	3.85	0.10 mg/L	CK	3/4/09 1115 HRS


Laboratory Manager

These results relate only to this sample.

For all results qualified with an I, the PQL is defined to be 4 times the MDL

ATTACHMENT 3

TABLES

**Table 1. Summary of Leachate Effluent Quality Analytical Results
Citrus County Central Landfill**

Parameter	Standard	MCL	Units	Leachate Effluent	
				10/15/2008	1/27/2009
Volatile Organics					
Benzene	PDWS	1	ug/L	0.5 U	1 U
Ethylbenzene	SDWS	30	ug/L	0.5 U	1 U
Ethylene Dibromide	PDWS	0.02	ug/L	0.0061 U	0.0064 U
Toluene	SDWS	40	ug/L	0.5 U	1 U
Vinyl chloride	PDWS	1	ug/L	0.53 U	1.1 U
Xylenes, Total	SDWS	20	ug/L	1 U	2.1 I
Trihalomethanes					
Bromodichloromethane	See Total THMs		ug/L	---	14
Bromoform	See Total THMs		ug/L	---	2.9
Chloroform	See Total THMs		ug/L	---	11
Dibromochloromethane	See Total THMs		ug/L	---	6.9
Total THMs	Permit	100	ug/L	---	34.8
General Chemistry					
Ammonia, Total	GCTL	2.8	mg/L	0.094	1.1
Chloride	SDWS	250	mg/L	940	1300
Sodium	PDWS	160	mg/L	570	800
TDS	SDWS	500	mg/L	2400	2800
General Field Parameters					
Conductivity	NS	NS	umhos/cm	3929	4907
Dissolved Oxygen	NS	NS	mg/L	2.96	0.93
pH	SDWS	6.5-8.5	pH Units	7.87	7.79
Temperature, Water	NS	NS	deg C	26.55	17.35
Turbidity	NS	NS	NTU	1.07	1.65

Notes

1. PDWS = Primary Drinking Water Standard (62-550 F.A.C.).
2. SDWS = Secondary Drinking Water Standard (62-550 F.A.C.).
3. GCTL = Groundwater Clean-up Target Level (62-777 F.A.C.).
4. THMs = Trihalomethanes
5. NS = No numeric standard has been set for this analyte.
6. --- = Parameter not analyzed.
7. mg/l: milligrams per liter.
8. ug/l: micrograms per liter.
9. NTU: nephelometric turbidity units.
10. Yellow Shaded values indicate parameter concentrations exceeded primary, secondary Drinking Water Standards or groundwater cleanup target levels.
11. **I** = Analyte detected below quantitation limits.
12. **U** = Analyte concentration was below the laboratory detection limit (value shown).

**Table 2. Summary of Leachate Effluent Monthly Analytical Results
Citrus County Central Landfill**

Parameter	Standard	MCL	Units	Leachate Effluent		
				1/7/2009	2/4/2009	3/4/2009
CBOD	Permit	20	mg/L	1.38	4.56	4.4
TSS	Permit	20	mg/L	<1	3	7.5
Nitrate	Permit	10	mg/L	5	6.03	3.85

Notes

1. mg/l: milligrams per liter.
2. ug/l: micrograms per liter.
3. Yellow Shaded values indicate parameter concentrations exceeded Permit MCL levels.
4. **I** = Analyte detected below quantitation limits.
5. **U** = Analyte concentration was below the laboratory detection limit (value shown).

ATTACHMENT 4

COMPACT DISK CONTAINING
REPORT IN PDF FORMAT AND
VALIDATOR FILE