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SCS ENGINEERS

April 5, 2010
File No. 09208040.04

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

Subject: Citrus County Central Landfill
Quarterly Leachate Sampling – First Quarter 2010
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 "ADaPT" format provided by TestAmerica Laboratories Inc., (TestAmerica).

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 pages 7, 8, 10, 11, 12, and 13 of 26 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 leachate quality sampling, physical readings and measurements, and leachate quality analyses were performed by TestAmerica. 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 TestAmerica quality manual. Laboratory analyses were performed in accordance with Chapter 62-160, FAC DEP-SOP-001/01. TestAmerica is certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP).

TestAmerica mobilized to the site on January 26, 2010, 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 2010, are included in Attachment 2 and summarized on 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

Charles E. Hilton 4/6/10
C. Ed Hilton, P.E.
Vice President
SCS ENGINEERS

KEG/CEH:keg

cc: T. Casey Stephens – Citrus County
Solid Waste Administrator, FDEP - Tallahassee

Attachments

DEP Form #: 62-701.900(31), F.A.C

Form Title: Water Quality Monitoring Certification

Effective Date January 6, 2010

Incorporated in Rule 62-701.510(9), F.A.C.

Florida Department of Environmental Protection

Bob Martinez Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

WATER QUALITY MONITORING CERTIFICATION

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) WACS Facility ID 39859

(3) DEP Permit Number 21375-008-SO/01

(4) Authorized Representative Name Casey Stephens, Title Director of Solid Waste

Address PO BOX 340

City Lecanto Zip 34460

Telephone Number (352) 527-7670

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 submission of false information including the possibility of fine and imprisonment.

Date: 4/5/10

T. Casey Stephens

Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization TestAmerica Laboratories, Inc

Analytical Lab NELAC / HRS Certification # NELAP Certifications E84282 and E81005

Lab Name TestAmerica Laboratories, Inc

Address 6712 Benjamin Road, Suite 100, Tampa, Fl 33634

Phone Number (813) 885-7427

Email address (if available) nancy.robertson@testamericainc.com

ATTACHMENT 1

LABORATORY ANALYTICAL RESULTS AND FIELD FORMS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 660-33514-1

Job Description: Citrus County EFF Leachate

For:
SCS Engineers
4041 Park Oaks Blvd
Suite 100
Tampa, FL 33610

Attention: Mr. Ken Guilbeault

Approved for release.
Nancy Robertson
Project Manager II
2/8/2010 9:17 AM

Nancy Robertson
Project Manager II
nancy.robertson@testamericainc.com
02/08/2010

Methods: FDEP, DOH Certification #: TestAmerica Tampa E84282, TestAmerica Tallahassee E81005.
These test results meet all the requirements of NELAC unless specified in the case narrative. All questions regarding this test report should be directed to the TestAmerica Project Manager who signed this test report. The estimated uncertainty associated with these reported results is available upon request. The results contained in this test report relate only to these samples included herein.

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
Method 8260B: The matrix spike (MS) recovery for batch 90011 was outside control limits for Bromoform. The associated laboratory control sample (LCS) recovery met acceptance criteria. Sample Leachate EFF is flagged with J3.

No other analytical or quality issues were noted.

GC Semi VOA
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry
Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 90114 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

EXECUTIVE SUMMARY - Detections

Client: SCS Engineers Job Number: 660-33514-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
660-33514-1	**LEACHATE EFF**					
Trihalomethanes, Total		38		0.50	ug/L	524.2
Bromoform		7.0	J3	1.0	ug/L	8260B
Chlorodibromomethane		9.7		1.0	ug/L	8260B
Chloroform		8.3		1.0	ug/L	8260B
Bromodichloromethane		13		1.0	ug/L	8260B
Field pH		7.27			SU	Field Sampling
Oxidation Reduction Potential		228			millivolts	Field Sampling
Oxygen, Dissolved		7.01			mg/L	Field Sampling
Sheen		None			SU	Field Sampling
Specific Conductance		3475			umhos/cm	Field Sampling
Turbidity		1.84			NTU	Field Sampling
Temperature		17.1			Degrees C	Field Sampling
Chloride		1000		10	mg/L	300.0
Ammonia (as N)		0.086		0.020	mg/L	350.1
Total Dissolved Solids		2200		17	mg/L	SM 2540C
Total Recoverable						
Sodium		580		5.0	mg/L	6010B

METHOD SUMMARY

Client: SCS Engineers Job Number: 660-33514-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Total Trihalomethane Calculation	TAL TAM	EPA-DW 524.2	
Volatile Organic Compounds (GC/MS)	TAL TAM	SW846 8260B	
Purge and Trap	TAL TAM		SW846 5030B
EDB	TAL TAM	EPA 8011	
Microextraction	TAL TAM		SW846 8011
Metals (ICP)	TAL TAM	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL TAM		SW846 3005A
Anions, Ion Chromatography	TAL TAM	MCAWW 300.0	
Nitrogen, Ammonia	TAL TAM	MCAWW 350.1	
Solids, Total Dissolved (TDS)	TAL TAM	SM SM 2540C	
Field Sampling	TAL TAM	EPA Field Sampling	

Lab References:

TAL TAM = TestAmerica Tampa

Method References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: SCS Engineers Job Number: 660-33514-1

Method	Analyst	Analyst ID
EPA-DW 524.2	Harris, Chris	CH
SW846 8260B	Harris, Chris	CH
EPA 8011	Ballard, James	JB
SW846 6010B	Fox, Greg	GF
EPA Field Sampling	Sampler, Field	FS
MCAWW 300.0	Cerome, Saurel	SC
MCAWW 350.1	Steward, Tiffany	TS
SM SM 2540C	Oonnoonny, Thomas	TO

SAMPLE SUMMARY

Client: SCS Engineers Job Number: 660-33514-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
660-33514-1	Leachate EFF	Water	01/26/2010 1130	01/26/2010 1725
660-33514-2TB	Trip Blank	Water	01/26/2010 1130	01/26/2010 1725

Client: SCS Engineers Job Number: 660-33514-1

Client Sample ID: **Leachate EFF**

Lab Sample ID: 660-33514-1 Date Sampled: 01/26/2010 1130
Client Matrix: Water Date Received: 01/26/2010 1725

524.2 Total Trihalomethane Calculation

Method:	524.2	Analysis Batch: 660-90043		Instrument ID:	NOEQUIP
Preparation:	N/A			Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Date Analyzed:	01/28/2010 1359			Final Weight/Volume:	1.0 mL
Date Prepared:					

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Trihalomethanes, Total	38		0.25	0.50

Client: SCS Engineers Job Number: 660-33514-1

Client Sample ID: Leachate EFF

Lab Sample ID: 660-33514-1 Date Sampled: 01/26/2010 1130
Client Matrix: Water Date Received: 01/26/2010 1725

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 660-90011 Instrument ID: BVMJ5975
Preparation: 5030B Lab File ID: 1JA2815.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Date Analyzed: 01/28/2010 1359 Final Weight/Volume: 5 mL
Date Prepared: 01/28/2010 1359

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Benzene	0.50	U	0.50	1.0
Ethylbenzene	0.44	U	0.44	1.0
Toluene	0.51	U	0.51	1.0
Xylenes, Total	0.50	U	0.50	3.0
Vinyl chloride	0.50	U	0.50	1.0
Bromoform	7.0	J3	0.58	1.0
Chlorodibromomethane	9.7		0.34	1.0
Chloroform	8.3		0.90	1.0
Bromodichloromethane	13		0.35	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	107		70 - 130
Dibromofluoromethane	107		70 - 130
4-Bromofluorobenzene	109		70 - 130

Client: SCS Engineers Job Number: 660-33514-1

Client Sample ID: **Trip Blank**

Lab Sample ID: 660-33514-2TB Date Sampled: 01/26/2010 1130
Client Matrix: Water Date Received: 01/26/2010 1725

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B Analysis Batch: 660-90011 Instrument ID: BVMJ5975
Preparation: 5030B Lab File ID: 1JA2812.D
Dilution: 1.0 Initial Weight/Volume: 5 mL
Date Analyzed: 01/28/2010 1250 Final Weight/Volume: 5 mL
Date Prepared: 01/28/2010 1250

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Benzene	0.50	U	0.50	1.0
Ethylbenzene	0.44	U	0.44	1.0
Toluene	0.51	U	0.51	1.0
Xylenes, Total	0.50	U	0.50	3.0
Vinyl chloride	0.50	U	0.50	1.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	104		70 - 130
Dibromofluoromethane	102		70 - 130
4-Bromofluorobenzene	107		70 - 130

Client: SCS Engineers Job Number: 660-33514-1

Client Sample ID: Leachate EFF

Lab Sample ID: 660-33514-1 Date Sampled: 01/26/2010 1130
Client Matrix: Water Date Received: 01/26/2010 1725

8011 EDB

Method:	8011	Analysis Batch: 660-90072		Instrument ID:	BSGU
Preparation:	8011	Prep Batch: 660-90069		Initial Weight/Volume:	35.7317 g
Dilution:	1.0			Final Weight/Volume:	2.0 mL
Date Analyzed:	01/29/2010 0046			Injection Volume:	4 uL
Date Prepared:	01/28/2010 1430			Result Type:	PRIMARY

Analyte	Result (ug/L)	Qualifier	MDL	PQL
Ethylene Dibromide	0.0098	U	0.0098	0.020

Surrogate	%Rec	Qualifier	Acceptance Limits
1,1,1,2-Tetrachloroethane	95		60 - 140

Client: SCS Engineers

Job Number: 660-33514-1

Client Sample ID: **Leachate EFF**

Lab Sample ID: 660-33514-1
Client Matrix: Water

Date Sampled: 01/26/2010 1130
Date Received: 01/26/2010 1725

6010B Metals (ICP)-Total Recoverable

Method:	6010B	Analysis Batch: 660-90039		Instrument ID:	ICPA
Preparation:	3005A	Prep Batch: 660-89989		Lab File ID:	10A29A
Dilution:	10			Initial Weight/Volume:	50 mL
Date Analyzed:	01/29/2010 1255			Final Weight/Volume:	50 mL
Date Prepared:	01/28/2010 1000				

Analyte	Result (mg/L)	Qualifier	MDL	PQL
Sodium	580		3.1	5.0

General Chemistry

Client Sample ID: **Leachate EFF**

Lab Sample ID: 660-33514-1 Date Sampled: 01/26/2010 1130
Client Matrix: Water Date Received: 01/26/2010 1725

Analyte	Result	Qual	Units	MDL	PQL	Dil	Method
Chloride	1000		mg/L	4.0	10	20	300.0
Analysis Batch: 660-90019	Date Analyzed: 01/28/2010 1406						
Ammonia (as N)	0.086		mg/L	0.010	0.020	1.0	350.1
Analysis Batch: 660-90114	Date Analyzed: 02/01/2010 1243						

Analyte	Result	Qual	Units	PQL	PQL	Dil	Method
Total Dissolved Solids	2200		mg/L	17	17	1.0	SM 2540C
Analysis Batch: 660-89979	Date Analyzed: 01/28/2010 0743						

Field Service / Mobile Lab

Client Sample ID: **Leachate EFF**

Lab Sample ID: 660-33514-1 Date Sampled: 01/26/2010 1130
Client Matrix: Water Date Received: 01/26/2010 1725

Analyte	Result	Qual	Units	Dil	Method	Analysis Batch	Date Analyzed Date Prepared
Field pH	7.27		SU	1.0	Field Sampling	660-90290	01/26/2010 1130
Oxidation Reduction Potential	228		millivolts	1.0	Field Sampling	660-90290	01/26/2010 1130
Oxygen, Dissolved	7.01		mg/L	1.0	Field Sampling	660-90290	01/26/2010 1130
Sheen	None		SU	1.0	Field Sampling	660-90290	01/26/2010 1130
Specific Conductance	3475		umhos/cm	1.0	Field Sampling	660-90290	01/26/2010 1130
Turbidity	1.84		NTU	1.0	Field Sampling	660-90290	01/26/2010 1130
Temperature	17.1		Degrees C	1.0	Field Sampling	660-90290	01/26/2010 1130

DATA REPORTING QUALIFIERS

Client: SCS Engineers Job Number: 660-33514-1

Lab Section	Qualifier	Description
GC/MS VOA		
	J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
	U	Indicates that the compound was analyzed for but not detected.
GC Semi VOA		
	U	Indicates that the compound was analyzed for but not detected.
Metals		
	U	Indicates that the compound was analyzed for but not detected.
General Chemistry		
	J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
	U	Indicates that the compound was analyzed for but not detected.

Client: SCS Engineers

Job Number: 660-33514-1

Method Blank - Batch: 660-90011

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 660-90011/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1143
Date Prepared: 01/28/2010 1143

Analysis Batch: 660-90011
Prep Batch: N/A
Units: ug/L

Instrument ID: BVMJ GC/MS
Lab File ID: 1JA2809.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	PQL
Benzene	0.50	U	0.50	1.0
Ethylbenzene	0.44	U	0.44	1.0
Toluene	0.51	U	0.51	1.0
Xylenes, Total	0.50	U	0.50	3.0
Vinyl chloride	0.50	U	0.50	1.0
Bromoform	0.58	U	0.58	1.0
Chlorodibromomethane	0.34	U	0.34	1.0
Chloroform	0.90	U	0.90	1.0
Bromodichloromethane	0.35	U	0.35	1.0

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	106	70 - 130
Dibromofluoromethane	104	70 - 130
4-Bromofluorobenzene	111	70 - 130
4-Bromofluorobenzene	111	70 - 130

Lab Control Sample - Batch: 660-90011

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 660-90011/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 0948
Date Prepared: 01/28/2010 0948

Analysis Batch: 660-90011
Prep Batch: N/A
Units: ug/L

Instrument ID: BVMJ GC/MS
Lab File ID: 1JA2804.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	20.0	16.9	85	64 - 140	
Ethylbenzene	20.0	17.0	85	69 - 131	
Toluene	20.0	15.0	75	70 - 131	
Vinyl chloride	20.0	15.4	77	48 - 147	
Bromoform	20.0	16.4	82	65 - 130	
Chlorodibromomethane	20.0	16.3	82	70 - 130	
Chloroform	20.0	17.5	87	59 - 130	
Bromodichloromethane	20.0	17.5	88	70 - 130	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: SCS Engineers Job Number: 660-33514-1

Matrix Spike - Batch: 660-90011

Method: 8260B
Preparation: 5030B

Lab Sample ID: 660-33514-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1511
Date Prepared: 01/28/2010 1511

Analysis Batch: 660-90011
Prep Batch: N/A
Units: ug/L

Instrument ID: BVMJ GC/MS
Lab File ID: 1JA2818.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Benzene	0.50	U	20.0	20.1	100	64 - 140	
Ethylbenzene	0.44	U	20.0	19.2	96	69 - 131	
Toluene	0.51	U	20.0	17.9	89	70 - 131	
Vinyl chloride	0.50	U	20.0	18.1	91	48 - 147	
Bromoform	7.0		20.0	19.9	64	65 - 130	J3
Chlorodibromomethane	9.7		20.0	25.7	80	70 - 130	
Chloroform	8.3		20.0	28.2	99	59 - 130	
Bromodichloromethane	13		20.0	34.5	106	70 - 130	

Duplicate - Batch: 660-90011

Method: 8260B
Preparation: 5030B

Lab Sample ID: 660-33514-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1445
Date Prepared: 01/28/2010 1445

Analysis Batch: 660-90011
Prep Batch: N/A
Units: ug/L

Instrument ID: BVMJ GC/MS
Lab File ID: 1JA2817.D
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Benzene	0.50	U	0.50	NC	30	U
Ethylbenzene	0.44	U	0.44	NC	30	U
Toluene	0.51	U	0.51	NC	30	U
Xylenes, Total	0.50	U	0.50	NC	30	U
Vinyl chloride	0.50	U	0.50	NC	30	U
Bromoform	7.0		6.84	3	30	
Chlorodibromomethane	9.7		8.91	8	30	
Chloroform	8.3		7.98	4	30	
Bromodichloromethane	13		12.1	9	30	

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	105	70 - 130
Dibromofluoromethane	109	70 - 130
4-Bromofluorobenzene	110	70 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: SCS Engineers Job Number: 660-33514-1

Method Blank - Batch: 660-90069

Method: 8011
Preparation: 8011

Lab Sample ID: MB 660-90069/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1741
Date Prepared: 01/28/2010 1430

Analysis Batch: 660-90072
Prep Batch: 660-90069
Units: ug/L

Instrument ID: HP 5890 DUAL ECD
Lab File ID: 1A28U013.D
Initial Weight/Volume: 34.7964 g
Final Weight/Volume: 2.0 mL
Injection Volume: 4 uL
Column ID: PRIMARY

Analyte	Result	Qual	MDL	PQL
Ethylene Dibromide	0.010	U	0.010	0.020

Surrogate	% Rec	Acceptance Limits
1,1,1,2-Tetrachloroethane	86	60 - 140

Lab Control Sample - Batch: 660-90069

Method: 8011
Preparation: 8011

Lab Sample ID: LCS 660-90069/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1801
Date Prepared: 01/28/2010 1430

Analysis Batch: 660-90072
Prep Batch: 660-90069
Units: ug/L

Instrument ID: HP 5890 DUAL ECD
Lab File ID: 1A28U014.D
Initial Weight/Volume: 34.7006 g
Final Weight/Volume: 2.0 mL
Injection Volume: 4 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ethylene Dibromide	0.252	0.224	89	60 - 140	

Matrix Spike - Batch: 660-90069

Method: 8011
Preparation: 8011

Lab Sample ID: 660-33498-H-4-B MS
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1842
Date Prepared: 01/28/2010 1430

Analysis Batch: 660-90072
Prep Batch: 660-90069
Units: ug/L

Instrument ID: HP 5890 DUAL ECD
Lab File ID: 1A28U016.D
Initial Weight/Volume: 36.1711 g
Final Weight/Volume: 2.0 mL
Injection Volume: 4 uL
Column ID: PRIMARY

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Ethylene Dibromide	0.010	U	0.242	0.202	83	60 - 140	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: SCS Engineers

Job Number: 660-33514-1

Duplicate - Batch: 660-90069

Method: 8011
Preparation: 8011

Lab Sample ID: 660-33511-H-4-B DU
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 2326
Date Prepared: 01/28/2010 1430

Analysis Batch: 660-90072
Prep Batch: 660-90069
Units: ug/L

Instrument ID: HP 5890 DUAL ECD
Lab File ID: 1A28U030.D
Initial Weight/Volume: 35.8355 g
Final Weight/Volume: 2.0 mL
Injection Volume: 4 uL
Column ID: PRIMARY

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Ethylene Dibromide	0.010	U	0.0098	NC	40	U

Surrogate	% Rec	Acceptance Limits
1,1,1,2-Tetrachloroethane	95	60 - 140

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: SCS Engineers Job Number: 660-33514-1

Method Blank - Batch: 660-89989

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: MB 660-89989/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/29/2010 1026
Date Prepared: 01/28/2010 1000

Analysis Batch: 660-90039
Prep Batch: 660-89989
Units: mg/L

Instrument ID: TJA ICP TRACE
Lab File ID: 10A29A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	PQL
Sodium	0.31	U	0.31	0.50

Lab Control Sample - Batch: 660-89989

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID: LCS 660-89989/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/29/2010 1032
Date Prepared: 01/28/2010 1000

Analysis Batch: 660-90039
Prep Batch: 660-89989
Units: mg/L

Instrument ID: TJA ICP TRACE
Lab File ID: 10A29A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sodium	10.0	10.1	101	75 - 125	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 660-89989

Method: 6010B
Preparation: 3005A
Total Recoverable

MS Lab Sample ID: 660-33484-B-2-B MS
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/29/2010 1050
Date Prepared: 01/28/2010 1000

Analysis Batch: 660-90039
Prep Batch: 660-89989

Instrument ID: TJA ICP TRACE
Lab File ID: 10A29A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 660-33484-B-2-C MSD
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/29/2010 1055
Date Prepared: 01/28/2010 1000

Analysis Batch: 660-90039
Prep Batch: 660-89989

Instrument ID: TJA ICP TRACE
Lab File ID: 10A29A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Sodium	109	94	75 - 125	2	20		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: SCS Engineers Job Number: 660-33514-1

Method Blank - Batch: 660-90019

Method: 300.0
Preparation: N/A

Lab Sample ID: MB 660-90019/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1146
Date Prepared: N/A

Analysis Batch: 660-90019
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS 2000
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	PQL
Chloride	0.20	U	0.20	0.50

Lab Control Sample - Batch: 660-90019

Method: 300.0
Preparation: N/A

Lab Sample ID: LCS 660-90019/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 1203
Date Prepared: N/A

Analysis Batch: 660-90019
Prep Batch: N/A
Units: mg/L

Instrument ID: ICS 2000
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	10.0	10.4	104	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 660-90019

Method: 300.0
Preparation: N/A

MS Lab Sample ID: 640-25852-J-3 MS ^2
Client Matrix: Water
Dilution: 2.0
Date Analyzed: 01/28/2010 1423
Date Prepared: N/A

Analysis Batch: 660-90019
Prep Batch: N/A

Instrument ID: ICS 2000
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

MSD Lab Sample ID: 640-25852-J-3 MSD ^2
Client Matrix: Water
Dilution: 2.0
Date Analyzed: 01/28/2010 1441
Date Prepared: N/A

Analysis Batch: 660-90019
Prep Batch: N/A

Instrument ID: ICS 2000
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume: 5 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Chloride	102	102	90 - 110	1	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: SCS Engineers Job Number: 660-33514-1

Method Blank - Batch: 660-90114

Method: 350.1
Preparation: N/A

Lab Sample ID: MB 660-90114/11
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/01/2010 1206
Date Prepared: N/A

Analysis Batch: 660-90114
Prep Batch: N/A
Units: mg/L

Instrument ID: Autoanalyzer
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	MDL	PQL
Ammonia (as N)	0.010	U	0.010	0.020

Lab Control Sample - Batch: 660-90114

Method: 350.1
Preparation: N/A

Lab Sample ID: LCS 660-90114/12
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/01/2010 1207
Date Prepared: N/A

Analysis Batch: 660-90114
Prep Batch: N/A
Units: mg/L

Instrument ID: Autoanalyzer
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ammonia (as N)	0.500	0.526	105	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 660-90114

Method: 350.1
Preparation: N/A

MS Lab Sample ID: 660-33526-A-1 MS
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/01/2010 1226
Date Prepared: N/A

Analysis Batch: 660-90114
Prep Batch: N/A

Instrument ID: Autoanalyzer
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 660-33526-A-1 MSD
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 02/01/2010 1227
Date Prepared: N/A

Analysis Batch: 660-90114
Prep Batch: N/A

Instrument ID: Autoanalyzer
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ammonia (as N)	81	82	90 - 110	1	30	J3	J3

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: SCS Engineers Job Number: 660-33514-1

Method Blank - Batch: 660-89979

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 660-89979/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 0734
Date Prepared: N/A

Analysis Batch: 660-89979
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	PQL	PQL
Total Dissolved Solids	5.0	U	5.0	5.0

Lab Control Sample - Batch: 660-89979

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 660-89979/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 0734
Date Prepared: N/A

Analysis Batch: 660-89979
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids	10000	9900	99	80 - 120	

Duplicate - Batch: 660-89979

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 660-33514-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 01/28/2010 0744
Date Prepared: N/A

Analysis Batch: 660-89979
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 15 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids	2200	2270	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Orlando Service Center
8010 Sunport Drive Suite 116
Orlando, FL 32809
Phone (813) 885-7427 Fax (813) 885-7049

Chain of Custody Record

660-33514

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

02/08/2010

Client Information	Sampler: Beth Harry TA Orlando	Lab PM: Robertson, Nancy	Carrier Tracking No(s):	COC No: 660-27090.1
Client Contact: Mr. Ken Guilbeault	Phone:	E-Mail: nancy.robertson@testamericainc.com		Page: Page 1 of 1
Company: SCS Engineers				Job #:
Address: 4041 Park Oaks Blvd Suite 100	Due Date Requested:			
City: Tampa	TAT Requested (days):			
State, Zip: FL, 33610				
Phone:	PO #: Purchase Order Requested			
Email: kguilbeault@scsengineers.com	WO #:			
Project Name: Citrus County Leachate EFF Quarterly	Project #: 66002924			
Site: EFF Leachate Tank	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	350.1 - Ammonia (as N)	6010B - Sodium	8260B - Volatiles for BTEX and Vinyl Chloride	300.0_28D - Chloride	2540C - Total Dissolved Solids	8011 - EDB	Total Number of containers	Special Instructions/Note:
			Preservation Code				S	D	A	N	N	N		
EFF (Leachate)	1-26-10	1130	G	Water			X	X	X	X	XX			
				Water										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: BH Date: 1010 1-25-10 Time: 1725-10 @1010 Method of Shipment: Fed Ex

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	1-26-10 1135			1-26-10 1135	
Relinquished by:	Date/Time: 1-26-10	Company	Received by:	Date/Time: 1-26-10 553	Company TA Tampa
Relinquished by:	Date/Time: 1-26-10 1725	Company TA Tampa	Received by:	Date/Time: 1-26-10 1725	Company TA-TP

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.0 C ea-07

Page 23 of 30

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

PRESERVATION CONFIRMATION FORM

Tampa, FL

JOB NUMBER: 660-33514 Logged in TALS By : Charles Volz

Cooler Received on (date) 1-26-12 And Opened By (full name): Amanda Harrison

1. Shipper (circle one) FEDEX UPS DHL WALK-IN COURIER (lab) OTHER: N/

2. Tracking # _____

3. Temperature of rep. sample or temp blank when opened: 2.0 °C on -07 *Degrees Celsius*

4. Number of H2SO4 (sulfuric acid) preserved containers: 1

   All containers pH < 2 ? YES If not please comment below:

5. Number of HCL (hydrochloric acid) preserved containers: _____

   All containers pH < 2 ? _____ If not please comment below:

6. Number of HNO3 (nitric acid) preserved containers: 1

   All containers pH < 2 ? YES If not please comment below:

7. Number of NaOH (sodium hydroxide) preserved containers: _____

   All containers pH >12 ? _____ If not please comment below:

8. Number of Unpreserved containers: 2

   All containers pH between 6 and 8? YES If not please comment below:

9. Was chlorine present in any of the unpreserved containers? NO

   If yes, which samples? _____

Meter #'s: Cyclone Meters

PAGE: 1 of 1

Form FD 9000-7: Field Parameter Data Sheet for Surface Water

CLIENT NAME: SCS ENGINEERS
SURVEY/PROJECT: EFF (Leachate)

SAMPLERS: Brett Harvey, Shawn. Victory

Time Out: ____
Time In: ____

SAMPLE ID	TIME HR:MIN	TOTAL DEPTH (feet)	SECCHI (feet)	SAMPLE DEPTH (feet)	WATER TEMP (Celsius)	DO (mg/L)	FIELD Ox-Red (mV)	Cond (µS/cm)	SALINITY (ppt)	PH (su)	TURBIDITY (NTU)	Comments
EFF	1138	—		Surface	17.1	7.01	228	3475	NA	7.27	1.84	No Sheen

Instrument Calibrations: YSI 3500 Calibrated to pH 7.00, slope to pH 4.00, pH 6.00= 6.00

KCL Conductivity Standards: 0.001M = 145 (147µΩ/cm) 0.01M = 1412 (1413µΩ/cm) YSI 85 D.O. Meter Calibrated to 16.1 mg/L @ 9.31 °C Cooler Temp: ___ °C

Signature: [signature] Relinquished by: [signature] Date: 1,26,10 Time: 1315

Date Completed: 1/26/10 Received by: Date: / / Time:

FIELD CONDITIONS FOR STATION#	AT TIME :	
CLOUD COVER (%):	WIND DIRECTION:	TIDAL STAGE:
PREVIOUS RAINFALL:	WIND SPEED (MPH/KNOTS):	WAVE CONDITIONS:

Note: This Sheet is used for recording Sample Data – Calibration information must also be documented

Field Instrument Maintenance Logbook

TestAmerica, Analytical Testing Corp. 4310 East Anderson Road, Orlando, Florida 32812

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS **INSTRUMENT #** Cyclone-5108741

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☑ pH ☐ ORP

☐ TURBIDITY ☐ RESIDUAL CL ☐ 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 Fisher Buffer Solution ph 7.00 Lot 092920 exp 06/11

Standard B Fisher Buffer Solution ph 4.00 Lot 093748 exp 07/11

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
1-25-10	1005	A	7.00	7.01	.01	YES	INIT	
↓	↓	B	4.00	4.01	.01	↓	↓	
1-26-10	957	A	7.00	7.00	0	YES	INIT	
↓	↓	B	4.00	4.02	.02	↓	↓	

Field Instrument Maintenance Logbook

TestAmerica, Analytical Testing Corp. 4310 East Anderson Road, Orlando, Florida 32812

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS **INSTRUMENT #** Cyclone-51387A1

PARAMETER: *[check only one]*

☐ TEMPERATURE ☑ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP

☐ TURBIDITY ☐ RESIDUAL CL ☐ 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 Conductivity Standard 100 µs Lot 2903689 3/11

Standard B Conductivity Standard 1000 µs Lot 2903689 3/11

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
1-25-10	1006	A	100	100	0	YES	INIT	
↓	↓	B	1000	1000	0	↓	L	
1-26-10	1001	A	100	95	5	NO	CONT	
↓	↓	B	1000	1000	0	YES	INIT	

Field Instrument Maintenance Logbook

TestAmerica, Analytical Testing Corp. 4310 East Anderson Road, Orlando, Florida 32812

INSTRUMENT (MAKE/MODEL#) Hach 2100P Turbidimeter **INSTRUMENT #** 2

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☐ ORP

☑ TURBIDITY ☐ RESIDUAL CL ☐ 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 Hach Turbidity Standards kit cat A8018 .16 NTU

Standard B 20 NTU

Standard C 100 NTU

D 800 NTU

DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
1-25-10	1010	A	.16	.21	.05	NO	CONT	
		B	20	18.5	1.5			
		C	100	95	5			
		D	800	786	16			
1-26-10	1015	A	.16	.21	.05	NO	CONT	
		B	20	18.5	1.5			
		C	100	96	4			
		D	800	785	15			

Field Instrument Maintenance Logbook

TestAmerica, Analytical Testing Corp. 4310 East Anderson Road, Orlando, Florida 32812

INSTRUMENT (MAKE/MODEL#) YSI 556 MPS **INSTRUMENT #** Cyclone 5138741

PARAMETER: *[check only one]*

☐ TEMPERATURE ☐ CONDUCTIVITY ☐ SALINITY ☐ pH ☑ ORP

☐ TURBIDITY ☐ RESIDUAL CL ☑ 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 Zobell's Solution for ORP 428 mV Lot 2904031 June/2010

Standard B _____

Standard C _____

DATE (yy/mm/dd)	TIME (hr:min)	STD ~~(A, B, C)~~	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS
1-25-10	1000	16.1	9.88	16.1 / 9.85	.03	YES	INIT	AA
1-26-10	954	16.0	9.80	16.0 / 9.80	0	YES	INIT	AA
1-26-10	957	429 A	428	428	0	YES	INIT	AA

Login Sample Receipt Check List

Client: SCS Engineers

Job Number: 660-33514-1

Login Number: 33514
List Source: TestAmerica Tampa
Creator: Volz, Charles
List Number: 1

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0 Degrees C. CU-07
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	

ATTACHMENT 2

MONTHLY LEACAHATE QUALITY ANALYTICAL RESULTS FOR JANUARY, FEBRUARY, AND MARCH 2010

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

SOLID WASTE MANAGEMENT
PO BOX 340
LECANTO FL 34460

Invoice Number 10812

Client	CITRUS COUNTY UTILITIES	***Sample Number***	E100023	
Project	LANDFILL LEACHATE PLANT	***Date/Time Sampled***	1/6/10	0815 HRS
Sample Description	WWTP/EFF	***Date/Time Received***	1/6/10	1040 HRS

Method	Analytes	Units	Results	MDL	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	1.50	0.30 mg/L	SJL	1/7/10 1249 HRS
SM2540-D	TSS	mg/L	<1	1.00 mg/L	SJL	1/8/10 0935 HRS
SM4500-NO3-E	NITRATE	mg/L	1.25	0.06 mg/L	CK	1/6/10 1045 HRS

Sally Russ Carrillo
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 10874

Client CITRUS COUNTY UTILITIES ***Sample Number*** E100212
Project LANDFILL LEACHATE PLANT ***Date/Time Sampled*** 2/3/10 1030 HRS
Sample Description WWTP/EFF ***Date/Time Received*** 2/3/10 1300 HRS

Method	Analytes	Units	Results	MDL	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	1.77	0.30 mg/L	SJL	2/3/10 1500 HRS
SM2540-D	TSS	mg/L	2.50	1.00 mg/L	SJL	2/5/10 1015 HRS
SM4500-NO3-E	NITRATE	mg/L	6.12	0.06 mg/L	CK	2/4/10 0900 HRS

Sally Ann Lassiter
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 10923

Client	CITRUS COUNTY UTILITIES	***Sample Number***	E100408	
Project	LANDFILL LEACHATE PLANT	***Date/Time Sampled***	3/2/10	0941 HRS
Sample Description	WWTP/EFF	***Date/Time Received***	3/2/10	1221 HRS

Method	Analytes	Units	Results	MDL	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	1.64	0.30 mg/L	SJL	3/3/10 1100 HRS
SM2540-D	TSS	mg/L	<1	1.00 mg/L	SJL	3/5/10 1010 HRS
SM4500-NO3-E	NITRATE	mg/L	1.06	0.06 mg/L	CK	3/3/10 0800 HRS

Sally Ann Camillo
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	4/20/2009	7/21/2009	9/9/2009	10/14/2009	1/26/2010
Volatile Organics								**Resample**		
Acetone	GCTL	6300	ug/L	---	---	---	21	---	---	---
Benzene	PDWS	1	ug/L	0.5 **U**	1 **U**	0.5 **U**	0.5 **U**	---	0.5 U	0.5 U
Ethylbenzene	SDWS	30	ug/L	0.5 **U**	1 **U**	0.5 **U**	0.44 **U**	---	0.44 U	0.44 U
Ethylene Dibromide	PDWS	0.02	ug/L	0.0061 **U**	0.0064 **U**	0.0064 **U**	0.5 **U**	---	0.0061 U	0.0098 U
Toluene	SDWS	40	ug/L	0.5 **U**	1 **U**	0.5 **U**	0.51 **U**	---	0.51 U	0.51 U
Vinyl chloride	PDWS	1	ug/L	0.53 **U**	1.1 **U**	0.53 **U**	0.5 **U**	---	0.5 U	0.5 U
Xylenes, Total	SDWS	20	ug/L	1 **U**	2.1 **I**	1 **U**	0.5 **U**	---	0.5 U	0.5 U
Trihalomethanes										
Bromodichloromethane	See Total THMs		ug/L	---	14	---	410	0.35 U	---	13
Bromoform	See Total THMs		ug/L	---	2.9	---	71	0.58 U	---	7
Chloroform	See Total THMs		ug/L	---	11	---	370	0.90 U	---	8.3
Dibromochloromethane	See Total THMs		ug/L	---	6.9	---	280	0.58 U	---	9.7
Total THMs	Permit	100	ug/L	---	34.8	---	1131	**Not Detected**	**---**	38
Metals										
Arsenic	PDWS	0.01	mg/L	---	---	---	0.0091 **I**	---	---	---
Barium	PDWS	2	mg/L	---	---	---	0.058	---	---	---
Cobalt	GCTL	0.14	mg/L	---	---	---	0.011	---	---	---
Chromium	PDWS	0.1	mg/L	---	---	---	0.0058 **I**	---	---	---
Copper	SDWS	1	mg/L	---	---	---	0.014	---	---	---
Nickel	PDWS	0.1	mg/L	---	---	---	0.046	---	---	---
Iron	SDWS	0.3	mg/L	---	---	---	0.068 **I**	---	---	---
Zinc	SDWS	5	mg/L	---	---	---	0.020 **I**	---	---	---
General Chemistry										
Ammonia, Total	GCTL	2.8	mg/L	0.094	1.1	0.19	0.16	---	0.010 U	0.086
Chloride	SDWS	250	mg/L	940	1300	1500	710	---	910	1000
Cyanide	PDWS	0.2	mg/L	---	---	---	0.014	---	---	---
Sodium	PDWS	160	mg/L	570	800	820	430	---	570	580
TDS	SDWS	500	mg/L	2400	2800	3000	1800	---	2000	2200
General Field Parameters										
Conductivity	NS	NS	umhos/cm	3929	4907	4820	3462	2786	3772	3475
Dissolved Oxygen	NS	NS	mg/L	2.96	0.93	2.78	1.34	0.3	0.72	7.01
pH	SDWS	6.5-8.5	pH Units	7.87	7.79	7.68	7.49	7.94	7.83	7.27
Oxygen Reduction Potential	NS	NS	mV	---	---	---	---	---	---	228
Temperature, Water	NS	NS	deg C	26.55	17.35	24.83	31.5	27.9	27.9	17.1
Turbidity	NS	NS	NTU	1.07	1.65	5	---	6.67	4.73	1.84

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. Twelve Month Summary of Leachate Effluent Monthly Analytical Results
Citrus County Central Landfill

Parameter	Standard	MCL	Units	4/1/2009	5/12/2009	6/4/2009	7/1/2009	8/5/2009	9/9/2009	10/7/2009	11/4/2009	12/9/2009	1/6/2010	2/3/2010	3/2/2010
CBOD	Permit	20	mg/L	2.78	3.3	10.04	5.96	2.38	1.54	1.48	2.4	1.76	1.5	1.77	1.64
TSS	Permit	20	mg/L	3	7	1	5	5	3.5	5	1.0 **U**	1.0 **U**	1.0 **U**	6.5	1.0 **U**
Nitrate	Permit	10	mg/L	1.85	0.52	0.46	5.68	0.38	0.45	1.01	3.6	1.38	1.25	6.12	1.06

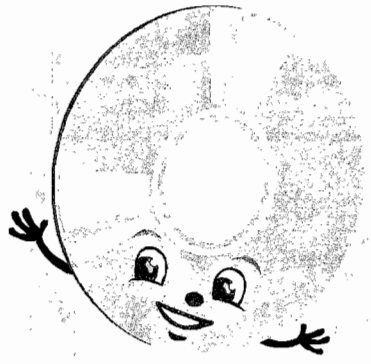
Notes

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
ADaPT FILE

ATTENTION



ATTACHMENT 4 IS AVAILABLE ON DISC:

- To view the disk please contact:

State of Florida
Department of Environmental Protection
Waste Cleanup Program
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926
Phone: (813) 632-7600