SCS ENGINEERS

July 6, 2009 File No. 09208040.02

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 – Second Quarter 2009

Permit No. 21375-008-SO/01

Dear Mr. Morris:

SCS Engineers (SCS) is providing the Second 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). Subsequent monitoring reports will include an EDD in the ADaPT format.

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.

Second Quarter 2009 leachate quality sampling and physical readings and measurements were performed by SCS. Second 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. July 6, 2009 Page 2

by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP).

SCS mobilized to the site on April 20, 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 April, May, and June of 2009 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

KEG/JAB:keg

Project Director

cc: Susan Metcalfe – Citrus County

Solid Waste Administrator, FDEP - Tallahassee

Attachments

DEF Form # 62-522-900(2)
Form Tille Ground Water Monitoring Report
Effective Date
DEP Application No.

Florida Department of Environmental Protection Twin Towers Office Bldg. 2600 Blair Stone Rand Tallahassee. Florida 32399-2400

GROUND WATER MONITORING REPORT Rule 62-522.600(11)

PART I GB	NERAL	INFORM	MATION
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•	Citrus County Central Lat PO BOX			
Address	Lecanto	270	Zip	34460
City				
Telephone Nun		<u>-7670</u>		
2) Facility WACS N	iumber <u>SWD/09/39</u>			
3) DEP Permit Nun	iber <u>21375-008-</u>	SO/01		
4) Authorized Rep	resentative Name Su	san Metcalfe, P.G., D	irector of Solid Waste	
Address	РО ВОХ	340		34460
City	Lecanto		Zip	34460
Telephone Nu	mber <u>(352) 52</u>	7-7670		
5) Type of Dischar	ge Trea	ted Class Landfill L	cachate	
6) Method of Disch	arge <u>Gro</u> u	indwater via Percolat	on	
. ,		Certificati	ion	
and all attachments a	y of law that I have person nd that, based on my inquination is true, accurate, a g the possibility of fine a	nd complete. I am av	n familiar with the information is immediately responsible for vare that there are significant possible to the significant possible signature of Owner or the signature of Own	1 Melcalle
PART II QUALITY	ASSURANCE REQUIR	EMENTS		
Sample Organization	Comp QAP#	NA	NELAP Certification E83	079
Analytical Lab		IRS Certification #	MEDIAL CALAMANA	
Lah Name	Pace Analytical Service	s, Inc.	74	
Address	8 East Tower Circle, Or	mond Beach, FL 321	/4	
	(386) 672-5668			

ATTACHMENT 1 LABORATORY ANALYTICAL RESULTS AND FIELD FORMS

May 01, 2009

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

RE: Citrus County Leachate/09208040.22 Order No.: F09040840

Dear Mr. Mark Tumlin:

Pace Analytical Services, Inc received 3 samples on 4/20/2009 2:05:00 PM for the analyses presented in the following report. The results included in this report relate only to the samples received. 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) 676-4806.

Sincerely, Jeff Baylor

Project Manager

Pace Analytical Services, Inc.

Jell Bryler

P.O. Box 468

Ormond Beach, FL 32175-0468

The test results in this report meet the requirements of the 2003 NELAC standards unless otherwise noted.

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
dw Dry Weight
kg Kilograms
L Liter

LCS Laboratory Control Spike (may also be appended with an abbreviation indicating spiking level)

MBLK Preparation Method Blank

MDL Laboratory Method Detection Limit

mg Milligrams
ml Milliliter

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

RL Reporting Limit

RPD Relative Percent Difference

SPK Spike

SUB Indicates subcontracted analytical results

TIC Tentatively Identified Compound
TNTC Too Numerous To Count

ug Micrograms

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.

Because 1,2-diphenylhydrazine breaks down rapidly to azobenzene at the GC inlet after initial smple injection, all results for this compound will be quantified as azobenzene.

All analytical results are provide on an "as received" basis unless units include the term "dw", indicating that the analytical results are provided on a dry weight basis.

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
Louisiana	DHH	LA090012
Maine	LCP	FL020
Massachusetts	DEP	M-FL1264
Michigan	DEQ	9911
Mississippi	DOH	FL NELAC Reciprocity
Nevada	EP	NAC 445A
New Hampshire	DES	2958
New Jersey	DEP	FL765
New York	DOH	11608
North Carolina	NCPH	12710
Pennsylvania	DEP	68-547
Puerto Rico	DOH	FL 00020
Tennessee	DOH	TN02974
Texas	CEQ	TX246
Virginia	DGS	432

Case Narrative

CLIENT: SCS Engineers

Project: Citrus County Leachate/09208040.22

Lab Order: F09040840

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. All sample containers received for this report were collected by either the client or an agent of the client. Any field data results contained within this report were therefore generated by the client and were reported at the request of the client.

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.

On 5/1/09, the client requested that the sample ID for F09040840-001 be revised due to an error on the chain of custody. A revised report was generated on 5/1/09.

SW8011: A heavy emulsion was generated during the extraction process employed in the preparation of sample F09040840-001 for this analysis.

SW8260: For samples F09040840-001 and -002, the recovery for surrogate 1,2-Dichloroethane-d4 exceeded method guidance criteria (high bias).

III. QUALITY CONTROL

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

Analytical Report

Sample Description: 172

CLIENT: Client Sample ID: Leachate Effluent **SCS** Engineers

Lab Order: F09040840 **Collection Date:** 4/20/2009 11:10:00 AM **Project:** Citrus County Leachate/09208040.22

Lab ID: F09040840-001 Matrix: Waste Water

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ICP METALS		SW6010	PrepDat	e: 4/22	/2009 9:15:00 A		Analyst: TPI	
Sodium	820		5.0	10	mg/L	10	04/23/09 15:45	61070
8011: EDB AND DBCP		SW8011	PrepDat	e: 4/21	/2009 1:30:00 P		Analyst: LMA	
Ethylene Dibromide	0.0064	U	0.0064	0.010	μg/L	1	04/22/09 02:37	61034
8260: VOLATILE ORGANIC COMPOUNDS		SW8260	PrepDat	e: 4/24	/2009 10:00:00		Analyst: JH	
Benzene	0.50	U	0.50	1.0	μg/L	1	04/24/09 21:36	61179
Ethylbenzene	0.50	U	0.50	1.0	μg/L	1	04/24/09 21:36	61179
Toluene	0.50	U	0.50	1.0	μg/L	1	04/24/09 21:36	61179
Vinyl chloride	0.50	U	0.50	1.0	μg/L	1	04/24/09 21:36	61179
Xylenes, Total	1.0	U	1.0	3.0	μg/L	1	04/24/09 21:36	61179
Surr: 4-Bromofluorobenzene	82.2		0	70-114	%REC	1	04/24/09 21:36	61179
Surr: Dibromofluoromethane	117		0	88-117	%REC	1	04/24/09 21:36	61179
Surr: 1,2-Dichloroethane-d4	125	S	0	86-125	%REC	1	04/24/09 21:36	61179
Surr: Toluene-d8	103		0	87-113	%REC	1	04/24/09 21:36	61179
ANIONS BY ION CHROMATOGRAPHY		E300.0	PrepDat	e:			Analyst: AMD	
Chloride	1500	x	0.43	10	mg/L	20	04/21/09 05:35	R78288c
NITROGEN, AMMONIA		E350.1	PrepDat	e:			Analyst: TKE	
Nitrogen, Ammonia (As N)	0.19		0.020	0.050	mg/L	1	04/21/09 14:40	R78296E
SOLIDS, TOTAL DISSOLVED		SM2540 C	PrepDat	e: 4/21	/2009 8:16:09 A		Analyst: JPE	
Solids, Total Dissolved	3000	х	5.0	5.0	mg/L	1	04/21/09 09:19	61039

Data Qualifier Code Key:

Analyte detected below quantitation limits

U Not Detected Above the MDL

 $[\]mathbf{S}$ Spike Recovery outside accepted recovery limits

Value exceeds Maximum Contaminant Level

Analytical Report

CLIENT: SCS Engineers Client Sample ID: Blank 1

Lab Order: F09040840 **Collection Date:** 4/22/2009 11:20:00 AM

Project: Citrus County Leachate/09208040.22 Sample Description:

Lab ID: F09040840-002 Matrix: Drinking Water

Analyses	Result	Qual	MDL	PQL	Units	DF	Date Analyzed	Batch ID
ICP METALS		SW6010	PrepDat	e: 4/22	/2009 9:15:00 A		Analyst: TPI	
Sodium	0.50	U	0.50	1.0	mg/L	1	04/22/09 22:56	61070
8011: EDB AND DBCP		SW8011	PrepDate	e: 4/21	/2009 1:30:00 P		Analyst: LMA	
Ethylene Dibromide	0.0063	U	0.0063	0.010	μg/L	1	04/22/09 02:53	61034
8260: VOLATILE ORGANIC COMPOUNDS		SW8260	PrepDate	e: 4/24	/2009 10:00:00		Analyst: JH	
Benzene	0.50	U	0.50	1.0	μg/L	1	04/24/09 22:12	61179
Ethylbenzene	0.50	U	0.50	1.0	μg/L	1	04/24/09 22:12	61179
Toluene	0.50	U	0.50	1.0	μg/L	1	04/24/09 22:12	61179
Vinyl chloride	0.50	U	0.50	1.0	μg/L	1	04/24/09 22:12	61179
Xylenes, Total	1.0	U	1.0	3.0	μg/L	1	04/24/09 22:12	61179
Surr: 4-Bromofluorobenzene	86.8		0	70-114	%REC	1	04/24/09 22:12	61179
Surr: Dibromofluoromethane	113		0	88-117	%REC	1	04/24/09 22:12	61179
Surr: 1,2-Dichloroethane-d4	128	S	0	86-125	%REC	1	04/24/09 22:12	61179
Surr: Toluene-d8	105		0	87-113	%REC	1	04/24/09 22:12	61179
ANIONS BY ION CHROMATOGRAPHY		E300.0	PrepDat	e:			Analyst: AMD	
Chloride	0.021	U	0.021	0.50	mg/L	1	04/21/09 05:51	R78288c
NITROGEN, AMMONIA		E350.1	PrepDat	e:			Analyst: TKE	
Nitrogen, Ammonia (As N)	0.029	1	0.020	0.050	mg/L	1	04/21/09 14:41	R78296E
SOLIDS, TOTAL DISSOLVED		SM2540 C	PrepDat	e: 4/21	/2009 8:16:09 A		Analyst: JPE	
Solids, Total Dissolved	5.0	U	5.0	5.0	mg/L	1	04/21/09 09:20	61039

Data Qualifier Code Key:

Analyte detected below quantitation limits

U Not Detected Above the MDL

S Spike Recovery outside accepted recovery limits

x Value exceeds Maximum Contaminant Level

CLIENT: SCS Engineers

Work Order: F09040840

Project: Citrus County Leachate/09208040.22

ANALYTICAL QC SUMMARY REPORT

TestCode: 8011_W

Sample ID	MB-61034	SampType:	MBLK		TestCode: 8011_W	<i>I</i> Units	s: µg/L	Prep Da	ate: 4/21/ 2	2009	RunNo:	78385	
Client ID:	MB-61034	Batch ID:	61034		TestNo: SW8011	SW8	011	Analysis D	ate: 4/21/	2009	SeqNo:	2400144	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Ethylene Dib	oromide		0.0062	U	0.0062								
Sample ID	LCS-61034	SampType:	LCS		TestCode: 8011_W	<i>I</i> Units	ε: μg/L	Prep Da	ate: 4/21/ 2	2009	RunNo:	78385	
Client ID:	LCS-61034	Batch ID:	61034		TestNo: SW8011	SW8	011	Analysis D	ate: 4/21/	2009	SeqNo:	2400145	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Ethylene Dib	oromide		0.25		0.0062	0.25	0	101	60	140			
Sample ID	F09040819-001BMS	SampType:	MS		TestCode: 8011_W	<i>I</i> Units	s: μg/L	Prep Da	ate: 4/21/ 2	2009	RunNo:	78385	
		Batch ID:	61034		TestNo: SW8011	SW8	011	Analysis D	ate: 4/21/	2009	SeqNo:	2400148	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Ethylene Dib	oromide		0.48		0.010	0.42	0	113	60	140			
Sample ID	F09040819-001BMSI	D SampType:	MSD		TestCode: 8011_W	<i>I</i> Units	s: μg/L	Prep Da	ate: 4/21/ 2	2009	RunNo:	78385	
		Batch ID:	61034		TestNo: SW8011	SW8	011	Analysis D	ate: 4/22/ 2	2009	SeqNo:	2400149	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Ethylene Dil	oromide		0.49		0.010	0.42	0	116	60	140	0.48	1.84	40

Data Qualifier Analyte detected below quantitation limits

Code Key:

S Spike Recovery outside accepted recovery limits

Q Holding times for preparation or analysis exceeded

TestCode: 8260_W

CLIENT: SCS Engineers
Work Order: F09040840

ANALYTICAL QC SUMMARY REPORT

Project: Citrus County Leachate/09208040.22

Sample ID MB-61179	SampType: MBLK		TestCode: 8260_W		: μg/L	Prep Date			RunNo:		
Client ID: MB-61179	Batch ID: 61179		TestNo: SW8260	SW50	030A	Analysis Dat	te: 4/24/2	009	SeqNo:	2402538	
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Benzene	0.50	U	0.50								
Ethylbenzene	0.50	U	0.50								
Toluene	0.50	U	0.50								
Vinyl chloride	0.50	U	0.50								
Xylenes, Total	1.0	U	1.0								
Surr: 4-Bromofluorobenzene	36		0	40	0	89.7	70	114			
Surr: Dibromofluoromethane	44		0	40	0	110	88	117			
Surr: 1,2-Dichloroethane-d4	48		0	40	0	120	86	125			
Surr: Toluene-d8	41		0	40	0	103	87	113			
Sample ID LCS-61179	SampType: LCS		TestCode: 8260_W	Units	: μg/L	Prep Date	e: 4/24/2	009	RunNo:	78474	
Client ID: LCS-61179	Batch ID: 61179		TestNo: SW8260	SW50)30A	Analysis Dat	e: 4/24/2	009	SeqNo:	2402540	
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Ethylbenzene	22		0.50	20	0	112	79	140			
Toluene	23		0.50	20	0	114	69	140			
Vinyl chloride	23		0.50	20	0	115	62	140			
Surr: 4-Bromofluorobenzene	41		0	40	0	102	70	114			
Surr: Dibromofluoromethane	41		0	40	0	103	88	117			
Surr: 1,2-Dichloroethane-d4	43		0	40	0	107	86	125			
Surr: Toluene-d8	42		0	40	0	104	87	113			
Sample ID F09040954-002AMS	SampType: MS		TestCode: 8260_W	Units	: μg/L	Prep Date	e: 4/24/2	009	RunNo:	78474	
	Batch ID: 61179		TestNo: SW8260	SW50	030A	Analysis Dat	e: 4/24/2	009	SeqNo:	2402555	
Analyte	Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Ethylbenzene	20		0.50	20	0	102	79	140			

Data

Analyte detected below quantitation limits

Qualifier Code Key:

S Spike Recovery outside accepted recovery limits

Q Holding times for preparation or analysis exceeded

CLIENT: SCS Engineers

Work Order: F09040840

Project: Citrus County Leachate/09208040.22

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID F09040954-002AMS	SampType: MS		TestCode: 8260_W	Units	:: μg/L	Prep Date	e: 4/24/2	2009	RunNo:	78474	
	Batch ID: 61179		TestNo: SW8260	SW5	030A	Analysis Dat	e: 4/24/2	2009	SeqNo:	2402555	
Analyte	Resul	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Toluene	20		0.50	20	0	102	69	140			
Vinyl chloride	23		0.50	20	0	115	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	44		0	40	0	111	86	125			
Surr: Toluene-d8	42	!	0	40	0	106	87	113			
Sample ID F09040954-002AMSI	DSampType: MSD		TestCode: 8260_W	Units	: μg/L	Prep Date	e: 4/24/2	009	RunNo:	78474	
Sample ID F09040954-002AMSI	DSampType: MSD Batch ID: 61179		TestNo: SW8260			Prep Date Analysis Dat				78474 2402556	
Sample ID F09040954-002AMSI Analyte		Qual	_		030A	Analysis Dat	e: 4/25/2				RPDLimit
	Batch ID: 61179		TestNo: SW8260	SW5	030A	Analysis Dat	e: 4/25/2	2009	SeqNo:	2402556	RPDLimit 40
Analyte	Batch ID: 61179		TestNo: SW8260	SW50	SPK Ref Val	Analysis Dat	e: 4/25/2 LowLimit	HighLimit	SeqNo:	2402556 %RPD	
Analyte Ethylbenzene	Batch ID: 61179 Result	1	TestNo: SW8260 MDL 0.50	SPK value	SPK Ref Val	Analysis Dat	te: 4/25/2 LowLimit 79	HighLimit	SeqNo: RPD Ref Val	2402556 %RPD 1.31	40
Analyte Ethylbenzene Toluene	Batch ID: 61179 Result		TestNo: SW8260 MDL 0.50 0.50	SPK value 20 20	SPK Ref Val 0 0	Analysis Dat	te: 4/25/2 LowLimit 79 69	HighLimit 140 140	SeqNo: RPD Ref Val 20 20	2402556 %RPD 1.31 0.638	40 40
Analyte Ethylbenzene Toluene Vinyl chloride	Batch ID: 61179 Result 21 20 24		TestNo: SW8260 MDL 0.50 0.50 0.50	SPK value 20 20 20 20	030A SPK Ref Val 0 0 0	Analysis Dat %REC 104 102 118	LowLimit 79 69 62	HighLimit 140 140 140	SeqNo: RPD Ref Val 20 20 23	2402556 %RPD 1.31 0.638 2.80	40 40 40
Analyte Ethylbenzene Toluene Vinyl chloride Surr: 4-Bromofluorobenzene	Batch ID: 61179 Result 21 20 24		TestNo: SW8260 MDL 0.50 0.50 0.50 0	SPK value 20 20 20 40	030A SPK Ref Val 0 0 0 0	%REC 104 102 118 101	LowLimit 79 69 62 70	HighLimit 140 140 140 141	SeqNo: RPD Ref Val 20 20 23 41	2402556 %RPD 1.31 0.638 2.80 0	40 40 40 0

Data Qualifier Code Key: Analyte detected below quantitation limits

S Spike Recovery outside accepted recovery limits

Holding times for preparation or analysis exceeded

CLIENT: SCS Engineers

Work Order: F09040840

ANALYTICAL QC SUMMARY REPORT

Project: Citrus County Leachate/09208040.22 TestCode: IC300_W

Sample ID	МВ	SampType:	MBLK		TestCode: IC300_\	V Units	: mg/L	Prep Dat	te:		RunNo:	78288	
Client ID:	MB	Batch ID:	R78288c		TestNo: E300.0			Analysis Da	te: 4/21/2	2009	SeqNo:	2394887	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride			0.028	U	0.028								
Nitrogen, N	itrate		0.0054	U	0.0054								
Sample ID	LCS	SampType:	LCS		TestCode: IC300_\	V Units	: mg/L	Prep Dat	te:		RunNo:	78288	
Client ID:	LCS	Batch ID:	R78288c		TestNo: E300.0			Analysis Da	te: 4/21/2	2009	SeqNo:	2394888	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Chloride			23		0.028	25	0	91.5	90	110			
			2.3		0.0054	0.5	0	93.3	90	110			
Nitrogen, N	itrate		2.3		0.0054	2.5	0	33.3	30	110			
Nitrogen, Ni Sample ID	F09040783-006AMS	SampType:			TestCode: IC300_V		: mg/L	Prep Dat			RunNo:	78288	
		' ''							te:			78288 2394899	
		' ''	MS	Qual	TestCode: IC300_V			Prep Dat	te: 4/21/2				RPDLimit
Sample ID		' ''	MS R78288c		TestCode: IC300_\ TestNo: E300.0	V Units	: mg/L	Prep Dat Analysis Da	te: 4/21/2	2009	SeqNo:	2394899	RPDLimit
Sample ID Analyte	F09040783-006AMS	' ''	MS R78288c Result	Qual	TestCode: IC300_V TestNo: E300.0 MDL	V Units	: mg/L SPK Ref Val	Prep Dat Analysis Da %REC	te: 4/21/2 LowLimit	2009 HighLimit	SeqNo:	2394899	RPDLimit
Sample ID Analyte Chloride Nitrogen, I	F09040783-006AMS	Batch ID:	MS R78288c Result 13 0.88	Qual S	TestCode: IC300_V TestNo: E300.0 MDL 0.028	V Units SPK value 10 1.0	SPK Ref Val	Prep Dat Analysis Da %REC 88.2	te: 4/21/2 LowLimit 90 90	2009 HighLimit	SeqNo:	2394899 %RPD	RPDLimit
Sample ID Analyte Chloride Nitrogen, I	F09040783-006AMS	Batch ID:	MS R78288c Result 13 0.88	Qual S QS	TestCode: IC300_V TestNo: E300.0 MDL 0.028 0.0054	V Units SPK value 10 1.0	SPK Ref Val	Prep Dat Analysis Da %REC 88.2 88.3	te: 4/21/2 LowLimit 90 90	2009 HighLimit 110 110	SeqNo: RPD Ref Val RunNo:	2394899 %RPD	RPDLimit
Sample ID Analyte Chloride Nitrogen, I	F09040783-006AMS	Batch ID:	MS R78288c Result 13 0.88	Qual S QS	TestCode: IC300_V TestNo: E300.0 MDL 0.028 0.0054 TestCode: IC300_V	V Units SPK value 10 1.0	SPK Ref Val	Prep Date Analysis Date Analys	te: 4/21/2 LowLimit 90 90 ee: te: 4/21/2	2009 HighLimit 110 110	SeqNo: RPD Ref Val RunNo:	2394899 %RPD 78288	RPDLimit RPDLimit
Sample ID Analyte Chloride Nitrogen, I Sample ID	F09040783-006AMS	Batch ID:	MS R78288c Result 13 0.88 MSD R78288c	Qual S QS	TestCode: IC300_V TestNo: E300.0 MDL 0.028 0.0054 TestCode: IC300_V TestNo: E300.0	V Units SPK value 10 1.0 V Units	: mg/L SPK Ref Val 4.4 0	Prep Dat Analysis Da %REC 88.2 88.3 Prep Dat Analysis Da	te: 4/21/2 LowLimit 90 90 ee: te: 4/21/2	2009 HighLimit 110 110	SeqNo: RPD Ref Val RunNo: SeqNo:	2394899 %RPD 78288 2394900	

Data

Analyte detected below quantitation limits

Qualifier Code Key:

S Spike Recovery outside accepted recovery limits

Q Holding times for preparation or analysis exceeded

CLIENT: SCS Engineers
Work Order: F09040840

Project:

F09040840 Citrus County Leachate/09208040.22

ANALYTICAL QC SUMMARY REPORT

TestCode: ICP-6010_W

Sample ID	MB-61070	SampType:	MBLK	TestCode	: ICP-6010	_W Units	: μg/L	Prep Da	te: 4/22/2	2009	RunNo:	78329	
Client ID:	MB-61070	Batch ID:	61070	TestNo	SW6010	SW30	005A	Analysis Da	ate: 4/22/2	2009	SeqNo:	2399162	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Sodium			500	U	500								
Sample ID	LCS-61070	SampType:	LCS	TestCode	: ICP-6010)_W Units	: μg/L	Prep Da	te: 4/22/2	2009	RunNo:	78329	
Client ID:	LCS-61070	Batch ID:	61070	TestNo	SW6010	SW30	005A	Analysis Da	ate: 4/22/2	2009	SeqNo:	2399163	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Sodium			12000		500	12000	0	96.0	80	120			
Sample ID	F09040832-004BMS	SampType:	MS	TestCode	: ICP-6010	_W Units	: μg/L	Prep Da	te: 4/22/2	2009	RunNo:	78329	
		Batch ID:	61070	TestNo	SW6010	SW30	005A	Analysis Da	ate: 4/22/2	2009	SeqNo:	2399174	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Sodium			12000		500	12000	0	96.8	75	125			
Sample ID	F09040832-004BMSI	DSampType:	MSD	TestCode	: ICP-6010	_W Units	: μg/L	Prep Da	te: 4/22/2	2009	RunNo:	78329	
		Batch ID:	61070	TestNo	SW6010	SW30	005A	Analysis Da	ate: 4/22/2	2009	SeqNo:	2399175	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Sodium			12000		500	12000	0	98.4	75	125	500 U	1.64	20

Qualifier Code Key:

Data

Analyte detected below quantitation limits

S Spike Recovery outside accepted recovery limits

Q Holding times for preparation or analysis exceeded

ANALYTICAL QC SUMMARY REPORT

SCS Engineers CLIENT: Work Order:

Project:

F09040840

TestCode: N-NH3_W Citrus County Leachate/09208040.22

Sample ID	QCS	SampType:	QCS		TestCode:	N-NH3_	W Units	: mg/L	Prep D	ate:		RunNo:	78296	
Client ID:	QCS	Batch ID:	R78296		TestNo:	E350.1			Analysis D	ate: 4/21/2	2009	SeqNo:	2396065	
Analyte			Result	Qual		MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Nitrogen, Ar	mmonia (As N)		9.8			0.020	10	0	98.1	90	110			
Sample ID	MB-R78296E	SampType:	MBLK		TestCode:	N-NH3_	W Units	: mg/L	Prep D	ate:		RunNo:	78296	
Client ID:	MB-R78296E	Batch ID:	R78296E		TestNo:	E350.1			Analysis D	ate: 4/21/2	2009	SeqNo:	2396270	
Analyte			Result	Qual		MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Nitrogen, Ar	mmonia (As N)		0.020	U		0.020								
Sample ID	LCS-R78296E	SampType:	LCS		TestCode:	N-NH3_	W Units	: mg/L	Prep D	ate:		RunNo:	78296	
Client ID:	LCS-R78296E	Batch ID:	R78296E		TestNo:	E350.1			Analysis D	ate: 4/21/2	2009	SeqNo:	2396283	
Analyte			Result	Qual		MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Nitrogen, Ar	mmonia (As N)		1.0			0.020	1.0	0	99.6	90	110			
Sample ID	F09040837-004AMS	SampType:	MS		TestCode:	N-NH3_	W Units	: mg/L	Prep D	ate:		RunNo:	78296	
		Batch ID:	R78296E		TestNo:	E350.1			Analysis D	ate: 4/21/2	2009	SeqNo:	2396297	
Analyte			Result	Qual		MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Nitrogen, Ar	mmonia (As N)		6.9			0.020	1.0	5.9	96.7	90	110			
Sample ID	F09040837-004ADUP	SampType:	DUP		TestCode:	N-NH3_	W Units	: mg/L	Prep D	ate:		RunNo:	78296	
		Batch ID:	R78296E		TestNo:	E350.1			Analysis D	ate: 4/21/2	2009	SeqNo:	2396292	
Analyte			Result	Qual		MDL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Nitrogen, Ar	mmonia (As N)		5.9			0.020						5.9	0.101	20

Data

Analyte detected below quantitation limits

Qualifier Code Key: S Spike Recovery outside accepted recovery limits

Holding times for preparation or analysis exceeded

CLIENT: SCS Engineers
Work Order: F09040840

F09040840

Project: Citrus County Leachate/09208040.22

ANALYTICAL QC SUMMARY REPORT

TestCode: SOLIDS-TDS

Sample ID	MB-61039	SampType:	MBLK		TestCode: SOLIDS-	TDS Uni	s: mg/L	Prep Da	ate: 4/21/2009	RunNo:	78285	
Client ID:	MB-61039	Batch ID:	61039		TestNo: SM2540	C SM2	2540 C	Analysis Da	ate: 4/21/2009	SeqNo:	2399021	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Tota	l Dissolved		5.0	U	5.0							
Sample ID	LCS-61039	SampType:	LCS		TestCode: SOLIDS-	TDS Uni	s: mg/L	Prep Da	ate: 4/21/2009	RunNo:	78285	
Client ID:	LCS-61039	Batch ID:	61039		TestNo: SM2540	C SM2	2540 C	Analysis Da	ate: 4/21/2009	SeqNo:	2399023	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Tota	l Dissolved		300		5.0	300	0	100	90 110			
Sample ID	F09040811-004DDUP	SampType:	DUP		TestCode: SOLIDS-	TDS Uni	s: mg/L	Prep Da	ate: 4/21/2009	RunNo:	78285	
		Batch ID:	61039		TestNo: SM2540	C SM2	2540 C	Analysis Da	ate: 4/21/2009	SeqNo:	2399029	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Tota	al Dissolved		560	х	5.0					560	0	20
Sample ID	F09040840-002ADUP	SampType:	DUP		TestCode: SOLIDS-	TDS Uni	s: mg/L	Prep Da	ate: 4/21/2009	RunNo:	78285	
Client ID:	Blank 1 DUP	Batch ID:	61039		TestNo: SM2540	C SM2	2540 C	Analysis Da	ate: 4/21/2009	SeqNo:	2399049	
Analyte			Result	Qual	MDL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit	RPD Ref Val	%RPD	RPDLimit
Solids, Tota	Il Dissolved		5.0	U	5.0					5.0 U	0	20

Data Qualifier Code Key: Analyte detected below quantitation limits

r s s

S Spike Recovery outside accepted recovery limits

Q Holding times for preparation or analysis exceeded



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Drinking Wat Water Waste Water	WT	valid codes to left)	C=COMP)	COMP	OSITE	сомроз	SITE	COLLECTION									1 DS, Anious Lyten Chros						11						
Product Soil/Solid	P SL	e valid	(G=GRAB	STA	RT	END/GR	AB	LE LE									1 DS, Anious Ly Lanch	18c							Residual Chlorine (Y/N)				
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SAMPLING KIT-EMPTY	((N	7	ZI	10.		431	$\overline{\mathbf{y}}$									_					Ť							
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	ΛD	NG!	NI A I		SAMPLE	R NAME A																		4	ပ္	Received on Ice (Y/N)	Custody ealed Cooler (Y/N)	<u> </u>	(Y/N)
	UH	RIGII	INAL	-			e of SAMPL	_								-	DATE	E Signe	nd .					4	Temp in °C	sceive Se (₹	Custc aled C	Selec	<u>چ</u>
						SIGNATUR	E of SAMPL	ER:										nn//							ř	& <u>-</u>	Š		5

DEP-SOP-001/01 Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Haror	es Chemicals	Citrus c	ty lau	rdfill		SITE LOCATION: 5	230 6	witte h	alex Blid		·
W ELL NG :				SAMPLE		icha le		wn.7	DATE:1/20/6	e ./_/	49
						SING DA				1/27/9	7
WELL DIAMETER (ii	nches).	TUBINO	nahaa):	WELL SCR			STATIC DI		PURGE PUMP	TYPE	
WELL VOLUI	ME PURGE:	1 WELL VOLU	ME = (TOTAL	DEPTH:	feet to	feet TIC DEPTH 1	TO WATER)	K (feet): X WELL CAF	OR BAILER:	-	
only fill out if	applicable)		= (feet		Teet)	X	gallons/foo	nt =	gallons
EQUIPMENT (only fill out if	VOLUME PUR	RGE: 1 EQUIP	MENT VOL. =	PUMP VOLU	JME + (TUE	SING CAPACI	TY X	TUBING LENG	GTH) + FLOW CE		gallons
(only lin out ii	applicable)		=	= gal	lons + (gallo	ons/foot X		feet) +	gallons	= gallons
INITIAL PUMI DEPTH IN W			FINAL PUMP DEPTH IN W			PURGIN		PURGIN		TOTAL VOL	
T		CUMUL.		DEPTH		I	COND.	DISSOLVED		PURGED (ga	allons):
TIME	VOLUME PURGED (gallons)	VOLUME PURGED (gallons)	PURGE RATE (gpm)	TO WATER (feet)	pH (standard units)	TEMP. (°C)	(µmhos/c m or (µS/cm),	OXYGEN (circle mg/L) % saturation)	TURBIDITY or (NTUs)	COLOR (describe	ODOR (describe)
1200	7.11	·			7,79	1735	4.967	193	1,65	yelows	1 Cerebrate
		· · · · · · · · · · · · · · · · · · ·									
							- 1				
		<u> </u>									
				_							
10/5/1 6 1 5 1											
TUBING INSI	DE DIA. CAPA	Per Foot): 0.7 CITY (Gal./Ft.)	5" = 0.02; : 1/8" = 0.00	1" = 0.04; 06; 3/16" =	1.25" = 0.00 0.0014;						12" = 5.88 /8" = 0.016
CAMPIEDIDA	(DOINE) (A E	FU 1471011	1	,		LING DA	ATA				
SAMPLED BY	wiff wa	FILIATION:	\sigma \s	VIPLER(S) SIC	SNATURES	3 :		SAMPLING	19.00	SAMPLING	
PUMP OR TU		-}-		MPLE PUMP	-8			INITIATED AT	10	ENDED AT	· · · · · · · · · · · · · · · · · · ·
DEPTH IN WE				OW RATE (mL			ER SIZE:	MATERIAL CO	DDE:		
FIELD DECO			1	ation Equipme		Y FILI	ER 312E	μ m	DUPLICATE:	Υ ((1)
	SAMPLE CO SPECIFION	CATION			SAM	PLE PRESER	RVATION		INTENDE	,	SAMPLING
SAMPLE ID CODE	CONTAINI	MATERI E AL CODE	VOLUME	PRESERV. USEC		TOTAL VO	L D (mL)	FINAL pH	ANALYSIS AN	D/OR E	EQUIPMENT CODE
		β€.	500	162				ζ	Inorganic	5	
	1	PE	150	HNOS				7	10 pmetar	ls	
	1	PE	150	H2301) je			2	Artrojen, An	renews.	
	3	CG	40 vial	Hel		-		۲,	Vac15		
	2	CG	40 vial	100				٦	Soil EDB+D	BCP	
	-										
REMARKS:											
REWARKS:											
MATERIAL CO	ODES:	AG = Amber G	Blass; CG =	Clear Glass;	PE = Po	lyethylene;	PP = Polyp	ronviene. e -	Silicone; T = T	eflon: O = 0	Other (Specific)
SAMPLING/P	URGING A	PP = After Peris	staltic Pump:	B = Baile	er; BP	= Bladder Pu	ımp; ES	SP = Electric Sub			Other (Specify)
EQUIPMENT	CODES: RI	FPP = Reverse	Flow Peristalt	ic Pump;		w Method (Tu	bing Gravity	Drain); VT	' ≃ Vacuum Trap;		er (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

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

^{2.} STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

DEP-SOP-001/01 Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Herer	es Chemicals	atres a	ty Lano	<i>kfull</i>		SITE LOCATION: 5	132 Trente	n St., Tampa, FŁ	230 Cm	x to las	lee Blod				
WELL NO:	,			SAMPLE		vip BI			DATE:1/26/9		7/09				
						SING DA		7	<u> </u>		1-1				
WELL		TUBING			REEN INTER	RVAL	STATIC I		PURGE PUMP	TYPE					
DIAMETER (in		DIAMETER (in		DEPTH:	feet to	feet	TO WATER	ER (feet):	OR BAILER:		·				
only fill out if a	applicable)	WELL VOLUM				HE DEPIN I		_	PACHY						
EQUIPMENT	VOLUME PUR	GE: 1 EQUIPM	= (feet -	NING CADACI	feet		gallons/foo GTH) + FLOW CE		gallons				
(only fill out if a	applicable)							TOBING LEN		_					
				= ga	allons + (gallo	ons/foot X	····	feet) +	gallens	= gallons				
INITIAL PUMP DEPTH IN WE			FINAL PUMP DEPTH IN W	OR TUBING	;	PURGIN		PURGI		TOTAL VOL					
		CUMUL.	DEI 111 11 VV	DEPTH	-11		COND.	DISSOLVED		PURGED (g	alions):				
TIME	VOLUME PURGED	VOLUME PURGED	PURGE RATE	TO WATER	pH (standard	TEMP.	(μmhos/c	OXYGEN	TURBIDITY						
	(gallons)	(gallons)	(gpm)	(feet)	units)	(°C)	m or μS/cm)	(circle mg/L o		(describe	e) (describe)				
										_					
									-						
		· · · · · · · · · · · · · · · · · · ·	-			 		 		 					
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						<u></u>	<u> </u>								
						ļ!	ļ		7.7						
WELL CAPAC	ITY (Gallons F DE DIA. CAPA	Per Foot): 0.75 CITY (Gal./Ft.):	5" = 0.02; 1/8" = 0.00	1" = 0.04; 006: 3/16"	1.25" = 0.06 = 0.0014;	6; 2" = 0.1 1/4" = 0.002		0.37; 4" = 0.65 " = 0.004; 3/8			12" = 5.88				
				100, 5		LING DA		- U.UU-1, UIU	- 0.000, 112	= 0.010,	5/8" = 0.016				
SAMPLED BY	(PRINT) / AFF	ILIATION:	SA	MPLER(SYS	CMATIBLE			SAMPLING	1.0	SAMPLING	·				
	Scotth	any		> cold				INITIATED AT	r: 1210	ENDED AT					
PUMP OR TUI DEPTH IN WE				MPLE PUMP OW RATE (m			<u> </u>	TUBING MATERIAL C	ODE:						
FIELD DECON		: Y N	FIE	LD-FILTERE	D: Y N		ER SIZE:	μm	DUPLICATE:	Υ ,					
	SAMPLE CO		Filt	tration Equipn					DOFEICATE.	(<u> </u>				
<u> </u>	SPECIFIC #				SAM	IPLE PRESEF	RVATION		INTENDED		SAMPLING				
SAMPLE ID CODE	CONTAINE		VOLUME	PRESER\ USE		TOTAL VO		FINAL	ANALYSIS ANI METHOD)/OR	EQUIPMENT CODE				
	RS	CODE	500	 		/DED IN FIEL	.D (IIIL)	pH			1				
	 '	PE	 -	140				7	Inorganier						
	 '-	PE	150	HN03	\longrightarrow			۷	reportat	's					
		PE	150	H2 SOY	//	a_		Σ	My fregge, Am	-cun					
	3	Ca	HUVIA	Hel				<u> </u>	VOL'S						
	2	Con	your	1 4				2	8011 EDB + DI	BLP					
									-						
REMARKS:							•——		<u> </u>						
MATERIAL CO	DDES:	AG = Amber G	lass; CG =	Clear Glass;	PE = Pc	olyethylene;	PP = Poi	lypropylene; S	= Silicone; T = T	eflon; O =	Other (Specify)				
SAMPLING/PU EQUIPMENT (PP = After Peris PP = Reverse		B = Bai		= Bladder Pu aw Method (Tu	ımp; I	ESP = Electric Su	bmersible Pump;		staltic Pump				
			TION T CHISTON	mo r unip,	3W - 3U	TAN INIGHTON (I C	Juliy Glavi	ity Diain), v	T = Vacuum Trap;	U = Oth	er (Specify)				

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

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

^{2.} STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

DEP-SOP-001/01 FT 1000 General Field Testing and Measurement

INICTOLIN	Forr	m FD 9000)-8: FIEL	D INSTRUME	NT CAL	IBRATION R	ECORDS	Pive Renta	15
		AKE/MOD heck only		451556		INSTRUM	ENT#	· F2275	4
☐ TEN	MPERATU	RE 💢	CONDUCT		SALINITY		Æ ORP		,
	RBIDITY		RESIDUAL	7			ER		
STANDA values, and	. RDS: [S I the date ti	pecify the ty _l he standards	pe(s) of star s were prepa	ndards used for ca ared or purchased	alibration, 11	the origin of the	standards, the	standard	
	lard A		, .,	, , , , , , , , , , , , , , , , , , , ,	·.				
Stand	lard B	4,00	*		· 1 1				
Stand	lard C	10 00							
DATE (yy/mm/dd)	TIME (hr:min)	STD (A, B, C)	STD VALUE	INSTRUMENT RESPONSE	% DEV	CALIBRATED (YES, NO)	TYPE (INIT, CONT)	SAMPLER INITIALS	ė
1/27	1130	cond	1413	11431		Yes 1:413	1417	8	_
	1140	A	7, 50	7.06		Yes 107.0	1m, if	5_	7
	1145	В	4.00	3.86		yes to 4,0	mit	<u>s</u> _	7
	1158	<u>C</u>	10.00	9,94		yes to 100	enst	8-	4
						•			
1/27	1,55	orp	ZYUMV	257		15 4257	inst	2	1%
									/
1/27	1158	DO	100%	96.8		Yes 100.	1411	S	
1/27	1150	T-16	1220	1,03		425	Init	8	
			10 No						
्र पूर									
-		/				1975 201			
, , , , , , , , , , , , , , , , , , , ,					1	<u> </u>		 	

Revision Date: February 1, 2004

SCS ENGINEERS

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

CHAIN OF CUSTODY RECORD

(813) 621-00	080 Ph; (813) 623-6757 - F	ax											Page .	! _ of	
CLIENT:		PROJ	ECT NAME			······································	BOTTLE		,					-	
50 € €	borgs can so dex \$	C	itis c	our dy			SIZE & TYPE								
ADDRESS:	glower Blad &	P.O. N	IUMBER/PR	OJECT NUM	BER:		A R N E								L
4541 1/2 Tayu	70 5 5 6 7 FAX:	PROJI LOCA	ECT				A Q L U Y I								В
PHONE:	FAX:	6757 61	rus Coon	Ly Cond	41		S R I E S D			4. 4.		o'			N U M
CONTACT	Gran Brown +	SAMP	LED BY:	À					·n.	4		DAC			B E
URNAROU		REMARKS / SPEC						ن د د	· Cakal	_		\$ 903			R
RUSH	Due Date							Nevass	, 2	N. Kaken	7.6	13			
WW=wastewater	SW=surface water GW=gro	oundwater DW =drinking wa	ter OIL	A=air SO=	soil	SL =sludge	Preserv	14	41003	Margaret	*1	10-			
SAMPLE ID	SAMPLE DESCRIPT	ION Grab/	SA	MPLING	MATRIX	NUMBER OF									
project for the second		Composite	DATE	TIME		CONTAINERS									
EEE -		9000	1-27-09	1200	i so so o	ક									
1969 7 1995 C		geo b	1-27-09	1210	Div	8					,				
							_								
								_							
=lce H=(H0	CI) S=(H2SO4) N=(HN0	O3)		Relinquished	by:	Date	Time		Po	ceived	bv.		Date	Tim	
laT=(Sodium Ti aboratory:	hiosulfate)			Application of the second	<i>∪y.</i>	1.27 69	1550		Bo C	XX	ъу. }		1-27-01		
			2//				1,00		hor.				1-6001	(3)	ja (mř
	The second secon		3			•	<u> </u>						<u> </u>	 	

ATTACHMENT 2

MONTHLY LEACAHATE QUALITY ANALYTICAL RESULTS FOR APRIL, MAY, AND JUNE 2009

13525277672

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

SOLID WASTE MANAGEMENT PO BOX 340 LECANTO FL 34460

Invoice Number 10287

Client

CITRUS COUNTY UTILITIES

Sample Number

E090673

0855 HR\$

Project

LANDFILL LEACHATE PLANT

Date/Time Sampled

4/1/09

4441100

Sample Description

wwtp/EFF

Date/Time Received

4/1/09

1114 HR\$

Method	Analytes	Units	Results	MDL mg/L	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L	2.78	1.4 mg/L	SJL	4/2/09 1103 HRS
SM2540-D	TSS	mg/L	3,00	1,0 mg/l	SJL.	4/3/09 0920 HRS
SM4500-NO3-E	NITRATE	mg/L	1.85	0.10 mg/L	ск	4/2/09 0930 HR\$

Sace Oun Carrello Laboratory Manager

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

SOLID WASTE MANAGEMENT PO BOX 340 LECANTO FL 34460

Invoice Number 10345

Client

CITRUS COUNTY UTILITIES

Sample Number E

E090967

1315 HRS

Project

Sample Description

LANDFILL LEACHATE PLANT

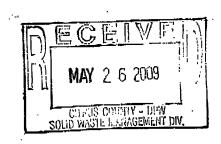
WWTP/EFF

Date/Time Sampled
Date/Time Received

5/12/09 5/12/09

1353 HRS

	Aceletes	Units	Results	MDL mg/L	Analyst	Analysis Date/Time
Method	Analytes	Omto	Tiesaite			Dare
SM5210-B	CBOD	mg/L	3.30	1.4 mg/L	SJL	5/14/09 1030 HRS
SM2540 - D	TSS	mg/L	7.00	1,0 mg/L	SJL	5/13/09 0925 HRS
SM4500-NO3-E	NITRATE	mg/L	0.52	0.10 mg/L	СК	5/14/09 0945 HRS



Sally Oun Crullo
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 10423

Client

CITRUS COUNTY UTILITIES

Sample Number E091130

Project

LANDFILL LEACHATE PLANT

Date/Time Sampled

6/4/09

0935 HRS

Sample Description

WWTP/EFF

Date/Time Received

6/4/09

1140 HRS

Method	Analytes	Units	Results	MDL	Analyst	Analysis Date/Time
SM5210-B	CBOD	mg/L.	10.04	1.4 mg/L	SJL	6/4/09 1530 HRS
SM2540-D	TSS	mg/L	1.00	1,0 mg/L	SJL	6/5/09 0955 HRS
SM4500-NO3-E	NITRATE	mg/L	0,46	0.10 mg/L	ÇK	6/4/09 1430 HRS

ATTACHMENT 3 TABLES

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

Parameter	Standard	MCL	Units								
				10/15/2008	1/27/2009	4/20/2009					
Volatile Organics											
Benzene	PDWS	1	ug/L	0.5 U	1 U	0.5 U					
Ethylbenzene	SDWS	30	ug/L	0.5 U	1 U	0.5 U					
Ethylene Dibromide	PDWS	0.02	ug/L	0.0061 U	0.0064 U	0.0064 U					
Toluene	SDWS	40	ug/L	0.5 U	1 U	0.5 U					
Vinyl chloride	PDWS	1	ug/L	0.53 U	1.1 U	0.53 U					
Xylenes, Total	SDWS	20	ug/L	1 U	2.1 I	1 U					
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	0.19					
Chloride	SDWS	250	mg/L	940	1300	1500					
Sodium	PDWS	160	mg/L	570	800	820					
TDS	SDWS	500	mg/L	2400	2800	3000					
General Field Parameters											
Conductivity	NS	NS	umhos/cm	3929	4907	4820					
Dissolved Oxygen	NS	NS	mg/L	2.96	0.93	2.78					
рН	SDWS	6.5-8.5	pH Units	7.87	7.79	7.68					
Temperature, Water	NS	NS	deg C	26.55	17.35	24.83					
Turbidity	NS	NS	NTU	1.07	1.65	5					

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. $\mathbf{U} = \text{Analyte concentration was below the laboratory detection limit (value shown).}$

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

				Leachate Effluent								
Parameter	Standard	MCL	Units	1/7/2009	2/4/2009	3/4/2009	4/1/2009	5/12/2009	6/4/2009			
CBOD	Permit	20	mg/L	1.38	4.56	4.4	2.78	3.3	10.04			
TSS	Permit	20	mg/L	<1	3	7.5	3	7	1			
Nitrate	Permit	10	mg/L	5	6.03	3.85	1.85	0.52	0.46			

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. $\mathbf{U} = \text{Analyte concentration was below the laboratory detection limit (value shown).}$

ATTACHMENT 4

COMPACT DISK CONTAINING REPORT IN PDF FORMAT AND VALIDATOR FILE