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October 1, 2012

Dept. of Environmental

Protection

OCT 03 2012

Southwest District

Ms. Susan Pelz, P.E.
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 – Third Quarter (July - September, 2012)

Dear Ms. Pelz:

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 third 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 7.3 - 8.3 pH units and the monthly analytical samples ranged from 8.01 - 8.46 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 July 3, August 3, and September 5, 2012.

All effluent 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.

Ms. Susan Pelz October 1, 2012 Page 2

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

Sincerely,

David S. Adams, P.G. Environmental Manager Public Utilities Department

Environmental Services

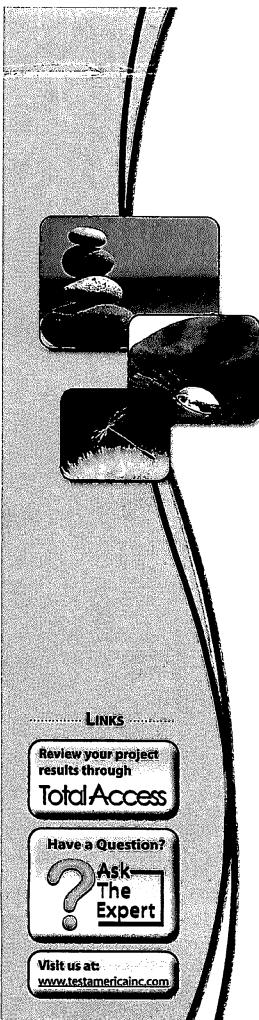
DSA/mdt Enclosures

xc: Larry Ruiz, Public Utilities

Beth Schinella, Public Utilities

Ron Cope, EPC

G:enviro/self/leachate plant/ltp-effluent-3rdqtr2012.doc



TestAmerica Oct 03 2012 TAIVIRONMENTAL TESTING TO STATE OF THE PROPERTY OF T Protection ien

ANALYTICAL REPORT

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

Tel: (813)885-7427

TestAmerica Job ID: 660-48652-1 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: 7/17/2012 12:43:05 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.



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Definitions/Glossary

Client: Hilisborough County Public Utilities Dep

Project/Site: Leachate Effluent

Qualifiers	
General Chem	ilstry
Qualifier	Qualifier Description
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
l	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
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
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
DC .	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48652-1

Job ID: 660-48652-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-48652-1

Comments

No additional comments.

Receipt

The samples were received on 7/3/2012 2:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

General Chemistry

Method 353.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 126260 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method SM 5220D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 126358 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

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Detection Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48652-1

Client Sample ID: Leachate	Effluent	· · · · · · · · · · · · · · · · · · ·				Lal	Sample ID:	660-48652-
- Analyte	Result	Qualifler	PQL	MDL	Unit	Dil Fac	D Method	Prep Type
Nitrate as N	0.25	1	0.50	0.10	mg/L	1	353.2	Total/NA
Chemical Oxygen Demand	1900		200	100	mg/L	10	5220 D	Total/NA
Total Dissolved Solids	4900		250	250	mg/L	1	SM 2540C	Total/NA
Total Suspended Solids	18	• • • • • • • • •	1.0	1.0	mg/L	1	SM 2540D	Total/NA
Biochemical Oxygen Demand	32		12	12	mg/L	1	SM 5210B	Total/NA
Field pH	8.46				SU	1	Field Sampling	Total/NA
Field Temperature	32.42				Degrees C	1	Field Sampling	Total/NA
Oxygen, Dissolved	5.73				mg/L	1	Field Sampling	Total/NA
Specific Conductance	8407				umhos/cm	1	Field Sampling	Total/NA
lient Sample ID: Equipmer	nt Blank					Lal	b Sample ID:	660-48652

No Detections

5

Client Sample Results

Client: Hillsborough County Public ! Hillities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48652-1

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-48652-1 Date Collected: 07/03/12 11:30

Matrix: Water

Date Received: 07/03/12 14:00

General Chemistry									
Analyto	Resuit	Qualifler	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.25	ī	0.50	0.10	mg/L			07/04/12 07:02	1
Chemical Oxygen Demand	1900		200	100	mg/L		07/06/12 07:30	07/06/12 11:30	10
Total Dissolved Solids	4900		250	250	mg/L			07/09/12 14:42	1
Total Suspended Solids	18		1.0	1.0	mg/L			07/10/12 08:03	1
Biochemical Oxygen Demand	32		12	12	mg/L			07/05/12 07:28	1
Method: Field Sampling - Field S	ampling								
Analyto	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fleid pH	8.46				SU			07/03/12 11:30	
Field Temperature	32.42				Degrees C			07/03/12 11:30	1
Oxygen, Dissolved	5.73				mg/L			07/03/12 11:30	1
Specific Conductance	8407				umhos/cm			07/03/12 11:30	1



Client Sample Results

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48652-1

Client Sample ID: Equipment Blank

Date Collected: 07/03/12 11:25 Date Received: 07/03/12 14:00 Lab Sample ID: 660-48652-2

Matrix: Water

	General Chemistry Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Nitrate as N	0.10	U	0.50	0.10	mg/L			07/04/12 07:03	
1	Chemical Oxygen Demand	10	U	20	10	mg/L		07/05/12 14:40	07/06/12 11:00	1
•	Total Dissolved Solids	5.0	υ	5.0	5.0	mg/L			07/09/12 14:42	1
	Total Suspended Solids	1.0	U	1.0	1.0	mg/L			07/10/12 08:03	1
	Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			07/05/12 07:28	1



Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Lab Sample ID: MB 660-126260/23												Client Sa	mple ID: Meti	nod E	Slan
Matrix: Water													Prep Type		
Analysis Batch: 126260															
		MB	MB												
Analyte	R	esult	Qualifier		PQL		MDL	Unit		D	Pı	epared	Analyzed		DII Fa
litrate as N		0.10	Ū		0.50		0.10	mg/L					07/04/12 06:48		
ab Sample ID: LCS 660-126260/24										CI	ient	Sample I	D: Lab Contr	ol Sa	mp
fatrix: Water												·	Prep Type		-
Analysis Batch: 126260													• ••		
				Spike		LCS	LCS						%Rec.		
nalyte				Added		Result	Qual	ifler	Unit		D	%Rec	Limits		
itrate Nitrite as N				1.00		0.981			mg/L		_	98	90 - 110		
itrite as N				0.500		0.500			mg/L			100	90 - 110		
ab Sample ID: 660-48611-A-3 MS												Client S	ample ID: Ma	trix S	iae
latrix: Water													Prep Type		•
nalysis Batch: 126260															
•	Sample	Sam	ple	Spike		MS	MS						%Rec.		
nalyte	Result	Qua	lifter	Added		Result	Qual	ifler	Unit		D	%Rec	Limits		
itrate Nitrite as N	5.7			1.00		6.88	J3		mg/L		_	121	90.110		
itrite as N	0.10			0.500		0.543			mg/L			109	90 - 110		
ab Sample ID: 660-48611-A-3 MSD)									Clien	t Sa	mole ID:	Matrix Spike	Duni	ica
latrix: Water													Prep Type	•	
nalysis Batch: 126260													i iop type	, 104	201
yolo Datolli. 120200	Sample	Sam	cle	Spike		MSD	MSD						%Rec.		R
nalyte	Result		•	Added		Result	Qual	ifier	Unit		D	%Rec		PD	u
itrate Nitrite as N	5.7			1.00		6.90	J3		mg/L		_	123	90 - 110		_
itrite as N	0.10			0.500		0.543			mg/L			109	90 - 110	0	
ethod: 5220 D - Chemical Ox	ygen [)em	and									_			
		Dem	and						<u>-</u>		_	Client Sa	mple ID: Meti	nod E	3la
ab Sample ID: MB 660-126353/4-A		Dem	and					1111 2				Client Sa	mple ID: Met		
ab Sample ID: MB 660-126353/4-A Aatrix: Water		Dem	and									Client Sa	Prep Type	: Tota	al/l
ab Sample ID: MB 660-126353/4-A Aatrix: Water			and MB									Client Sa	•	: Tota	al/l
ab Sample ID: MB 660-126353/4-A Matrix: Water Analysis Batch: 126357			мв		PQL		MDL	Unit		D			Prep Type Prep Bato	: Tota h: 12	al/N 263
ab Sample ID: MB 660-126353/4-A latrix: Water nalysis Batch: 126357		мв	MB Qualifler		PQL 20		MDL 10	Unit mg/L		<u>D</u> -	Pı	Client Sa repared 5/12 14:40	Prep Type	: Tota h: 12	al/l 263
ab Sample ID: MB 660-126353/4-A flatrix: Water Analysis Batch: 126357 Inalyte Idemical Oxygen Demand	R	MB esult	MB Qualifler								P: 07/0:	repared 5/12 14:40	Prep Type Prep Bato Analyzed 07/06/12 11:00	: Tota h: 12	a1/l 263
ab Sample ID: MB 660-126353/4-A flatrix: Water Analysis Batch: 126357 Inalyte Chemical Oxygen Demand	R	MB esult	MB Qualifler								P: 07/0:	repared 5/12 14:40	Prep Type Prep Bato Analyzed 07/08/12 11:00	: Tota h: 12	a1/I 263 Dii I
ab Sample ID: MB 660-126353/4-A Matrix: Water Analysis Batch: 126357 Analyte Chemical Oxygen Demand Ab Sample ID: LCS 660-126353/5-/	R	MB esult	MB Qualifler								P: 07/0:	repared 5/12 14:40	Prep Type Prep Bato Analyzed 07/06/12 11:00	: Tota h: 12	al/l 263 Dii F mp
Lab Sample ID: MB 660-126353/4-A Matrix: Water Analysis Batch: 126357 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-126353/5-/ Matrix: Water	R	MB esult	MB Qualifler	Spiko		LCS					P: 07/0:	repared 5/12 14:40	Prep Type Prep Bato Analyzed 07/08/12 11:00	: Tota h: 12	al/l 263 Dii F mp
ab Sample ID: MB 660-126353/4-A flatrix: Water Analysis Batch: 126357 Analyte Analyte Analyte Analyte Analyte Analyte Analyte Analyte Analyte Analysis Batch: 126357	R	MB esult	MB Qualifler	Spike Added		LCS Result	10	mg/L	Unit		P: 07/0:	repared 5/12 14:40	Prep Type Prep Bato Analyzed 07/06/12 11:00 D: Lab Contr Prep Type Prep Bato	: Tota h: 12	al/l 263 Dii F mp
ab Sample ID: MB 660-126353/4-A latrix: Water analysis Batch: 126357 nalyto hemical Oxygen Demand ab Sample ID: LCS 660-126353/5-/ latrix: Water analysis Batch: 126357	R	MB esult	MB Qualifler				10	mg/L	Unit mg/L		P: 07/0: ient	repared 5/12 14:40 Sample I	Prep Type Prep Bate Analyzed 07/06/12 11:00 ID: Lab Contr Prep Type Prep Bate %Rec.	: Tota h: 12	al/l 263 Dii I mj al/l
ab Sample ID: MB 660-126353/4-A flatrix: Water Analysis Batch: 126357 Inalyte Indicated Oxygen Demand Inab Sample ID: LCS 660-126353/5-/ Inalysis Batch: 126357 Inalyte Inalysis Batch: 126357 Inalyte Inalysis Oxygen Demand	R	MB esult	MB Qualifler	Added		Result	10	mg/L			P: 07/0: ient	**Pepared 5/12 14:40 Sample ***	Analyzed 07/06/12 11:00 D: Lab Contr Prep Type Prep Bate %Rec. Limits 90 - 110	ol Sa : Tota : Tota : Tota	al/I 263 Dii I mj al/I 263
ab Sample ID: MB 660-126353/4-A latrix: Water analysis Batch: 126357 nalyte hemical Oxygen Demand ab Sample ID: LCS 660-126353/5-/ latrix: Water analysis Batch: 126357 nalyte hemical Oxygen Demand ab Sample ID: 640-39254-A-2-B Ms	R	MB esult	MB Qualifler	Added		Result	10	mg/L			P: 07/0: ient	**Pepared 5/12 14:40 Sample ***	Prep Type Prep Bate Analyzed 07/06/12 11:00 ID: Lab Contr Prep Type Prep Bate %Rec. Limits 90 - 110 Bample ID: Ma	: Total	al/I 263 Dii I mj al/I 263
ab Sample ID: MB 660-126353/4-A Matrix: Water Analysis Batch: 126357 Malyte Chemical Oxygen Demand Ab Sample ID: LCS 660-126353/5-/ Matrix: Water Analysis Batch: 126357 Malyte Chemical Oxygen Demand Ab Sample ID: 640-39254-A-2-B M: Matrix: Water	R	MB esult	MB Qualifler	Added		Result	10	mg/L			P: 07/0: ient	**Pepared 5/12 14:40 Sample ***	Prep Type Prep Bate Analyzed 07/06/12 11:00 ID: Lab Contr Prep Type Prep Bate %Rec. Limits 90 - 110 Gample ID: Ma Prep Type	ol Sa : Tota : Tota : Tota : Tota : Tota	al/I 263 Dil I mp al/I 263
Lab Sample ID: MB 660-126353/4-A Matrix: Water Analysis Batch: 126357 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-126353/5-/ Matrix: Water Analysis Batch: 126357 Analyte Chemical Oxygen Demand Lab Sample ID: 640-39254-A-2-B M: Matrix: Water	R	MB lesult 10	MB Qualifier U	Added		Result 49.9	10	mg/L			P: 07/0: ient	**Pepared 5/12 14:40 Sample ***	Prep Type Prep Bate Analyzed 07/06/12 11:00 ID: Lab Contr Prep Type Prep Bate %Rec. Limits 90 - 110 Bample ID: Ma	ol Sa : Tota : Tota : Tota : Tota : Tota	al/I 263 mr al/I 263 Spi
lethod: 5220 D - Chemical Ox Lab Sample ID: MB 660-126353/4-A Matrix: Water Analysis Batch: 126357 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-126353/5-/ Matrix: Water Analysis Batch: 126357 Analyte Chemical Oxygen Demand Lab Sample ID: 640-39254-A-2-B M: Matrix: Water Analysis Batch: 126357 Analyte Analysis Batch: 126357	A S	MB lesult 10	MB Qualifier U	Added 50.0		Result 49.9	LCS Qual	mg/L			P: 07/0: ient	**Pepared 5/12 14:40 Sample ***	Prep Type Prep Bate Analyzed 07/06/12 11:00 ID: Lab Contr Prep Type Prep Bate %Rec. Limits 90 - 110 Gample ID: Ma Prep Type Prep Bate	ol Sa : Tota : Tota : Tota : Tota : Tota	al/l 263 Dii I mj al/l 263 Spi

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Lab Sample ID: 640-39254-A-2-C M	SD							Clier	ıt Sa	imple ID:	Matrix Sp	-	
Matrix: Water											Prep Ty		
Analysis Batch: 126357	C1-	C1-	0-11-			***					Prep B	atch: 1	
A maketa		Sample	Spike			MSD			_		%Rec.		RPC
Analyte		Qualifier	Added			Qualifier	Unit		<u>D</u>	%Rec	Limits	RPD	Limit
Chemical Oxygen Demand	26		50.0		73.6		mg/L			96	90 - 110	5	20
_ab Sample ID: MB 660-126354/4- <i>A</i>										Client Sa	ample ID: N	fethod	Blank
Matrix: Water	-										Prep Ty		
Analysis Batch: 126358											Prep B		
,		мв мв										uton	2000
Analyte	R	esult Qua	lifler	PQL		MDL Unit		D	P	repared	Analyze	d	Dil Fac
Chemical Oxygen Demand		10 U		20		10 mg/L				6/12 07:30	07/06/12 1		1
	_												
ab Sample ID: LCS 660-126354/5-	A							CI	ient	Sample	ID: Lab Co		-
flatrix: Water											Prep Ty	•	
Analysis Batch: 126358											Prep B	atch: 1	26354
			Spike			LCS					%Rec.		
nalyte			Added			Qualifier	Unit		D	%Rec	Limits		
hemical Oxygen Demand			200		204		mg/L			102	90 - 110		
ab Sample ID: 660-48627-N-1-B M	s									Client	Sample ID:	Matrix	Snike
Aatrix: Water										0110111	Prep Ty		•
Analysis Batch: 126358											Prep B	•	
analysis Daton. 120000	Sample	Sample	Spike		MS	MS					%Rec.	aten: i	20334
Analyte	•	Qualifier	Added			Qualifler	Unit		D	%Rec	Limits		
Chemical Oxygen Demand	1500	J3	100		1530	J3	mg/L		_	45	90 - 110		
		••									001110		
ab Sample ID: 660-48627-N-1-C M	SD							Clier	nt Sa	mple ID:	: Matrix Sp	ike Duj	plicate
Matrix: Water											Prep Ty	/pe: To	tal/NA
Analysis Batch: 126358											Prep B	•	
•	Sample	Sample	Spike		MSD	MSD					%Rec.		RPD
Analyte	Result	Qualifier	Added		Result	Qualifier	Unit		D	%Rec	Limits	RPD	Limit
hemical Oxygen Demand	1500	J3	100		1540	J3	mg/L		_	53	90 - 110	1	20
ethod: SM 2540C - Solids, To	otal Dis	solved	I (TDS)										
_ab Sample ID: MB 660-126399/1										Cliant S.	amala ID: B	fathad	Diank
Matrix: Water										Chent S	ample ID: N		
											Prep Ty	/pe: ro	tal/NA
Analysis Batch: 126399		MB MB											
Analyte	ь	esult Qua		PQL		MDL Unit		n			Anabas		DU F
Total Dissolved Solids		5.0 U		5.0				_ D		repared	Analyze		Dil Fac
Cam Pissolied Golids		3.0 0		3,0		5.0 mg/L					07/09/12 1	4:42	1
								C	lient	Sample	ID: Lab Co	ntrol S	ample
_ab Sample ID: LCS 660-126399/2										• -			-
-											Preb IV	/De: In	
Matrix: Water											Prep Ty	/pe: Id	van IV
Lab Sample ID: LCS 660-126399/2 Matrix: Water Analysis Batch: 126399			Spike		LCS	LCS					•	/pe: Id	Canto
Matrix: Water			Spike Added			LCS Qualifier	Unit		D	%Rec	%Rec.	/pe: Ic	, can it

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Lab Sample ID: 640-39291-B-1 DU Matrix: Water											Clie	ent Sample ID: D	-
watrix: water Analysis Batch: 126399												Prep Type:	otal/N/
Milalysis Datcil. 120355	Sample	Sam	ple			DU	DU						RPI
Analyte	Result		-			_	Qualifier	Unit		D		RP	
Total Dissolved Solids	230					232		mg/L					2 20
								•					
lethod: SM 2540D - Solids, To	tal Sus	spe	nded (TS	S)			and the state of t						
Lab Sample ID: MB 660-126417/1										-	Client S	ample ID: Metho	d Blani
Matrix: Water												Prep Type:	Total/NA
Analysis Batch: 126417													
	_		MB										
Analyte	Re		Qualifier		PQL		MDL Unit		. <u>D</u> .	Pr	epared	Analyzed	Dil Fac
Total Suspended Solids		1.0	U		1.0		1.0 mg/L					07/10/12 08:03	•
Lab Sample ID: LCS 660-126417/2									CI	ient	Sample	ID: Lab Control	Sample
Matrix: Water											-	Prep Type:	
Analysis Batch: 126417												•	
				Spike			LCS					%Rec.	
Analyte				Added			Qualifier	Unit		D	%Rec	Limits	
otal Suspended Solids				100		88.4		mg/L			88	80 - 120	
_ab Sample ID: 660-48652-1 DU										Clia	-4 Cam.	nla ID: Lagabata	- 40
Matrix: Water										Cile	nt Samp	ple ID: Leachate	
Analysis Batch: 126417												Prep Type:	IOCALINA
Analysis Dateil. 120417	Sample	Sam	ple			DU	DU						RPO
Analyte	Result		•			Result	Qualifier	Unit		D		RP	
												RF	D Limi
Total Suspended Solids	18					16.8		mg/L		=			D Limi 9 20
-										<u>-</u>			
Total Suspended Solids lethod: SM 5210B - BOD, 5-D	ay												9 20
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2	ay										Client S	Sample ID: Metho	9 20
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water	ay										Client S		9 20
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2	ay SCB	SCR			* Namidelands More						Client S	Sample ID: Metho	9 20
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264	ay SCB		SCB		POI		MDI IInk		n			Sample ID: Metho Prep Type:	9 20 od Blani Total/NA
ethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte	ay SCB		SCB Qualifter		PQL 2.0		MDŁ Unit				Client S	Sample ID: Metho Prep Type: Analyzed	9 20
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte	ay SCB	esult	SCB				MDŁ Unit					Sample ID: Metho Prep Type:	9 20 od Blani Total/NA
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand	ay SCB	esult	SCB Qualifter						D	Pı	repared	Sample ID: Metho Prep Type: Analyzed	9 20 od Blani Total/NA Dii Fa
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-126264/1	ay SCB	esult	SCB Qualifter						D .	Pı	repared	Sample ID: Metho Prep Type: Analyzed 07/05/12 07:28	9 20 Dil Fa
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-126264/1 Matrix: Water	ay SCB Ro	2.0	SCB Qualifter U							Pı	repared	Analyzed 07/05/12 07:28	9 20 Dil Fa
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-126264/1 Matrix: Water Analysis Batch: 126264	ay SCB Re	2.0	SCB Qualifier U		2.0		2.0 mg/L		D	Pı	repared	Analyzed 07/05/12 07:28	9 20 Dil Fa
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-126264/1 Matrix: Water Analysis Batch: 126264	ay SCB Re	2.0 USB	SCB Qualifier U		2.0		2.0 mg/L MDL Unit			Pr	repared	Analyzed O7/05/12 07:28 Sample ID: Methor	9 20 Dil Fa
ethod: SM 5210B - BOD, 5-D ab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand ab Sample ID: USB 660-126264/1 Matrix: Water Analysis Batch: 126264	ay SCB Re	2.0	SCB Qualifier U		2.0		2.0 mg/L			Pr	repared Client S	Analyzed 07/05/12 07:28 Sample ID: Metho	od Blani Total/NA Dii Fa
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-126264/1 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand	ay SCB Re	2.0 USB	SCB Qualifier U		2.0		2.0 mg/L MDL Unit		. <u>D</u> .	Pi	repared Client S	Analyzed O7/05/12 07:28 Analyzed O7/05/12 07:28 Analyzed O7/05/12 07:28	od Blani Total/NA Dil Far Dd Blani Total/NA
Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-126264/1 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-126264/3	ay SCB Re	2.0 USB	SCB Qualifier U		2.0		2.0 mg/L MDL Unit		. <u>D</u> .	Pi	repared Client S	Analyzed O7/05/12 07:28 Sample ID: Methor Prep Type: Analyzed O7/05/12 07:28 O7/05/12 07:28 O ID: Lab Contro	od Blani Total/NA Dil Fa
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water	ay SCB Re	2.0 USB	SCB Qualifier U		2.0		2.0 mg/L MDL Unit		. <u>D</u> .	Pi	repared Client S	Analyzed O7/05/12 07:28 Analyzed O7/05/12 07:28 Analyzed O7/05/12 07:28	od Blani Total/NA Dil Fa
lethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-126264/2 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-126264/1 Matrix: Water Analysis Batch: 126264 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-126264/3 Matrix: Water	ay SCB Re	2.0 USB	SCB Qualifier U	Spike	2.0	16.8	2.0 mg/L MDL Unit		. <u>D</u> .	Pi	repared Client S	Analyzed O7/05/12 07:28 Sample ID: Methor Prep Type: Analyzed O7/05/12 07:28 O7/05/12 07:28 O ID: Lab Contro	od Blani Total/NA Dil Fa

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48652-1

Method: SM	5210B - BOD,	5-Day	(Continued)

Lab Sample ID: 660-48650-A-1 DU Client Sample ID: Duplicate
Matrix: Water Prep Type: Total/NA

Analysis Batch: 126264

Sample Sample DU DU RPD nalyte Result Qualifier Result Qualifier Unit D RPD Limit

Biochemical Oxygen Demand 35 36.2 mg/L 4 20











QC Association Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48652-1

Analysis Batch: 126260	l				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-48611-A-3 MS	Matrix Spike	Total/NA	Water	353.2	
660-48611-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
660-48652-1	Leachate Effluent	Total/NA	Water	353.2	
660-48652-2	Equipment Blank	Total/NA	Water	353.2	
LCS 660-126260/24	Lab Control Sample	Total/NA	Water	353.2	
MB 660-126260/23	Method Blank	Total/NA	Water	353.2	
Analysis Batch: 126264					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-48650-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	
660-48652-1	Leachate Effluent	Total/NA	Water	SM 5210B	
660-48652-2	Equipment Blank	Total/NA	Water	SM 5210B	
LCS 660-126264/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-126264/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-126264/1 USB	Method Blank	Total/NA	Water	SM 5210B	
Prep Batch: 126353					
 Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-39254-A-2-B MS	Matrix Spike	Total/NA	Water	SM 5220	
640-39254-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
660-48652-2	Equipment Blank	Total/NA	Water	SM 5220	
LCS 660-126353/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-126353/4-A	Method Blank	Total/NA	Water	SM 5220	
Prep Batch: 126354 Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-48627-N-1-B MS	Matrix Spike	Total/NA	Water	SM 5220	
660-48627-N-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
660-48652-1	Leachate Effluent	Total/NA	Water	SM 5220	
LCS 660-126354/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-126354/4-A	Method Blank	Total/NA	Water	SM 5220	
Analysis Batch: 126357	•				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-39254-A-2-8 MS	Matrix Spike	Total/NA	Water	5220 D	126353
640-39254-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	126353
660-48652-2	Equipment Blank	Total/NA	Water	5220 D	126353
LCS 660-126353/5-A	Lab Control Sample	Total/NA	Water	5220 D	126353
MB 660-126353/4-A	Method Blank	Total/NA	Water	5220 D	126353
Analysis Batch: 126358	1				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-48627-N-1-B MS	Matrix Spike	Total/NA	Water	5220 D	126354
660-48627-N-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	126354
660-48652-1	Leachate Effluent	Total/NA	Water	5220 D	126354
LCS 660-126354/5-A	Lab Control Sample	Total/NA	Water	5220 D	126354
MB 660-126354/4-A	Method Blank	Total/NA	Water	5220 D	126354
Analysis Batch: 126399)				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-39291-B-1 DU	Duplicate	Total/NA	Water	SM 2540C	
040-33231-0-1-00	p.::			J 20	

Client: Hillshorough County Public Utilifies Dep

Project/Site: Leachate Effluent

General Chemistry (Continued)

Analysis Batch: 126399 (Continued)

-	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	660-48652-2	Equipment Blank	Total/NA	Water	SM 2540C	
-	LCS 660-126399/2	Lab Control Sample	Total/NA	Water	SM 2540C	
	MB 660-126399/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 126417

Lab Sample ID 660-48652-1 660-48652-1 DU	Client Sample ID Leachate Effluent Leachate Effluent	Prop Type Total/NA Total/NA	Matrix Water Water	Method SM 2540D SM 2540D	Prep Batch
660-48652-2	Equipment Blank	Total/NA	Water	SM 2540D	
LCS 660-126417/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-126417/1	Method Blank	Total/NA	Water	SM 2540D	

Field Service / Mobile Lab

Analysis Batch: 126274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prop Batch
660-48652-1	Leachate Effluent	Total/NA	Water	Field Sampling	

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TestAmerica Job ID: 660-48652-1

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Client Sample ID: Leachate Effluent

Date Collected: 07/03/12 11:30 Date Received: 07/03/12 14:00 Lab Sample ID: 660-48652-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2			126260	07/04/12 07:02	TO	TAL TAM
Total/NA	Analysis	SM 5210B		1	126264	07/05/12 07:28	AG	TAL TAM
Total/NA	Prep	SM 5220			126354	07/06/12 07:30	RWF	TAL TAM
Total/NA	Analysis	5220 D		10	126358	07/06/12 11:30	RWF	TAL TAM
Total/NA	Analysis	SM 2540C		1	126399	07/09/12 14:42	AG	TAL TAM
Total/NA	Analysis	SM 2540D		1	126417	07/10/12 08:03	AG	TAL TAM
Total/NA	Analysis	Field Sampling		1	126274	07/03/12 11:30		TAL TAM

Client Sample ID: Equipment Blank

Date Collected: 07/03/12 11:25

Date Received: 07/03/12 14:00

Lab Sample ID: 660-48652-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	126260	07/04/12 07:03	TO	TAL TAM
Total/NA	Analysis	SM 5210B		1	126264	07/05/12 07:28	AG	TAL TAM
Total/NA	Prep	SM 5220			126353	07/05/12 14:40	RWF	TAL TAM
Total/NA	Analysis	5220 D		1	126357	07/06/12 11:00	RWF	TAL TAM
Total/NA	Analysis	SM 2540C		1	126399	07/09/12 14:42	AG	TAL TAM
Total/NA	Analysis	SM 2540D		1	126417	07/10/12 08:03	AG	TAL TAM

Laboratory References:

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: 660-48652-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Tampa	Alabama	State Program	4	40610
TestAmerica Tampa	Florida	NELAC	4	E84282
TestAmerica Tampa	Georgia	State Program	4	905
TestAmerica Tampa	USDA	Federal		P330-11-00177

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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(e)

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Method Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48652-1

Method	Method Description	Protocol	Laboratory
353.2	Nitrate	MCAWW	TAL TAM
5220 D	Chemical Oxygen Demand	SM20	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
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",

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

Laboratory References:

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













Sample Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-48652-1	Leachate Effluent	Water	07/03/12 11:30	07/03/12 14:00
660-48652-2	Equipment Blank	Water	07/03/12 11:25	07/03/12 14:00













660-48652

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

	EACH	IATE PLANT	
PRECLEANED SAMPLE CONTAINERS:	-		DATE TIME
RELINQUISHED BY:		REP. OF CONTRACT LAB. REP. OF SOLID WASTE DEPT	1
ACCEPTED BY:		REP. OF SOLID WASTE DEPT	1. 29 ml 210 a
		. The total wilder bull	· 6. 51.121 2.30
LOCATION: LEACHATE EFFLUENT		SAMPLE MATRIX: WATER OT	LED MARDIY.
DEDGOVAL ENGROUP THE GRAPE CO.		DANTIE MAIKIA. WAIER OI	HER MAIRIX:
PERSONAL ENGAGED IN SAMPLE COL	LECTI	ON: DA.Balloon D 12	
<u>F</u>	<u>IELD</u>	PARAMETERS:	
		COND PH DO	TURB
AB 130 32.4	2	8407 8.44 S.73	N/A =
			
•			
S	AMPL	E CONTAINERS	
QTY CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	2		FRESERVED
40 ml VIAL		40 ml VIAL	
125 ml. PLASTIC 125 ml GLASS		125 ml. PLASTIC	
250 ml. PLASTIC		125 ml GLASS	
250 ml. GLASS		250 ml. PLASTIC 250 ml. GLASS	
500 ml. PLASTIC		500 ml. PLASTIC	
500 ml. GLASS		500 ml. GLASS	
3 LITER PLASTIC		LITER PLASTIC	
LITER GLASS		LITER GLASS	
BACTERIAL		BACTERIAL	
	ı	0.10121111	
TOTAL NO. OF SAMPLES C	OTATABLO	TED:	
COLORS & SHEENS: YES N/A		NO	COLLECTED ·
COLORD & DIMEND. 1ED N/A		NO	
			DATE TIME
	3373 T 17 <i>6</i>	TA STATE COMP.	7.3,12 11:30
:	ANALIS	IS REQUESTED:	
MONTHLY LEACHATE PLANT PARAMETERS	BOD	TSS NITRATE TDS CO	n
		100 00	<u> </u>
PRESERVED SAMPLES PH < 2.0		SAMPLE STORAGE: COOLER	& ICE TO 4.0 c
			100 10 4.0 0
ABOVE LISTED SAMPLES:			DATE TIME
RELINOUTSHED BY	-	₽₽₽ -∩₽-Չ∩ՆቼŊ ₩ Λ -₽₩₽∩₽₽₩	
RELINQUISHED BY:Cloyte ACCEPTED BY:CALLETTE	1011/4	DED OF COMMENCE IND	· 7.3.12 C:03
ACCELLED DI.	MANA	REF. OF CONTRACT LAB.	7.3.12 8.00
	•		
COMMENTE C			
COMMENT'S: Uo # 0048			

3.1° c 007

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

	LEANED SAMPLE CONTAINERS:			DATE TIME
	NQUISHED BY:		REP. OF CONTRACT LAB.	
ACCE	PTED BY:		REP. OF SOLID WASTE DEP	T. 4.29.2 2:30
LOCAT	TION: EQUIPMENT BLANK		SAMPLE MATRIX: WATER O	THER MATRIX:
PERSO	ONAL ENGAGED IN SAMPLE CO	TTECTT	ON: DA Balloon DA C-	
		1111111	on. G R.Dalloon E 30	
	FI	ELD PA	RAMETERS: N/A	
			E CONTAINERS	
QTY	CONTAINER DESCRIPTION	OTY	CONTAINER DESCRIPTION	PRESERVED
*		2		PRESERVED
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC 125 ml GLASS		125 ml, PLASTIC 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	
3	LITER PLASTIC		LITER PLASTIC	
	LITER GLASS BACTERIAL		LITER GLASS	
	BACTERTAL		BACTERIAL	
	TOTAL No. OF SAMPLES	COLLEC	TED:	
			·	
COLOF	RS & SHEENS: YES N/A		NO	COLLECTED
				DATE TIME
				7.3.12 11:25
		ANALYS	IS REQUESTED:	
монтні	LY LEACHATE PLANT PARAMETERS	BOD	TSS NITRATE TDS C	OD
PRESE	ERVED SAMPLES PH < 2.0		SAMPLE STORAGE: -COOLER	& ICE TO 4.0 c
ABOVE	E LISTED SAMPLES:			DATE TIME
	QUISHED BY: A Clos	~	REP. OF SOLID WASTE DEP	
ACCE	PTED BY:	Mr. Mad	TREP. OF CONTRACT LAB.	7.3.12-12:00
· · ·		THE PERSON NAMED IN		
COMME	ENT'S: WOTT OOGE			

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-48652-1

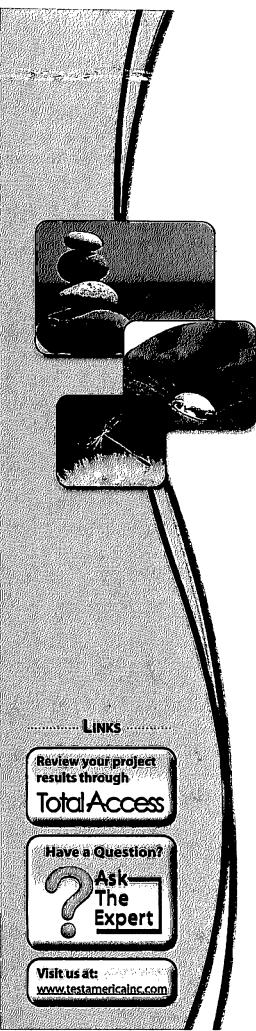
Login Number: 48652 List Number: 1

List Source: TestAmerica Tampa

Creator: McNulty, Carol

True The cooler's custody seal, if present, is intact. The cooler or samples do not appear to have been compromised or ampered with. Samples were received on ice. True Cooler Temperature is acceptable. True Cooler Temperature is recorded. True COO is filed out in ink and legible. True COC is filled out with all pertinent information. True COC is filled out with all pertinent information. True COC is filled out with all pertinent information. True COC is filled out with all pertinent information. True COC is filled out with all pertinent information. True COC is filled out with all pertinent information. True COC is filled out with all pertinent information. True COC is filled out with all pertinent information. True Coche filled out with a	Question	Answer	Comment
The cooler or samples do not appear to have been compromised or ampered with. Samples were received on ice. Cooler Temperature is acceptable. Cooler Temperature is recorded. COC is present. COC is present. COC is filled out in ink and legible. COC is filled out with all pertinent information. In the collection of the containers and increase and i	Radioactivity either was not measured or, if measured, is at or below background	N/A	
ampered with. Samples were received on ice. Cooler Temperature is acceptable. Cooler Temperature is recorded. Cooler True Cooler Temperature is recorded. Cooler True Cooler Temperature is recorded. Cooler Temperature is r	The cooler's custody seal, if present, is intact.	True	
Cooler Temperature is acceptable. Cooler Temperature is recorded. Cooler Temperature is recorded. Cool is present. Cool is present. Cool is filled out in ink and legible. Cool is filled out with all pertinent information. In true Cool is filled out with all pertinent i	The cooler or samples do not appear to have been compromised or tampered with.	True	
Cooler Temperature is recorded. COC is present. COC is present. COC is filled out in ink and legible. COC is filled out with all pertinent information. In the coch is filled out with all pertinet information. In the coch is filled out with all pertinet information. In the coch is filled out with all pertinet information. In the coch is filled out with all pertinet information. In the coch is filled out with all pertinet information. In the coch is filled out with all pertinet information. In the coch is filled out with all pertinet information. In the coch is filled out with all pertinet information. In the co	Samples were received on ice.	True	3.1 deg C Cu-07
COC is present. COC is filled out in ink and legible. COC is filled out with all pertinent information. In the cochieve of the present of the containers and the cochieve of the cochieve o	Cooler Temperature is acceptable.	True	
COC is filled out in ink and legible. COC is filled out with all pertinent information. In true Sompler's name present on COC? There are no discrepancies between the sample IDs on the containers and the COC. Samples are received within Holding Time. 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 Chere is sufficient vol. for all requested analyses, incl. any requested AS/MSDs //OA sample vials do not have headspace or bubble is <6mm (1/4") in Kamples do not require splitting or compositing.	Cooler Temperature is recorded.	True	
COC is filled out with all pertinent information. True s the Field Sampler's name present on COC? True There are no discrepancies between the sample IDs on the containers and he COC. Samples are received within Holding Time. True Sample containers have legible labels. Containers are not broken or leaking. 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 AS/MSDs //OA sample vials do not have headspace or bubble is <6mm (1/4") in liameter. Autiliphasic samples are not present. True	COC is present.	True	
True There are no discrepancies between the sample IDs on the containers and he COC. Samples are received within Holding Time. 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 filted. Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested ASAMSDs VOA sample vials do not have headspace or bubble is <6mm (1/4*) in Multiphasic samples are not present. True Samples do not require splitting or compositing.	COC is filled out in ink and legible.	True	
True Containers are no discrepancies between the sample IDs on the containers and he COC. Samples are received within Holding Time. Sample containers have legible labels. Containers are not broken or leaking. Containers are not broken or leaking. 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 AS/MSDs //OA sample vials do not have headspace or bubble is <6mm (1/4") in Multiphasic samples are not present. True Samples do not require splitting or compositing.	COC is filled out with all pertinent information.	True	
Samples are received within Holding Time. 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 AS/MSDs //OA sample vials do not have headspace or bubble is <6mm (1/4") in liameter. Autiliphasic samples are not present. True Samples do not require splitting or compositing. True	Is the Field Sampler's name present on COC?	True	
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 //OA sample vials do not have headspace or bubble is <6mm (1/4") in liameter. Multiphasic samples are not present. True Samples do not require splitting or compositing.	There are no discrepancies between the sample IDs on the containers 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 AS/MSDs //OA sample vials do not have headspace or bubble is <6mm (1/4") in Initiameter. Autitiphasic samples are not present. True Samples do not require splitting or compositing. True	Samples are received within Holding Time.	True	
Sample collection date/times are provided. Appropriate sample containers are used. Sample bottles are completely filled. Sample Preservation Verified. True AS/MSDs /OA sample vials do not have headspace or bubble is <6mm (1/4") in N/A liameter. Multiphasic samples are not present. True Samples do not require splitting or compositing. True	Sample containers have legible labels.	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 ###################################	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 ### ### ### ### ### ### ### ### ### #	Sample collection date/times are provided.	True	
Sample Preservation Verified. True There is sufficient vol. for all requested analyses, incl. any requested ###################################	Appropriate sample containers are used.	True	
There is sufficient vol. for all requested analyses, incl. any requested #S/MSDs /OA sample vials do not have headspace or bubble is <6mm (1/4") in N/A N/A N/A N/A N/A N/A N/A N/	Sample bottles are completely filled.	True	
AS/MSDs /OA sample vials do not have headspace or bubble is <6mm (1/4") in N/A liameter. Aultiphasic samples are not present. True Samples do not require splitting or compositing. True	Sample Preservation Verified.	True	
liameter. Autiliphasic samples are not present. Samples do not require splitting or compositing. True	There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Samples do not require splitting or compositing. True	VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	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	





<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: 660-49257-1 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: 8/13/2012 11:28:22 AM

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Project Manager II
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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.

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Definitions/Glossary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Qualifiers		
General Cher	nistry	
Qualifier	Qualifier Description	
1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.	}
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.	į
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.	
۵	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	
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
EDL	Estimated Detection Limit	
EPA	United States Environmental Protection Agency	
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	
RL	Reporting Limit	!
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	

Case Narrative

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Job ID: 660-49257-1

Laboratory: TestAmerica Tampa

Narrativo

Job Narrative 660-49257-1

Comments

No additional comments.

Receipt

The samples were received on 8/3/2012 2:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7° C.

General Chemistry

Method SM 5220D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 127459 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

(§)

Detection Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Client Sample ID: BLANK EQUIPMENT						Lai	Sample ID:	660-49257-
- Analyto	Rosult	Qualifier	PQL	MDL	Unit	Dil Fac I) Method	Prep Type
Chemical Oxygen Demand	10	1	20	10	mg/L	1	5220 D	Total/NA
Client Sample ID: LEACHA	TE EFFLUEN	Γ				Lat	Sample ID:	660-49257-
Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac (Method	Prep Type
Nitrate as N	0.46	1	0.50	0.10	mg/L		353.2	Total/NA
Chemical Oxygen Demand	590		20	10	mg/L	1	5220 D	Total/NA
Total Dissolved Solids	4600		250	250	mg/L	1	SM 2540C	Total/NA
Total Suspended Solids	11		1.0	1.0	mg/L	1	SM 2540D	Total/NA
Field pH	8.01				su	1	Field Sampling	Total/NA
Field Temperature	32.96				Degrees C	1	Field Sampling	Tota!/NA
Oxygen, Dissolved	4.69				mg/L	1	Field Sampling	Total/NA
Specific Conductance	8.391				umhos/cm	1	Field Sampling	Total/NA

- .

Client Sample Results

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID. 660-49257-1

Client Sample ID: BLANK EQUIPMENT

Date Collected: 08/03/12 11:00 Date Received: 08/03/12 14:40 Lab Sample ID: 660-49257-1

Matrix: Water

	General Chemistry									
	Analyto	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzod	Dil Fac
	Nitrate as N	0.10	U	0.50	0.10	mg/L			08/03/12 16:05	1
	Chemical Oxygen Demand	10	1	20	10	mg/L		08/06/12 13:00	08/06/12 15:45	1
	Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			08/07/12 09:05	1
į	Total Suspended Solids	1.0	U	1.0	1.0	mg/L			08/06/12 07:32	
	Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			08/03/12 15:50	1



Client Sample Results

Client Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 08/03/12 11:10

Lab Sample ID: 660-49257-2

Matrix: Water

Date Received: 08/03/12 14:40				···-				1444 U I	k. water
General Chemistry									
Analyto	Rosult	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.46	ī	0.50	0.10	mg/L			08/03/12 16:06	
Chemical Oxygen Demand	590		20	10	mg/L		08/06/12 13:00	08/06/12 16:10	1
Total Dissolved Solids	4600		250	250	mg/L			08/07/12 09:05	1
Total Suspended Solids	11		1.0	1.0	mg/L			08/06/12 07:32	1
Biochemical Oxygen Demand	12	U	12	12	mg/L			08/03/12 15:50	1
Method: Field Sampling - Field S	ampling								
Analyte	Rosult	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.01				SU			08/03/12 11:10	
Field Temperature	32.96				Degrees C			08/03/12 11:10	1
Oxygen, Dissolved	4.69				mg/L			08/03/12 11:10	1
Specific Conductance	8.391				umhos/cm			08/03/12 11:10	1

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Client Sample ID: M8 660-127433/12 M8 bits Prep Type: To Analysis Batch: 127433 Prep Type: To Analysis Batch: 127433 Prep Type: To Analysis Batch: 127433/13 Prep Type: To Analysis Batch: 127433 Prep Type: To Analysis Batch: 12	Method: 353.2 - Nitrate			···	·		··			·	·			
Maily	Matrix: Water											Client S	-	
Analyto	Analysis Batch: 127433													
Name on Name	Anabda	_	1											
Committee Comm											D	Propared		Dit Fa
Matrix: Water Analysis Batch: 127433 Analysis Batch: 127433 Analysis Batch: 127433 Lab Sample ID: 660-49226-C-1 MS Matrix: Water Analysis Batch: 127433 Analysis Batch: 127433 Lab Sample ID: 660-49226-C-1 MS Matrix: Water Analysis Batch: 127433 Sample Result Qualifier Added Result Qualifier Matrix: Water Analysis Batch: 127433 Analysis Batch: 127433 Sample ID: 660-49226-C-1 MSD Matrix Spike Dup Result Qualifier Matrix: Water Analysis Batch: 127433 Analysis Batch: 127434 Analysis Batch: 127452/4-A Matrix: Water Analysis Batch: 127452/4-A Analysis Batch: 127459 Ana	-		0.10	U		0.50		0.10 r	ng/L				08/03/12 11:27	,
Analysis Batch: 127433 Spike LCS LCS LCS LCS LCS LCS Lmits											Clie	nt Sample		
Analyte	Analysis Batch: 127433													
Note	Arrahar				•		LCS	LCS					%Rec.	
Namic as N								Qualif				%Rec	Limits	
Lab Sample ID: 660-49226-C-1 MS Matrix: Water Analytic Batch: 127433 Sample Sam										-				
Matrix: Water Analysis Batch: 127433 Sample Result Qualifier Added Result Qualifier Unit D Matrix Spike During Interest National Prepagation (Commical Oxygen Demand) Lab Sample ID: 660-49226-C-1 MSD Sample Sample Sample Spike MSD MSD Client Sample ID: Matrix Spike During Interest National Nation	Halife 92 ta				0.500		0.496	ı		mg/L		99	90 - 110	
Matrix: Water Mary Matrix Matr	Lab Sample ID: 660-49226-C-1 MS											Cliont	Samala ID: Ma	tain Caile
Analysis Batch: 127433 Sample Result Qualifier Added Result Qualifier Unit D %Rec Limits	-											Client		•
Manayto Result Qualifier Addod Result Qualifier Unit Uni	Analysis Batch: 127433												Fieb Type	i i Otal/N/
Nitrate Nitrite as N 0.22 1 100 1.20 mg/L 39 50.110 100 120 10	•	Sample	Sam	ple	Spike		MS	MS					%Rec.	
Nitrite as N 0.10 U 0.500 0.508 mg/L 102 90.110 102	Analyto	Result	Qual	ifier	Added		Result	Qualifi	ier	Unit		%Rec	Limits	
Client Sample ID: Matrix Spike Dup Matrix: Water	Nitrate Nitrite as N	0.22			1 00		1.20			mg/L		99	90 . 110	
Matrix: Water Sample Sample Sample Spike MSD M	Nitrite as N	0.10	U		0.500		0.508			mg/L		102	90 - 110	
Sample Sample Sample Result Qualifier Addod Result Qualifier Unit D MR0c Limits RPD	Matrix: Water										Client	Sample ID		-
Analyto	Analysis Dateil. 127455	Sample	Sam	ple	Spike		MSD	MSD					%Rec	RP
Nitrate Nitrite as N	Analyto	•		31	•				ier	Unit	C	%Rec		
Method: 5220 D - Chemical Oxygen Demand	Nitrate Nitrite as N	0.22	<u> </u>		1.00		1.17			mg/L		96	90 - 110	
Client Sample ID: MB 660-127452/4-A Client Sample ID: Method Matrix: Water Prep Type: Total Analysis Batch: 127459 Prep Batch: 1	Nitrite as N	0.10	U		0.500		0.502			mg/L		100	90 - 110	1 3
Matrix: Water Prep Type: To Prep Batch: 1 Analysis Batch: 127459 MB MB MB MB MB MB MB MB MB MDL Unit D Prep ared Analyzod	Method: 5220 D - Chemical Oxy	/gen [Dem	and										
Analysis Batch: 127459 MB MB Analyte Result Qualifier PQL MDL Unit D Prepared Analyzed Chemical Oxygen Demand 10 U 20 10 mg/L 08/06/12 13:00 08/06/12 15:45 Lab Sample ID: LCS 660-127452/5-A Matrix: Water Analysis Batch: 127459 Spike LCS LCS Prep Batch: 1 Spike LCS LCS Frep Batch: 1 Spike LCS LCS Frep Batch: 1 Spike LCS LCS Frep Batch: 1 Added Result Qualifier Unit D Rec Limits Chemical Oxygen Demand 50 54.5 mg/L 109 90 . 110 Lab Sample ID: 660-49120-F-3-B MS Matrix: Water Analysis Batch: 127459 Sample Sample Sample Spike MS MS MS KRec.												Client S	•	
Analyte Result Qualifier PQL MDL Unit D Prepared Analyzed Chemical Oxygen Demand 10 U 20 10 mg/L O8/08/12 13:00 08/08/12 15:45 Lab Sample ID: LCS 660-127452/5-A Matrix: Water Analysis Batch: 127459 Spike LCS LCS Prep Batch: 1 Spike LCS LCS Spike LC														
Analyte	Analysis Daten. 127439		MB	MB									Prep Batc	n: 12/45
Chemical Oxygen Demand 10 U 20 10 mg/L 08/06/12 13:00 08/06/12 15:45	Analyte	R				PQL		MOL L	Jnit		D	Prepared	Analyzort	DII Fa
Matrix: Water Prep Type: Tot Analysis Batch: 127459 Prep Batch: 1 Owner Lab Sample ID: 660-49120-F-3-B MS Client Sample ID: Matrix Matrix: Water Prep Type: Tot Analysis Batch: 127459 Prep Batch: 1 Prep Batch: 1 </td <td>-</td> <td></td> <td>-</td> <td></td>	-												-	
Matrix: Water Prep Type: Tot Prep Batch: 1 Type: Tot Prep Batch: 1 Analysis Batch: 127459 Spike LCS LCS LCS KRec. KRec. Limits Analyte Added Result Qualifier Unit D %Rec. Limits Chemical Oxygen Demand 50 0 54.5 mg/L 109 90 - 110 Lab Sample ID: 660-49120-F-3-B MS Client Sample ID: Matrix Matrix: Water Prep Type: Tot Analysis Batch: 127459 Sample Sample Spike MS MS %Rec.	Lab Sample ID: LCS 660-127452/5-A										Clie	nt Sample	ID: Lab Contro	ol Sampl
Spike LCS LCS KRec.												•		
Analyte Added Result Qualifier Unit D Rec Limits Chemical Oxygen Demand 50 0 54.5 mg/L 109 90 - 110 Lab Sample ID: 660-49120-F-3-B MS Matrix: Water Prep Type: To Analysis Batch: 127459 Sample Sample Spike MS MS MS Rec.	Analysis Batch: 127459												Prep Batc	h: 12745
Chemical Oxygen Demand 50 0 54.5 mg/L 109 90 - 110 Lab Sample ID: 660-49120-F-3-B MS Client Sample ID: Matrix Matrix: Water Prep Type: To Analysis Batch: 127459 Sample Sample Spike MS MS %Rec.					Spike		LCS	LCS					%Rec.	
Lab Sample ID: 660-49120-F-3-B MS Matrix: Water Analysis Batch: 127459 Sample Sample Spike MS MS Client Sample ID: Matrix Prep Type: To Prep Batch: 1 %Rec.								Qualifi	er	Unit		%Rec	Limits	
Matrix: Water Analysis Batch: 127459 Sample Sample Spike MS MS MS %Rec.	Chemical Oxygen Demand				50 O		54.5			mg/L		109	90 - 110	
Sample Sample Spike MS MS %Rec.	Matrix: Water											Client		
• • • • • • • • • • • • • • • • • • • •	Analysis Batch: 127459	_	_		_									h: 12745
A La	Anakan	-		-	•									
Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Chemical Oxygen Demand 14 I J3 50.0 78.4 J3 mg/L 129 90.110				ifier										

Method: 5220 D - Chemical Ox	ygen l	Demand (Co	ontinue	d)								·····		
Lab Sample ID: 660-49120-F-3-C M	SD					-		-	Clie	nt S	ample ID	: Matrix S _l	ike Du	plicate
Matrix: Water													ype: To	-
Analysis Batch: 127459												-	Batch: 1	
	Sample	Sample	Spike		MSD	MSD						%Rec.	outon.	RPC
Analyte	Result	Qualifier	Added		Result	Quali	ifier	Unit		D	%Rec	Limits	RPD	Limb
Chemical Oxygen Demand	14	I J3	50.0		71.3	J3		mg/L		_	115	90 - 110	9	20
Lab Sample ID: MB 660-127453/4-A											Client S	ample ID:	Method	Blank
Matrix: Water													ype: To	
Analysis Batch: 127460												•	Batch: 1	
		мв мв										ор .	, ,	
Analyto	R	esult Qualifier		PQL		MDL	Unit		D	P	ropared	Analyz	ed	Dil Fac
Chemical Oxygen Demand		10 U		20		10	mg/L		- - ·	08/0	6/12 13:00	08/06/12		1
- -														
Lab Sample ID: LCS 660-127453/5-	A								CI	ient	Sample	ID: Lab Co	ntrol S	ample
Matrix: Water													ype: To	
Analysis Batch: 127460													Batch: 1	
			Spike		LCS	LCS						%Rec.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Analyto			Added		Result	Quali	fier	Unit		D	%Rec	Limits		
Chemical Oxygen Demand			200		215			mg/L			107	90 - 110		
-								•						
Lab Sample ID: 640-39703-D-2-B M	S										Client !	Sample ID:	Matrix	Snike
Matrix: Water											••	Prep T		
Analysis Batch: 127460													Batch: 1	
•	Sample	Sample	Spike		MS	MS						%Rec.	Jaicii. I	2/433
Analyte		Qualifier	Added		Result	_	flor	Unit		D	%Rec	Limits		
Chemical Oxygen Demand	61		100		156			mg/L		-	95	90 - 110		
 Lab Sample ID: 640-39703-D-2-C M	SD								Clien	ı S:	amala ID:	: Matrix Sp	ika Due	nlianta
Matrix: Water											inpie ib.	Prep T		
Analysis Batch: 127460														
7	Sample	Sample	Spike		MSD	MSD						%Rec.	Batch: 1	27453 RPD
Analyte	Result	, i	Added		Result		Go.	Unit		D	%Rec	Limits	555	
Chemical Oxygen Demand	61		100		164	Guan		mg/L		_	102	90 - 110	RPD 5	Limit 20
Method: SM 2540C - Solids, To	tal Die	colved (TD	C)			*** ***					···			
~	Cai Dis	SOIVEU (ID	<u> </u>											
Lab Sample ID: MB 660-127470/1											Client Sa	ample ID: I	Method	Blank
Matrix: Water												Prep T		
Analysis Batch: 127470												•		
		MB MB												
Analyte	R	esult Qualifier		PQL		MDL	Unit		D	P	repared	Analyz	od	Dil Fac
Total Dissolved Solids		5.0 U		5.0		5.0	mg/L					08/07/12		1
Lab Sample ID: LCS 660-127470/2									ÇI	ient	Sample	ID: Lab Co	ntrol S	ample
Matrix: Water												Prep T		•
Analysis Batch: 127470													,,0	
			Spike		1.00	LCS						%Rec.		
			ahiko		FC3	200								
Analyte			Added		Result		fier	Unit		D	%Rec	Limits		

Project/Site: Leachate Effluent

Lab Sample ID: 660-49238-B-22 DU	J											Cli	ent Sample	ID: Du	plicate
Matrix: Water Analysis Batch: 127470													Prep T	ype: To	otal/NA
Analysis Datell. 127470	Sample	Sam	ple			חום	DU								
Analyte	Result		-				Qualit	fier	Unit		D			RPD	RPC Limi
Total Dissolved Solids	410					424			mg/L		Ξ.			3	20
Method: SM 2540D - Solids, To	otal Su	spei	nded (TS	SS)											
Lab Sample ID: MB 660-127409/1		i										Client S	Sample ID: N	fethod	i Blani
Matrix: Water													Prep Ty		
Analysis Batch: 127409													•	•	
A 4 A	_	MB													
Analyte Total Suspended Solids	R		Qualifier		PQL		MOL			_ D	Pr	epared	Analyzo		Dil Fac
Total Suspended Solids		1.0	U		1.0		1.0	mg/L					08/06/12 0	7:32	1
Lab Sample ID: LCS 660-127409/2										CI	ient	Sample	ID: Lab Co	ntrol S	Sample
Matrix: Water													Prep Ty	/pe: To	tal/NA
Analysis Batch: 127409															
Anabas				Spike			LCS	_			_		%Rec.		
Analyte Total Suspended Solids				Added 100		98.0	Qualif	ier	Unit		D ~	%Rec	Limits		
Com. Casponada Conas				100		30.0			mg/L			98	80 - 120		
Lab Sample ID: 660-49257-2 DU Matrix: Water										Clien	t Sar	nple ID	: LEACHAT		
													Prep Ty	rpe: To	stal/NA
Analysis Batch: 127409															
Analysis Batch: 127409	Sample	Samı	ple			DU	ĐU								
	Sample Result	•					DU Qualif	ier	Unit		D			RPD	RPD Limit
	•	•						lier	Unit mg/L	- Anne Contains	<u>D</u> .				RPD
Analysis Batch: 127409 Analyte Total Suspended Solids Method: SM 5210B - BOD, 5-Da	Result 11	•				Result		fier			<u>D</u>				RPD Limit
Analyte Total Suspended Solids Tethod: SM 5210B - BOD, 5-D Lab Sample ID: SCB 660-127379/2	Result 11	•				Result		ier .				Client S	sample ID: N	RPD 7	RPD Limit 20
Analyte Total Suspended Solids Tethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water	Result 11	•				Result		fier				Client S		RPD 7	RPD Limit 20
Analyte Total Suspended Solids Tethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water	Result 11 ay SCB	Quali	fier			Result		ier .				Client S	sample ID: N	RPD 7	RPD Limit 20
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Da Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379	Result 11 ay SCB	Quali	SCB		POI	Result	Qualif						ample ID: N	RPD 7 flethod ype: To	RPD Limit 20 Blank otal/NA
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379	Result 11 ay SCB	Quali	SCB Qualifier		PQL 2.0	Result	Qualif	Unit				Client S	ample ID: N Prep Ty Analyzo	RPD 7 flethod /pe: To	RPD Limit 20 I Blank otal/NA
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Biochemical Oxygen Demand	Result 11 ay SCB	Quali SCB esuit	SCB Qualifier			Result	Qualif	Unit			Pr	epared	Analyzo	RPD 7 Method pe: To od 0:25	RPD Limit 20 Blank otal/NA Dil Fac
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1	Result 11 ay SCB	Quali SCB esuit	SCB Qualifier			Result	Qualif	Unit			Pr	epared	Analyze 08/03/12 1 Sample ID: R	RPD 7 flethod rpe: To	RPD Limit 20 Blank btal/NA Dil Fac
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1	Result 11 ay SCB	Quali SCB esuit	SCB Qualifier			Result	Qualif	Unit			Pr	epared	Analyzo	RPD 7 flethod rpe: To	RPD Limit 20 Blank tal/NA Dil Fac
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1	Result 11 ay SCB Ro	Quali SCB soult 2.0	SCB Qualifier U			Result	Qualif	Unit			Pr	epared	Analyze 08/03/12 1 Sample ID: R	RPD 7 flethod rpe: To	RPD Limit 20 Blank tal/NA Dil Fac
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-D: Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1 Matrix: Water Analysis Batch: 127379	Result 11 ay SCB Ro	SCB esult 2.0	SCB Qualifier U		2.0	Result	MDL (Unit mg/L		<u>.</u>	Pro	epared Client S	Analyze 08/03/12 1 cample ID: R Prep Ty	RPD 7 flethod /pe: To dd 0:25 flethod /pe: To	RPD Limit 20 Blank otal/NA Dil Fac 1 Blank otal/NA
Analyte Total Suspended Solids Lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1 Matrix: Water Analysis Batch: 127379 Analyte	Result 11 ay SCB Ro	SCB esult 2.0	SCB Qualifier U			Result	Qualif	Unit mg/L		D -	Pro	epared	Analyze 08/03/12 1 Sample ID: R	RPD 7 flethod pe: To d 0:25 flethod pe: To	RPD Limit 20 Blank tal/NA Dil Fac
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand	Result 11 ay SCB Ro	SCB esult 2.0	SCB Qualifier U		2.0	Result	MDL (Unit mg/L		D	Pri	epared Client S	Analyze 08/03/12 1 Sample ID: R Prep Ty Analyze 08/03/12 1	RPD 7 flethod pe: To dd 0:25 flethod pe: To	RPD Limit 20 Blank btal/NA Dil Fac 1 Blank btal/NA Dil Fac
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-127379/3	Result 11 ay SCB Ro	SCB esult 2.0	SCB Qualifier U		2.0	Result	MDL (Unit mg/L		D	Pri	epared Client S	Analyze OB/03/12 1 Sample ID: R Prep Ty Analyze 08/03/12 1	RPD 7 flethod pe: To d 0:25 flethod pe: To d 0:25 ntrol S	RPD Limit 20 Blank btat/NA Dil Fac 1 Blank btat/NA Dil Fac 1
Analyte Total Suspended Solids lethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2: Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-127379/3 Matrix: Water	Result 11 ay SCB Ro	SCB esult 2.0	SCB Qualifier U		2.0	Result	MDL (Unit mg/L		D	Pri	epared Client S	Analyze 08/03/12 1 Sample ID: R Prep Ty Analyze 08/03/12 1	RPD 7 flethod pe: To d 0:25 flethod pe: To d 0:25 ntrol S	RPD Limit 20 Blank btat/NA Dil Fac 1 Blank btat/NA Dil Fac 1
Analyte Total Suspended Solids	Result 11 ay SCB Ro	SCB esult 2.0	SCB Qualifier U	Spike	2.0	Result 12.0	MDL (Unit mg/L		D	Pri	epared Client S	Analyze OB/03/12 1 Sample ID: R Prep Ty Analyze 08/03/12 1	RPD 7 flethod pe: To d 0:25 flethod pe: To d 0:25 ntrol S	RPD Limit 20 Blank btat/NA Dil Fac 1 Blank btat/NA Dil Fac 1
Analyte Total Suspended Solids Tethod: SM 5210B - BOD, 5-Di Lab Sample ID: SCB 660-127379/2 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: USB 660-127379/1 Matrix: Water Analysis Batch: 127379 Analyte Biochemical Oxygen Demand Lab Sample ID: LCS 660-127379/3 Matrix: Water	Result 11 ay SCB Ro	SCB esult 2.0	SCB Qualifier U	Spike	2.0	Result 12.0	MDL 1	Unit mg/L Unit		D	Pri	epared Client S	Analyze 08/03/12 1 Sample ID: R Prep Ty Analyze 08/03/12 1	RPD 7 flethod pe: To d 0:25 flethod pe: To d 0:25 ntrol S	RPD Limit 20 Blank btat/NA Dil Fac 1 Blank btat/NA Dil Fac 1

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Lab Sample ID: 660-49230-D-9 DU

Matrix: Water

Analyte

Analysis Batch: 127379

Biochemical Oxygen Demand

Client Sample ID: Duplicate

Prep Type: Total/NA

Sample Sample DU DU Result Qualifier Result Qualifier RPD Limit 2.0 U 2.0 U mg/L NC 20

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

General Chemistry					
Analysis Batch: 127379					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prop Batch
660-49230-D-9 DU	Duplicate	Total/NA	Water	SM 5210B	Frep Batter
660-49257-1	BLANK EQUIPMENT	Total/NA	Water	SM 5210B	
660-49257-2	LEACHATE EFFLUENT	Tota!/NA	Water	SM 5210B	
LCS 660-127379/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-127379/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-127379/1 USB	Method Blank	Total/NA	Water	SM 5210B	
Analysis Batch: 127409					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49257-1	BLANK EQUIPMENT	Total/NA	Water	SM 2540D	- Frep Batti
660-49257-2	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
660-49257-2 DU	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
LCS 660-127409/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-127409/1	Method Blank	Total/NA	Water	SM 2540D	
Analysis Batch: 127433	,				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49226-C-1 MS	Matrix Spike	Total/NA	Water	353.2	
660-49226-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
660-49257-1	BLANK EQUIPMENT	Total/NA	Water	353.2	
LCS 660-127433/13	Lab Control Sample	Total/NA	Water	353.2	
MB 660-127433/12	Method Blank	Total/NA	Water	353.2	
Analysis Batch: 127440	•				
 Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49257-2	LEACHATE EFFLUENT	Total/NA	Water	353.2	
Prep Batch: 127452					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49120-F-3-B MS	Matrix Spike	Total/NA	Water	SM 5220	
660-49120-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
660-49257-1	BLANK EQUIPMENT	Total/NA	Water	SM 5220	
LCS 660-127452/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-127452/4-A	Method Blank	Total/NA	Water	SM 5220	
Prep Batch: 127453					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-39703-D-2-B MS	Matrix Spike	Total/NA	Water	SM 5220	
640-39703-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
660-49257-2	LEACHATE EFFLUENT	Total/NA	Water	SM 5220	
LCS 660-127453/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-127453/4-A	Method Blank	Total/NA	Water	SM 5220	
Analysis Batch: 127459)				
Lab Samplo ID	Client Sample ID	Prep Typo	Matrix	Method	Prep Batch
660-49120-F-3-B MS	Matrix Spike	Total/NA	Water	5220 D	127452
660-49120-F-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	127452
660-49257-1	BLANK EQUIPMENT	Total/NA	Water	5220 D	127452
LCS 660-127452/5-A	Lab Control Sample	Total/NA	Water	5220 D	127452

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Anal	ysis	Batch:	127460
------	------	--------	--------

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-39703-D-2-B MS	Matrix Spike	Total/NA	Water	5220 D	127453
640-39703-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	127453
660-49257-2	LEACHATE EFFLUENT	Total/NA	Water	5220 D	127453
LCS 660-127453/5-A	Lab Control Sample	Total/NA	Water	5220 D	127453
MB 660-127453/4-A	Method Blank	Total/NA	Water	5220 D	127453

Analysis Batch: 127470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49238-B-22 DU	Duplicate	Total/NA	Water	SM 2540C	
660-49257-1	BLANK EQUIPMENT	Total/NA	Water	SM 2540C	
660-49257-2	LEACHATE EFFLUENT	Total/NA	Water	SM 2540C	
LCS 660-127470/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-127470/1	Method Blank	Total/NA	Water	SM 2540C	

Field Service / Mobile Lab

Analysis Batch: 127537

_ •					
Lab Sample ID 660-49257-2	Client Sample ID LEACHATE EFFLUENT	Prep Type Total/NA	Matrix Water	Method Field Sampling	Prep Batch

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Client Sample ID: BLANK EQUIPMENT

Date Collected: 08/03/12 11:00 Date Received: 08/03/12 14:40 Lab Sample ID: 660-49257-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	,
Total/NA	Analysis	SM 5210B		1	127379	08/03/12 15:50	AG	TAL TAM	
Total/NA	Analysis	SM 2540D		1	127409	08/06/12 07:32	то	TAL TAM	
Total/NA	Analysis	353.2		1	127433	08/03/12 16:05	KW	TAL TAM	
Total/NA	Prep	SM 5220			127452	08/06/12 13:00	RWF	TAL TAM	
Total/NA	Analysis	5220 D		1	127459		RWF	TAL TAM	
					(St	art) 08/06/12 15:45			_
					(E	nd) 08/06/12 16:00			
Total/NA	Analysis	SM 2546C		1	127470	08/07/12 09:05	то	TAL TAM	

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 08/03/12 11:10

Date Received: 08/03/12 14:40

Lab Sample ID: 660-49257-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	127379	08/03/12 15:50	ĀG	TAL TAM
Total/NA	Analysis	SM 2540D		1	127409	08/06/12 07:32	то	TAL TAM
Total/NA	Analysis	353.2		1	127440	08/03/12 16:06	KW	TAL TAM
Total/NA	Prep	SM 5220			127453	08/06/12 13:00	RWF	TAL TAM
Total/NA	Analysis	5220 D		1	127460		RWF	TAL TAM
					(Sta	irt) 08/06/12 16:10		
					(Er	nd) 08/06/12 16:30		
Total/NA	Analysis	SM 2540C		1	127470	08/07/12 09:05	то	TAL TAM
Total/NA	Analysis	Field Sampling		1	127537	08/03/12 11:10		TAL TAM

Laboratory References:

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

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Certification Summary

Client. Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Laboratory: TestAmerica Tampa

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

	,			
Authority	Program	EPA Region	Cortification ID	Expiration Date
Alabama	State Program	4	40610	06-30-13
Florida	NELAC	4	E84282	06-30-13
Georgia	State Program	4	905	07-31-12
USDA	Federal		P330-11-00177	04-20-14

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Method Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-49257-1

Method	Method Description	Protocol	Laboratory
353.2	Nitrate	MCAWW	TAL TAM
5220 D	Chemical Oxygen Demand	SM20	TAL TAM
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL TAM
SM 2540D	Solids, Total Suspended (TSS)	SM	
SM 5210B	BOD, 5-Day	_	TAL TAM
Field Sampling	Field Sampling	SM	TAL TAM
reid Sampling	rieid Sainpinig	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",

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

Laboratory References:

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

TestAmerica Tampa 8/13/2012

Sample Summary

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

TestAmerica Job ID: 660-49257-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-49257-1	BLANK EQUIPMENT	Water	08/03/12 11:00	08/03/12 14:40
660-49257-2	LEACHATE EFFLUENT	Water	08/03/12 11:10	08/03/12 14:40



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

	LEACHATE	PLAN	T EQUIPMENT BLANK	=
PREC	CLEANED SAMPLE CONTAINERS:			DATE TIME
RELI	INQUISHED BY: At last		REP. OF CONTRACT LAB.	722 12 1/25
ACCE	EPTED BY:		REP. OF SOLID WASTE DEPT	722-12 2: 82
TOCI	TTON. POUTDACEM DE SAIR			
TOCK	ATION: EQUIPMENT BLANK		SAMPLE MATRIX: WATER OT	HER MATRIX:
PERS	SONAL ENGAGED IN SAMPLE CO	LLECTIO	ON: FA. Balloon & L. Claut.	<u>~ □</u>
			O	
	FII	ELD PA	RAMETERS: N/A	
		SAMPLE	CONTAINERS	
QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED
	40 ml VIAL	1	40 ml VIAL	
	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
	250 ml. PLASTIC	/	250 ml. PLASTIC	
	250 ml. GLASS 500 ml. PLASTIC		250 ml. GLASS	
	500 ml. PLASTIC	 	500 ml. PLASTIC	
3	LITER PLASTIC		500 ml. GLASS LITER PLASTIC	
 	LITER GLASS	+	LITER GLASS	
	BACTERIAL	 	BACTERIAL	
	•			
<u> </u>	TOTAL No. OF SAMPLES (COLLEC!	red:	
				
COLO	ORS & SHEENS: YES N/A		NO	COLLECTED
				DATE TIME
				8.3.12/1/100
		ANALYS:	IS REQUESTED:	0.3.12177.00
MONTE	TV IPACHAME DIAMM DADAMMEDO	BAB	MOG NYEDNER CO.	_
ENHI	HLY LEACHATE PLANT PARAMETERS	<u> </u>	TSS NITRATE TOS CO	<u>DD</u>
PRES	ERVED SAMPLES PH < -2.0		SAMPLE STORAGE: COOLER	-& -TCFTO 4 0 -c
				u 10H 10 4.0 C
ABOV	E LISTED SAMPLES:			DATE TIME
	NOUISHED BY: A. Cat	-	REP. OF SOLID WASTE DEPT	8.312 2:49
	PTED BY:	Multu	REP. OF CONTRACT LAB.	8.8.2 2:40
				- Marian - Land
COMM	MENT'S: WO # 0069			

4.70 (4-07

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

PRECLEANED SAMPLE CONTAINERS: RELINQUISHED BY: ACCEPTED BY:		REP. OF CONTRACT LAB. REP. OF SOLID WASTE DEPT	DATE TIME 7-23-/2 /405
LOCATION: LEACHATE EFFLUENT	<u> </u>	SAMPLE MATRIX: WATER OT	
PERSONAL ENGAGED IN SAMPLE COL			
<u>F</u>	IELD	PARAMETERS:	
BY TIME TEM AB & ///0 32.7		8.991 1 4.69 4.69	TURB
	S NAME T	S.o (
QTY CONTAINER DESCRIPTION	QTY	E CONTAINERS CONTAINER DESCRIPTION	PRESERVED
40 ml VIAL		40 ml VIAL	
125 ml. PLASTIC 125 ml GLASS	ļ	125 ml. PLASTIC 125 ml GLASS	<u> </u>
250 ml. PLASTIC	 	250 ml. PLASTIC	
250 ml. GLASS	 '	250 ml. GLASS	
500 ml. PLASTIC		500 ml. PLASTIC	
300 ml. GLASS		500 ml. GLASS	
LITER PLASTIC		LITER PLASTIC	
LITER GLÄSS BACTERIAL	ļ	LITER GLASS	
BACTERIAL	L	BACTERIAL	<u> </u>
COLORS & SHEENS: YES N/A	OLLEC	CTED:	COLLECTED
	 -		DATE TIME
			8.3.12 11:10
	ANALYS	SIS REQUESTED:	
MONTHLY LEACHATE PLANT PARAMETERS.	BOD	TSS_NITRATETDSCO	<u> </u>
PRESERVED SAMPLES PH < 2.0		SAMPLE STORAGE: COOLER	& ICE TO 4.0 c
ABOVE LISTED SAMPLES: RELINQUISHED BY:		REP. OF SOLID WASTE DEPT	DATE TIME 8.3.12 2:46
ACCEPTED BY:	chult	REP. OF SOLID WASTE DEPT REP. OF CONTRACT LAB.	8.3.12 2:40
COMMENT'S: WO # 00 49			

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-49257-1

Login Number: 49257

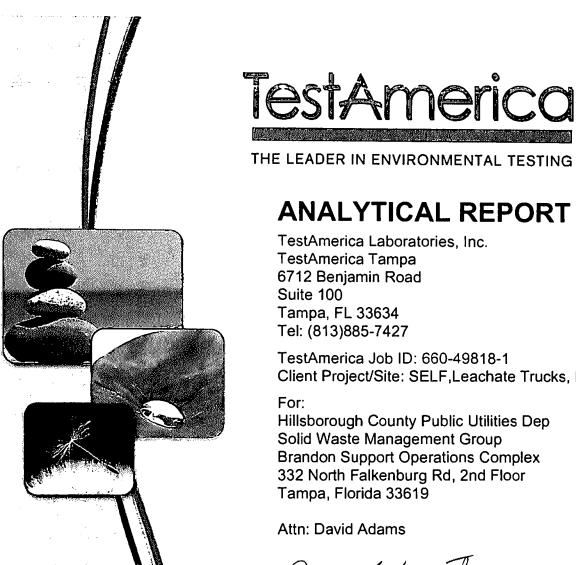
List Number: 1

Creator: Snead, Joshua

List Source: TestAmerica Tampa

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Client Project/Site: SELF, Leachate Trucks, EFF

Hillsborough County Public Utilities Dep **Brandon Support Operations Complex** 332 North Falkenburg Rd, 2nd Floor

Authorized for release by: 9/19/2012 2:04:20 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.

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Definitions/Glossary

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF

TestAmerica Joh ID: 660-49818-1

Qualifiers		
General Cher	nistry	<u></u> -
Qualifier	Qualifier Description	
U	Indicates that the compound was analyzed for but not detected.	
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.	18
1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
D	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	Ana a
CNF	Contains no Free Liquid	
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample	**
EDL	Estimated Detection Limit	
EPA	United States Environmental Protection Agency	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	į.
PQL	Practical Quantitation Limit	. *
QC	Quality Control	[2]
RL	Reporting Limit	Ti
RPD	Relative Percent Difference, a measure of the relative difference between two points	en e
TEF	Toxicity Equivalent Factor (Dioxin)	•*
TEQ	Toxicity Equivalent Quotient (Dioxin)	* **

Case Narrative

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Job ID: 660-49818-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-49818-1

Comments

No additional comments.

Receipt

The samples were received on 9/5/2012 3:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

General Chemistry

Method 353.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 128695 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method SM 5220D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 129087 were outside control limits of 90-110%. The associated laboratory control sample (LCS) recovery met acceptance criteria. The sample is flagged with J3.

No other analytical or quality issues were noted.

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Detection Summary

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-49818-1

Client Sample ID: LEACH	lient Sample ID: LEACHATE EFFLUENT							
- Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D Method	Prep Type
Nitrate as N	0.31		0.50	0.10	mg/L	1	353.2	Total/NA
Chemical Oxygen Demand	660	J3	200	100	mg/L	10	5220 D	Total/NA
Total Dissolved Solids	3700		250	250	mg/L	1	SM 2540C	Tota!/NA
Total Suspended Solids	17		1.0	1.0	mg/L	1	SM 2540D	Total/NA
Field pH	8.10				SU	1	Field Sampling	Total/NA
Field Temperature	33.10				Degrees C	1	Field Sampling	Total/NA
Oxygen, Dissolved	5.24				mg/L	1	Field Sampling	Total/NA
Specific Conductance	9053				umhos/cm	1	Field Sampling	Total/NA
Client Sample ID: BLANK	EQUIPMENT					La	b Sample ID:	660-49818
Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac	D Method	Prep Type
Total Suspended Solids	1.2	-	1.0	1.0	mg/L		SM 2540D	Total/NA

Client Sample Results

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 09/05/12 12:55 Date Received: 09/05/12 15:20 Lab Sample ID: 660-49818-1

Matrix: Water

General Chemistry	:								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.31	ī	0.50	0.10	mg/L			09/06/12 08:44	1
Chemical Oxygen Demand	660	J3	200	100	mg/L		09/15/12 10:30	09/16/12 13:20	10
Total Dissolved Solids	3700		250	250	mg/L			09/11/12 09:55	1
Total Suspended Solids	17		1.0	1.0	mg/L		• • •	09/11/12 07:29	1
Biochemical Oxygen Demand	12	U	12	12	mg/L			09/06/12 07:40	1
− Method: Field Sampling - Field	Sampling								
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.10				SU			09/05/12 12:55	1
Field Temperature	33.10				Degrees C			09/05/12 12:55	1
Oxygen, Dissolved	5.24				mg/L			09/05/12 12:55	1
Specific Conductance	9053				umhos/cm			09/05/12 12:55	1



Client Sample Results

Client: Hillsborough County Public Utilities ⊓ep-Project/Site: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-49818-1

Client Sample ID: BLANK EQUIPMENT

Date Collected: 09/05/12 12:36 Date Received: 09/05/12 15:20 Lab Sample ID: 660-49818-2

Matrix: Water

General Chemistry Analyte	Result	Qualifier	PQL	MDL.	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	Ū	0.50	0.10	mg/L			09/06/12 08:47	1
Chemical Oxygen Demand	10	U	20	10	mg/L		09/15/12 10:30	09/16/12 12:17	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			09/11/12 09:55	1
Total Suspended Solids	1.2		1.0	1.0	mg/L		* * * * * * * * * * * * * * * * * * * *	09/11/12 07:29	1
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			09/06/12 07:40	1



QC Sample Results

Client: Hillsborough County Public Utilities Dap Project/Site: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-49818-1

Method: 353.2 - Nitrate															
Lab Sample ID: MB 660-128695/12 Matrix: Water											*	Client Sa	ample ID: Meti Prep Type:		
Analysis Batch: 128695															
			MB												
Analyte	R		Qualifier		PQL		MDL I			D	Pı	epared	Analyzed		il Fac
Nitrate as N		0.10	U		0.50		0.10	ng/L					09/06/12 08:42		1
Lab Sample ID: LCS 660-128695/13										~ !		Camala	ID. I al Canta		
Matrix: Water										G	ıenı	Sample	ID: Lab Contro		•
Analysis Batch: 128695													Prep Type:	iota	WNA
, and Julian 12000				Spiko		LCS	LCS						%Rec.		
Analyte				Added		Result	Qualif	ier	Unit		D	%Rec	Limits		
Nitrate Nitrite as N				1.00		0.985			mg/L			99	90 - 110		
Nitrite as N				0.500		0.487	1		mg/L			97	90 - 110		
Lab Sample ID: 660-49814-A-7 MS												Client	Sample ID: Ma		
Matrix: Water													Prep Type:	Tota	I/NA
Analysis Batch: 128695		_													
A	Sample			Spike			MS	_			_		%Rec.		
Analyte Nitrate Nitrite as N	Result 0.10	Qua U	 	Added			Qualif		Unit		<u>D</u>	%Rec	Limits		
Nitrite as N		n 13	1	1.00 0.500		1.10 0.554	12		mg/L			110	90 - 110		
	0.10	0 33	•	0.500		0.554	33		mg/L			111	90 - 110		
Lab Sample ID: 660-49814-A-7 MSD										Clien	t Sa	mple ID:	: Matrix Spike	Dunli	cate
Matrix: Water													Prep Type:		
Analysis Batch: 128695															
	Sample	Sam	ple	Spike		MSD	MSD						%Rec.		RPD
Analyte	Result	Qua	lifier	Added		Result	Qualif	ier	Unlt		D	%Rec	Limits R	PD	Limit
Nitrate Nitrite as N	0.10	Ū		1.00		1.10			mg/L		_	110	90 - 110	0	30
Nitrite as N	0.10	U J3				0.555	J3		mg/L			111	90 - 110	0	30
		_	1	0.500											
Method: 5220 D - Chemical Oxy		Dem		0.500		-v									
Method: 5220 D - Chemical Oxy		Dem		0.500								Client Sa	ample ID: Meti	nod B	lank
		Dem		0.500		- 12 (k - ak +						Client Sa	ample ID: Meti Prep Type		
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A)em		0.500								Client Sa	Prep Type:	Tota	VNA
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water				0.500								Client Sa	•	Tota	VNA
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water	/gen [MB esuit	and MB Qualifier	0.500	PQL		MDL (Jnit		D		Client Sa	Prep Type:	: Tota h: 12	VNA
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088	/gen [мв	and MB Qualifier	0.500	PQL 20			Jnit ng/L			Pi		Prep Type: Prep Batc	Tota h: 12	I/NA 9087
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand	/gen [MB esuit	and MB Qualifier	0.500							Pr 09/1:	repared 5/12 10:30	Prep Type: Prep Batc Analyzed 09/16/12 13:20	Tota h: 12	I/NA 9087 oil Fac
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088	/gen [MB esuit	and MB Qualifier	0.500							Pr 09/1:	repared 5/12 10:30	Prep Type Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro	Tota h: 12 	I/NA 9087 9087 1
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water	/gen [MB esuit	and MB Qualifier	0.500							Pr 09/1:	repared 5/12 10:30	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type:	Tota h: 12	I/NA 9087 bil Fac 1 mple
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A	/gen [MB esuit	and MB Qualifier	Spike		LCS					Pr 09/1:	repared 5/12 10:30	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type: Prep Batc	Tota h: 12	I/NA 9087 bil Fac 1 mple
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water	/gen [MB esuit	and MB Qualifier				10 1	ng/L	Unit		Pr 09/1:	repared 5/12 10:30	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type:	Tota h: 12	I/NA 9087 bil Fac 1 mple
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water Analysis Batch: 129088	/gen [MB esuit	and MB Qualifier	Spike			10 r	ng/L	Unit mg/L		Pr 09/1: ient	repared 5/12 10:30 Sample	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type: Prep Batc %Roc.	Tota h: 12	I/NA 9087 bil Fac 1 mple
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand	/gen [MB esuit	and MB Qualifier	Spike Added		Result	10 r	ng/L	mg/L	CI	Pi 09/19 ient	**Sample** **Rec** 107	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type: Prep Batc %Roc. Limits 90 - 110	Tota h: 12	I/NA 9087 iii Fac 1 mple I/NA 9087
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water Analysis Batch: 129088 Analyte	/gen [MB esuit	and MB Qualifier	Spike Added		Result	10 r	ng/L	mg/L	CI	Pi 09/19 ient	**Sample** **Rec** 107	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type: Prep Batc %Rec. Limits 90 - 110 LEACHATE E	Tota h: 12	II/NA 9087 1 Fac 1 mple 1I/NA 9087
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: 660-49818-1 MS Matrix: Water	/gen [MB esuit	and MB Qualifier	Spike Added		Result	10 r	ng/L	mg/L	CI	Pi 09/19 ient	**Sample** **Rec** 107	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type: Prep Batc %Rec. Limits 90 - 110 LEACHATE E Prep Type:	Tota h: 12 DI Sai Tota h: 12	I/NA 9087 iii Fac 1 mple II/NA 9087
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: 660-49818-1 MS	/gen [MB esult 10	MB Qualifler U	Spike Added		Result 215	10 r	ng/L	mg/L	CI	Pi 09/19 ient	**Sample** **Rec** 107	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contro Prep Type: Prep Batc %Rec. Limits 90 - 110 LEACHATE E	Tota h: 12 DI Sai Tota h: 12	I/NA 9087 iii Fac 1 mple II/NA 9087
Method: 5220 D - Chemical Oxy Lab Sample ID: MB 660-129087/4-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-129087/5-A Matrix: Water Analysis Batch: 129088 Analyte Chemical Oxygen Demand Lab Sample ID: 660-49818-1 MS Matrix: Water	/gen [MB esuit 10	and MB Qualifler U	Spike Added 200		Result 215 MS	LCS Qualif	ng/L	mg/L	CI	Pi 09/19 ient	**Sample** **Rec** 107	Prep Type: Prep Batc Analyzed 09/16/12 13:20 ID: Lab Contre Prep Type: Prep Batc %Roc. Limits 90 - 110 LEACHATE E Prep Type: Prep Batc	Tota h: 12 DI Sai Tota h: 12	I/NA 9087 iii Fac 1 mple II/NA 9087

Client: Hillsborough County Public Utilities Pap Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Client Sample ID: Method Blank

Method: 5220 D - Chemical Oxygen Demand (Continued)
=

Lab Sample ID: 660-49818-1 MSD Client Sample ID: LEACHATE EFFLUENT Matrix: Water Prep Type: Total/NA Analysis Batch: 129088 Prep Batch: 129087 Sample Sample Spiko MSD MSD RPD Analyte Result Qualifier Addod Result Qualifier Limits RPD Limit Chemical Oxygen Demand 660 J3 100 735 J3 mg/L 90 - 110 20

Lab Sample ID: MB 660-129089/4-A

Matrix: Water

Analysis Batch: 129090

Prep Type: Total/NA

Prep Batch: 129089

мв мв Analyte Result Qualifier POL MDL Unit Prepared Analyzed Dil Fac Chemical Oxygen Demand 10 U 20 10 mg/L 09/15/12 10:30 09/16/12 12:17

Lab Sample ID: LCS 660-129089/5-A

Matrix: Water

Analysis Batch: 129090

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 129089

Spike LCS LCS %Rec. **Analyte** Added Result Qualifier Unit Limits Chemical Oxygen Demand 50.0 46.4 mg/L 90.110

Lab Sample ID: 660-49766-A-1-B MS

Matrix: Water

Analysis Batch: 129090

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 129089

Sample Sample Spike MS MS %Rec. Analyte Result Qualifler Added Result Qualifier Unit %Rec Limits Chemical Oxygen Demand 10 U 50.0 49.7 mg/L 90 - 110

Lab Sample ID: 660-49766-A-1-C MSD

Matrix: Water

Analysis Batch: 129090

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 129089

Sample Sample Spike MSD MSD %Rec. RPD Analyte Result Qualifler Added Result Qualifier Unit D %Rec Limits RPD Limit Chemical Oxygen Demand 10 U 50.0 51.6 mg/L 103 90 - 110 20

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

Lab Sample ID: MB 660-128828/1

Matrix: Water

Analysis Batch: 128828

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Analyte Result Qualifier PQL MDL Unit Propared Analyzed Dil Fac **Total Dissolved Solids** 5.0 U 5.0 5.0 mg/L 09/11/12 09:55

Lab Sample ID: LCS 660-128828/2

Matrix: Water

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Analysis Batch: 128828

Spike LCS LCS %Rec. Added Result Qualifier Unit %Rec Limits Total Dissolved Solids 10000 9970 mg/L

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-49818-1

Method: SM 2540C - Solids, To	otal Dis	sol	ved (TDS	S) (Con	tinue	ed)						·	
Lab Sample ID: 640-40194-C-6 DU Matrix: Water											Clie	ent Sample ID: D Prep Type: 1	
Analysis Batch: 128828													
	Sample		•				ĐU	_					RPD
Analyte Total Dissolved Solids	Result 160	Qual	lifler			Result 162	Quali	fier	Unit		<u>D</u>	RPI	
-	100					102			mg/L				1 20
Nethod: SM 2540D - Solids, To	otal Su	spe	nded (TS	SS)									
Lab Sample ID: MB 660-128819/1 Matrix: Water											Client S	ample ID: Metho Prep Type: 1	
Analysis Batch: 128819		MD.	MB										
Analyte	R		Qualifier		PQL		MOL	Unit		D	Prepared	Analyzed	Dil Fac
Total Suspended Solids		1.0			1.0			mg/L			Frepareu	09/11/12 07:29	t
Lab Sample ID: LCS 660-128819/2 Matrix: Water										Cli	ent Sample	ID: Lab Control	•
Analysis Batch: 128819				0-2-								A/ B = =	
Analyto				Spike Added		Result	LCS	ifia-	Unit		D %Rec	%Rec. Limits	
Total Suspended Solids				100		96.0			mg/L		96	80 - 120	
Lab Sample ID: 660-49818-1 DU Matrix: Water Analysis Batch: 128819	Sample		•			DU	DU			Ollella	Sample ID	: LEACHATE EF	
Analyto	Result	Qua	lifler 			Result	Qual	fler	Unit		<u>D</u>	RP	
Total Suspended Solids	17					15.2			mg/L			1	0 20
Method: SM 5210B - BOD, 5-D	ay		•			-							
Lab Sample ID: SCB 660-128625/2 Matrix: Water	SCB										Client S	sample ID: Metho Prep Type:	
Analysis Batch: 128625													
			SCB										
Analyte Biochemical Oxygen Demand	F	2.0	Qualifier	-	PQL 2.0		MDL	Unit mg/L	· ·	_ D	Prepared	Analyzed 09/06/12 07:40	Dil Fac
Dischanical Cxygen Demana		2.0	•		2.0		2.0	myrc				09/06/12 07:40	'
Lab Sample ID: USB 660-128625/1	USB										Client S	Sample ID: Metho	
Matrix: Water												Prep Type:	Tota!/NA
Analysis Batch: 128625		HED	USB										
Analyte	F		Qualifier		PQL		MDL	Unit		Ð	Prepared	Analyzed	Dil Fac
		2.0			2.0			mg/L			- Toparos	09/06/12 07:40	1
Biochemical Oxygen Demand										Cli	ient Sample	ID: Lab Control	l Sample
Biochemical Oxygen Demand Lab Sample ID: LCS 660-128625/3 Matrix: Water												Prep Type: '	Total/NA
Lab Sample ID: LCS 660-128625/3												Prep Type:	Total/NA
Lab Sample ID: LCS 660-128625/3 Matrix: Water				Spike Addod		LCS Result	LCS				D %Rec	Prep Type: '	Total/NA

QC Sample Results

Client: Hillsborough County Public Utilities Dep Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Lab Sample ID: 660-49818-1 DU **Client Sample ID: LEACHATE EFFLUENT**

Matrix: Water Prep Type: Total/NA Analysis Batch: 128625

Sample Sample DU DU RPD Result Qualifier Result Qualifier RPD Llmit Biochemical Oxygen Demand 12 U 12 Ü mg/L NC 20

Client: Hillsborough County Public Utilities Dep

Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 669-49818-1

General Chemistry					
Analysis Batch: 128625	:				
Lab Sample ID	Client Sample ID	Prop Type	Matrix	Method	Prep Batc
660-49818-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5210B	- -
660-49818-1 DU	LEACHATE EFFLUENT	Total/NA	Water	SM 5210B	
660-49818-2	BLANK EQUIPMENT	Total/NA	Water	SM 5210B	
LCS 660-128625/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-128625/2 SCB	Method Blank	Tctal/NA	Water	SM 5210B	
USB 660-128625/1 USB	Method Blank	Tctal/NA	Water	SM 5210B	
Analysis Batch: 128695	}				
Lab Sample ID	Client Sample ID	Prop Type	Matrix	Method	Prep Batc
660-49814-A-7 MS	Matrix Spike	Total/NA	Water	353.2	
660-49814-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
660-49818-1	LEACHATE EFFLUENT	Total/NA	Water	353.2	
660-49818-2	BLANK EQUIPMENT	Total/NA	Water	353.2	
LCS 660-128695/13	Lab Control Sample	Total/NA	Water	353.2	
MB 660-128695/12	Method Blank	Total/NA	Water	353.2	
Analysis Batch: 128819					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
660-49818-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
660-49818-1 DU	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
660-49818-2	BLANK EQUIPMENT	Total/NA	Water	SM 2540D	
LCS 660-128819/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-128819/1	Method Blank	Total/NA	Water	SM 2540D	
Analysis Batch: 128828	l .				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
640-40194-C-6 DU	Duplicate	Total/NA	Water	SM 2540C	
660-49818-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540C	
660-49818-2	BLANK EQUIPMENT	Tctal/NA	Water	SM 2540C	
LCS 660-128828/2	Lab Control Sample	Tota!/NA	Water	SM 2540C	
MB 660-128828/1	Method Blank	Total/NA	Water	SM 2540C	
Prep Batch: 129087					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
660-49818-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5220	
660-49818-1 MS	LEACHATE EFFLUENT	Total/NA	Water	SM 5220	
660-49818-1 MSD	LEACHATE EFFLUENT	Total/NA	Water	SM 5220	
LCS 660-129087/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-129087/4-A	Method Blank	Total/NA	Water	SM 5220	
Analysis Batch: 129088 					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batci
660-49818-1	LEACHATE EFFLUENT	Total/NA	Water	5220 D	12908
660-49818-1 MS	LEACHATE EFFLUENT	Total/NA	Water	5220 D	12908
660-49818-1 MSD	LEACHATE EFFLUENT	Total/NA	Water	5220 D	12908
LCS 660-129087/5-A	Lab Control Sample	Total/NA	Water	5220 D	12908
MB 660-129087/4-A	Method Blank	Total/NA	Water	5220 D	12908
Prep Batch: 129089					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batci
660-49766-A-1-B MS	Matrix Spike	Total/NA	Water	SM 5220	
660-49766-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	

QC Association Summary

Client: Hillsborough County Public Utilities Dep

Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	660-49818-2	BLANK EQUIPMENT	Total/NA	Water	SM 5220	
ĺ	LCS 660-129089/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
	MB 660-129089/4-A	Method Blank	Total/NA	Water	SM 5220	

Analysis Batch: 129090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49766-A-1-B MS	Matrix Spike	Total/NA	Water	5220 D	129089
660-49766-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	129089
660-49818-2	BLANK EQUIPMENT	Total/NA	Water	5220 D	129089
LCS 660-129089/5-A	Lab Control Sample	Total/NA	Water	5220 D	129089
MB 660-129089/4-A	Method Blank	Total/NA	Water	5220 D	129089

Field Service / Mobile Lab

Analysis Batch: 128874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-49818-1	LEACHATE EFFLUENT	Total/NA	Water	Field Sampling	

Client: Hillshorough County Public Utilities Dep Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 09/05/12 12:55 Date Received: 09/05/12 15:20 Lab Sample ID: 660-49818-1

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	128625	09/06/12 07:40	AG	TAL TAM
Total/NA	Analysis	353.2		1	128695	09/06/12 08:44	KW	TAL TAM
Total/NA	Analysis	SM 2540D		1	128819	09/11/12 07:29	то	TAL TAM
Total/NA	Analysis	SM 2540C		1	128828	09/11/12 09:55	то	TAL TAM
Total/NA	Prep	SM 5220			129087	09/15/12 10:30	RWF	TAL TAM
Total/NA	Analysis	5220 D		10	129088		RWF	TAL TAM
					(Sta	irt) 09/16/12 13:20		
					(Er	nd) 09/16/12 14:00		
Total/NA	Analysis	Field Sampling		1	128874	09/05/12 12:55		TAL TAM

Client Sample ID: BLANK EQUIPMENT

Date Collected: 09/05/12 12:36 Date Received: 09/05/12 15:20 Lab Sample ID: 660-49818-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	128625	09/06/12 07:40	AG	TAL TAM
Total/NA	Analysis	353.2		1	128695	09/06/12 08:47	KW	TAL TAM
Total/NA	Analysis	SM 2540D		1	128819	09/11/12 07:29	то	TAL TAM
Total/NA	Analysis	SM 2540C		1	128828	09/11/12 09:55	то	TAL TAM
Total/NA	Prep	SM 5220			129089	09/15/12 10:30	RWF	TAL TAM
Tota!/NA	Analysis	5220 D		1	129090		RWF	TAL TAM

(Start) 09/16/12 12:17 (End) 09/16/12 13:00

Laboratory References:

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

Certification Summary

Client: Hillsborough County Public Utilities Oup

Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Laboratory: TestAmerica Tampa

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

1	Authority	Program	EPA Region	Certification ID	Expiration Date
į	Alabama	State Program	 4	40510	06-30-13
	Florida	NELAC	4	E84282	06-30-13
Ì	Georgia	State Program	4	905	07-31-12
-	USDA	Federal		P330-11-00177	04-20-14

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Method Summary

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Method	Method Description	Protocol	Laboratory
353.2	Nitrate	MCAWW	TAL TAM
5220 D	Chemical Oxygen Demand	SM20	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
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",

SM20 = "Standard Methods For The Examination Of Water And Wastewater", 20th Edition."

Laboratory References:

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

TestAmerica Tampa 9/19/2012

Sample Summary

Client: Hillsborough County Public Utilities Den-Project/Site: SELF,Leachate Trucks, EFF

TestAmerica Job ID: 660-49818-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-49818-1	LEACHATE EFFLUENT	Water	09/05/12 12:55	09/05/12 15:20
660-49818-2	BLANK EQUIPMENT	Water	09/05/12 12:36	09/05/12 15:20



660-49818

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

PRECLEANED SAMPLE CONTAINERS: RELINQUISHED BY: ACCEPTED BY:		REP. OF CONTRACT LAB.	DATE TIME	
ACCEPTED BY:		REP. OF SOLID WASTE DEPT	. 9.4-12 2:10	
LOCATION: LEACHATE REFILIENT		CAMBIE MATRICA MATRICA	III D. Marmaria	
LOCATION: LEACHATE EFFLUENT	T:Y DOM:	SAMPLE MATRIX: WATER U	HER MATRIX:	
PERSONAL ENGAGED IN SAMPLE CO	PPECL1	ON: LA Balloon J JC		
	DIDIO	DIDIVERSE		
	FIETD	PARAMETERS:		
BY TIME TE	MP I			
AB 10 12:55 33.		COND PH DO 5.24	TURB	
40 20 112, 33 1 33,1	7.6	9053 8.10 5.24	N/A =	
	SAMPL	E CONTAINERS		
QTY CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED	
40 ml VIAL		40 ml VIAL		
125 ml. PLASTIC		125 ml. PLASTIC		
125 ml GLASS 250 ml. PLASTIC	 	125 ml GLASS		
250 ml. GLASS		250 ml. PLASTIC		
500 ml. PLASTIC		250 ml. GLASS		
500 ml. GLASS		500 ml. PLASTIC		
3 LITER PLASTIC		500 ml. GIASS		
LITER GLASS		LITER PLASTIC		
BACTERIAL		LITER GLASS BACTERIAL		
35.02.24.41.44	_!	DACTERIAL		
	COLLEC	TED:		
COLORS & SHEENS: YESN/A		NO	COLLECTED	
			DATE TIME	
			9-5-17, 12:55	
	ANALYS	IS REQUESTED:	9-3-/2 12:33	
MONTHLY LEACHATE PLANT PARAMETERS BOD TSS NITRATE TDS COD				
DESCRIPTION OF THE PROPERTY OF THE	7/2		_	
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. 9-5-1/2 3:20				
ACCEPTED BY: Caral McMulty REP. OF CONTRACT LAB. 9-5- 2 3:20				
	182344		1-3- /- J-	
COMMENT'S: WOH 0070				
		3.7°C	CUO /	

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

RELINQUISHED BY: ACCEPTED BY: REP. OF CONTRACT LAB. REP. OF SOLID WASTE DEPT.				
ACCE	PTED BY:		REP. OF SOLID WASTE DEPT. 9-4/12 12:10	
LOCA	TION: EQUIPMENT BLANK		SAMPLE MATRIX: WATER OTHER MATRIX:	
PERSONAL ENGAGED IN SAMPLE COLLECTION: Q A. Balloon G. TO				
			ANACHER DO N. / P.	
	<u>F11</u>	SLD PA	RAMETERS: N/A	
	<u> </u>	SAMPLE	CONTAINERS	
QTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION PRESERVED	
	40 ml VIAL		40 ml VIAL	
	125 ml. PLASTIC 125 ml GLASS		125 ml. PLASTIC 125 ml GLASS	
	250 ml. PLASTIC	+ , +	250 ml, PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
-	500 ml. GLASS		500 ml. GLASS LITER PLASTIC	
	LITER GLASS		LITER GLASS	
	BACTERIAL		BACTERIAL	
	TOTAL No. OF SAMPLES ORS & SHEENS: YES N/A		red: NO COLLECTED DATE TIME 9-5-12-36 IS REQUESTED:	
MONTHLY LEACHATE PLANT PARAMETERS BOD TSS NITRATE TDS COD				
PRESERVED SAMPLES PH < 2.0 7/25 SAMPLE STORAGE: COOLER & ICE TO 4.0 c				
ABOVE LISTED SAMPLES: RELINQUISHED BY: REP. OF SOLID WASTE DEPT. REP. OF CONTRACT LAB. DATE TIME 3:20 3:				
COMMENT'S: WOROS 78				

Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-49818-1

Login Number: 49818

List Number: 1

Creator: McNuity, Carol

List Source: TestAmerica Tampa

Question	Answer Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A
The cooler's custody seal, if present, is intact.	True
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
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A
Multiphasic samples are not present.	True
Samples do not require splitting or compositing.	True
Residual Chlorine Checked.	N/A

