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April 1, 2013

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

APR 9 2013

SOUTHWEST DISTRICT TAMPA

Mr. John Morris, P.G. Florida Department of Environmental Protection Solid Waste Section 13051 Telecom Parkway Temple Terrace, FL 33637

Re:

Southeast County Landfill Leachate Treatment Plant Effluent Analytical Data – First Quarter (January-March, 2013)

Dear Mr. Morris:

In accordance with Specific Condition E.9.b(2) of the Southeast County Landfill (SCLF) Operation Permit No. 35435-014-SO/01, the Hillsborough County Public Utilities Department (County), is pleased to provide the laboratory analytical data for the first quarter effluent sampling of the leachate treatment plant located at 15960 County Road 672 in Lithia, Florida.

The referenced permit requires the monthly sampling of the leachate treatment plant effluent and the recording of the plant pH values. Monthly effluent samples are collected by the County and analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), and Nitrate.

The daily pH values recorded by plant personnel during this quarterly period ranged from 7.4 - 8.2 pH units and the monthly analytical samples ranged from 7.97 - 8.16 pH units. These values represent compliance with the State of Florida Secondary Drinking Water Standard (FAC Ch. 62-550.320) for pH. County personnel collected the effluent samples from the dedicated sampling port at the treatment plant on January 10, February 6, and March 6, 2013.

All collected samples were analyzed by our contracted laboratory, Test America, Inc. and the analytical data reports are provided herein for your technical review. No significant changes in the concentrations of any parameters were noted during this quarterly reporting period.

Mr. John Morris April 1, 2013 Page 2

Should you have any questions or comments concerning the information provided in this submittal, please feel free to contact us at (813) 663-3221 or (813) 663-3222.

Sincerely,

Michael D. Townsel

4-1-2013

Senior Hydrologist

Public Utilities Department

Environmental Services

DSA/mdt Enclosures

xc:

Larry Ruiz, Public Utilities

Andy Berry, Public Utilities

Ron Cope, EPC

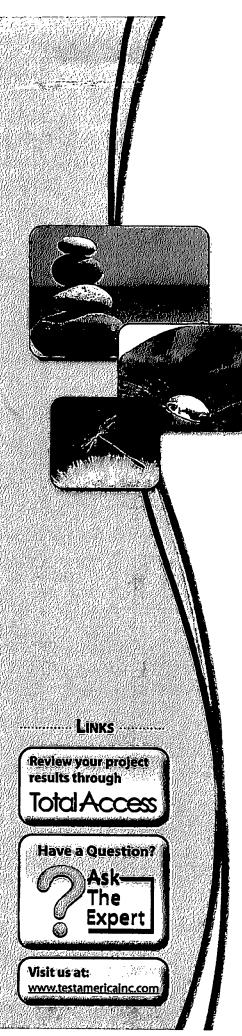
G:enviro/self/leachate plant/ltp-effluent-1stqtr2013.doc

Sincerely,

David S. Adams, P.G.

Environmental Manager Public Utilities Department

Environmental Services



<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Tampa 6712 Benjamin Road Suite 100 Tampa, FL 33634

Tel: (813)885-7427

TestAmerica Job ID: 660-52098-1 Client Project/Site: Leachate Effluent

For:

Hillsborough County Public Utilities Dep Solid Waste Management Group Brandon Support Operations Complex 332 North Falkenburg Rd, 2nd Floor Tampa, Florida 33619

Attn: David Adams

Authorized for release by: 1/22/2013 9:10:00 AM

Nancy Robertson
Project Manager II
nancy.robertson@testamericainc.com

The lest results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

1
2
3
4
5
6
7
9
12
14
15
16
18
21

Sample Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Lab Samplo ID	Client Sample ID	Matrix	Collected	Received
660-52098-1	LEACHATE EFFLUENT	Water	01/10/13 11:30	01/10/13 16:00
660-52098-2	BLANK EQUIPMENT	Water	01/10/13 11:20	01/10/13 16:00



TestAmerica Tampa

Case Narrative

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Job ID: 660-52098-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-52098-1

Comments

No additional comments.

Receipt

The samples were received on 1/10/2013 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.3° C, 3.3° C and 4.0° C.

General Chemistry

Method SM 2540D: The sample duplicate %RPD associated with batch 133434 was outside the control limits.

Method SM 5220D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 263099 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

TestAmerica Job ID: 660-52098-1

Definitions/Glossary

Client: Hillsborough County Public Utilities Pep

Project/Site: Leachate Effluent

Qualifiers	

General Chemistry

Qualifier	Qualifier Description
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.
1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Glossary	
Abbreviation	Those commonly used abbreviations may or may not be present in this report.
\$	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	M.nimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC .	Quality Control
RER	Relative error ratio
₹L	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Lab Sample ID: 660-52098-1 Client Sample ID: LEACHATE EFFLUENT PQL Dil Fac D Method Result Qualifier **MDL** Unit Analyte Prep Type Nitrate as N 0.50 0.10 mg/L 353.2 Total/NA 17 **Total Dissolved Solids** 5700 250 250 mg/L SM 2540C Total/NA **Total Suspended Solids** SM 2540D 73 1.7 Total/NA 1.7 mg/L **Biochemical Oxygen Demand** 47 24 24 mg/L SM 5210B Total/NA Chemical Oxygen Demand 580 20 6.3 mg/L SM 5220D Total/NA Field Sampling Field pH 7.97 SU Total/NA Field Temperature 28.31 Degrees C Field Sampling Total/NA Oxygen, Dissolved 4.65 mg/L Field Sampling Total/NA Specific Conductance 11413 umhos/cm Field Sampling Total/NA Client Sample ID: BLANK EQUIPMENT Lab Sample ID: 660-52098-2

No Detections

6

Client. Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 01/10/13 11:30 Date Received: 01/10/13 16:00 Lab Sample ID: 660-52098-1

Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	17		0.50	0.10	mg/L			01/12/13 08:12	1
Total Dissolved Solids	5700		250	250	mg/L			01/16/13 13:34	1
Total Suspended Solids	73		1.7	1.7	mg/L			01/14/13 10:17	1
Biochemical Oxygen Demand	47		24	24	mg/L			01/11/13 12:10	1
Chemical Oxygen Demand	580		20	6.3	mg/L			01/17/13 12:32	1
 Method: Field Sampling - Field S	ampling								
Analyto	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fleld pH	7.97				SU			01/10/13 11:30	1
Field Temperature	28.31				Degrees C			01/10/13 11:30	1
Oxygen, Dissolved	4.65				mg/L			01/10/13 11:30	1
Specific Conductance	11413				umhos/cm			01/10/13 11:30	1

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Date Received: 01/10/13 16:00

TestAmerica Job ID. 660-52098-1

Client Sample ID: BLANK EQUIPMENT

Date Collected: 01/10/13 11:20

Lab Sample ID: 660-52098-2

Matrix: Water

	General Chemistry Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
i	Nitrate as N	0.10	U	0.50	0.10	mg/L			01/12/13 08:12	1
į	Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			01/16/13 13:34	1
i	Total Suspended Solids	1.0	U	1.0	1.0	mg/L			01/15/13 06:44	1
	Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			01/11/13 12:10	1
	Chemical Oxygen Demand	6.3	U	20	6.3	mg/L			01/17/13 12:32	1



Client: Hillsborough County. Public Utilities Dep

Project/Site: Leachate Effluent

Method: 353.2 - Nitrate												<u> </u>	
Lab Sample ID: MB 660-133506/5 Matrix: Water											Client S	iample ID: Meth Prep Type:	
Analysis Batch: 133506													
Analysis		MB	MB Qualifier		501			114	_	_			
Analyte Nitrate as N		0.10			PQL 0.50		0.10 n	ng/L	_ <u>D</u> -		repared	Analyzed 01/12/13 08:12	Dil
Lab Sample ID: LCS 660-133506/6									CI	iont	Cample	ID: Lab Contro	ol Com
Matrix: Water									0,		Campie	Prep Type:	
Analysis Batch: 133506												тор турс	1000
•				Spike		LCS	LCS					%Rec.	
Analyte				Added		Result	Qualifi	ier Unit		D	%Rec	Limits	
Nitrate Nitrite as N				1.00		0.960		mg/L		_	96	90 - 110	
Nitrite as N				0.500		0.495	1	mg/L			99	90 - 110	
Lab Sample ID: 660-52102-B-2 MS Matrix: Water											Client	Sample ID: Ma Prep Type:	
Analysis Batch: 133506													1000
•	Sample	Sam	ple	Spike		MS	MS					%Rec.	
Analyte	Result	Qua	lifier	Added		Result	Qualif	er Unit		D	%Rec	Limits	
Nitrate Nitrite as N	0.10	U		1.00		1.04		mg/L		_	104	90 - 110	
Nitrite as N	0.10	U		0.500		0.523		mg/L			105	90 - 110	
Lab Sample ID: 660-52102-B-2 MSE Matrix: Water)								Clier	nt Sa	ample IC	D: Matrix Spike Prep Type:	-
Analysis Batch: 133506		_	_										
A	Sample			Spike			MSD			_		%Rec.	
Analyte Nitrate Nitrite as N	Result 0.10		inter	Added 1 00		1.05	Qualifi			D	%Rec		PD L
Nitrite as N	0.10			0.500		0.522		mg/L mg/L			105 104	90 - 110 90 - 110	1 0
Method: SM 2540C - Solids, To	otal Dis	sol	ved (TD:	S)						· -			
Lab Sample ID: MB 660-133505/1											Client S	Sample ID: Meti	
Matrix: Water Analysis Batch: 133505												Prep Type:	Total/
Analysis Datell. 155505		MB	MB										
Analyte	R		Qualifier		PQL		MDL L	Init	D	Р	repared	Analyzed	Dil
Total Disselved Solids		5.0			5.0		5.0 n		- - -	<u>-</u> :-		01/16/13 13:34	
Lab Sample ID: LCS 660-133505/2									CI	ient	Sample	ID: Lab Contro Prep Type	
Matrix: Water												op .ypa	····
						LCS	LCS					%Rec.	
				Spike									
Analysis Batch: 133505				Spike Added			Qualif	ier Unit		D	%Rec	Limits	
				•			Qualifi	ier Unit mg/L		D	%Rec 99	80 - 120	
Analysis Batch: 133505 Analyte Total Dissolved Solids Lab Sample ID: 640-41852-K-2 DU				Added		Result	Qualifi			<u>D</u>	99	80 - 120 ent Sample ID:	
Analysis Batch: 133505 Analyte Total Dissolved Solids Lab Sample ID: 640-41852-K-2 DU Matrix: Water				Added		Result	Qualifi			<u>D</u>	99	80 - 120	
Analysis Batch: 133505 Analyte Total Dissolved Solids Lab Sample ID: 640-41852-K-2 DU Matrix: Water	Sample			Added		Result 9900	Qualifi			D 	99	80 - 120 ent Sample ID:	Total/
Analysis Batch: 133505 Analyte Total Dissolved Solids Lab Sample ID: 640-41852-K-2 DU	Sample Result		•	Added		Result 9900		mg/L		D	99	80 - 120 ent Sample ID: Prep Type	

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Lab Sample ID: MB 660-133394/1												Client S	ample ID: Meti		
Matrix: Water													Prep Type	: Tot	al/NA
Analysis Batch: 133394															
Analyte	Θ.	MB	MB Qualifier		PQL		MDL	Unit		D	0.	repared	Anahmad		Dil Fac
Total Suspended Solids		1.0	U		1.0			mg/L				epareu	Analyzed 01/14/13 10:17		1
Total Gasponada Gallad			· ·		1.0		1.0	g. L					0111111010.11		•
Lab Sample ID: LCS 660-133394/2										CI	ent	Sample	ID: Lab Contr	ol Sa	ample
Matrix: Water												•	Prep Type		-
Analysis Batch: 133394															
•				Spike		LCS	LCS						%Rec.		
Analyte				Added		Result	Qual	lifier	Unit		D	%Rec	Limits		
Total Suspended Solids				100		96.0			mg/L			96	80 - 120		
Lab Sample ID: 660-52098-1 DU										Clien	Sa	mple ID:	: LEACHATE E	FFL	UENT
Matrix: Water													Prep Type	: To	al/NA
Analysis Batch: 133394		_	_												_
	Sample		•				DŲ				_				RPE
Analyto Table 2	Result	Qua	IIIIEF			Result	Qual	litier	Unit		D		F	RPD	Limi
Total Suspended Solids	73					66.7			mg/L					9	20
Lab Sample ID: MB 660-133434/1												Client S	ample ID: Not	had	Diant
Matrix: Water												Chent 3	ample ID: Met		
Analysis Batch: 133434													Prep Type	. 10	MUINA
Analysis Datell. 100404		МВ	MB												
Analyte	R/		Qualifier		PQL		MDL	Unit		D	P	repared	Analyzed		Dil Fac
Total Suspended Solids		1.0			1.0		1.0	mg/L		- - -			01/15/13 06:44	<u> </u>	
								•							
Lab Sample ID: LCS 660-133434/2										CI	ient	Sample	ID: Lab Contr	ol S	ample
Matrix: Water													Prep Type	: To	al/NA
Analysis Batch: 133434															
													%Rec.		
				Spike		LCS	LCS								
Analyte				Spike Added		LCS Result			Unit		D	%Rec	Limits		
Analyte Total Suspended Solids				•					Unit mg/L		<u>D</u>	%Rec 93	Limits 80 - 120		
Total Suspended Solids				Added		Result					D	93	80 - 120	<u></u> -	
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU			 -	Added		Result					<u>D</u>	93	80 - 120 ent Sample ID:	•	
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water				Added		Result					<u>D</u>	93	80 - 120	•	
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU				Added		Result 92.8	Qua				<u>D</u>	93	80 - 120 ent Sample ID:	•	tal/NA
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434	Sample		-	Added		Result 92.8 DU	Qua	lifler	mg/L		_	93	80 - 120 ent Sample ID: Prep Type	: To	RPI
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434 Analyte	Result		-	Added		Pesult 92.8 DU Result	Qua DU Qua	lifler	mg/L		D	93	80 - 120 ent Sample ID: Prep Type	: To	tal/NA RPC Limi
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434	-		-	Added		Result 92.8 DU	Qua DU Qua	lifler	mg/L		_	93	80 - 120 ent Sample ID: Prep Type	: To	RPI
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434 Analyte Total Suspended Solids	Result 21		-	Added		Pesult 92.8 DU Result	Qua DU Qua	lifler	mg/L		_	93	80 - 120 ent Sample ID: Prep Type	: To	tal/NA RPC Limi
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434 Analyte Total Suspended Solids Method: SM 5210B - BOD, 5-D	Result 21		-	Added		Pesult 92.8 DU Result	Qua DU Qua	lifler	mg/L		D _	93 Clie	80 - 120 ent Sample ID: Prep Type	RPD 31	RPI Limi 20
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434 Analyte Total Suspended Solids	Result 21		-	Added		Pesult 92.8 DU Result	Qua DU Qua	lifler	mg/L		D _	93 Clie	80 - 120 ent Sample ID: Prep Type	RPD 31	RPI Limi 20
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434 Analyte Total Suspended Solids Method: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-133345/2: Matrix: Water	Result 21		-	Added		Pesult 92.8 DU Result	Qua DU Qua	lifler	mg/L		D _	93 Clie	80 - 120 ent Sample ID: Prep Type	RPD 31	RPI Limi 20
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434 Analyte Total Suspended Solids Method: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-133345/2	Result 21 ay SCB	Qua	-	Added		Pesult 92.8 DU Result	Qua DU Qua	lifler	mg/L		D _	93 Clie	80 - 120 ent Sample ID: Prep Type	RPD 31	RPI Limi 20
Total Suspended Solids Lab Sample ID: 660-52100-A-1 DU Matrix: Water Analysis Batch: 133434 Analyte Total Suspended Solids Method: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-133345/2: Matrix: Water	Result 21 ay SCB	Qua	lifler	Added	PQL	Pesult 92.8 DU Result	DU Qua J3	lifler	mg/L		_ _	93 Clie	80 - 120 ent Sample ID: Prep Type	RPD 31	RPI Limi 20

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

_															
Lab Sample ID: USB 660-133345/1 Matrix: Water	USB											Client S	Sample ID: M Prep Ty		
Analysis Batch: 133345															
		USB U	SB												
Analyte	Re	esult C			PQL		MDL	Unit		<u> </u>	Pi	repared	Anatyze	1	Dil Fac
Biochemical Oxygen Demand		2.0 U			2.0		2.0	mg/L					01/11/13 09	:02	1
Lab Sample ID: LCS 660-133345/3										CI	ient	Sample	D: Lab Cor	ntrol S	ample
Matrix: Water													Prep Ty	pe: To	tal/NA
Analysis Batch: 133345															
A A				Spike			LCS				_		%Rec.		
Analyte				Added		Result	Qua	lifier	Unit		D 	%Rec	Limits		
Biochemical Oxygen Demand				198		178			mg/L			90	85 - 115		
Lab Sample ID: 640-41827-C-1 DU												Clic	ent Sample I	D: Du	plicate
Matrix: Water													Prep Ty	-	-
Analysis Batch: 133345														-	
-	Sample	Sample	0			DU	DU								RPC
Analyte	Result	Qualifi	er			Result	Qua	lifier	Unit		D			RPD	Limit
Biochemical Oxygen Demand	120					122		_	mg/L		_			0.4	20
Method: SM 5220D - COD				·											
Lab Sample ID: MB 680-263099/3 Matrix: Water												Client S	Sample ID: M Prep Ty		
Matrix: Water Analysis Batch: 263099			AB									Client			
Matrix: Water Analysis Batch: 263099 Analyte	R	esult C	Qualifier		PQL			Unit		_ <u>D</u> .		Client S		pe: To	otal/NA
Matrix: Water Analysis Batch: 263099	R		Qualifier		PQL 20	,		Unit mg/L		_ <u>D</u> .			Prep Ty	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyto	R	esult C	Qualifier								P	repared	Analyze 01/17/13 12	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand	R	esult C	Qualifier								P	repared	Analyze O1/17/13 12 D1D: Lab Col	pe: To d 2:32	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4	R	esult C	Qualifier								P	repared	Analyze 01/17/13 12	pe: To d 2:32	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water	R	esult C	Qualifier	Spike		LCS		mg/L			P	repared	Analyze O1/17/13 12 D1D: Lab Col	pe: To d 2:32	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water	R	esult C	Qualifier	Spike Added		LCS Result	6.3	mg/L	Unit		P	repared	Analyze O1/17/13 12 Prep Ty	pe: To d 2:32	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099	R	esult C	Qualifier	•			6.3	mg/L	Unit mg/L		Pilient	repared : Sample	Analyze O1/17/13 12 DID: Lab Cor Prep Ty %Roc.	pe: To d 2:32	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyto	R	esult C	Qualifier	Added		Result	6.3	mg/L			Pilient	*Sample	Analyze 01/17/13 12 e ID: Lab Cor Prep Ty %Roc. Limits 90 - 110	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand	R	esult C	Qualifier	Added		Result	6.3	mg/L			Pilient	*Sample	Analyze 01/17/13 12 e ID: Lab Cor Prep Ty %Roc. Limits 90 - 110	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water	R	esult C	Qualifier	Added		Result	6.3	mg/L			Pilient	*Sample	Analyze 01/17/13 12 e ID: Lab Cor Prep Ty %Roc. Limits 90 - 110	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS	R	esult C	Qualifier	Added		Result 96.9	6.3	mg/L			Pilient	*Sample	Analyze 01/17/13 12 e ID: Lab Cor Prep Ty %Roc. Limits 90 - 110	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water	Sample	esult C	<u>Qualifier</u>	Added 100		Result 96.9	6.3 LCS Qua	mg/L			Pilient	*Sample	Analyze 01/17/13 12 e ID: Lab Cor Prep Ty %Roc. Limits 90 - 110 e Sample ID: Prep Ty	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water Analysis Batch: 263099	Sample	esult C	<u>Qualifier</u>	Added 100 Spike		Result 96.9 MS Result	6.3 LCS Qua	mg/L	mg/L		P lient	**Rec 97	Analyze O1/17/13 12 DE ID: Lab Col Prep Ty *Rec. Limits 90 - 110 Sample ID: Prep Ty *Rec.	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water Analysis Batch: 263099 Analyte	Sample Result	esult C	<u>Qualifier</u>	Added 100 Spike Added		Result 96.9 MS Result	6.3 LCS Qua	mg/L	mg/L Unit	CI	D D	*Rec 97 Client	Analyze 01/17/13 12 9 ID: Lab Cor Prep Ty %Roc. Limits 90 - 110 Sample ID: Prep Ty %Rec. Limits 90 - 110	pe: To	Dil Fac
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand	Sample Result	esult C	<u>Qualifier</u>	Added 100 Spike Added		Result 96.9 MS Result	6.3 LCS Qua	mg/L	mg/L Unit	CI	D D	*Rec 97 Client	Analyze Analyze 01/17/13 12 PID: Lab Cor Prep Ty %Roc. Limits 90 - 110 %Rec. Limits 90 - 110 C: Matrix Spi	pe: To d 2:32 ntrol S pe: To Matrix pe: To	Dil Factorial/NA
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MSI	Sample Result	esult C	<u>Qualifier</u>	Added 100 Spike Added		Result 96.9 MS Result	6.3 LCS Qua	mg/L	mg/L Unit	CI	D D	*Rec 97 Client	Analyze 01/17/13 12 9 ID: Lab Cor Prep Ty %Roc. Limits 90 - 110 Sample ID: Prep Ty %Rec. Limits 90 - 110	pe: To d 2:32 ntrol S pe: To Matrix pe: To	Dil Face To Sample otal/NA
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MSI Matrix: Water Analyte Chemical Oxygen Demand	Sample Result	Sampl Qualifi	e e e	Added 100 Spike Added		96.9 MS Result	6.3 LCS Qua	mg/L sliffer	mg/L Unit	CI	D D	*Rec 97 Client	Analyze Analyze 01/17/13 12 PID: Lab Cor Prep Ty %Roc. Limits 90 - 110 %Rec. Limits 90 - 110 C: Matrix Spi	pe: To d 2:32 ntrol S pe: To Matrix pe: To	Dil Face To Sample otal/NA
Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MSI Matrix: Water Analysis Batch: 263099 Analyte Analysis Batch: 263099 Analyte	Sample Result 280	Sampl Qualifi J3	e e	Spike Added 100 Spike Added		MSD Result	MS Qua	mg/L	mg/L Unit	CI	D D	*Rec 97 Client	Analyze Analyze 01/17/13 12 E ID: Lab Cor Prep Ty %Roc. Limits 90 - 110 %Rec. Limits 90 - 110 O: Matrix Spi Prep Ty	pe: To d 2:32 ntrol S pe: To Matrix pe: To	Dil Factorial/NA
Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: LCS 680-263099/4 Matrix: Water Analysis Batch: 263099 Analyto Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MS Matrix: Water Analysis Batch: 263099 Analyte Chemical Oxygen Demand Lab Sample ID: 640-41827-G-1 MSI Matrix: Water Analysis Batch: 263099	Sample Result 280	Sampl Qualifi J3	e e	Added 100 Spike Added 100		MSD Result	6.3 LCS Qua MS Qua J3	mg/L	mg/L Unit mg/L	CI	D D	%Rec 97 Client %Rec 82	Analyze Analyze 01/17/13 12 B ID: Lab Cor Prep Ty %Roc. Limits 90 - 110 Sample ID: Prep Ty %Rec. Limits 90 - 110 C: Matrix Spi Prep Ty %Roc.	pe: To d 2:32 ntrol S pe: To Matrix pe: To ke Du pe: To	Dil Factorial/NA

QC Association Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

General Chemistry		and the second s		manda, Mari III e arang menang meng 1 e nasariwa nanariwanan	
Analysis Batch: 13334	5				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-41827-C-1 DU	Duplicate	Total/NA	Water	SM 5210B	
660-52098-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5210B	
660-52098-2	BLANK EQUIPMENT	Total/NA	Water	SM 5210B	
LCS 660-133345/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-133345/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-133345/1 USB	Method Blank	Total/NA	Water	SM 5210B	
Analysis Batch: 13339	4				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-52098-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
660-52098-1 DU	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
LCS 660-133394/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-133394/1	Method Blank	Total/NA	Water	SM 2540D	
Analysis Batch: 13343	4				
- Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-52098-2	BLANK EQUIPMENT	Total/NA	Water	SM 2540D	-
660-52100-A-1 DU	Duplicate	Total/NA	Water	SM 2540D	
LCS 660-133434/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-133434/1	Method Blank	Total/NA	Water	SM 2540D	
– Analysis Batch: 13350 –					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-41852-K-2 DU	Duplicate	Total/NA	Water	SM 2540C	
660-52098-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540C	
660-52098-2	BLANK EQUIPMENT	Total/NA	Water	SM 2540C	
LCS 660-133505/2	Lab Control Sample	Tctal/NA	Water	SM 2540C	
MB 660-133505/1	Method Blank	Tctal/NA	Water	SM 2540C	
Analysis Batch: 13350 	6				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
660-52098-1	LEACHATE EFFLUENT	Total/NA	Water	353.2	
660-52098-2	BLANK EQUIPMENT	Total/NA	Water	353.2	
660-52102-B-2 MS	Matrix Spike	Total/NA	Water	353.2	
660-52102-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
LCS 660-133506/6	Lab Control Sample	Total/NA	Water	353.2	
MB 660-133506/5	Method Blank	Total/NA	Water	353.2	
Analysis Batch: 26309	9				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-41827-G-1 MS	Matrix Spike	Tctal/NA	Water	SM 5220D	
640-41827-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220D	
660-52098-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5220D	
660-52098-2	BLANK EQUIPMENT	Total/NA	Water	SM 5220D	
LCS 680-263099/4	Lab Control Sample	Total/NA	Water	SM 5220D	

QC Association Summary

Line receipt the contract

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Field Service / Mobile Lab

Analysis Batch: 133388

Lab Sample ID Client Sample ID Prop Typo Matrix Method Prop Batch
660-52098-1 LEACHATE EFFLÜENT Total/NA Water Field Sampling

a

11

Lab Chronicle

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 01/10/13 11:30 Date Received: 01/10/13 16:00 Lab Sample ID: 660-52098-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Numbor	or Analyzod	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	133345	01/11/13 12:10	AG	TAL TAM
Total/NA	Analysis	SM 2540D		1	133394	01/14/13 10:17	то	TAL TAM
Total/NA	Analysis	SM 2540C		1	133505	01/16/13 13:34	то	TAL TAM
Total/NA	Analysis	353.2		1	133506	01/12/13 08:12	то	TAL TAM
Total/NA	Analysis	SM 5220D		1	263099	01/17/13 12:32	TAR	TAL SAV
Total/NA	Analysis	Field Sampling		1	133388	01/10/13 11:30		TAL TAM

Lab Sample ID: 660-52098-2

Matrix: Water

Date Collected: 01/10/13 11:20 Date Received: 01/10/13 16:00

Client Sample ID: BLANK EQUIPMENT

<u> </u>	Batch	Batch		Dilution	Batch	Propared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	133345	01/11/13 12:10	AG	TAL TAM
Total/NA	Analysis	SM 2540D		1	133434	01/15/13 06:44	то	TAL TAM
Total/NA	Analysis	SM 2540C		1	133505	01/16/13 13:34	то	TAL TAM
Total/NA	Analysis	353.2		1	133506	01/12/13 08:12	то	TAL TAM
Total/NA	Analysis	SM 5220D		1	263099	01/17/13 12:32	TAR	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Method Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Method	Method Description	Protocol	Laboratory
353.2	Nitrate	MCAWW	TAL TAM
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
SM 2540D	Solids, Total Suspended (TSS)	SM .	TAL TAM
SM 5210B	BOD, 5-Day	SM	TAL TAM
SM 5220D	COD	SM	TAL SAV
Field Sampling	Field Sampling	EPA	TAL TAM

Protocol References:

EPA = US Environmental Protection Agency

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",

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

199

Certification Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Laboratory: TestAmerica Tampa

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40610	06-30-13
Florida	NELAP	4	E84282	06-30-13
Georgia	State Program	4	905	06-30-13
USDA	Federal		P330-11-00177	04-20-14

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	02-28-13
A2LA	ISO/IEC 17025		399.01	02-28-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
Arkansas DEQ	State Program	6	88-0692	02-01-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-12
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
linois .	NELAP	5	200022	11-30-12
Indiana	State Program	5	N/A	06-30-13
lowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	02-28-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-12
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-12
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	12-31-12
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-13
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
<i>N</i> ashington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-12

TestAmerica Tampa

Certification Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52098-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
West Virginia DEP	State Program	3	94	06-30-13
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13



660-52098

HILLSBOROUGH COUNTY PUBLIC UTILITIES DEPARTMENT COC SHEET LEACHATE TRUCKS AND TANKS MONITORING PROGRAM LEACHATE PLANT

	T1101	12.7.13 T 1712.11.1.7	
PRECLEANED SAMPLE CONTAINERS:		DED OF CONTRACT LAR	DATE TIME
RELINQUISHED BY: ACCEPTED BY:		REP. OF SOLID WASTE DEPT	1.10-13 9120
LOCATION: LEACHATE EFFLUENT			
PERSONAL ENGAGED IN SAMPLE COL	J.ECTT	ON: I'A Balloon By Char	~ n
			<u> </u>
<u> </u>	IELD	PARAMETERS:	
BY TIME TEM		COND PH DO	TURB
ABX 111:30 128.3	1	11413 7.97 4.65	N/A =
			a'r marail
	SAMPL	E CONTAINERS	 .
QTY CONTAINER DESCRIPTION	QTY		PRESERVED
40 ml VIAL		40 ml VIAL	
125 ml. PLASTIC		125 ml. PLASTIC	
125 ml GLASS		125 ml GLASS	
250 ml. PLASTIC 250 ml. GLASS		250 ml. PLASTIC	
500 ml. GLASS	 	250 ml. GLASS	
500 ml. GLASS	 	500 ml. PLASTIC 500 ml. GLASS	
LITER PLASTIC	 -	LITER PLASTIC	
LITER GLASS		LITER PLASTIC LITER GLASS	
BACTERIAL	 -	BACTERIAL	
	<u>. </u>		
TOTAL No. OF SAMPLES C	OLLEC	TED:	
COLORS & SHEENS: YES N/A		NO	COLLECTED
			DATE TIME
			1.10.131/1.30
	ANALYS	SIS REQUESTED:	1.75,1317.155
MONTHLY LEACHATE PLANT PARAMETERS	BOD	TSS NITRATE TOS CO	<u>D</u>
PRESERVED SAMPLES PH < 2.0		SAMPLE STORAGE: COOLER	& ICE TO 4.0 c
ABOVE LISTED SAMPLES:			DATE TIME
RELINQUISHED BY:		REP. OF SOLID WASTE DEPT	1,1913 4:00
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY:		REP. OF CONTRACT LAB.	1.10.13 41:00
		•	
COMMENT'S:			
		22 23	49001177

HILLSBOROUGH COUNTY PUBLIC UTILITIES DEPARTMENT COC SHEET LEACHATE TRUCKS AND TANKS MONITORING PROGRAM LEACHATE PLANT EQUIPMENT BLANK

	LEANED SAMPLE CONTAINERS:	-	REP. OF CONTRACT LAB.	DATE TIME
ACCE	PTED BY:		REP. OF SOLID WASTE DEPT	1.10.13 9:20
LOCAT	TION: EQUIPMENT BLANK		SAMPLE MATRIX: WATER OF	THER MATRIX:
PERSO	NAL ENGAGED IN SAMPLE CO	DLLECTI	ON: A. Balloon & 3 Clay 6	<u> </u>
	0		•	
	F	ELD PA	RAMETERS: N/A	
		SAMPLE	CONTAINERS	
QTY	-GONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
7	250 ml. PLASTIC 250 ml. GLASS		250 ml. PLASTIC	
	500 ml. PLASTIC	-	250 ml. GLASS 500 ml. PLASTIC	<u> </u>
	500 ml. GLASS		500 ml. GLASS	· · · · · · · · · · · · · · · · · · ·
2	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	
COLO	TOTAL No. OF SAMPLES RS & SHEENS: YESN/A		NO	COLLECTED DATE TIME
		ANALYS	IS REQUESTED:	
MONTH	LY LEACHATE PLANT PARAMETERS	BOD	TSS NITRATE TDS C	<u>OD</u>
PRESI	ERVED SAMPLES PH < 2.0 _		SAMPLE STORAGE: _COOLER	& ICE TO 4.0 c
ABOVI RELII ACCE	E LISTED SAMPLES:		REP. OF SOLID WASTE DEPTREP. OF CONTRACT LAB.	DATE TIME 1. 1/10.13 4:0 0 1/10 13 4:0 0
COMM	ENT`S:			

TestAmerica Tampa

6712 Benjamin Road Suite 100

Tampa, FL 33634

Chain of Custody Record



Phone (813) 885-7427 Fax (813) 885-7049 Sampler Carrier Tracking No(s): COC No: Client Information (Sub Contract Lab) Robertson, Nancy 650-52038.1 E-Mat Client Contact: Page. Shipping/Receiving nancy.robertson@testamericainc.com Page 1 of 1 Company. Job #. **Analysis Requested** TestAmerica Laboratories, Inc. 660-52098-1 Address. Duc Date Requested: Preservation Codes: 5102 LaRoche Avenue, 1/17/2013 TAT Requested (days): City B NaOH N - None Savannah C - Zn Acetate O - AsNaO2 D - Nitrio Actd P - Na204S State, Zip E - NaHSO4 O - Na2SO3 GA, 31404 R - Na2S2SOJ F - MeOH Phorus PO# G - Amchlor S - H2SO4 912-354-7858(Tel) 912-352-0165(Fax) 1 - TSP Dodecahydrate H - Ascorbic Acid U - Acetone WO# 1 - Ice J - DI Water V - MCAA W - ph 4-5 K-EDTA Project Name Troject # L - EDA Z - other (specify) 66003914 SELF, Leachate Trucks, EFF SSOW#. Other: Leachate, Tank Trucks Matrix Sample (W-maces. Type Smooth Sample (C=comp, Sample Identification - Client ID (Lab ID) Sample Date Time G=grab) Special Instructions/Note: Preservation Code: 11:30 LEACHATE EFFLUENT (660-52098-1) 1/10/13 Water Х Eastern 11:20 BLANK EQUIPMENT (660-52098-2) 1/10/13 Water Х Fastern Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont Possible Hazard Identification Archive For Unconfirmed Months Special Instructions/QC Requirements: Deliverable Requested I, II, III, IV, Other (specify) Empty Kit Relinquished by Time: Method of Shipmoid Date. Roceived by Henry W. C. OFN 114 Received by Date/Time Retinguished by Date/Time: Сопралу Received by Сопралу Custody Seals Intact: Custody Seal No.: Cooler Temperature(s) *C and Other Remarks Λ Yos Δ No

Page

20

<u>Q</u>

22

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-52098-1

Login Number: 52098

List Number: 1

Creator: McNulty, Carol

List Source: TestAmerica Tampa

Question	nswer Comment
Radioactivity wasn't checked or is = background as measured by a N/survey meter.</td <td>IA .</td>	IA .
The cooler's custody seal, if present, is intact.	rue
Sample custody seals, if present, are intact.	rue
The cooler or samples do not appear to have been compromised or tampered with.	rue
Samples were received on ice.	rue
Cooler Temperature is acceptable.	rue
Cooler Temperature is recorded.	rue
COC is present.	rue
COC is filled out in ink and legible.	rue
COC is filled cut with all pertinent information.	rue
Is the Field Sampler's name present on COC?	rue
There are no discrepancies between the containers received and the COC.	rue
Samples are received within Holding Time.	rue
Sample containers have legible labels.	rue
Containers are not broken or leaking.	ne
Sample collection date/times are provided.	rue
Appropriate sample containers are used.	rue
Sample bottles are completely filled.	rue
Sample Preservation Verified.	rue
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	rue
Containers requiring zero headspace have no headspace or bubble is https://doi.org/10.40 Notes that the containers requiring zero headspace have no headspace or bubble is https://doi.org/10.40	//A
Multiphasic samples are not present.	rue
Samples do not require splitting or compositing.	rue
Residual Chlorine Checked.	WA



14

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

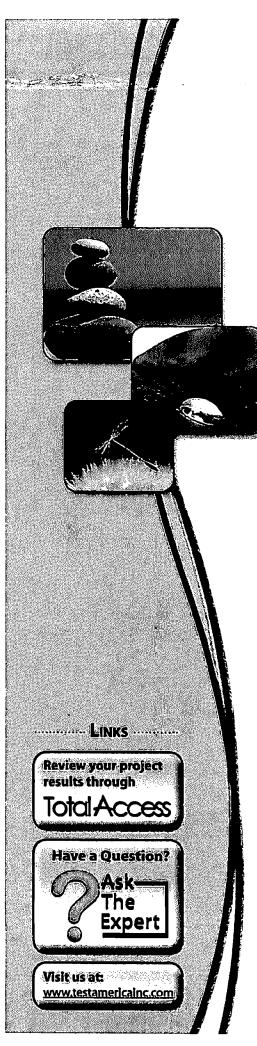
Job Number: 660-52098-1

Login Number: 52098 List Number: 1 List Source: TestAmerica Savannah List Creation: 01/12/13 08:49 AM

Creator: Conner, Keaton

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received 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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <pre><6mm (1/4").</pre>	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Tampa 6712 Benjamin Road Suite 100 Tampa, FL 33634 Tel: (813)885-7427

TestAmerica Job ID: 660-52543-1 Client Project/Site: Leachate Effluent

For:

Hillsborough County Public Utilities Dep Solid Waste Management Group Brandon Support Operations Complex 332 North Falkenburg Rd, 2nd Floor Tampa, Florida 33619

Attn: David Adams

Authorized for release by: 2/19/2013 3:22:28 PM

Nancy Robertson
Project Manager II
nancy.robertson@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	
Definitions/Glossary	5
Detection Summary	6
Client Sample Results	7
QC Sample Results	10
QC Association Summary	13
Lab Chronicle	15
Method Summary	16
Certification Summary	17
Chain of Custody	19
Receipt Checklists	23

Sample Summary

Client: Hillsperough County Public Utilities Dep-

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

				—
Lab Sample ID	Client Sample ID	Matrix	Collected Received	1
660-52543-1	Leachate Effluent	Water	02/06/13 13:36 02/06/13 15:	:55
660-52543-2	Duplicate	Water	02/06/13 00:00 02/06/13 15:	:55
660-52543-3	Equipment Blank	Water	02/06/13 13:31 02/06/13 15:	:55





Case Narrative

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Job ID: 660-52543-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-52543-1

Comments

No additional comments.

Receipt

The samples were received on 2/6/2013 3:55 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

General Chemistry

Method SM 2540C: The following samples were analyzed outside of analytical holding time for TDS due to Lab Error: Duplicate (660-52543-2), Equipment Blank (660-52543-3), Leachate Effluent (660-52543-1). The sample is consistent with historical results. The samples are flagged with Q.

No other analytical or quality issues were noted.

13

Definitions/Glossary

Client: Hillsborough County Public Utilities Dep Project/Site: Leachate Effluent TestAmerica Job ID: 660-52543-1

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14	AU.				-	

General Chemistry

Qualifier	Qualifier Description
U	Indicates that the compound was analyzed for but not detected.
i	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Q	Sample held beyond the accepted holding time.

Q	Sample held beyond the accepted holding time.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
Q	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Client Sample ID: Leachate	Effluent	.				L	ab	Sample ID:	660-52543-
- Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	Đ	Method	Prep Type
Nitrate as N	130		50	10	mg/L	100	_	353.2	Total/NA
Total Dissolved Solids	6100	Q	250	250	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	48		1.3	1.3	mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	89		40	40	mg/L	1		SM 5210B	Total/NA
Chemical Oxygen Demand	620		20	6.3	mg/L	1		SM 5220D	Total/NA
Field pH	8.16				SU	1		Field Sampling	Total/NA
Field Temperature	25.61				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.66				mg/L	1		Field Sampling	Total/NA
Specific Conductance	11404				umhos/cm	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	PQL	MDL	Linit	Dil Fac	D	Method	Prep Type
Nitrate as N	130	-	50	10	mg/L	100	_	353.2	Total/NA
Total Dissolved Solids	5700	0	250		mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	67	_	1.6		mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	92		40		mg/L	1		SM 5210B	Total/NA
Chemical Oxygen Demand	610		20		mg/L	1		SM 5220D	Total/NA
Client Sample ID: Equipme	nt Blank			······•·		La	ab	Sample ID:	660-52543
Analyto	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chemical Oxygen Demand	15	i	20	6.3	mg/L	1	_	SM 5220D	Total/NA

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-52543-1

Date Collected: 02/06/13 13:36 Date Received: 02/06/13 15:55 Matrix: Water

General Chemistry									
Analyto	Result	Qualifier	PQL	MDL	Unit	Đ	Prepared	Analyzed	Dil Fac
Nitrate as N	130		50	10	mg/L			02/08/13 06:06	100
Total Dissolved Solids	6100	Q	250	250	mg/L			02/14/13 15:16	1
Total Suspended Solids	48		1.3	1.3	mg/L			02/12/13 09:46	1
Biochemical Oxygen Demand	89		40	40	mg/L			02/07/13 10:59	1
Chemical Oxygen Demand	620		20	6.3	mg/L			02/13/13 11:13	1
- Method: Field Sampling - Field S	ampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.16				SU			02/06/13 13:36	1
Field Temperature	25.61				Degrees C			02/06/13 13:36	1
Oxygen, Dissolved	5.66				mg/L			02/06/13 13:36	1
Specific Conductance	11404				umhos/cm			02/06/13 13:36	1

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Client Sample ID: Duplicate Lab Sample ID: 660-52543-2

Date Collected: 02/06/13 00:00 Matrix: Water
Date Received: 02/06/13 15:55

General Chemistry										۲*;
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Nitrate as N	130		50	10	mg/L			02/08/13 06:06	100	
Total Dissolved Solids	5700	Q	250	250	mg/L			02/14/13 15:16	1	
Total Suspended Solids	67		1.6	1.6	mg/L			02/12/13 09:46	1	
Biochemical Oxygen Demand	92		40	40	mg/L			02/07/13 12:07	1	
Chemical Oxygen Demand	610		20	6.3	mg/L			02/13/13 11:13	1	-



Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Client Sample ID: Equipment Blank

Date Collected: 02/06/13 13:31 Date Received: 02/06/13 15:55 Lab Sample ID: 660-52543-3

Matrix: Water

General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	Ü	0.50	0.10	mg/L			02/08/13 06:06	1
Total Dissolved Solids	5.0	Qυ	5.0	5.0	mg/L			02/14/13 15:16	1
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			02/12/13 09:46	1 .
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			02/07/13 12:07	1
Chemical Oxygen Demand	15	1	20	6.3	mg/L			02/13/13 11:13	1

8

Client: Hillsborough County Public Utilities Dap

Project/Site: Leachate Effluent

Method: 353.2 - Nitrate Lab Sample ID: MB 660-134249/5 Client Sample ID: Method Blank

Matrix: Water

Analysis Batch: 134249

Prep Type: Total/NA

mg/L

100

90 - 110

MB MB Analyto Result Qualifier PQL **MDL** Unit Ð Prepared Analyzed Dil Fac Nitrate as N 0.10 U 0.50 0.10 mg/L 02/08/13 06:06

Lab Sample ID: LCS 660-134249/6 Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA

Analysis Batch: 134249

Nitrite as N

Spike LCS LCS %Rec. Analyte Added Result Cualifier %Rec Unit D Limite Nitrate Nitrite as N 1.00 0.974 mg/L 97 90 - 110

0.500

Lab Sample ID: 660-52536-H-2 MS Client Sample ID: Matrix Spike **Matrix: Water** Prep Type: Total/NA

0.499 1

Analysis Batch: 134249

Spike Sample Sample MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Nitrate Nitrite as N 0.10 U 1.00 1.05 mg/L 105 90 - 110 Nitrite as N 0.10 U 0.500 0.507 mg/L 90 - 110 101

Lab Sample ID: 660-52536-H-2 MSD Client Sample ID: Matrix Spike Duplicate Matrix: Water Prep Type: Total/NA

Analysis Batch: 134249

Sample Sample Spike MSD MSD %Rec. RPD RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Limit Nitrate Nitrite as N 0.10 U 1.00 1.03 mg/L 103 90 - 110 30 0.10 U Nitrite as N 0.500 0.494 1 mg/L 99 90 - 110 30

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 660-134491/1 Client Sample ID: Method Blank **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 134491

MB MB Analyte Result Qualifler PQL MDL Unit D Prepared Analyzed Dil Fac Total Dissolved Solids 5.0 5.0 mg/L 5.0 U 02/14/13 15:16

Lab Sample ID: LCS 660-134491/2 Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/NA

Analysis Batch: 134491

Spike LCS LCS %Rec. Analyte Added Result Qualifier D %Rec Limits Unit Total Dissolved Solids 10000 9820 mg/L 98 80 - 120

Lab Sample ID: 640-42234-A-3 DU Client Sample ID: Duplicate Prep Type: Total/NA

Matrix: Water Analysis Batch: 134491

DU DU Sample Sample RPD Analyte Result Qualifier Result Qualifier Unit RPD Limit **Total Dissolved Solids** 590 567 20 mg/L

TestAmerica Tampa

Client: Hillshorough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Lab Sample ID: MB 660-134365/1												Client S	ample ID: M	ethod	Blank
Matrix: Water													Prep Ty	pe: To	tal/NA
Analysis Batch: 134365		MED	мв												
Analyte	R		Qualifier		PQL		MDL	Unit		D	Pr	epared	Analyzeo	1	Dil Fac
Total Suspended Solids		1.0	U		1.0		1.0	mg/L					02/12/13 09		1
Lab Sample ID: LCS 660-134365/2										CI	iont	Sample	ID: Lab Con	C	
Matrix: Water										01	10111	Sample	Prep Tyl		
Analysis Batch: 134365													, ,	, , ,	
-				Spike		LCS	LCS						%Rec.		
Analyto				Added		Result	Quai	ifier	Unit		D	%Rec	Limits		
Total Suspended Solids				100		98.8			mg/L		_	99	80 - 120		
Lab Sample ID: 660-52554-A-24 D	IJ											Clie	ent Sample II	D: Dui	olicate
Matrix: Water													Prep Ty		
Analysis Batch: 134365															
	Sample	Sam	ple			טם	DU								RPE
Anatyto	Result	Qua	Jifier			Result	Qual	ifier	Unit		D			RPD	Limit
Total Suspended Solids	320					333			mg/L					4	20
Lab Sample ID: SCB 660-134200/2			<u>-</u>				_					Client S	ample ID: M		
Lab Sample ID: SCB 660-134200/2 Matrix: Water		SCB	SCB				-					Client S	ample ID: M Prep Tyl		
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200	SCB		SCB Qualifler	entermination of the Alex	PQL		MDL	Unit		D		Client S	-	pe: To	
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 ^{Analyte}	SCB		Qualifier		PQL 2.0			Unit mg/L		D			Prep Ty	pe: To	tal/NA
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand	SCB	esult	Qualifier							D	Pr	repared	Prep Tyl Analyzec 02/07/13 07	pe: To	Dil Fac
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1	SCB	esult	Qualifier							D	Pr	repared	Analyzed 02/07/13 07	pe: To	Dil Fac
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water	SCB	esult	Qualifier							D	Pr	repared	Prep Tyl Analyzec 02/07/13 07	pe: To	Dil Fac
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water	SCB	2.0	Qualifier							D	Pr	repared	Analyzed 02/07/13 07	pe: To	Dil Fac
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200	SCB	2.0	Qualifier U					mg/L		D	Pr	repared	Analyzed 02/07/13 07	ethod	Dil Fac
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand	SCB	2.0	Qualifler U USB Qualifler		2.0		2.0	mg/L		. _ _	Pr	repared Client S	Analyzed 02/07/13 07 sample ID: M Prep Tyl	ethod	Dil Fac Blank
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200	SCB	2.0 USB	Qualifler U USB Qualifler		2.0		2.0	mg/L Unit		. <u>D</u> .	Pr Pr	repared Client S	Analyzed 02/07/13 07 Sample ID: M Prep Tyl Analyzed 02/07/13 07	ethod pe: To	Dil Face Blank tal/NA Dil Face Sample
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3	SCB	2.0 USB	Qualifler U USB Qualifler		2.0		2.0	mg/L Unit		. <u>D</u> .	Pr Pr	repared Client S	Analyzed 02/07/13 07 Sample ID: M Prep Tyl Analyzed 02/07/13 07	ethod pe: To	Dil Face Blank tal/NA Dil Face Sample
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water	SCB	2.0 USB	Qualifler U USB Qualifler	Spike	2.0	LCS	2.0	mg/L Unit mg/L		. <u>D</u> .	Pr Pr	repared Client S	Analyzed 02/07/13 07 Sample ID: M Prep Tyl Analyzed 02/07/13 07	ethod pe: To	Dil Face Blank tal/NA Dil Face Sample
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water Analysis Batch: 134200 Analyte Analysis Batch: 134200 Analyte	SCB	2.0 USB	Qualifler U USB Qualifler	Spike	2.0	LCS Result	MDL 2.0	mg/L Unit mg/L	Unit	. <u>D</u> .	Pr Pr	repared Client S	Analyzed 02/07/13 07 sample ID: M Prep Tyl Analyzed 02/07/13 07	ethod pe: To	Dil Face Blank tal/NA Dil Face Sample
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water Analysis Batch: 134200 Analyte Analysis Batch: 134200 Analyte	SCB	2.0 USB	Qualifler U USB Qualifler	-	2.0		MDL 2.0	mg/L Unit mg/L	Unit mg/L	. <u>D</u> .	Pr Pr ient	repared Client S repared Sample	Analyzed 02/07/13 07 Sample ID: M Prep Tyl Analyzed 02/07/13 07 D: Lab Cor Prep Tyl %Rec.	ethod pe: To	Dil Face Blank tal/NA Dil Face Sample
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand	USB	2.0 USB	Qualifler U USB Qualifler	Added	2.0	Result	MDL 2.0	mg/L Unit mg/L		. <u>D</u> .	Pr Pr ient	repared Client S repared Sample	Analyzec 02/07/13 07 Sample ID: M Prep Tyl Analyzec 02/07/13 07 PID: Lab Cor Prep Tyl %Rec. Limits	ethod pe: To	Dil Fac Blank stal/NA Dil Fac sample stal/NA
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: 660-52536-B-4 DU Matrix: Water	USB	2.0 USB	Qualifler U USB Qualifler	Added	2.0	Result	MDL 2.0	mg/L Unit mg/L		. <u>D</u> .	Pr Pr ient	repared Client S repared Sample	Analyzed 02/07/13 07 sample ID: M Prep Tyl Analyzed 02/07/13 07 Prep Tyl **Rec. Limits 85 . 115 ent Sample I	ethod pe: To	Dil Fac Blank stal/NA Dil Fac sample stal/NA
Lab Sample ID: SCB 660-134200/2 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-134200/1 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-134200/3 Matrix: Water Analysis Batch: 134200 Analyte Biochemical Oxygen Demand	USB	USB Result 2.0	USB Qualifler U	Added	2.0	Result 181	MDL 2.0	mg/L Unit mg/L		. <u>D</u> .	Pr Pr ient	repared Client S repared Sample	Analyzed 02/07/13 07 sample ID: M Prep Tyl Analyzed 02/07/13 07 Prep Tyl **Rec. Limits 85 . 115 ent Sample I	ethod pe: To	Dil Fac Blank stal/NA Dil Fac sample stal/NA

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Method: SM 5220D - COD															
Lab Sample ID: MB 680-266163/3 Matrix: Water Analysis Batch: 266163												Client S	iample ID: I Prep T		
,,		MB	мв												
Analyto	R	esult	Qualifier		PQL		MDL	Unit		D	Pı	repared	Analyz	ed	Dil Fac
Chemical Oxygen Demand		6.3	U		20		6.3	mg/L				-	02/13/13	11:13	1
Lab Sample ID: LCS 680-266163/4										Clie	ent	Sample	ID: Lab Co	ntrol S	ample
Matrix: Water												•	Prep T	ype: To	tal/NA
Analysis Batch: 266163													· ·	•	
				Spiko		LCS	LCS						%Rec.		
Analyto				Added		Result	Qua	lifter	Unit		D	%Rec	Limits		
Chemical Oxygen Demand		·		100		94.7			mg/L		_	95	90 - 110		
 Lab Sample ID: 680-87171-E-2 MS												Client	Sample ID:	Matrix	Spike
Matrix: Water													Prep T	ype: To	tal/NA
Analysis Batch: 266163													, ,		
-	Sample	Samp	le	Spike		MS	MS						%Rec.		
Analyte	Rosult	Quali	fler	Added		Result	Qua	lifier	Unit		D	%Rec	Limits		
Chemical Oxygen Demand	17	l		100		117			mg/L		_	100	90 - 110		
 Lab Sample ID: 680-87171-E-2 MSC)									Client	Sa	ımple IC): Matrix Sp	ike Duj	plicate
Matrix: Water													Prep T	ype: To	tal/NA
Analysis Batch: 266163													• '		
-	Sample	Samp	olo	Spike		MSD	MSE)					%Rec.		RPD
Analyte	Result	Quali	fier	Added		Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Limit
Chemical Oxygen Demand	17	1		100		117			mg/L		_	100	90 - 110	0	30

Project/Site: Leachate Effluent

General	Chen	nistn
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Analy	/sis	Batc	h: 1	34200
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Lab Sample ID	Client Sample tD	Prep Typo	Matrix	Method	Prep Batch
660-52536-B-4 DU	Duplicate	Total/NA	Water	SM 5210B	
660-52543-1	Leachate Effluent	Total/NA	Water	SM 5210B	
660-52543-2	Duplicate	Total/NA	Water	SM 5210B	
660-52543-3	Equipment Blank	Total/NA	Water	SM 5210B	
LCS 660-134200/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-134200/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-134200/1 USB	Method Blank	Total/NA	Water	SM 5210B	

Analysis Batch: 134249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-52536-H-2 MS	Matrix Spike	Total/NA	Water	353.2	
660-52536-H-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
660-52543-1	Leachate Effluent	Total/NA	Water	353.2	
660-52543-2	Duplicate	Total/NA	Water	353.2	
660-52543-3	Equipment Blank	Total/NA	Water	353.2	
LCS 660-134249/6	Lab Control Sample	Total/NA	Water	353.2	
MB 660-134249/5	Method Blank	Total/NA	Water	353.2	

Analysis Batch: 134365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-52543-1	Leachate Effluent	Total/NA	Water	SM 2540D	
660-52543-2	Duplicate	Total/NA	Water	SM 2540D	
660-52543-3	Equipment Blank	Total/NA	Water	SM 2540D	
660-52554-A-24 DU	Duplicate	Total/NA	Water	SM 2540D	
LCS 660-134365/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-134365/1	Method Blank	Total/NA	Water	SM 2540D	

Analysis Batch: 134491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-42234-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	
660-52543-1	Leachate Effluent	Total/NA	Water	SM 2540C	
660-52543-2	Duplicate	Total/NA	Water	SM 2540C	
660-52543-3	Equipment Blank	Total/NA	Water	SM 2540C	
LCS 660-134491/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-134491/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 266163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-52543-1	Leachate Effluent	Total/NA	Water	SM 5220D ·	
660-52543-2	Duplicate	Total/NA	Water	SM 5220D	
660-52543-3	Equipment Blank	Total/NA	Water	SM 5220D	
680-87171-E-2 MS	Matrix Spike	Total/NA	Water	SM 5220D	
680-87171-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220D	
LCS 680-266163/4	Lab Control Sample	Total/NA	Water	SM 5220D	
MB 680-266163/3	Method Blank	Total/NA	Water	SM 5220D	

2/19/2013

QC Association Summary

Client: Hillsborough County Public.Utilities (Jep Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Field Service / Mobile Lab

Analysis Batch: 134430

Lab Sample ID Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-52543-1 Leachate Effluent	Total/NA	Water	Field Sampling	

TestAmerica Tampa

Lab Chronicle

Client: Hillsborough County Public.Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Client Sample ID: Leachate Effluent

Date Collected: 02/06/13 13:36 Date Received: 02/06/13 15:55

Lab Sample ID: 660-52543-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Propared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B	··•	1	134200	02/07/13 10:59	AG	TAL TAM
Total/NA	Analysis	353.2		100	134249	02/08/13 06:06	RWF	TAL TAM
Total/NA	Analysis	SM 2540D		1	134365	02/12/13 09:46	то	TAL TAM
Total/NA	Analysis	SM 2540C		1	134491	02/14/13 15:16	то	TAL TAM
Total/NA	Analysis	SM 5220D		1	266163	02/13/13 11:13	TAR	TAL SAV
Total/NA	Analysis	Field Sampling		1	134430	02/06/13 13:36		TAL TAM

Client Sample ID: Duplicate

Date Collected: 02/06/13 00:00

Date Received: 02/06/13 15:55

Lab Sample ID: 660-52543-2

Matrix: Water

Batch Batch Dilution Batch Prepared **Prep Type** Method Type Run Factor Number or Analyzed Analyst SM 5210B TAL TAM Total/NA Analysis 134200 02/07/13 12:07 AG Total/NA **Analysis** 353.2 100 134249 02/08/13 06:06 RWF TAL TAM Total/NA Analysis SM 2540D 134365 02/12/13 09:46 TO TAL TAM Total/NA Analysis SM 2540C 02/14/13 15:16 TAL TAM TAL SAV Total/NA **Analysis** SM 5220D 266163 02/13/13 11:13 TAR

Client Sample ID: Equipment Blank

Date Collected: 02/06/13 13:31

Date Received: 02/06/13 15:55

Lab Sample ID: 660-52543-3

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prop Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	134200	02/07/13 12:07	AG	TAL TAM
Total/NA	Analysis	353.2		1	134249	02/08/13 06:06	RWF	TAL TAM
Total/NA	Analysis	SM 2540D		1	134365	02/12/13 09:46	то	TAL TAM
Total/NA	Analysis	SM 2540C		1	134491	02/14/13 15:16	то	TAL TAM
Total/NA	Analysis	SM 5220D		1	266163	02/13/13 11:13	TAR	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Method Summary

Client: Hillsborough County Public Utilities Dep Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-1

Method	Method Description	Protocol	Laboratory
353.2	Nitrate	MCAWW	TAL TAM
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL TAM
SM 5210B	BOD, 5-Day	SM	TAL TAM
SM 5220D	COD	SM	TAL SAV
Field Sampling	Field Sampling	EPA	TAL TAM

Protocol References:

EPA = US Environmental Protection Agency

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",

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

,

... TestAmerica Job ID: 660-52543-1

Certification Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Laboratory: TestAmerica Tampa

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

_				
Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40610	06-30-13
Florida	NELAP	4	E84282	06-30-13
Georgia	State Program	4	905	06-30-13
USDA	Federal		P330-11-00177	04-20-14

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		0399-01	02-28-13
VZLA	ISO/IEC 17025		399.01	02-28-13
Nabama	State Program	4	41450	06-30-13
Naska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-12
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
llinois	NELAP	5	200022	11-30-12
ndiana	State Program	5	N/A	06-30-13
owa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	02-28-13
_ouisiana	NELAP	6	30690	06-30-13
cuisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-12
Vassachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	12-31-12
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-13
South Carclina	State Program	4	98001	06-30-13
Tennesse e	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
√irginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-12
West Virginia DEP	State Program	3	94	06-30-13

TestAmerica Tampa

Certification Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-52543-

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

İ	Authority	Program	EPA Region	Certification ID	Expiration Date
	Wisconsin	State Program	5	999819810	08-31-13
Į	Wyoming	State Program	8	8TMS-Q	06-30-13





660-52543

HILLSBOROUGH COUNTY PUBLIC UTILITIES DEPARTMENT COC SHEET LEACHATE TRUCKS AND TANKS MONITORING PROGRAM

HATE	TRUCKS	AND	TANKS	MONITORING	PROGRAM
	LE	ACH	ATE I	PLANT	

PRECLEANED SAMPLE CONTAINERS:			DAT	TE TIME
RELINQUISHED BY:	REP. O	F CONTRACT LA	ъв. ——	_
ACCEPTED BY:	REP. O	F SOLID WASTE	DEPT. /-30	73 /2:30
			/E	
LOCATION: LEACHATE EFFLUENT	SAMPLE	MATRIX: WATE	R OTHER MA	TRIX:
PERSONAL ENGAGED IN SAMPLE CO	OLLECTION: Z A	.Balloon 🗗 🗴		
	FIELD PARAMETI	ERS:	•	
BY TIME T	EMP COND	PH	DO TUP	æ
HB 10 1:32 25	41 11404	8.14 5	46 N/A	

SAMPLE CONTAINERS

QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC		250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
2	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	

4 TOTAL No. OF SAMPLES COLLECTED:	
COLORS & SHEENS: YES N/A NO	COLLECTED DATE TIME Z.6.13 /:36
ANALYSIS REQUESTED:	
MONTHLY LEACHATE PLANT PARAMETERS BOD TSS NITRATE TDS COD	
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: _COOLER &	ICE TO 4.0 c
ABOVE LISTED SAMPLES: RELINQUISHED BY: REP. OF SOLID WASTE DEPT. ACCEPTED BY: REP. OF CONTRACT LAB.	DATE TIME 2413 3:35 2413 3:35
COMMENT'S:	

4.1°C 2407

13

HILLSBOROUGH COUNTY PUBLIC UTILITIES DEPARTMENT COC SHEET LEACHATE TRUCKS AND TANKS MONITORING PROGRAM T.E.A.C.HATE DIANT

LEACHATE PLANT				
PRECLEANED SAMPLE CONTAINERS: DATE TIME				
	QUISHED BY:	REP. OF CONTRACT LAB.		
	TED BY:		REP. OF SOLID WASTE DEPT.	
ACCEP 1	-B		MEL. OF SOUTH MASTE DEET. 1978-1783	
፤ ሰርልጥ፤	ION: Duplicate		SAMPLE MATRIX: WATER OTHER MATRIX:	
PERSON	NAL ENGAGED IN SAMPLE COL	LECTI	ION: 🗹 A.Balloon 🗗 🖂 🗆	
	F	IELD	PARAMETERS:	
	_			
	BY TIME TEM	₽	COND PH DO TURB	
	AB JC NA T		N/A =	
	9	AMPL	E CONTAINERS	
QTY	CONTAINER DESCRIPTION	QTY		
QII		QII		
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
/	250 ml. PLASTIC	<i> </i>	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS 500 ml. PLASTIC	
	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS	ļ	LITER PLASTIC	
2	LITER PLASTIC LITER GLASS		LITER GLASS	
ļ	BACTERIAL	}	BACTERIAL	
	BACIERIAL	<u> </u>	BACIERIAL	
COLORS	S & SHEENS: YES N/A		NO COLLECTED	
			DATE TIM	
			2,4,13	
		ANALY:	SIS REQUESTED:	
MONTHL:	Y LEACHATE PLANT PARAMETERS	BOD	TSS NITRATE TDS COD	
PRESE	RVED SAMPLES PH < 2.0		SAMPLE STORAGE: COOLER & ICE TO 4.0	
RELING	LISTED SAMPLES: QUISHED BY: TED BY:		REP. OF SOLID WASTE DEPT. 2.6.1317:51 REP. OF CONTRACT LAB. 2.6.1313:5	
COMME	NT`S:			

HILLSBOROUGH COUNTY DEPT. OF SOLID WASTE COC SHEET LEACHATE TRUCKS AND TANKS MONITORING PROGRAM LEACHATE PLANT EQUIPMENT BLANK

PRECLEANED SAMPLE CONTAINERS:

PREC	CLEANED SAMPLE CONTAINERS:			DATE TIME	
RELI	RELINQUISHED BY: ACCEPTED BY: REP. OF CONTRACT LAB. REP. OF SOLID WASTE DEPT. 1-30-13 /2:50				
ACCE	EPTED BY:		REP. OF SOLID WASTE DEPT	1.1-70-13 17:50	
			•	• ————	
	ATION: EQUIPMENT BLANK				
PERS	SONAL ENGAGED IN SAMPLE COL	LECTI	ON: PA.Balloon D Se		
	FIE	LD PA	RAMETERS: N/A		
		SAMPLI	E CONTAINERS		
QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED	
	40 ml VIAL		40 ml VIAL		
	125 ml. PLASTIC		125 ml. PLASTIC		
	125 ml GLASS		125 ml GLASS		
1.	250 ml. PLASTIC	1	250 ml. PLASTIC		
	250 ml. GLASS		250 ml. GLASS		
	500 ml. PLASTIC		500 ml. PLASTIC		
	500 ml. GLASS	<u> </u>	500 ml. GLASS		
2	LITER PLASTIC	ļ	LITER PLASTIC		
<u> </u>	LITER GLASS	<u> </u>	LITER GLASS		
L	BACTERIAL		BACTERIAL	<u> </u>	
_#	TOTAL No. OF SAMPLES O	COLLEC	TED:		
COL	ORS & SHEENS: YES N/A		NO	COLLECTED	
				DATE TIME	
				24.13 1:81	
		ANALYS	HIS REQUESTED:	44.13 11.81	
BOD5	COD TSS Nitrate-N TDS				
PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c					
ABOVE LISTED SAMPLES: RELINQUISHED BY: ACCEPTED BY: REP. OF SOLID WASTE DEPT. REP. OF CONTRACT LAB. DATE TIME 2.4.13 3:35					
COM	MENT`S:				

TestAmerica Tampa

6712 Benjamin Road Suite 100

Tampa, FL 33634

Chain of Custody Record



Phone (813) 885-7427 Fax (813) 885-7049 Sampler: Corrier Tracking No(s): COC No: Robertson, Nancy 660-52832.1 Client Information (Sub Contract Lab) Client Contact Phone: Poge: Shipping/Receiving nancy.robertson@testamericainc.com Page 1 of 1 Company: Job # **Analysis Requested** TestAmerica Laboratories, Inc. 660-52543-1 Address Due Date Requested: Preservation Codes: 5102 LaRoche Avenue. 2/13/2013 A - HCL M - Haxana Cay. TAT Requested (days): B - NaOH N - None Savannah C - Zn Acetote O - AsNoO2 State, Zip: D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 GA. 31404 F - MeOH R - Na2\$2\$03 Phone: PO # G - Amehior S - H2SO4 912-354-7858(Tel) 912-352-0165(Fax) T - TSP Dodocanydrate H - Ascorbic Acid Email WO # I - Ico U - Acetone J - Di Water V-MCAA K-EDTA W - ph 4-5 roject #: L - EOA Z - other (specify) SELF, Leachate Trucks, EFF 66003914 Other: SSOW#. Leachate, Tank Trucks Matrix Sample Type (Cocomp. Sample Sample Identification - Client ID (Lab ID) Sample Date Time G=grab) Special Instructions/Note: Preservation Code 13:38 Leachate Effluent (660-52543-1) Water 2/6/13 Fastern Duplicate (660-52543-2) Water х 2/6/13 Eastern 13:31 Equipment Blank (660-52543-3) Water x 2/6/13 Eastern Sample Disposal (A fee may be assessed if sumples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Month Possible Hazard Identification Return To Client Archive For Unconfirmed Special Instructions/QC Requirements: Deliverable Requested: I, II, III, IV, Other (specify) Mothod of Shipment Date: Time: Empty Kit Relinquished by: Received by Ldwards 17 0865 Received by: Date/Time: Сопралу Resinquished by: Received by: Oate/Time: Company Cooter Temperature(s) *C and Other Remarks: Custody Seals Intact: Custody Seal No.: Δ Yes Δ No

Page

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-52543-1

Login Number: 52543

List Number: 1

Creator: McNulty, Carol

List Source: TestAmerica Tampa

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-52543-1

Login Number: 52543

List Number: 1

Creator: Conner, Keaton

List Source: TestAmerica Savannah List Creation: 02/09/13 09:51 AM

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received 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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Tampa 6712 Benjamin Road Suite 100 Tampa, FL 33634

Tel: (813)885-7427

TestAmerica Job ID: 660-53060-1
Client Project/Site: Leachate Effluent

For:

Hillsborough County Public Utilities Dep Solid Waste Management Group Brandon Support Operations Complex 332 North Falkenburg Rd, 2nd Floor Tampa, Florida 33619

Attn: David Adams

Authorized for release by: 3/21/2013 12:35:01 PM

Nancy Robertson Project Manager II

nancy.robertson@testamericainc.com

Review your project

results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

_	
Cover Page	1
Table of Contents	2
Sample Summary	3
— •• ••	4
Definitions/Glossary	5
	6
Client Sample Results	7
	9
	13
Lab Chronicle	15
Method Summary	16
Certification Summary	17
	19
Receipt Checklists	22

Sample Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

	Ω
ceived	

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-53060-1	LEACHATE EFFLUENT	Water	03/06/13 12:22	03/06/13 15:24
660-53060-2	BLANK EQUIPMENT 53060	Water	03/06/13 12:15	03/06/13 15:24

Case Narrative

Client: Hillsborough County Public Utilities Dep Project/Site: Leachate Effluent	TestAmerica Job ID: 660-53060-1
Job ID: 660-53060-1	
Laboratory: TestAmerica Tampa	
Narrativo	
Job Narrative 660-53060-1	
Comments No additional comments.	
Receipt The samples were received on 3/6/2013 3:24 PM; the samples arrived in good condit The temperature of the cooler at receipt was 3.5° C.	ion, properly preserved and, where required, on ice.
General Chemistry	

No analytical or quality issues were noted.

Definitions/Glossary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Qualifiers

General Chemistry

Qualifier Qualifier Description

The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

u Indicates that the compound was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CNF Contains no Free Liquid

DER Duplicate error ratio (normalized absolute difference)

DL. RA. RE. IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision level concentration MDA Minimum detectable activity EOL **Estimated Detection Limit**

MDC Minimum detectable concentration

MDL **Method Detection Limit** ML Minimum Level (Dioxin)

ND Not detected at the reporting limit (or MDL or EDL if shown)

PQL **Practical Quantitation Limit**

QC **Quality Control** RER Relative error ratio

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Hillsborough County Public Utilities Dep

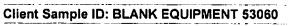
Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Client Sample ID: LEACHATE EFFLUENT	

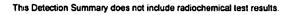
Lab :	Samp	le ID:	660-	53060-1
-------	------	--------	------	---------

Analyto	Result (Qualifier	PQL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nitrate as N	95		25	5.0	mg/L	50		353.2	Total/NA
Total Dissolved Solids	6100		250	250	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	80		1.8	1.8	mg/L	1		SM 2540D	Total/NA
Biochemical Oxygen Demand	16		12	12	mg/L	1		SM 5210B	Total/NA
Chemical Oxygen Demand	520		20	6.3	mg/L	1		SM 5220D	Total/NA
Field pH	8.04				SU	1		Field Sampling	Total/NA
Field Temperature	22.18				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.82				mg/L	1		Field Sampling	Total/NA
Specific Conductance	11107				umhos/cm	1		Field Sampling	Total/NA



Lab Sample ID: 660-53060-2

No Detections





Client Sample Results

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 03/06/13 12:22 Date Received: 03/06/13 15:24

Specific Conductance

Lab Sample ID: 660-53060-1

03/06/13 12:22

Matrix: Water

General Chemistry Analyto	Result	Qualiflor	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	95		25	5.0	mg/L			03/07/13 08:09	50
Total Dissolved Solids	6100		250	250	mg/L			03/11/13 14:56	1
Total Suspended Solids	89		1.8	1.8	mg/L			03/12/13 08:08	1
Biochemical Oxygen Demand	16		12	12	mg/L			03/07/13 10:20	1
Chemical Oxygen Demand	520		20	6.3	mg/L			03/12/13 11:43	1
- Method: Field Sampling - Field S	ampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.04				SU			03/06/13 12:22	1
Field Temperature	22.18				Degrees C			03/06/13 12:22	1
Oxygen, Dissolved	5.82				ma/L			03/06/13 12:22	1

umhos/cm



Client Sample Results

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Client Sample ID: BLANK EQUIPMENT 53060

Date Collected: 03/06/13 12:15 Date Received: 03/06/13 15:24 Lab Sample ID: 660-53060-2

Matrix: Water

General Chemistry									
Analyto	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.50	0.10	mg/L			03/07/13 08:09	ī
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			03/11/13 14:56	1
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			03/12/13 08:08	1
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			03/07/13 10:20	1
Chemical Oxygen Demand	6.3	U	20	6.3	mg/L			03/18/13 13:53	1



QC Sample Results

Client: Hillsborough County Public Utilities Dep Project/Site: Leachate Effluent

														-
Lab Sample ID: MB 660-135177/5										Cli	ent S	ample ID: N	fethod	Blan
Matrix: Water												Prep Ty	pe: To	tal/N
Analysis Batch: 135177														
		MB												
Analyte	R		Qualifier		PQL		MDL Unit		D	Propa	red	Analyzo	d	Dil Fa
Nitrate as N		0.10	U		0.50		0.10 mg/L					03/07/13 0	8:09	
Lab Sample ID: LCS 660-135177/6									Cli	ent Sa	mple	ID: Lab Co	ntrol S	ampl
Matrix: Water												Prep Ty	pe: To	tal/N/
Analysis Batch: 135177														
				Spike		LCS	LCS					%Rec.		
Analyte				Added			Qualifier	Unit		D %	Rec	Limits		
litrate Nitrite as N				1.00		0.959		mg/L			96	90 - 110		
litrite as N				0.500		0.494	ı	mg/L			99	90 - 110		
_ab Sample ID: 660-53034-D-1 MS										С	lient	Sample ID:	Matrix	Spik
Matrix: Water												Prep Ty	pe: To	tal/N
Analysis Batch: 135177														
	Sample	Sam	ple	Spiko		MS	MS					%Rec.		
Analyto	Result	Qual	iflor	Added		Result	Qualifier	Unit		D %	Rec	Limits		
Vitrate Nitrite as N	0.10	Ū		1.00		0.931		mg/L			93	90 - 110		
litrite as N	0.10	U		0.500		0.482	1	mg/L			96	90 - 110		
.ab Sample ID: 660-53034-D-1 MSD)								Client	t Samı	ole ID	: Matrix Sp	ike Dup	olicat
Matrix: Water												Prep Ty	pe: To	tal/N
Analysis Batch: 135177												•	•	
•	Sample	Sam	ple	Spike		MSD	MSD					%Rec.		RP
Analyte	Result	Qual	ifler	Added		Result	Qualifier	Unit		D %	Rec	Limits	RPD	Llm
Nitrate Nitrite as N	0.10	Ũ		1.00		0.928		mg/L		-	93	80 - 110	Ō	:
Nitrite as N	0.10	U		0.500		0.483	ı	mg/L			97	90 . 110	0	3
lethod: SM 2540C - Solids, To	tal Dis	loa	ed (TDS	S)			· · · · · · · · · · · · · · · · · · ·							
										CII	ant C	amala ID: I		Dian
Lab Sample ID: MB 660-135269/1 Matrix: Water										CII	ent 3	ample ID: I Prep T		
Analysis Batch: 135269														
		MB	MB											
Analyte	R	esult	Qualifler		PQL		MDL Unit		D	Prepa	ared	Analyz	od .	DII Fa
Total Dissolved Solids		5.0	U		5.0		5.0 mg/L					03/11/13 1	4:56	
									Cli	ent Sa	ımple	ID: Lab Co	ntrol S	ampi
Lab Sample ID: LCS 660-135269/2												Prep T	/pe: To	tal/N
•														
Matrix: Water												•		
Matrix: Water				Spike		LCS	LCS					%Rec.		
Matrix: Water Analysis Batch: 135269 ^{Analyte}				Spike Addod			LCS Qualifier	Unit		D %	Rec			
Matrix: Water Analysis Batch: 135269 ^{Analyte}			·····	•				Unit mg/L		D %	Rec 99	%Rec.		
Matrix: Water Analysis Batch: 135269 Analyte Total Dissolved Solids				Added		Rosult				D %	99	%Rec. Limits	ID: Dup	plicat
Matrix: Water Analysis Batch: 135269 Analyte Total Dissolved Solids Lab Sample ID: 660-53037-C-1 DU Matrix: Water	• • • • • • • • • • • • • • • • • • • •		····	Added		Rosult				D %	99	%Rec. Limits 80 - 120	•	
Matrix: Water Analysis Batch: 135269 Analyte Total Dissolved Solids Lab Sample ID: 660-53037-C-1 DU Matrix: Water	•			Added		Rosult				D %	99	%Rec. Limits 80 - 120 ent Sample	•	
Matrix: Water Analysis Batch: 135269 Analyte Total Dissolved Solids Lab Sample ID: 660-53037-C-1 DU	Samplo	Sam		Added		Result 9890				D %	99	%Rec. Limits 80 - 120 ent Sample	•	
Analysis Batch: 135269 Analyte Total Dissolved Solids Lab Sample ID: 660-53037-C-1 DU Matrix: Water	Sample Result		•	Added		Rosutt 9890 DU	Qualifier			D %	99	%Rec. Limits 80 - 120 ent Sample	•	tal/N

QC Sample Results

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Lab Sample ID: MB 660-135280/1										Client S	iample ID: Met		
Matrix: Water Analysis Batch: 135280											Prep Type	e: To	tal/NA
Analysis Saton. 100200	МВ	мв											
Analyte	Result	Qualifier		PQL		MDL Unit		D	Pi	epared	Analyzod		Dit Fac
Total Suspended Solids	1.0	U		1.0		1.0 mg/l	•			-	03/12/13 08:0	8	
Lab Sample ID: LCS 660-135280/2								CII	ient	Sample	ID: Lab Cont	roi Sa	ample
Matrix: Water											Prep Type		
Analysis Batch: 135280													
			Spike			LCS					%Rec.		
Analyto			Added			Qualifier	Unit		D	%Rec	Limits		
ctal Suspended Solids			100		97.2		mg/L			97	80 - 120		
Lab Sample ID: 660-53060-1 DU								Client	t Sa	mple ID	: LEACHATE!	EFFL	.UENT
Matrix: Water											Ргер Тур	e: To	tal/N/
Analysis Batch: 135280													
	Sample Sam	•				DU							RPI
Analyto	Result Qua	liflor				Qualifier	Unit		D			RPD	Lim
otal Suspended Solids	80				78.5		mg/L					2	2
ab Sample ID: SCB 660-135130/2			- · 					-		Client S	Sample ID: Mei Prep Type		
_ab Sample ID: SCB 660-135130/2 Matrix: Water	SCB	SCB						-		Client S	•		
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130	SCB	SCB Qualifler		PQL		MDL Unit	_	D		Client S	•		tal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130	SCB	Qualifier		PQL 2.0		MDL Unit		D			Prep Type	e: To	tal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyto Biochemical Oxygen Demand	SCB SCB Result 2.0	Qualifier						D	P	repared	Analyzed 03/07/13 08:0	e: To	Dii Fa
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water	SCB SCB Result 2.0	Qualifier						D	P	repared	Analyzed 03/07/13 08:0	e: To	Dii Fa
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water	SCB SCB Result 2.0	Qualifler U						D _	P	repared	Analyzed 03/07/13 08:0	e: To	Dii Fa
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyto Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130	SCB SCB Result 2.0 USB	Qualifier U		2.0		2.0 mg/	•	<u> </u>	P	repared Client S	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ	e: To	Dii Fa Biani tal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130	SCB SCB Result 2.0 USB USB	Qualifier U USB Qualifier		2.0		2.0 mg/l	•	D _	P	repared	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ	e: To	Dii Fa Biani tal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130	SCB SCB Result 2.0 USB	Qualifier U USB Qualifier		2.0		2.0 mg/	•	<u> </u>	P	repared Client S	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ	e: To	Dii Fa Biani tal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler		2.0		2.0 mg/l	•	D	P	repared Client S	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0	e: To 8 thod e: To	Dii Fa Bian tai/N/
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler		2.0		2.0 mg/l	•	D	P	repared Client S	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0	e: To 8 thod e: To	Dii Fa Bian tai/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler		2.0		2.0 mg/l	•	D	P	repared Client S	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 9 ID: Lab Cont	e: To 8 thod e: To	Dii Fa Bian tai/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler	Spike	2.0		2.0 mg/l		D	P	repared Client S repared	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 PID: Lab Cont Prep Typ	e: To 8 thod e: To	Dii Fa Biani stal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler	Added	2.0	Result	MDL Unit 2.0 mg/	Unit	D	P	repared Client S repared Sample	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 PID: Lab Cont Prep Typ %Rec. Limits	e: To 8 thod e: To	Dii Fa Biani stal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler	•	2.0		MDL Unit 2.0 mg/		D	P	repared Client S repared	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 PID: Lab Cont Prep Typ	e: To 8 thod e: To	Dii Fa Biani stal/N/
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler	Added	2.0	Result	MDL Unit 2.0 mg/	Unit	D	P	repared Client S repared Sample %Rec 87	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 PID: Lab Cont Prep Typ %Rec. Limits 85 - 115	e: To 8 thod e: To 8 rol S e: To	DII Fa Blani tal/N/ DII Fa
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyto Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyto Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyto Biochemical Oxygen Demand Lab Sample ID: 660-53053-A-1 DU	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler	Added	2.0	Result	MDL Unit 2.0 mg/	Unit	D	P	repared Client S repared Sample %Rec 87	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 PID: Lab Cont Prep Typ %Rec. Limits 85 - 115	e: To 8 thod e: To 8 rol S e: To	Blani tal/NA Blani tal/NA Dil Factorial/NA
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: 660-53053-A-1 DU Matrix: Water	SCB SCB Result 2.0 USB USB Result 2.0	Qualifler U USB Qualifler	Added	2.0	Result	MDL Unit 2.0 mg/	Unit	D	P	repared Client S repared Sample %Rec 87	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 PID: Lab Cont Prep Typ %Rec. Limits 85 - 115	e: To 8 thod e: To 8 rol S e: To	Blani tal/NA Blani tal/NA Dil Factorial/NA
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand	SCB SCB Result 2.0 USB USB Result 2.0	USB Qualifier U	Added	2.0	Rosuit 173	MDL Unit 2.0 mg/	Unit	D	P	repared Client S repared Sample %Rec 87	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 PID: Lab Cont Prep Typ %Rec. Limits 85 - 115	e: To 8 thod e: To 8 rol S e: To	Blani tal/NA Blani tal/NA Dil Factorial/NA
Lab Sample ID: SCB 660-135130/2 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-135130/1 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-135130/3 Matrix: Water Analysis Batch: 135130 Analyte Biochemical Oxygen Demand Lab Sample ID: 660-53053-A-1 DU Matrix: Water	SCB SCB Result 2.0 USB USB Result 2.0	USB Qualifier U	Added	2.0	Result 173 DU	MDL Unit 2.0 mg/	Unit	D	P	repared Client S repared Sample %Rec 87	Analyzed 03/07/13 08:0 Sample ID: Me Prep Typ Analyzed 03/07/13 08:0 Prep Typ %Rec. Limits 85 - 115 ent Sample ID Prep Typ	e: To 8 thod e: To 8 rol S e: To	Blaniotal/NA Dil Factorial/NA pilcate pilcate

QC Sample Results

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Method: SM 5220D - COD											
Lab Sample ID: MB 680-269070/3									Client S	Sample ID: Met	hod Blank
Matrix: Water										Prep Type	: Total/NA
Analysis Batch: 269070											
A b. a -	_	MB MB									
Analyto	R	esult Qualifier		PQL		OL Unit		. D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand		6.3 U		20	6	.3 mg/L				03/12/13 11:4:	3 1
Lab Sample ID: LCS 680-269070/4								Cli	ent Sample	D: Lab Contr	ol Sample
Matrix: Water									•	Prep Type	-
Analysis Batch: 269070											
Analida			Spike	-	CS L					%Rec.	
Analyto Chemical Oxygen Demand			Added			ualifler	Unit		D %Rec	Limits	
Chemical Oxygen Demand			100	9	9.1		mg/L		99	90 - 110	
Lab Sample ID: 640-42546-D-1 MS Matrix: Water									Client	Sample ID: Ma Prep Type	•
Analysis Batch: 269070											
•	Sample	Sample	Spike		MS M	ıs				%Rec.	
Analyte	Result	Qualifler	Added	Res	ult Q	ualifier	Unit		D %Rec	Limits	
Chemical Oxygen Demand	50		100		46		mg/L		96	90 - 110	
Lab Sample ID: 640-42546-D-1 MSD								Clien	t Sample II	D: Matrix Spike	
Matrix: Water										Prep Type	: Total/NA
Analysis Batch: 269070	Camala	Commis	Calko		SD M	ien.				%Rec.	RPD
Ameliato		Sample Qualifier	Spike Added			ualifior	Unit		D %Rec		
Analyte Chemical Oxygen Demand	Kesuit 50	Quantitor	100		146	ualinor	mg/L		96	90 - 110	RPD Limit
- Chemical Oxygen Demand	4 0		100		140		myrc		30	90 - 110	0 30
Lab Sample ID: MB 680-269739/3									Client S	Sample ID: Met	hod Blank
Matrix: Water										Prep Type	: Total/NA
Analysis Batch: 269739											
	_	MB MB						_			
Analyto	R	esult Qualifier	·	PQL		DL Unit		_ D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand		6.3 U		20	6	5.3 mg/L				03/18/13 13:5	3 1
Lab Sample ID: LCS 680-269739/4 Matrix: Water								CI	ient Sample	D: Lab Cont	rol Sample e: Total/NA
Analysis Batch: 269739											
•			Spike	L	.CS L	CS				%Rec.	
Analyto			Added	Ros	sult Q	ualiflor	Unit		D %Rec	Limits	
Chemical Oxygen Demand			100	9	6.9		mg/L		97	90 - 110	
 Lab Sample ID: 660-53155-Q-1 MS									Client	Sample ID: M	atrix Spike
Matrix: Water										-	: Total/NA
Analysis Batch: 269739											
•	Samplo	Samplo	Spike		MS N	is				%Rec.	
Analyto	Result	Qualifier	Added	Re	sult Q	lualifier	Unit		D %Rec	Limits	
Chemical Oxygen Demand	39		100		130		mg/L		91	90 - 110	
Lab Sample ID: 660-53155-Q-1 MSD Matrix: Water	ı							Clien	nt Sample II	D: Matrix Spike	-
Matrix: water Analysis Batch: 269739										-гер тур	e: Total/NA
Alialysis DalGii: 203/38	Samolo	Sample	Spike	N	SD M	ISD				%Rec.	RP
Analyte	-	Qualifier	Added			lualifier	Unit		D %Rec		RPD Limi
Chemical Oxygen Demand	39		100		130						
, Unemical Oxygen Demand	39		100		130		mg/L		91	90 - 110	0 3

Client: Hillsborough County Public Utilities Dep Project/Site: Leachate Effluent

QC Association Summary

Client: Hillsborough County Public Utilities Dep Project/Site: Leachate Effluent

General Chemistry	· · · · · · · · · · · · · · · · · · ·				
Analysis Batch: 13513	0				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prop Batch
660-53053-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	
660-53060-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5210B	
660-53060-2	BLANK EQUIPMENT 53060	Total/NA	Water	SM 5210B	
LCS 660-135130/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-135130/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-135130/1 USB	Method Blank	Total/NA	Water	SM 5210B	
Analysis Batch: 13517	7				
Lab Sample ID	Cilent Sample ID	Ргор Туро	Matrix	Method	Prop Batch
660-53034-D-1 MS	Matrix Spike	Total/NA	Water	353.2	
660-53034-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
660-53060-1	LEACHATE EFFLUENT	Total/NA	Water	353.2	
660-53060-2	BLANK EQUIPMENT 53060	Total/NA	Water	353.2	
LCS 660-135177/6	Lab Control Sample	Total/NA	Water	353.2	
MB 660-135177/5	Method Blank	Total/NA	Water	353.2	
Analysis Batch: 13526	9				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-53037-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	
660-53060-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540C	
660-53060-2	BLANK EQUIPMENT 53060	Total/NA	Water	SM 2540C	
LCS 660-135269/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-135269/1	Method Blank	Total/NA	Water	SM 2540C	
Analysis Batch: 13528	0				
Lab Sample ID	Client Sample ID	Prop Type	Matrix	Method	Prep Batch
660-53060-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
660-53060-1 DU	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
660-53060-2	BLANK EQUIPMENT 53060	Total/NA	Water	SM 2540D	
LCS 660-135280/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-135280/1	Method Blank	Total/NA	Water	SM 2540D	
Analysis Batch: 26907	0				
Lab Sample ID	Client Sample ID	Ргер Туро	Matrix	Method	Prop Batch
640-42546-D-1 MS	Matrix Spike	Total/NA	Water	SM 5220D	
640-42546-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220D	
660-53060-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5220D	
LCS 680-269070/4	Lab Control Sample	Total/NA	Water	SM 5220D	
MB 680-269070/3	Method Blank	Total/NA	Water	SM 5220D	
Analysis Batch: 26973	9				
Lab Sample ID	Cilent Sample ID	Prep Type	Matrix	Method	Prop Batch
660-53060-2	BLANK EQUIPMENT 53060	Total/NA	Water	SM 5220D	
660-53155-Q-1 MS	Matrix Spike	Total/NA	Water	SM 5220D	
660-53155-Q-1 MSD	Matrix Spike Duplicate	Tota!/NA	Water	SM 5220D	
LCS 680-269739/4	Lab Control Sample	Total/NA	Water	SM 5220D	
MB 680-269739/3	Method Blank	Total/NA	Water	SM 5220D	

QC Association Summary

Client: Hillsborough County Public Utilities Dep TestAmerica Job ID: 660-53060-1 Project/Site: Leachate Effluent Field Service / Mobile Lab Analysis Batch: 135186 Lab Sample ID Client Sample ID Ргор Туре Matrix Method Prep Batch 660-53060-1 LEACHATE EFFLUENT Field Sampling Tctal/NA Water

Lab Chronicle

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 03/06/13 12:22 Date Received: 03/06/13 15:24

Lab Sample ID: 660-53060-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	135130	03/07/13 10:20	DK	TAL TAM
Total/NA	Analysis	353.2		50	135177	03/07/13 08:09	RWF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135269	03/11/13 14:56	то	TAL TAM
Total/NA	Analysis	SM 2540D		1	135280	03/12/13 08:08	то	TAL TAM
Total/NA	Analysis	SM 5220D		1	269070	03/12/13 11:43	TAR	TAL SAV
Total/NA	Analysis	Field Sampling		1	135186	03/06/13 12:22		TAL TAM

Client Sample ID: BLANK EQUIPMENT 53060

Date Collected: 03/06/13 12:15

Date Received: 03/06/13 15:24

Lab Sample ID: 660-53060-2

Matrix: Water

•	Batch	Batch		Dilution	Batch	Prepared		
Ргор Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B	. .	1	135130	03/07/13 10:20	DK	TAL TAM
Total/NA	Analysis	353.2		1	135177	03/07/13 08:09	RWF	TAL TAM
Total/NA	Analysis	SM 2540C		1	135269	03/11/13 14:56	то	TAL TAM
Total/NA	Analysis	SM 2540D		1	135280	03/12/13 08:08	то	TAL TAM
Total/NA	Analysis	SM 5220D		1	269739	03/18/13 13:53	TAR	TAL SAV

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427



Method Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Method	Method Description	Protocol	Laboratory
353.2	Nitrate	MCAWW	TAL TAM
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL TAM
SM 5210B	BOD, 5-Day	SM	TAL TAM
SM 5220D	COD	SM	TAL SAV
Field Sampling	Field Sampling	EPA	TAL TAM

Protocol References:

EPA = US Environmental Protection Agency

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",

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
TAL TAM = TestAmerica Tampa, 6712 Benjamin Road, Suite 100, Tampa, FL 33634, TEL (813)885-7427

Certification Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Laboratory: TestAmerica Tampa

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority Alabama	Program State Program	EPA Region	Certification ID 40610	Expiration Date 06-30-13
Florida	NELAP	4	E84282	06-30-13
Georgia	State Program	4	905	06-30-13
USDA	Federal		P330-11-00177	04-20-14

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Dat
A2LA	DoD ELAP		0399-01	03-31-13
A2LA	ISO/IEC 17025		399.01	03-31-13
Alabama	State Program	4	41450	06-30-13
Alaska (UST)	State Program	10	UST-104	06-19-13
California	NELAP	9	3217CA	07-31-13
Colorado	State Program	8	N/A	12-31-13
Connecticut	State Program	1	PH-0161	03-31-13
Florida	NELAP	4	E87052	06-30-13
GA Dept. of Agriculture	State Program	4	N/A	12-31-13
Georgia	State Program	4	N/A	06-30-13
Georgia	State Program	4	803	06-30-13
Guam	State Program	9	09-005r	04-17-13
Hawaii	State Program	9	N/A	06-30-13
Illinois	NELAP	5	200022	11-30-13
Indiana	State Program	5	N/A	06-30-13
lowa	State Program	7	353	07-01-13
Kentucky	State Program	4	90084	12-31-12
Kentucky (UST)	State Program	4	18	03-31-13
Louisiana	NELAP	6	30690	06-30-13
Louisiana	NELAP	6	LA100015	12-31-13
Maine	State Program	1	GA00006	08-16-14
Maryland	State Program	3	250	12-31-13
Massachusetts	State Program	1	M-GA006	06-30-13
Michigan	State Program	5	9925	06-30-13
Mississippi	State Program	4	N/A	06-30-13
Montana	State Program	8	CERT0081	01-01-14
Nebraska	State Program	7	TestAmerica-Savannah	06-30-13
New Jersey	NELAP	2	GA769	06-30-13
New Mexico	State Program	6	N/A	06-30-13
New York	NELAP	2	10842	04-01-13
North Carolina DENR	State Program	4	269	12-31-13
North Carolina DHHS	State Program	4	13701	07-31-13
Oklahoma	State Program	6	9984	08-31-13
Pennsylvania	NELAP	3	68-00474	06-30-13
Puerto Rico	State Program	2	GA00006	01-01-14
South Carolina	State Program	4	98001	06-30-13
Tennessee	State Program	4	TN02961	06-30-13
Texas	NELAP	6	T104704185-08-TX	11-30-13
USDA	Federal		SAV 3-04	04-07-14
Virginia	NELAP	3	460161	06-14-13
Washington	State Program	10	C1794	06-10-13
West Virginia	State Program	3	9950C	12-31-13
West Virginia DEP	State Program	3	94	06-30-13

TestAmerica Tampa

Certification Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-53060-1

Laboratory: TestAmerica Savannah (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999819810	08-31-13
Wyoming	State Program	8	8TMS-Q	06-30-13



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RECEIVED BY: (90NATU AVAL RECEIVED FOR LABOR SCENATURE)			3:24 TIME	-	ABOI	RAT	ORY ODY NO.		INLY LOG N	10.	LAB	orato	DRY R							

Form FD 9000-24 **GROUNDWATER SAMPLING LOG**

SITE NAME:	Souther	IST CO	WNTY L	ANDFI	CL ST	CATION:	6177	110	1, FL			
WELL NO:	LEACH	ATE EA	cluent	SAMPLE		PA CHA1			-	DATE: 3	-6-13	
				•		ING DA				·		
WELL DIAMETER	R (Inches): W	TUBIN DIAME	TER (Inches):A	J/A DEF	LL SCREEN PTHAV/A 19	el tow/A fe	eet TOV	NATE	EPTH R (feet): いん	A OF	RGE PUMP TYP	
WELL VOL	.UME PURGE; I if applicable)	1 WELL VO	LUME = (TOTA	AL WELL DEF	TH - STA	TIC DEPTH T	O WATER)) X	WELL CAPACI	ĭΥ		
EQUIPMEN	NT VOLUME P	URGE: 1 EQ	= (JIPMENT VOL.	<i>N A</i> = PUMP VOL	feet - UME + (TUB	N/A ING CAPACI	feet)) X TU	N/A BING LENGTH)	gailons/fc + FLOW C	pot = N/A ELL VOLUME	gallons
(only fill out	l if applicable)				allens + (ns/foot X		feet)	+	gallons =	gallons
	MP OR TUBIN WELL (feet):	G N∕r	FINAL PUM DEPTH IN V	P OR TUBING VELL (feet):	32/10	PURGIN INITIATE	G DAT: り	la.	PURGING ENDED AT:	N/A	TOTAL VOLU	
ПМЕ	VOLUME PURGED (gailons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (fest)	pH (standard units)	TEMP. (°C)	COND. (circle uni µmhos/c pr µS/cr	lts) :m	DISSOLVED OXYGEN (ctrcle units) mg/L gr % saturation	TURBIDI (NTUs		
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	ACITY (Gallor ISIDE DIA. CA		0.75" = 0.02; Fl.): 1/8" = 0.0					0.37; " = 0.0		5" = 1.02; .006; 1/:		2" = 6.88 3" = 0.018
PURGING	EQUIPMENT (CODES: E	= Baller; E	BP = Bladder I		SP = Electric		le Pun	np; PP=Pe	ristaltic Pu	mp; O=Oth	r (Specify)
SAMPLED	BY (PRINT) / A	AFFILIATION:		SAMPLER(S)		LING DA	MA_	_	L BANABI INC		CAMPI INC	
	BALLOUN			A3Ci	-/2			\leq	SAMPLING INITIATED AT	: /277	SAMPLING ENDED AT:	1222
PUMP OR		N/A		TÚBING MATERIAL C	ODE: N/	A -			FILTERED: Y		FILTER SIZ	: µm
	CONTAMINATIO		·		TUBING	Y QD) (re			DUPLICATE:	Y	(C)	
	PLE CONTAIN					RESERVATIO			INTENDE ANALYSIS AF		SAMPLING E	AMPLE PUMP
BAMPLE ID CODE	CONTAINERS	MATERIAL CODE	VOLUME	PRESERVAT USED		TOTAL VOL D IN FIELD (1		₩L H	METHO			mr ber mjunte)
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MATERIAL		AG = Amber		Clear Glass;	PE = Poly	•	PP = Polyp			ne; T = 1	Tetion; O ≃ Oth	er (Specify)
SAMPLING	EQUIPMENT		APP = After Per RFPP = Reverse	ristatic Pump;	B ≃ Bai		Bladder Pu		ESP = Electri Gravity Drain):			
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2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 6% Dissolved Oxygon: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

TestAmerica Tampa

6712 Benjamin Road Suite 100

Chain of Custody Record

TestAr			
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THE LEADER BY ENVIRONMENTAL TESTING

Tamps, FL 33634																				HID OF AGER 19 EN	BATHEHMERETAL	ILSTING
Phone (813) 885-7427 Fax (813) 885-7049	Sampler.			Leb (Ca	rnor	Track	ing N	No(s):				OC No. 60-53688.1		
Client Information (Sub Contract Lab)	J21941.				eriso	n, Na	ncy					-							-	00-33000. I		
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Page 21 of 23

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-53060-1

Login Number: 53060

List Source: TestAmerica Tampa

List Number: 1 Creator: McNuity, Carol

meter. The cooler's custody seals, if present, is intact. Sample custody seals, if present, are intact. True The cooler or samples do not appear to have been compromised or tampered with. Samples were received on ice. Cooler Temperature is acceptable. Cooler Temperature is recorded. True COC is present. True COC is filled out in ink and legible. True COC is filled out with all pertinent information. True	Question	Answer	Comment
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Sample containers have legible labels. Containers are not broken or leaking. Sample collection date/times are provided. Appropriate sample containers are used. Sample bottles are completely filled. Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). Multiphasic samples are not present. True True Samples do not require splitting or compositing. True	There are no discrepancies between the containers received and the COC.	True	
Containers are not broken or leaking. Sample collection date/times are provided. Appropriate sample containers are used. Sample bottles are completely filled. Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). Multiphasic samples are not present. True Samples do not require splitting or compositing.	Samples are received within Holding Time.	True	
Sample collection date/times are provided. Appropriate sample containers are used. True Sample bottles are completely filled. True Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs Containers requiring zero headspace have no headspace or bubble is <mm(1 4").="" are="" compositing.<="" do="" multiphasic="" not="" or="" present.="" require="" samples="" splitting="" td="" true=""><td>Sample containers have legible tabels.</td><td>True</td><td></td></mm(1>	Sample containers have legible tabels.	True	
Appropriate sample containers are used. Sample bottles are completely filled. Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). Multiphasic samples are not present. True Samples do not require splitting or compositing.	Containers are not broken or leaking.	True	
Sample bottles are completely filled. Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs Containers requiring zero headspace have no headspace or bubble is <mm(1 4").="" are="" compositing.="" do="" multiphasic="" not="" or="" present.="" require="" samples="" splitting="" td="" true="" true<=""><td>Sample collection date/times are provided.</td><td>True</td><td></td></mm(1>	Sample collection date/times are provided.	True	
Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). Multiphasic samples are not present. True Samples do not require splitting or compositing. True	Appropriate sample containers are used.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). Multiphasic samples are not present. Samples do not require splitting or compositing. True True	Sample bottles are completely filled.	True	
MS/MSDs Containers requiring zero headspace have no headspace or bubble is N/A 6mm (1/4"). Multiphasic samples are not present. True Samples do not require splitting or compositing. True	Sample Preservation Verified.	True	
<6mm (1/4"). Multiphasic samples are not present. Samples do not require splitting or compositing. True		True	
Samples do not require splitting or compositing. True		N/A	
	Multiphasic samples are not present.	True	
Residual Chlorine Checked. N/A	Samples do not require splitting or compositing.	True	
	Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-53060-1

List Source: TestAmerica Savannah List Creation: 03/08/13 08:42 AM

Creator: Conner, Keaton

Login Number: 53060

List Number: 1

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
the cooler or samples do not appear to have been compromised or ampered with.	True	
amples were received on ice.	True	
cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
OC is filled out in ink and legible.	True	
OC is filled out with all pertinent information.	True	
s the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received 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	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested /IS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is 6mm (1/4").	True	
fultiphasic samples are not present.	True	
amples do not require splitting or compositing.	True	
tesidual Chlorine Checked.	N/A	



TestAmerica Tampa
Page 23 of 23
3/21/2013