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July 6, 2012

Dept. Of Environmental Protection

JUL 12 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 – Second Quarter (April - June, 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, is pleased to provide the analytical data for the second quarter effluent sampling of the leachate treatment plant located at the SCLF.

The referenced permit requires the monthly sampling of the leachate treatment plant effluent, and recording of the pH value on a weekly basis. The pH values recorded during the three month period ranged from 7.7–8.4 pH units. The monthly samples of effluent collected are analyzed for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Total Dissolved Solids (TDS), and Nitrate.

On April 3, May 1, and June 5, 2012, the effluent samples were collected from the dedicated sampling port at the treatment plant. The samples were analyzed by our contracted laboratory, Test America, Inc. for the parameters listed above. The laboratory 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 July 6, 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) 272-5977 extension 43944.

Sincerely,

David S. Adams, P.G. Environmental Manager

Public Utilities Department

STATE OF

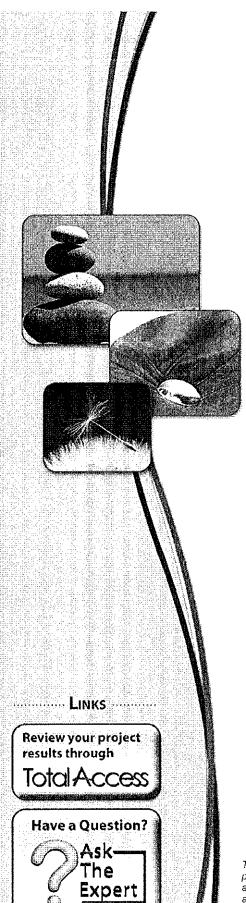
DSA/mdt Enclosures

xc:

Larry Ruiz, Public Utilities
Beth Schinella, Public Utilities

Ron Cope, EPC

G:enviro/self/leachate plant/ltp-effluent-2ndqtr2012.doc



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# **TestAmerica**

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: 660-46910-1

Client Project/Site: SELF, Leachate Trucks, EFF

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: 4/13/2012 2:40:48 PM

Ky Robert

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 Job ID: 660-46910-1

# (3)

# Qualifiers General Chemistry

Qualifier	Qualifier Description
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
υ	Indicates that the compound was analyzed for but not detected.
1	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

0	indicates that the compound was analyzed for but not detected.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Glossary	
Abbreviation	These commonly used abbreviations may or may not be present in this report.
<b>\$</b>	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: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Job ID: 660-46910-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-46910-1

Comments

No additional comments.

#### Receipt

All samples were received in good condition within temperature requirements.

#### **General Chemistry**

Method 353.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 122974 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 123168 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: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-46910-1

Analyte	Result Qualifier	PQL	MDL	Unit	Dil Fac	D Method	Prep Type
Nitrate as N	110	100	20	mg/L	200	353.2	Total/NA
Chemical Oxygen Demand	730	100	50	mg/L	5	5220 D	Total/NA
Total Dissolved Solids	4800	250	250	mg/L	1	SM 2540C	Total/NA
Total Suspended Solids	19	1.0	1.0	mg/L	1	SM 2540D	Total/NA
Biochemical Oxygen Demand	21	12	12	mg/L	1	SM 52108	Total/NA
Field pH	7.86			SU	1	Field Sampling	Total/NA
Field Temperature	29.97			Degrees C	1	Field Sampling	Total/NA
Oxygen, Dissolved	5.49			mg/L	1	Field Sampling	Total/NA
Specific Conductance	10244			umhos/cm	1	Field Sampling	Total/NA

No Detections

5

# **Client Sample Results**

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-46910-1

### Client Sample ID: Leachate Effluent

Date Collected: 04/03/12 13:40 Date Received: 04/03/12 15:30 Lab Sample ID: 660-46910-1

Matrix: Water

General Chemistry Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	110	- <del></del>	100	20	mg/L			04/04/12 12:50	200
Chemical Oxygen Demand	730		100	50	mg/L		04/10/12 10:45	04/10/12 15:10	5
Total Dissolved Solids	4800		250	250	mg/L			04/04/12 14:53	1
Total Suspended Solids	19		1.0	1.0	mg/L			04/04/12 08:57	1
Biochemical Oxygen Demand	21		12	12	mg/L			04/04/12 15:09	1



Method: Field Sampling - Fiel	d Sampling						
Analyte	Result Qualifier	PQL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.86		ŝu			04/03/12 13:40	1
Field Temperature	29.97		Degrees C			04/03/12 13:40	1
Oxygen, Dissolved	5.49		mg/L			04/03/12 13:40	1
Specific Conductance	10244		umhos/cm			04/03/12 13:40	1

# **Client Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: SELF, Leachate Trucks, EFF

TestAmerica Job ID: 660-46910-1

Lab Sample ID: 660-46910-2

Matrix: Water

#### Client Sample ID: Equipment Blank

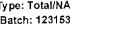
Date Collected: 04/03/12 13:35 Date Received: 04/03/12 15:30

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			04/04/12 11:01	1
Chemical Oxygen Demand	10	U	20	10	mg/L		04/10/12 10:45	04/10/12 14:45	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			04/04/12 14:53	1
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			04/04/12 08:57	1
Bìochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			04/04/12 15:05	1



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

Lab Sample ID: MB 660-122974/14 Matrix: Water								İ	Client Sa	mpie ID: M Prep Ty		
										,		
Analysis Batch: 122974		мв мв										
			~-	PQL	14	DL Unit		D Pr	epared	Analyze	d	Dil Fac
Analyte	R	esult Qualific	ег ———						epareu	04/04/12 10		1
Nitrate as N		0,10 U		0.50	U,	.10 mg/L				04/04/12 10	2.01	,
Lab Sample ID: LCS 660-122974/15								Client	Sample	ID: Lab Co	ntrol Sa	mple
Matrix: Water								- •- •		Prep Ty		
Analysis Batch: 122974			Spike		LCS	LCS				%Rec.		
Amalista			Added			Qualifier	Unit	D	%Rec	Limits		
Analyte Nitrate Nitrite as N			1,00		1.00		mg/L		100	90 - 110		
							mg/L		101	90 - 110		
Nitrite as N			0.500		0.505		ng/L		101	90.110		
Lab Sample ID: 660-46895-A-2 MS									Client S	Sample ID:	Matrix	Spike
										Prep Ty		
Matrix: Water										11001)	po	
Analysis Batch: 122974	Camala	Sample	Spike		ис	MS				%Rec.		
	•	-	_				Unit	D	%Rec	Limits		
Analyte		Qualifier	Added			Qualifier			101	90 - 110		
Nitrite as N	0.30	1	0.500		0.800		mg/L		101	90-110		
Lab Camala ID: 660 46905 A 2 MS /									Client 9	Sample ID:	Matrix	Spike
Lab Sample ID: 660-46895-A-2 MS /	٠ <u>٧</u>								Ollone	Prep Ty		
Matrix: Water										Lieb ià	pe. IO	.aiii i i
Analysis Batch: 122974										%Rec.		
	•	Sample	Spike			MS		_				
Analyte		Qualifier	Added	-		Qualifier	Unit	D		Limits		
Nitrate Nitrite as N	3.2	J3	2.00		4.08	J3	mg/L		43	90 - 110		
							_	liont Co	male ID	: Matrix Spi	ka Dur	licate
Lab Sample ID: 660-46895-A-2 MSD	)						·	ment 3a	illible in			
Matrix: Water										Prep Ty	pe. To	lama
Analysis Batch: 122974										4/ D		000
	-	Sample	Spike			MSD		_		%Rec.		RPC
Analyte		Qualifier	Added			Qualifier	Unit	D		Limits	RPD	Limi
Nitrite as N	0.30	1	0.500		0.802		mg/L		101	90 - 110	0	30
							_	N 4 C -	In 3D	. Blackeite Cmi	ika Dur	diante
Lab Sample ID: 660-46895-A-2 MSD	^2						C	Hent Sa	amble in	: Matrix Spi		
Matrix: Water										Prep Ty	pe: 10	tanne
Analysis Batch: 122974												
	Sample	Sample	Spike		MSD	MSD				%Rec.		RPE
Analyte	Result	Qualifier	Added		Result	Qualifier	Unit	D		Limits	RPD	Limi
Nitrate Nitrite as N	3.2	J3	2,00		4.08	J3	mg/L		43	90 - 110	0	30
lethod: 5220 D - Chemical Ox	ygen [	Demand										
									Client S	ample ID: N	Method	Blan
Matrix: Water	-									Prep Ty		
										Prep B	-	
Analysis Batch: 123164		мв мв										,
A 4.4-		tesult Qualifi	ior	PQL	R.F	IDL Unit		D P	repared	Analyze	d	Dil Fa
Analyte	<del>-</del>					10 mg/L			0/12 10:45			2.1.1.4.
Chemical Oxygen Demand		10 U		20		10 Ing/L		04/1	0/12 10.43	U-6 10/12 1	7.70	



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

Lab Sample ID: LCS 660-1231	53/5-A					I	Client S	Sample I	ID: Lab Cor		
Matrix: Water									Prep Ty		
Analysis Batch: 123164									Prep Ba	aton: 1	2315.
			Spike	LCS		11-14		0/ Doe	%Rec. Limits		
Analyte			Added		Qualifier	Unit	— D	%Rec 93	90.110	<del></del>	
Chemical Oxygen Demand			50.0	46.7		mg/L		93	50-110		
Lab Sample ID: 640-38050-A-4	-C MS							Client S	Sample ID:	Matrix	Spike
Matrix: Water									Prep Ty	pe: To	tal/N/
Analysis Batch: 123164									Prep B	atch: 1	2315
,	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chemical Oxygen Demand	10	U	50.0	49.0		mg/L		98	90 _ 110		
Lab Sample ID: 640-38050-A-4	-D MSD					Cli	ent Sar	nole ID:	Matrix Spi	ke Dur	olicate
Matrix: Water	222							•	Prep Ty		
Analysis Batch: 123164									Prep B		
Allalysis Batch. 123104	Samnle	Sample	\$pike	MSD	MSD				%Rec.	.,	RPI
Analyte	•	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Lim
Chemical Oxygen Demand	10		50.0	49.0		mg/L		98	90 - 110	0	2
Matrix: Water Analysis Batch: 123168		MB MB		no. <b>u</b>	DI 11-14	D	Dro	pared	Prep Ty Prep Ba	atch: 1	
Analyte	K	esult Qualifier  10 U		PQL M 20	DL Unit 10 mg/L			12 10:45	04/10/12 1		
Chemical Oxygen Demand		10 0		20	lo ingre		04, 10,	12 10.45	04/ (0/12 1		
Lab Sample ID: LCS 660-1231	66/5-A						Client 9	Sample !	ID: Lab Co		
Matrix: Water									Prep Ty		
Analysis Batch: 123168									Prep B	atch: 1	2316
			Spike	LCS	LCS				%Rec.		
Analyte			Added		Qualifier	Unit	D	%Rec	Limits		
Chemical Oxygen Demand			200	204		mg/L		102	90 - 110		
	-B MS							Client S	Sample ID:	Matrix	Spik
Lab Sample ID: 640-38046-C-2									Prep Ty	pe: To	tal/N
Lab Sample ID: 640-38046-C-2 Matrix: Water									Prep B	atch: 1	12316
Matrix: Water											
Matrix: Water	Sample	Sample	Spike	MS	MS				%Rec.		
	•	Sample Qualifier	Spike Added		MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Matrix: Water Analysis Batch: 123168 <sup>Analyte</sup>	•	Qualifier	•		Qualifier	Unit mg/L	<u>D</u>	%Rec 88			
Matrix: Water Analysis Batch: 123168 Analyte Chemical Oxygen Demand	Result 470	Qualifier	Added	Result	Qualifier	mg/L	D	88	90 - 110	ke Du	plicat
Matrix: Water Analysis Batch: 123168 Analyte Chemical Oxygen Demand Lab Sample ID: 640-38046-C-2	Result 470	Qualifier	Added	Result	Qualifier	mg/L	<u>D</u> ient Sar	88	Limits 90 - 110 Matrix Spi		
Matrix: Water Analysis Batch: 123168 Analyte Chemical Oxygen Demand Lab Sample ID: 640-38046-C-2 Matrix: Water	Result 470	Qualifier	Added	Result	Qualifier	mg/L	D_	88	90 - 110	pe: To	tal/N
Matrix: Water Analysis Batch: 123168	Result 470 -C MSD	Qualifier	Added 100	Result 561	Qualifier	mg/L	D_ Hent Sar	88	90 - 110 Matrix Spi	pe: To	tal/N. 12316
Matrix: Water Analysis Batch: 123168 Analyte Chemical Oxygen Demand Lab Sample ID: 640-38046-C-2 Matrix: Water	Result 470 -C MSD Sample	Qualifier	Added	Result 561 MSD	Qualifier J3	mg/L	D_ ient Sar	88	Limits 90 - 110 Matrix Spi Prep Ty Prep B	pe: To	tal/N



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

Lab Sample ID: MB 660-122955/1									С	lient Sa	mple ID: Me		
Matrix: Water											Prep Typ	e: 101	Ianna
Analysis Batch: 122955	•••	•••											
	MB			BOI	BAT	OL Unit		D	Prei	pared	Analyzed		Dil Fac
Analyte		Qualifier		PQL		5.0 mg/L					04/04/12 14:		1
Total Dissolved Solids	5.0	U		3.0	·	.o mg/L							
Lab Sample ID: LCS 660-122955/2								Clie	ent S	ample	D: Lab Con	trol S	ample
Matrix: Water											Ргер Тур		
Analysis Batch: 122955													
			Spike		LCS	LC\$					%Rec.		
Analyte			Added		Result	Qualifier	Unit		D	%Rec	Limits		
Total Dissolved Solids			10000		9940	_	mg/L			99	80 - 120		
											10 11 15		-1!4-
Lab Sample ID: 660-46895-A-1 DU										Cliei	nt Sample ID		
Matrix: Water											Prep Typ	e: 10	ANNA
Analysis Batch: 122955	Samele 5	ala.			DU	DII							RPD
	Sample Samp					Qualifier	Ųnit		D			RPD	Limit
Analyte	Result Qual		<del></del>		1120	Graffilei	mg/L					4	20
Total Dissolved Solids	1100				1120		iiig/L					•	
//atrix: Water									С	lient Sa	mple ID: Me Prep Typ		
Matrix: Water	мв	мв							С	lient Sa	Prep Typ	e: To	tal/NA
Matrix: Water Analysis Batch: 122918 <sup>Analyte</sup>	Result	Qualifier		PQL		DL Unit		D		lient Sa	Prep Typ	e: To	Dil Fac
Matrix: Water Analysis Batch: 122918 <sup>Analyte</sup>		Qualifier	<del>.</del>	PQL 1.0		DL Unit 1.0 mg/L		D			Prep Typ	e: To	Dil Fac
Matrix: Water Analysis Batch: 122918 Analyte Total Suspended Solids	Result	Qualifier						. –	Pre	pared	Prep Typ	e: To	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2	Result	Qualifier						. –	Pre	pared	Analyzed	e: To 57 trol S	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water	Result	Qualifier				1.0 mg/L		. –	Pre	pared	Analyzed  04/04/12 08:  ID: Lab Con Prep Typ	e: To 57 trol S	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water	Result	Qualifier	Spike		LCS	1.0 mg/L		. –	Pre ent S	pared Sample	Analyzed 04/04/12 08:  ID: Lab Con Prep Typ	e: To 57 trol S	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918	Result	Qualifier	Added		LCS Result	1.0 mg/L	Unit	. –	Pre	pared Sample %Rec	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits	e: To 57 trol S	Dit Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918	Result	Qualifier	-		LCS	1.0 mg/L	Unit mg/L	. –	Pre ent S	pared Sample	Analyzed 04/04/12 08:  ID: Lab Con Prep Typ	e: To 57 trol S	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids	Result	Qualifier	Added		LCS Result	1.0 mg/L		. –	Pre ent S	pared Sample %Rec 98	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits 80 - 120  nt Sample II	57 trol S be: To	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids	Result	Qualifier	Added		LCS Result	1.0 mg/L		. –	Pre ent S	pared Sample %Rec 98	Analyzed 04/04/12 08:  ID: Lab Con Prep Typ  %Rec. Limits 80 - 120	57 trol S be: To	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water	Result	Qualifier	Added		LCS Result 98.4	LCS Qualifier		. –	Pre ent S	pared Sample %Rec 98	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits 80 - 120  nt Sample II	57 trol S be: To	Dit Fac
Lab Sample ID: MB 660-122918/1 Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918	Result	Qualifier U	Added		LCS Result 98.4	1.0 mg/L		. –	Preent S	pared Sample %Rec 98	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits 80 - 120  nt Sample II	57  57  ttrol S  c: To	Dil Fac
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water	Result 1.0 Sample Sam Result Qual	Qualifier U	Added		LCS Result 98.4 DU Result	LCS Qualifier	mg/L Unit	. –	Pre ent S	pared Sample %Rec 98	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits 80 - 120  nt Sample II	557  trol S  e: To	Dil Fac  Dil Fac  1  ample  tal/NA  plicate  tal/NA  RPE  Limi
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918  Analyte Analyte	Result 1.0	Qualifier U	Added		LCS Result 98.4	LCS Qualifier	mg/L	. –	Preent S	pared Sample %Rec 98	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits 80 - 120  nt Sample II	57  57  ttrol S  c: To	Dit Factorial/NA
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids	Sample Sam Result Qual	Qualifier U	Added		LCS Result 98.4 DU Result	LCS Qualifier	mg/L Unit	. –	Preent S	pared Sample %Rec 98	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits 80 - 120  nt Sample II	557  trol S  e: To	Dit Factorial/NA
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Analyte Total Suspended Solids	Result 1.0  Sample Sam Result Qual 28	Qualifier U	Added		LCS Result 98.4 DU Result	LCS Qualifier	mg/L Unit	. –	Preent S	pared Sample  %Rec 98 Clie	Analyzed 04/04/12 08: ID: Lab Con Prep Typ %Rec. Limits 80 - 120  nt Sample II	57 57 57 57 Due: To	Dit Far  Sample Stal/NA  plicate tal/NA  RPI  Lim 2
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Method: SM 5210B - BOD, 5-D  Lab Sample ID: SCB 660-122938/2	Result 1.0  Sample Sam Result Qual 28	Qualifier U	Added		LCS Result 98.4 DU Result	LCS Qualifier	mg/L Unit	. –	Preent S	pared Sample  %Rec 98 Clie	Analyzed 04/04/12 08:  ID: Lab Con Prep Typ  %Rec. Limits 80 - 120  nt Sample II Prep Typ	57 57 57 57 Due: To	Dil Factorial/NA
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Method: SM 5210B - BOD, 5-D  Lab Sample ID: SCB 660-122938/2 Matrix: Water	Result 1.0  Sample Sam Result Qual 28	Qualifier U	Added		LCS Result 98.4 DU Result	LCS Qualifier	mg/L Unit	. –	Preent S	pared Sample  %Rec 98 Clie	Analyzed  O4/04/12 08:  iD: Lab Con Prep Typ  %Rec. Limits  80 - 120  nt Sample II Prep Typ	57 57 57 57 Due: To	Dil Factorial/NA
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2  Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918	Sample Sam Result Qual 28	Qualifier U	Added		LCS Result 98.4 DU Result	LCS Qualifier	mg/L Unit	. –	Pre D C	eample  *Rec 98 Clie	Analyzed 04/04/12 08:  iD: Lab Con Prep Typ  %Rec. Limits 80 - 120  nt Sample ID: Prep Typ  ample ID: Me	57 57 Di; Duj	Dil Face 1 sample stal/NA plicate tal/NA RPE Limit 20
Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-122918/2 Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Lab Sample ID: 660-46906-C-1 DU Matrix: Water Analysis Batch: 122918  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Method: SM 5210B - BOD, 5-D  Lab Sample ID: SCB 660-122938/2 Matrix: Water	Sample Sam Result Qual 28  Day  SCB	ple lifter  SCB  Qualifier	Added		LCS Result 98.4  DU Result 31.2	LCS Qualifier	mg/L Unit	. –	Pre D C	pared Sample  %Rec 98 Clie	Analyzed  O4/04/12 08:  iD: Lab Con Prep Typ  %Rec. Limits  80 - 120  nt Sample II Prep Typ	57 57 57 Digital Special Speci	Dil Factorial/NA

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-46910-1

Lab Sample ID: USB 660-122938/1 USB

Client Sample ID: Method Blank

Prep Type:

Prep Type: Total/NA

Analysis Batch: 122938

Matrix: Water

USB USB

Analyte	Result Qualifier	PQL	MDL	Ųnit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	2.0 U	2.0	2,0	mg/L	_		04/04/12 09:25	1

Lab Sample ID: LCS 660-122938/3

Matrix: Water

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

Analysis Batch: 122938

Spike LCS LCS %Rec.

Analyte Added Result Qualifier Unit D %Rec Limits
Biochemical Oxygen Demand 198 219 mg/L 110 85 - 115

Lab Sample ID: 660-46910-1 DU Client Sample ID: Leachate Effluent

Matrix: Water Prep Type: Total/NA

Analysis Batch: 122938
Sample Sample DU DU

 Sample
 Sample
 DU DU
 RPD

 Analyte
 Result Qualifier
 Result Qualifier
 Unit Dult Dult
 Dult
 RPD Limit Dult

 Biochemical Oxygen Demand
 21
 28.1
 J3
 mg/L
 29
 20



# **QC Association Summary**

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

MB 660-123153/4-A

Method Blank

TestAmerica Job ID: 660-46910-1

General Chemistry				week an indular. Dr. t. with a summarian	
Analysis Batch: 122918	l .				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46906-C-1 DU	Duplicate	Total/NA	Water	SM 2540D	
660-46910-1	Leachate Effluent	Total/NA	Water	SM 2540D	
660-46910-2	Equipment Blank	Total/NA	Water	SM 2540D	
LCS 660-122918/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-122918/1	Method Blank	Total/NA	Water	SM 2540D	
– Analysis Batch: 122938	i				
 Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46910-1	Leachate Effluent	Total/NA	Water	SM 52108	
660-46910-1 DU	Leachate Effluent	Total/NA	Water	SM 52108	
660-46910-2	Equipment Blank	Total/NA	Water	SM 5210B	
LCS 660-122938/3	Lab Control Sample	Total/NA	Water	SM 52108	
SC8 660-122938/2 SCB	Method Blank	Total/NA	Water	SM 52108	
USB 660-122938/1 USB	Method Blank	Total/NA	Water	SM 52108	
 Analysis Batch: 122955	i i				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-46895-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
660-46910-1	Leachate Effluent	Total/NA	Water	SM 2540C	
660-46910-2	Equipment Blank	Total/NA	Water	SM 2540C	
LCS 660-122955/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-122955/1	Method Blank	Total/NA	Water	SM 2540C	
 Analysis Batch: 122974					
_		Prop Tupo	Matrix	Method	Prep Batch
Lab Sample ID	Client Sample ID	Prep Type Total/NA	Water	353.2	- Trep Daten
660-46895-A-2 MS	Matrix Spike	Total/NA	Water	353.2	
660-46895-A-2 MS ^2	Matrix Spike	Total/NA	Water	353.2	
660-46895-A-2 MSD	Matrix Spike Duplicate		Water	353.2	
660-46895-A-2 MSD ^2	Matrix Spike Duplicate	Total/NA		353.2	
660-46910-1	Leachate Effluent	Total/NA	Water	353.2	
660-46910-2	Equipment Blank	Total/NA	Water		
LCS 660-122974/15	Lab Control Sample	Total/NA	Water	353,2	
MB 660-122974/14	Method Blank	Total/NA	Water	353.2	
Prep Batch: 123153					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-38050-A-4-C MS	Matrix Spike	Total/NA	Water	SM 5220	
640-38050-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
660-46910-2	Equipment Blank	Total/NA	Water	SM 5220	
LCS 660-123153/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-123153/4-A	Method Blank	Total/NA	Water	SM 5220	
Analysis Batch: 123164	l .				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
640-38050-A-4-C MS	Matrix Spike	Total/NA	Water	5220 D	123153
640-38050-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	123153
660-46910-2	Equipment Blank	Total/NA	Water	5220 D	123153
LCS 660-123153/5-A	Lab Control Sample	Total/NA	Water	5220 D	123153
	•				

TestAmerica Tampa 4/13/2012

123153

Total/NA

Water

5220 D

# **QC Association Summary**

Client: Hillsborough County Public Utilities Dep Project/Site: SELF, Leachate Trucks, EFF TestAmerica Job ID: 660-46910-1

General	Chemist	ry (Cor	ntinued)
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Prep Batch: 123
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ĺ		Clicat Cample ID	Prep Type	Matrix	Method	Prep Batch
	Lab Sample ID	Client Sample ID	Prep Type			
	640-38046-C-2-B MS	Matrix Spike	Total/NA	Water	SM 5220	
	640-38046-C-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
	660-46910-1	Leachate Effluent	Total/NA	Water	SM 5220	
	LCS 660-123166/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
	MB 660-123166/4-A	Method Blank	Total/NA	Water	SM 5220	

#### Analysis Batch: 123168

- Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-38046-C-2-B MS	Matrix Spike	Total/NA	Water	5220 D	123166
640-38046-C-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	123166
660-46910-1	Leachate Effluent	Total/NA	Water	5220 D	123166
LCS 660-123166/5-A	Lab Control Sample	Total/NA	Water	5220 D	123166
MB 660-123166/4-A	Method Blank	Total/NA	Water	5220 D	123166

#### Field Service / Mobile Lab

#### Analysis Batch: 123094

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
660-46910-1	Leachate Effluent	Total/NA	Water	Field Sampling	

Ŕ

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

Client Sample ID: Leachate Effluent

Lab Sample ID: 660-46910-1

Matrix: Water

Date Collected: 04/03/12 13:40 Date Received: 04/03/12 15:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D		<u> </u>	122918	04/04/12 08:57	TO	TAL TAM
Total/NA	Analysis	SM 5210B		1	122938	04/04/12 15:09	EM	TAL TAM
Total/NA	Analysis	SM 2540C		1	122955	04/04/12 14:53	то	TAL TAM
Total/NA	Analysis	353,2		200	122974	04/04/12 12:50	KW	TAL TAM
Total/NA	Prep	SM 5220			123166	04/10/12 10:45	EM	TAL TAM
Total/NA	Analysis	5220 D		5	123168	04/10/12 15:10	EM	TAL TAM
Total/NA	Analysis	Field Sampling		1	123094	04/03/12 13:40		TAL TAM

Client Sample ID: Equipment Blank

Date Collected: 04/03/12 13:35

Date Received: 04/03/12 15:30

Lab Sample ID: 660-46910-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540D			122918	04/04/12 08:57	то	TAL TAM
Total/NA	Analysis	SM 5210B		1	122938	04/04/12 15:05	EM	TAL TAM
Total/NA	Analysis	SM 2540C		1	122955	04/04/12 14:53	то	TAL TAM
Total/NA	Analysis	353.2		1	122974	04/04/12 11:01	KW	TAL TAM
Total/NA	Prep	SM 5220			123153	04/10/12 10:45	EM	TAL TAM
Total/NA	Analysis	5220 D		1	123164	04/10/12 14:45	EM	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: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-46910-1

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.

### **Method Summary**

Client: Hillsborough County Public Utilities Dep Project/Site: SELF,Leachate Trucks, EFF TestAmerica Job ID: 660-46910-1

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: SELF,Leachate Trucks, EFF

Lab Sample ID	Client Sample ID	Matrix	Collected	Received					
660-46910-1	Leachate Effluent	Water	04/03/12 13:40	04/03/12 15:30					
660-46910-2	Equipment Blank	Water	04/03/12 13:35	04/03/12 15:30					

660-46910

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

					IATE PI				
PREC RELI ACCI	CLEANED SAMPI INQUISHED BY EPTED BY:	LE CONTAI	NERS:	lty	REP. OF	CONTRAC SOLID W	T LAB. ASTE DEPT	DATE   TIM 3 2412   19 3-30-12   19	<u>50</u> 8 <u>0</u> 0
	ATION: LEACH SONAL ENGAGE		LE COLL	ECTI	ON: DA	Balloon		HER MATRIX:	<del></del> 
			F.T	ETD	PARAMETE	RS:			
	BY A JC	TIME			COND	PH	DO	<b>TURB</b>   N/A =	
	3 JC	1:40	<u>  29.97</u>	<u> </u>	10244	7.86	1 3.4 9	N/A =	
QTY	CONTATATA	R DESCRIPTI		AMPL)	E CONTAI	NERS	RIPTION	PRESERVED	
211		ml VIAL		¥		40 ml VIA			
		L. PLASTIC			12	5 ml. PLAS			
		ml GLASS				125 ml GLA			
		I, PLASTIC		7	250 ml. PLASTIC				
	250 r	nl. GLASS			250 ml. GLASS				
-		L. PLASTIC				0 ml. PLAS			
-		nl, GLASS				00 ml. GLA LITER PLAST			_
_3	l	R PLASTIC ER GLASS			<u>_</u>	LITER PLAST	70		
		TERIAL			· · · · · · · · · · · · · · · · · · ·	BACTERIAL			
COLO	TOTAL NOTAL	o. OF SAM	N/A			NO TED:		COLLECTED DATE   TIM	<u>1E</u>
момп	HLY LEACHATE P	LANT PARAME	TERS	BOD	TSS N	ITRATE	TDS CC	D	
			···········					& ICE TO 4.0	C
					REP. OF	F SOLID W F CONTRAC	MASTE DEPT	AIT   STAD   1:0 STAD	4E 30 30
COM	MENT`S:	Off O	067				5.	9° CU-07	

13

660-469/0

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

			N: B/A.Balloon B/ J/C XAMETERS: N/A		
			CONTAINERS	DDECEDIED	٦
YTY	CONTAINER DESCRIPTION	QTY	CONTAINER DESCRIPTION	PRESERVED	_
	40 ml VIAL		40 ml VIAL 125 ml. PLASTIC		
	125 ml. PLASTIC 125 ml GLASS		125 ml. PLASTIC 125 ml. GLASS		-
7	250 ml. PLASTIC	<del></del>	250 ml. PLASTIC		
$\overline{\cdot}$	250 ml. GLASS		250 ml. GLASS		
	500 ml. PLASTIC		500 ml. PLASTIC		
_	500 ml. GLASS		500 ml. GLASS		_
3	LITER PLASTIC LITER GLASS		LITER PLASTIC		-
: +	BACTERIAL		BACTERIAL		-
COLOI	TOTAL No. OF SAMPLES  RS & SHEENS: YES N/A	COLLECT	NO NO	COLLECT DATE   4-3-/2	TIME
		ANALYSI	S REQUESTED:	, J	131
ЮПТН	LY LEACHATE PLANT PARAMETERS	BOD	TSS NITRATE TDS	<u>:OD</u>	
PRESI	erved samples PH < 2.0	YES_	SAMPLE STORAGE: COOLER	& ICE TO 4	1.0 c
	E LISTED SAMPLES:		REP. OF SOLID WASTE DEP REP. OF CONTRACT LAB.	DATE	TIME

# Login Sample Receipt Checklist

Client: Hilfsborough County Public Utilities Dep

Job Number: 660-46910-1

List Source: TestAmerica Tampa

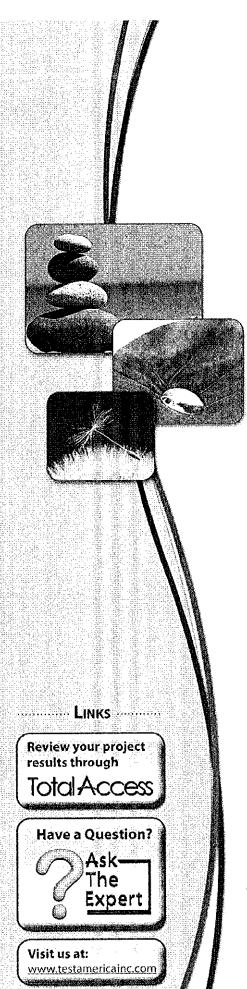
Login Number: 46910

List Number: 1

Creator: Snead, Joshua

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	
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	5.9c Cu07
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	





# TestAmerica

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: 660-47403-1 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: 5/18/2012 3:32:15 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: Leachate Effluent

TestAmerica Job ID: 660-47403-1

# 8

#### Qualifiers

#### **General Chemistry**

Q0110141 Q11	e monty
Qualifier	Qualifier Description
J3	Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
U	Indicates that the compound was analyzed for but not detected.
Q	Sample held beyond the accepted holding time.
4	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

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.
<del>\tilde{\</del>	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: 660-47403-1

Job ID: 660-47403-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-47403-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 5/1/2012 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 2540C: Due to a laboratory error, the TDS for sample Equipment Blank was analyzed after the hold time exceeded. The sample is flagged with Q.

Method SM 2540D: The sample duplicate %RPD associated with batch 124058 was outside control limits.

Method SM 5220D: matrix spike duplicate /MSD) recovery for batch 124296 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Fac D	Method	Prep Type
Nitrate as N	120		50	10	mg/L	100	353.2	Total/NA
Chemical Oxygen Demand	510		20	10	mg/L	1	5220 D	Total/NA
Total Dissolved Solids	4800		250	250	mg/L	1	SM 2540C	Total/NA
Total Suspended Solids	27		1.2	1.2	mg/L	1	SM 2540D	Total/NA
Biochemical Oxygen Demand	28		12	12	mg/L	1	SM 5210B	Total/NA
Field pH	7,68				SU	1	Field Sampling	Total/NA
Field Temperature	29.49				Degrees C	1	Field Sampling	Total/NA
Oxygen, Dissolved	6,20				mg/L	1	Field Sampling	Total/NA
Specific Conductance	9909				umhos/cm	1	Field Sampling	Total/NA

No Detections

5

### **Client Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Client Sample ID: LEACHATE EFFLUENT Lab Sample ID: 660-47403-1

Date Collected: 05/01/12 12:50

. Matrix: Water

Date Received: 05/01/12 14:40

General Chemistry									
Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	120		50	10	mg/L			05/02/12 17:46	100
Chemical Oxygen Demand	510		20	10	mg/L		05/09/12 10:16	05/09/12 12:25	1
Total Dissolved Solids	4800		250	250	mg/L			05/04/12 13:33	1
Total Suspended Solids	27		1.2	1.2	mg/L			05/03/12 08:10	1
Biochemical Oxygen Demand	28		12	12	mg/L			05/02/12 11:46	1
Method: Field Sampling - Field S	ampling								
Analyte	Result	Qualifier	PQL	MDL	Ųnit	D	Prepared	Analyzed	Dil Fac
Field pH	7,68				SU			05/01/12 12:50	1
Field Temperature	29.49				Degrees C			05/01/12 12:50	1
Oxygen, Dissolved	6.20				mg/L			05/01/12 12:50	1
Specific Conductance	9909				umhos/cm			05/01/12 12:50	1



### **Client Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

Client Sample ID: BLANK EQUIPMENT 47403

Date Collected: 05/01/12 12:40 Date Received: 05/01/12 14:40 Lab Sample ID: 660-47403-2

Matrix: Water

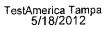
General Chemistry	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.50	0,10	mg/L			05/02/12 17:39	1
Chemical Oxygen Demand	10	U	20	10	mg/L		05/09/12 09:42	05/09/12 12:00	1
Total Dissolved Solids	5.0	UQ	5,0	5.0	mg/L			05/17/12 14:30	1
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			05/03/12 08:10	1
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			05/02/12 11:46	1



Client: Hillsborough County Public Utilities Dep

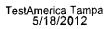
Project/Site: Leachate Effluent

Lab Sample ID: MB 660-124134/14 Matrix: Water											Client Sa	mple ID: Metho Prep Type:	
Analysis Batch: 124134		мп	мв										
Analyte	D		Qualifier		PQL		MDL Unit		D	Pı	repared	Analyzed	Dil Fac
Nitrate as N	- 1	0.10			0.50		0.10 mg/L					05/02/12 17:27	
									٠.			ID 1 -1- 0 t	Oamale
Lab Sample ID: LCS 660-124134/15 Matrix: Water									G	ient	Sample	D: Lab Control Prep Type:	
Analysis Batch: 124134				<b>.</b>								%Rec.	
				Spike			LCS	l lais		D	%Rec	Limits	
Analyte				Added 1.00		0,978	Qualifier	Unit mg/L		-	98	90 - 110	<del>-</del>
Nitrate Nitrite as N						0.484	1	mg/L			97	90 - 110	
Nitrite as N				0.500		0.404	ı	IIIg/L			37	301110	
Lab Sample ID: 660-47418-L-1 MS Matrix: Water											Client S	Sample ID: Mate Prep Type:	
Analysis Batch: 124134												**************************************	
	Sample		•	Spike			MS			_	N/D-+	%Rec.	
Analyte	Result		lifier ————————————————————————————————————	Added			Qualifier	Unit		D	%Rec	90 - 110	
Nitrate Nitrite as N	0.10			1.00		1.03		mg/L			103		
Nitrite as N	0.10	U		0.500		0.510		mg/L			102	90 - 110	
Lab Sample ID: 660-47418-L-1 MSD Matrix: Water Analysis Batch: 124134									Clier	nt Sa	ımple ID:	Matrix Spike D Prep Type:	
mary one Button, (2110)	Sample	Sam	ple	Spike		MSD	MSD					%Rec.	RP
Analyte	Result	Qual	lifier	Added		Result	Qualifier	Unit		D	%Rec	Limits RP	D Lim
Nitrate Nitrite as N	0.10	U		1.00		1.03		mg/L			103	90 - 110	0 3
Nitrite as N	0.10	U		0.500		0.509		mg/L			102	90 - 110	0 3
lethod: 5220 D - Chemical Ox	ygen [	Dem	and									4.1.48***	
Lab Sample ID: MB 660-124279/4-A											Client Sa	mple ID: Methor	
•												Prep Batch	
Matrix: Water												riep Daton	• 12477
•		MR	MB									•	: 12427
Matrix: Water Analysis Batch: 124297	D		MB		BOI		MDI linit		n	P	renared		
Matrix: Water Analysis Batch: 124297 <sup>Analyte</sup>	R	esult	Qualifier		PQL 20		MDL Unit		_ <u>D</u> .		repared 9/12 09:42	Analyzed 05/09/12 12:00	Dil Fa
Matrix: Water Analysis Batch: 124297 <sup>Analyte</sup>	R				PQL 20		MDL Unit			05/0	9/12 09:42	Analyzed 05/09/12 12:00	Dil Fa
Matrix: Water Analysis Batch: 124297 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-124279/5-/		esult	Qualifier	_						05/0	9/12 09:42	Analyzed 05/09/12 12:00 ID: Lab Contro Prep Type:	Dil Fa I Sampl Total/N
Matrix: Water Analysis Batch: 124297 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-124279/5-/ Matrix: Water		esult	Qualifier							05/0	9/12 09:42	Analyzed 05/09/12 12:00 ID: Lab Contro	Dil Fa I Samp Total/N
Matrix: Water Analysis Batch: 124297 Analyte Chemical Oxygen Demand Lab Sample ID: LCS 660-124279/5-/ Matrix: Water		esult	Qualifier	Spike		LCS				05/0	9/12 09:42 : Sample	Analyzed 05/09/12 12:00  ID: Lab Contro Prep Type: Prep Batch %Rec.	Dil Fa I Sampl Total/N
Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: LCS 660-124279/5-/ Matrix: Water Analysis Batch: 124297		esult	Qualifier	Added		Result	10 mg/L LCS Qualifier	Unit		05/0	9/12 09:42 Sample	Analyzed 05/09/12 12:00  ID: Lab Contro Prep Type: Prep Batch %Rec. Limits	Dil Fa I Sampl Total/N
Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: LCS 660-124279/5-/ Matrix: Water Analysis Batch: 124297		esult	Qualifier				10 mg/L LCS Qualifier	-		05/0	9/12 09:42 : Sample	Analyzed 05/09/12 12:00  ID: Lab Contro Prep Type: Prep Batch %Rec.	Dil Fa I Sampl Total/N
Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: LCS 660-124279/5-/ Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: 660-47419-B-1-B M:	Α	esult	Qualifier	Added		Result	10 mg/L LCS Qualifier	Unit		05/0	9/12 09:42  Sample  **Rec 102	Analyzed 05/09/12 12:00  ID: Lab Contro Prep Type: Prep Batch %Rec. Limits	Dil Fa
Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: LCS 660-124279/5-/ Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: 660-47419-B-1-B M: Matrix: Water	Α	esult	Qualifier	Added		Result	10 mg/L LCS Qualifier	Unit		05/0	9/12 09:42  Sample  **Rec 102	Analyzed 05/09/12 12:00  ID: Lab Contro Prep Type: Prep Batch %Rec. Limits 90 - 110  Sample ID: Mat	Dil Fa
Matrix: Water	Α	esult 10	Qualifier U	Added		Result 51.2	10 mg/L LCS Qualifier	Unit		05/0	9/12 09:42  Sample  **Rec 102	Analyzed 05/09/12 12:00  ID: Lab Contro Prep Type: Prep Batch %Rec. Limits 90 - 110  Sample ID: Mat Prep Type:	Dil Fa I Sampl Total/N : 12427  rix Spik Total/N
Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: LCS 660-124279/5-/ Matrix: Water Analysis Batch: 124297  Analyte Chemical Oxygen Demand  Lab Sample ID: 660-47419-B-1-B M: Matrix: Water	s	esult 10	Qualifier U	Added 50.0		Result 51.2	10 mg/L LCS Qualifier	Unit		05/0	9/12 09:42  Sample  **Rec 102	Analyzed 05/09/12 12:00  ID: Lab Contro Prep Type: Prep Batch %Rec. Limits 90 - 110  Sample ID: Mat Prep Type: Prep Batch	Dil Fa I Sampl Total/N. 1 2427  rix Spik Total/N.



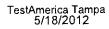
Client: Hillsborough County Public Utilities Dep Project/Site: Leachate Effluent

Lab Sample ID: 660-47419-B-1-C MS	SD								Clier	nt Sa	mple ID:	Matrix Spil	ce Dup	olicate
Matrix: Water												Prep Ty	oe: To	tal/NA
Analysis Batch: 124297												Prep Ba	itch: 1	24279
	Sample	Samp	е	Spike		MSD	MSD					%Rec.		RPD
Analyte	Result	Qualif	ier	Added		Result	Qualifier	Unit		D	%Rec	Limits	RPD	Limi
Chemical Oxygen Demand	28			50.0		75.2		mg/L			95	90 - 110	1	20
Lab Sample ID: MB 660-124281/4-A											Client Sa	ample ID: M	ethod	Blank
Matrix: Water												Prep Tyl	oe: To	tal/NA
Analysis Batch: 124296		мв і	uD.									Prep Ba	itch: 1	24281
A a livita			vio Qualifier		PQL		MDL Unit		D	P	repared	Analyzed	ł	Dil Fac
Analyte Chemical Oxygen Demand		10 1			20		10 mg/L	-	- <u>-</u> -		9/12 10:16	05/09/12 12		
Chemical Oxygen Demand		10 (	,		20		10 hig/L			00,0	U/12 10.10	00/00/12 12		
Lab Sample ID: LCS 660-124281/5-A	١.								CI	ient	Sample	ID: Lab Cor		
Matrix: Water												Prep Ty		
Analysis Batch: 124296				67		100	1.00					Prep Ba %Rec.	цсп: 1	2428T
				Spike			LCS	11		_	0/ Eas			
Analyte				Added			Qualifier	Unit		<u>D</u>	%Rec	Limits		
Chemical Oxygen Demand				200		191		mg/L			96	90 - 110		
Lab Sample ID: 640-38419-A-1-B M\$	3										Client	Sample ID: I		-
Matrix: Water												Prep Ty <sub>l</sub>		
Analysis Batch: 124296												Prep Ba	itch: 1	2428
	Sample	Samp	le	Spike			MS					%Rec.		
Analyte	Result		ier	Added			Qualifier	Unit		<u>D</u>	%Rec	Limits		
Chemical Oxygen Demand	2700	J3		100		2820		mg/L			90	90 - 110		
Lab Sample ID: 640-38419-A-1-C MS	SD								Clier	ıt Sa	ample ID	: Matrix Spil		
Matrix: Water												Prep Ty	pe: To	tal/NA
Analysis Batch: 124296												Prep Ba	atch: 1	
	Sample	Samp	le	Spike		MSD	MSD					%Rec.		RPI
Analyte	Result	Qualif	ier	Added		Result	Qualifier	Unit		D	%Rec	Limits	RPD	Limi
Chemical Oxygen Demand	2700	J3		100		2820	J3	mg/L			86	90 _ 110	0	2
lethod: SM 2540C - Solids, To	tal Dis	solv	ed (TD	S)										
Lab Sample ID: MB 660-124146/1											Client Sa	ample ID: M		
Matrix: Water												Prep Ty	pe: To	tal/N/
Analysis Batch: 124146														
		MB	MB											
Analyte	R		Qualifier		PQL		MDL Unit		D	Р	repared	Analyze		Dil Fa
Total Dissolved Solids		5.0	U		5.0		5.0 mg/L					05/04/12 13	3:28	
Lab Sample ID: LCS 660-124146/2									C	lient	Sample	ID: Lab Cor	ntrol S	Sample
Matrix: Water												Prep Ty	pe: To	otal/N/
Analysis Batch: 124146														
-				Spike		1.08	LCS					%Rec.		
				Spike		LOG						,,,,,,,,,		



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

Lab Sample ID: 660-47372-A-1 DU											Clie	ent Sample ID:		
Matrix: Water												Prep Type:	lota	al/NA
Analysis Batch: 124146														RPI
	Sample S	-				DU	-			_				
Analyte	Result C	Qualif	ier ————————————————————————————————————				Qualifier	Unit		_ D			<u>PD</u> -	Limi 2
Total Dissofved Solids	1200					1140		mg/	_				J	2
Lab Sample ID: MB 660-124611/1											Client S	ample ID: Meth	od E	3(an)
Matrix: Water												Prep Type:	Tota	al/N
Analysis Batch: 124611														
, <u> </u>	ı	мв .	мв											
Analyte	Res	ult (	Qualifier		PQL		MDL Uni	t	D	P	repared	Analyzed		Oil Fa
Total Dissolved Solids		5.0	J		5.0		5.0 mg	ſĻ,				05/17/12 13:59		
										Clions	Cample	ID: Lab Contro	al Sa	mn'
Lab Sample ID: LCS 660-124611/2										CHEIL	Sample	Prep Type:		
Watrix: Water												Fieb Type	100	ant
Analysis Batch: 124611				Spike		1.08	LCS					%Rec.		
No aliva-				Added			Qualifier	Uni	٠	D	%Rec	Limits		
Analyte				10000		9860		mg/		_ =	99	80 - 120		
otal Dissolved Solids				10000		3000		ilig,				00 = 7.00		
ab Sample ID: 660-47671-A-4 DU											Cli	ent Sample ID:	-	
Matrix: Water												Prep Type	Tot	al/N
Analysis Batch: 124611														
•	Sample S	Samp	le			DU	DU							RI
Analyte	Result (	Qualit	lier			Result	Qualifier	Uni	t 	_ D		R	PD	Lin
Total Dissolved Solids	200					204		mg/	L				4	
lethod: SM 2540D - Solids, To	otal Sus	pen	ded (TS	SS)										
Lat. Cample ID. 84D 660 424059/4											Client S	Sample ID: Meti	nod l	Blar
Lab Sample ID: MB 660-124058/1											Onone c	Prep Type		
Matrix: Water												1100.700		
Analysis Batch: 124058		мв	мя											
Analyte			Qualifier		PQL		MDL Un	it	D	Р	repared	Analyzed		Dil F
Fotal Suspended Solids		1.0		_	1.0		1.0 mg					05/03/12 08:10	<del>-</del> -	
otal Suspended Sends		,,,	•											
										Client	t Sample	e ID: Lab Contr		
Lab Sample ID: LCS 660-124058/2												Prep Type	: Tot	al/N
· ·														
Matrix: Water														
Matrix: Water				Spike		LCS	LCS					%Rec.		
Matrix: Water Analysis Batch: 124058				Spike Added			LCS Qualifier	· Uni	t	D	%Rec	%Rec. Limits		
Matrix: Water Analysis Batch: 124058 <sup>Analyte</sup>								Uni mg		_ <u>D</u>	%Rec 97			
Matrix: Water Analysis Batch: 124058 Analyte Total Suspended Solids				Added		Result				<u>D</u>	97	Limits	Dup	dica
Matrix: Water Analysis Batch: 124058  Analyte Fotal Suspended Solids  Lab Sample ID: 660-47380-C-5 DU				Added		Result				<u>D</u>	97	Limits 80 - 120		
Matrix: Water Analysis Batch: 124058  Analyte Total Suspended Solids  Lab Sample ID: 660-47380-C-5 DU Matrix: Water				Added		Result				<u>D</u>	97	Limits 80 - 120 ent Sample ID:		
Lab Sample ID: LCS 660-124058/2 Matrix: Water Analysis Batch: 124058  Analyte Total Suspended Solids  Lab Sample ID: 660-47380-C-5 DU Matrix: Water Analysis Batch: 124058	Sample :	Samp		Added		Result 97.2				<u>D</u>	97	Limits 80 - 120 ent Sample ID:		tal/N
Matrix: Water Analysis Batch: 124058  Analyte Total Suspended Solids  Lab Sample ID: 660-47380-C-5 DU Matrix: Water	Sample :			Added		97.2	Qualifier	mg.	'L	D D	97	Limits 80 - 120 ent Sample ID: Prep Type		



Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

	_											Client C	amala ID: Math	ad Blank
Lab Sample ID: SCB 660-124019/2 SC	В											Chent 5	ample ID: Metho	
Matrix: Water													Prep Type:	Otalina
Analysis Batch: 124019														
		SCB								_	_		Amalumad	Dil Fac
Analyte	Re		Qualifier		PQL		MDL			. <u>D</u> .	Р	repared	Analyzed	1
Biochemical Oxygen Demand		2.0	U		2,0		2.0	mg/L					05/02/12 11:46	
- Lab Sample ID: USB 660-124019/1 US	В											Client S	ample ID: Meth	od Blank
Matrix: Water													Prep Type:	Total/NA
Analysis Batch: 124019														
•		usB	USB											
Analyte	Re	sult	Qualifier		PQL		MDL	Unit		D	P	repared	Analyzed	Dil Fac
Biochemical Oxygen Demand		2.0	U		2.0		2.0	mg/L					05/02/12 11:46	1
Lab Sample ID: LCS 660-124019/3										CI	ient	Sample	ID: Lab Contro	I Sample
Matrix: Water												•	Prep Type:	Total/NA
Analysis Batch: 124019														
, many one Battern 12 10 10				Spike		LCS	LCS						%Rec.	
Analyte				Added		Result	Qual	lifier	Unit		D	%Rec	Limits	
Biochemical Oxygen Demand				198		215			mg/L		_	108	85 - 115	
Lab Sample ID: 660-47390-F-4 DU												Clie	ent Sample ID: D	Ouplicate
Matrix: Water													Prep Type:	Total/NA
Analysis Batch: 124019													, ,,	
•	ample	Sam	ple			Dυ	DΨ							RPD
	Result		,			Result	Qual	lifier	Unit		D		RP	D Limit
Biochemical Oxygen Demand	2.7					2.0					_			IC

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

# General Chemistry

Analysis Batch: 124019	1				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47390-F-4 DU	Duplicate	Total/NA	Water	SM 5210B	
660-47403-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5210B	
660-47403-2	BLANK EQUIPMENT 47403	Total/NA	Water	SM 5210B	
LCS 660-124019/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-124019/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-124019/1 USB	Method Blank	Total/NA	Water	SM 5210B	

#### Analysis Batch: 124058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47380-C-5 DU	Duplicate	Total/NA	Water	SM 2540D	<del></del>
660-47403-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540D	
660-47403-2	BLANK EQUIPMENT 47403	Total/NA	Water	SM 2540D	
LCS 660-124058/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-124058/1	Method Blank	Total/NA	Water	SM 2540D	

#### Analysis Batch: 124134

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
660-47403-1	LEACHATE EFFLUENT	Total/NA	Water	353,2	
660-47403-2	BLANK EQUIPMENT 47403	Total/NA	Water	353.2	
660-47418-L-1 MS	Matrix Spike	Total/NA	Water	353.2	
660-47418-L-1 MSD	Matrix Spike Duplicate	Total/NA	Water	353,2	
LCS 660-124134/15	Lab Control Sample	Total/NA	Water	353.2	
MB 660-124134/14	Method Blank	Total/NA	Water	353.2	

#### Analysis Batch: 124146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47372-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
660-47403-1	LEACHATE EFFLUENT	Total/NA	Water	SM 2540C	
LCS 660-124146/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-124146/1	Method Blank	Total/NA	Water	SM 2540C	

#### Prep Batch: 124279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47403-2	BLANK EQUIPMENT 47403	Total/NA	Water	SM 5220	
660-47419-B-1-B MS	Matrix Spike	Total/NA	Water	SM 5220	
660-47419-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
LCS 660-124279/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-124279/4-A	Method Blank	Total/NA	Water	SM 5220	

#### Prep Batch: 124281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-38419-A-1-B MS	Matrix Spike	Total/NA	Water	SM 5220	
640-38419-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
660-47403-1	LEACHATE EFFLUENT	Total/NA	Water	SM 5220	
LCS 660-124281/5-A	Lab Control Sample	Tota!/NA	Water	SM 5220	
MB 660-124281/4-A	Method Blank	Total/NA	Water	SM 5220	

#### Analysis Batch: 124296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
640-38419-A-1-B	MS Matrix Spike	Total/NA	Water	5220 D	124281
640-38419-A-1-C	MSD Matrix Spike Duplicate	Total/NA	Water	5220 D	124281
660-47403-1	LEACHATE EFFLUENT	Total/NA	Water	5220 D	124281

# **QC Association Summary**

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

Analysis Batch: 124296	6 (Continued)				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 660-124281/5-A	Lab Control Sample	Total/NA	Water	5220 D	124281
MB 660-124281/4-A	Method Blank	Total/NA	Water	5220 D	124281
nalysis Batch: 124297	7				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47403-2	8LANK EQUIPMENT 47403	Total/NA	Water	5220 D	124279
660-47419-B-1-B MS	Matrix Spike	Total/NA	Water	5220 D	124279
660-47419-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	12427
LCS 660-124279/5-A	Lab Control Sample	Total/NA	Water	5220 D	12427
MB 660-124279/4-A	Method Blank	Total/NA	Water	5220 D	12427
··· Analysis Batch: 124611	1				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-47403-2	BLANK EQUIPMENT 47403	Total/NA	Water	SM 2540C	
660-47671-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 660-124611/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-124611/1	Method Blank	Total/NA	Water	SM 2540C	
Field Service / Mob	ile Lab				
analysis Batch: 124064	4				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
660-47403-1	LEACHATE EFFLUENT	Total/NA	Water	Field Sampling	

TestAmerica Job ID: 660-47403-1

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Client Sample ID: LEACHATE EFFLUENT

Date Collected: 05/01/12 12:50 Date Received: 05/01/12 14:40 Lab Sample ID: 660-47403-1

Matrix: Water

	Batch	Batch		Dilution	Batch	<b>Pr</b> epared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	124019	05/02/12 11:46	AG	TAL TAM
Total/NA	Analysis	SM 2540D		1	124058	05/03/12 08:10	то	TAL TAM
Total/NA	Analysis	353.2		100	124134	05/02/12 17:46	EM	TAL TAM
Total/NA	Analysis	SM 2540C		1	124146	05/04/12 13:33	то	TAL TAM
Total/NA	Prep	SM 5220			124281	05/09/12 10:16	EM	TAL TAM
Total/NA	Analysis	5220 D		1	124296	05/09/12 12:25	EΜ	TAL TAM
Total/NA	Analysis	Field Sampling		1	124064	05/01/12 12:50		TAL TAM

Client Sample ID: BLANK EQUIPMENT 47403

Date Collected: 05/01/12 12:40

Date Received: 05/01/12 14:40

Lab Sample ID: 660-47403-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B			124019	05/02/12 11:46	ĀG	TAL TAM
Total/NA	Analysis	SM 2540D		1	124058	05/03/12 08:10	то	TAL TAM
Total/NA	Analysis	353.2		1	124134	05/02/12 17:39	EM	TAL TAM
Total/NA	Ргер	SM 5220			124279	05/09/12 09:42	EM	TAL TAM
Total/NA	Analysis	5220 D		1	124297	05/09/12 12:00	EM	TAL TAM
Total/NA	Analysis	SM 2540C		1	124611	05/17/12 14:30	TO	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: 660-47403-1

Laboratory	Authority	Program	EPA Region	Certification ID
TeslAmerica Tampa	Alabama	State Program	4	40610
TeslAmerica Tampa	Florida	NELAC	4	E84282
TeslAmerica Tampa	Georgia	State Program	4	905
TeslAmerica 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.



#### **Method Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-47403-1

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

TestAmerica Job ID: 660-47403-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-47403-1	LEACHATE EFFLUENT	Water	05/01/12 12:50	05/01/12 14:40
660-47403-2	BLANK EQUIPMENT 47403	Water	05/01/12 12:40	05/01/12 14:40



#### 13

# 660-47403

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

1	EACH	ATE PL	'ANT.			
PRECLEANED SAMPLE CONTAINERS: RELINQUISHED BY:				cen ran	DATE   T	IME
RELINQUISHED BY:		REP. OF	CONTRA	CT LAB.	DT	-00
ACCEPTED BY:		REP. OF	SOLID	MW2IF DF	5.1.12 1 /o	<u> POC</u>
OCATION: LEACHATE EFFLUENT						
PERSONAL ENGAGED IN SAMPLE COI	.ፒድር <u>ጥ</u> ፒ	ON · DA	Balloon	81 Cla	+ <b>-</b> □	
TANOCAL LINGS IN DANIO COL	10011	VII. <u>UF 22.</u>	<u> </u>			
E	TELD	PARAMETE	RS:			
	em 1	GOVED I	DII	1 DO	TURB	
BY   TIME   TEN Aで AC  2:50   29.4		COND	7.48		N/A =	
KIZ SC 1/2, SU 129.4			1.90	(4.20		
	SAMPLE	CONTAIN				
2TY CONTAINER DESCRIPTION	QTY		INER DESC		PRESERVED	
40-ml VIAL			-40-ml VI			
125 ml. PLASTIC 125 ml GLASS	<del></del> -		5 ml. PLA 25 ml GL			
250 ml. PLASTIC	- <u>-                                  </u>		0 ml. PLA			
250 ml. GLASS		2	50 ml. GI	ASS		
500 ml. PLASTIC		50	0 ml. PLA	ASTIC		
500 ml. GLASS LITER PLASTIC		500 ml. GLASS LITER PLASTIC			<del></del>	
		LITER GLASS				
			LITER GLA	ASS		
LITER GLASS BACTERIAL			LITER GLA BACTERIA	ASS		
LITER GLASS BACTERIAL	TOT TEC		LITER GLA	ASS		
LITER GLASS	COLLEC		LITER GLA	ASS		
BACTERIAL  TOTAL No. OF SAMPLES (		TED:	LITER GLA BACTERIA	ASS	COLLECTE	
LITER GLASS BACTERIAL		TED:	LITER GLA BACTERIA	ASS	DATE   T	IME
BACTERIAL  TOTAL No. OF SAMPLES (		TED:	LITER GL/ BACTERIA	ASS		IME
LITER GLASS BACTERIAL  TOTAL No. OF SAMPLES OF SAMPLES OF SHEENS: YES N/A	ANALYS	TED:	LITER GLA BÄCTERIA  O TED:	ASS	DATE   T 5.1.12   12.	IME
LITER GLASS BACTERIAL  TOTAL No. OF SAMPLES OF SAMPLES OF SHEENS: YES N/A	ANALYS	TED:	LITER GLA BÄCTERIA  O TED:	ASS	DATE   T 5.1.12   12.	IME
LITER GLASS BACTERIAL  TOTAL NO. OF SAMPLES OF SAMPLES OF SHEENS: YES N/A  MONTHLY LEACHATE PLANT PARAMETERS	ANALYS BOD	TED:  N IS REQUES  TSS N	LITER GL/ BACTERIA O TED:	ASS AL TDS	DATE   T  S.1.12   12.	IME So
LITER GLASS BACTERIAL  TOTAL No. OF SAMPLES OF SAMPLES OF SHEENS: YES N/A	ANALYS BOD	TED:  N IS REQUES  TSS N	LITER GL/ BACTERIA O TED:	ASS AL TDS	DATE   T  S.1.12   12.  COD  RR & ICE TO 4.	0 c
LITER GLASS BACTERIAL  TOTAL NO. OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES PLANT PARAMETERS  PRESERVED SAMPLES PH < 2.0	ANALYS BOD	TED:  IS REQUES  TSS N  SAMPLE	EITER GL/ BACTERIA  O  TED:  ITRATE  STORAGE	TDS COOLE	DATE   T  S.1.12   12.  COD  R & ICE TO 4.	O C
LITER GLASS BACTERIAL  TOTAL NO. OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES PLANT PARAMETERS  PRESERVED SAMPLES PH < 2.0	ANALYS BOD	TED:  IS REQUES  TSS N  SAMPLE	EITER GL/ BACTERIA  O  TED:  ITRATE  STORAGE	TDS COOLE	DATE   T  S.1.12   12.  COD  R & ICE TO 4.	O C
LITER GLASS BACTERIAL  TOTAL NO. OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES PLANT PARAMETERS  PRESERVED SAMPLES PH < 2.0	ANALYS BOD	TED:  IS REQUES  TSS N  SAMPLE	EITER GL/ BACTERIA  O  TED:  ITRATE  STORAGE	TDS COOLE	DATE   T  S.1.12   12.  COD  R & ICE TO 4.	O C
LITER GLASS BACTERIAL  TOTAL NO. OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES PRESERVED SAMPLES PRESERVED SAMPLES PRESERVED SAMPLES: RELINQUISHED BY: ACCEPTED BY:	analys BOD	TED:  IS REQUES  TSS N  SAMPLE  REP. OF	EITER GL/ BACTERIA  O  TED:  ITRATE  STORAGE  CONTRA	TDS COOLE WASTE DE	DATE   T  \$.1.12   12.  COD  RR & ICE TO 4.  DATE   T  EPT. \$\frac{5.1.12   6}{5.1.12   6}\$	O C
LITER GLASS BACTERIAL  TOTAL NO. OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES OF SAMPLES PLANT PARAMETERS  PRESERVED SAMPLES PH < 2.0	analys BOD	TED:  IS REQUES  TSS N  SAMPLE  REP. OF	EITER GL/ BACTERIA  O  TED:  ITRATE  STORAGE  CONTRA	TDS COOLE WASTE DE	DATE   T  \$.1.12   12.  COD  RR & ICE TO 4.  DATE   T  EPT. \$\frac{5.1.12   6}{5.1.12   6}\$	O C

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

		LEACHATE	PLANT	EQUIPMENT	BLANK
PRECLEANED	SAMPLE	CONTAINERS:			

PRECLEANED	SAMPLE CONTAINERS:	,				DATE	TIME
RELINQUISH	IED BY:		REP. OF	CONTRAC	T LAB.		J
ACCEPTED E	SY: La Claff		REP. OF	SOLID W	ASTE DEPT	· 54.12	10:00
LOCATION:	EQUIPMENT BLANK		SAMPLE N	MATRIX: '	WATER OI	HER MATR	IX:
PERSONAL E	NGAGED IN SAMPLE COL	LECTI	ON: JA.	Balloon	Brack 4	<b></b> □	
			<u> </u>		<del>- 3.(.16) 1-</del>		
	. <u>FI</u> F	CLD PA	RAMETERS	: N/A			
			CONTAIN				
QTY CO	NTAINER DESCRIPTION	QTY	CONTAI	NER DESCR	IPTION	PRESERVE	D
	40 ml VIAL	1		40 ml VIA			
	125 ml. PLASTIC		125	ml. PLAS	TIC		
	125 ml GLASS		1:	25 ml GLAS	38		
	250 ml. PLASTIC			ml. PLAS		<u> </u>	
	250 ml. GLASS	<del>   </del>		0 ml. GLA			
	500 ml. PLASTIC	1		ml. PLAS		ļ	<u></u>
	500 ml. GLASS LITER PLASTIC	ļ. <u> </u>	500 ml. GLASS			·	<del></del>
3	LITER GLASS	<del>  </del>	LITER PLASTIC				
<del></del>	BACTERIAL	ļ	LITER GLASS BACTERIAL				
LL	DICTBRITTE	1		DITCIDITIAL			<del></del>
K TO	TAL No. OF SAMPLES O	COLLEC	TED:				
COLORS & S	HEENS: YES N/A		NO	)		COLLE	CTED
							TIME
	•						12:40
		ANALYS	IS REQUEST:	ED:		5111/2	112-10
						÷	
MONTHLY LEAC	HATE PLANT PARAMETERS	BOD	TSS NI	TRATE	TDS CO	<u>DD</u>	
PRESERVED	SAMPLES PH < 2.0		SAMPLE S	STORAGE:	COOLER	& ICE TO	4.C c
ABOVE LIST	ED SAMPLES:					DATE	I ጥፕ <b>Μ</b> ፔ
DEL INCHTER	ED DANIEBD.		מתם	SOLID M	ממשל משטא	<u> Dain</u>	1 11111
VECTIMED B	N Di	1. AL	KEP. OF	SOTID MY	HOID DEEL	3.1.12	2,70
ACCEPTED B	ED BY: Lin Clot	MM	KEP. OF	CONTRAC	T TWQ.	<u> </u>	1 4.40
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	#				•	
COMMENTES		Ą					
COMMENT`S:							
	· ·		4	٠			

#### Login Sample Receipt Checklist

Client: Hillsborough County Public Utilities Dep

Job Number: 660-47403-1

Login Number: 47403

List Source: TestAmerica Tampa

List Number: 1 Creator: McNulty, Carol

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	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	4.7 deg C Cu-07
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.	True	



# LINKS Review your project results through Have a Question? Visit us at:

www.testamericainc.com

# **TestAmerica**

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: 660-48028-1 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: 6/19/2012 1:31:14 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.

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



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#### **Definitions/Glossary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

#### Qualifiers

#### **General Chemistry**

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.
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
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: 660-48028-1

Job ID: 660-48028-1

Laboratory: TestAmerica Tampa

Narrative

Job Narrative 660-48028-1



No additional comments.

#### Receipt

The samples were received on 6/5/2012 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

#### **General Chemistry**

Method SM 5220D: Due to the high concentration of analyte, the matrix spike / matrix spike duplicate (MS/MSD) for batch 125234 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. The sample is flagged with J3.

Method SM 5220D: The matrix spike (MS) recovery for batch 125421 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

4



#### **Detection Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Client Sample ID: Leachate Effluent						Lab Sample ID: 660-48028-			
- Analyte	Result	Qualifier	PQL	MDL	Unit	Dil Faç	D	Method	Prep Type
Chemical Oxygen Demand	660	J3 -	20	10	mg/L	1	_	5220 D	Total/NA
Nitrate as N	0.82		0.010	0.0047	mg/L	1		Nitrate by calc	Total/NA
Total Dissolved Solids	5100		250	250	mg/L	1		SM 2540C	Total/NA
Total Suspended Solids	27		1.0	1.0	mg/L	1		SM 2540D	Total/NA
Field pH	8.00				SU	1		Field Sampling	Total/NA
Field Temperature	31.57				Degrees C	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.18				mg/L	1		Field Sampling	Total/NA
Specific Conductance	10389				umhos/cm	1		Field Sampling	Total/NA

Client Sample ID: Equipment Blank 48028

Lab Sample ID: 660-48028-2

No Detections

TestAmerica Tampa 6/19/2012

Page 5 of 20

#### **Client Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Client Sample ID: Leachate Effluent

Date Collected: 06/05/12 12:40

Lab Sample ID: 660-48028-1

Matrix: Water

Date Received: 06/05/12 14:30

General Chemistry Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	660	J3	20	10	mg/L		06/06/12 12:00	06/06/12 16:30	1
Nitrate as N	0.82		0.010	0,0047	mg/L			06/11/12 18:07	1
Total Dissolved Solids	5100		250	250	mg/L			06/11/12 14:53	1
Total Suspended Solids	27		1.0	1.0	mg/L			06/06/12 06:03	1
Biochemical Oxygen Demand	40	U	40	40	mg/L			06/06/12 10:40	1

Method: Field Sampling - Fie	ld Sampling							
Analyte	Result Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.00			SU			06/05/12 12:40	1
Field Temperature	31.57			Degrees C			06/05/12 12:40	1
Oxygen, Dissolved	5.18			mg/L			06/05/12 12:40	1
Specific Conductance	10389			umhos/cm			06/05/12 12:40	1



#### **Client Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Lab Sample ID: 660-48028-2

Matrix: Water

Client Sample ID: Equipment Blank 48028

Date Collected: 06/05/12 12:30 Date Received: 06/05/12 14:30

General Chemistry Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	10	U	20	10	mg/L		06/12/12 11:13	06/12/12 13:39	1
Nitrate as N	0.0047	U	0.010	0.0047	mg/L			06/11/12 18:15	1
Total Dissolved Solids	5.0	U	5.0	5.0	mg/L			06/11/12 14:55	1
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			06/06/12 06:03	1
Biochemical Oxygen Demand	2.0	U	2.0	2.0	mg/L			06/06/12 10:40	1



#### **QC Sample Results**

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

TestAmerica Job ID: 660-48028-1

ab Sample ID: MB 660-125228/4-A										Client Sa	ample ID: Meth	od Blai
//atrix: Water											Prep Type:	Total/N
Analysis Batch: 125234											Prep Batcl	า: 1252:
,		МВ	MB									
inalyte	R	esult	Qualifier		PQL		MDL Unit		D	Prepared	Analyzed	Dil F
Chemical Oxygen Demand		10			20		10 mg/L		- 06	/06/12 12:00	06/06/12 16:30	
							·					
ab Sample ID: LCS 660-125228/5-A									Clier	nt Sample	ID: Lab Contro	i Samp
latrix: Water											Prep Type:	
Analysis Batch: 125234											Prep Batcl	h: 1252:
analysis Buton. 120201				Spike		LCS	LCS				%Rec.	
inalyte				Added			Qualifier	Unit	D	%Rec	Limits	
				200		187		mg/L	<u>-</u>	94	90 - 110	
Chemical Oxygen Demand				200		107		mg/L		٠,	001110	
ah Camala ID: 660 49039 4 MC									CI	iont Samn	le ID: Leachate	- Ffflue
ab Sample ID: 660-48028-1 MS									0.	ioni oamp	Prep Type:	
Matrix: Water												
Analysis Batch: 125234		_				***					Prep Batcl	n. 1292
	Sample			Spike			MS		_		%Rec.	
nalyte	Result	Quali	ifier	Added			Qualifier	Unit			Limits	
Chemical Oxygen Demand	660	J3		100		667	J3	mg/L		3	90 - 110	
ab Sample ID: 660-48028-1 MSD									CI	lient Samp	le ID: Leachat	
//atrix: Water											Prep Type:	Total/N
Analysis Batch: 125234											Prep Batcl	h: 1252
•	Sample	Samp	ple	Spike		MSD	MSD				%Rec.	R
Analyte	Result	Qual	ifier	Added		Result	Qualifier	Unit	D	%Rec	Limits R	PD Lii
Chemical Oxygen Demand	660	J3		100		649	J3	mg/L		-16	90 - 110	3
ab Sample ID: MB 660-125420/4-A										Client S	ample ID: Meth	od Bla
Matrix: Water											Prep Type:	
											Prep Batc	
Analysis Batch: 125421		мв	MB								1 top Date	
			Qualifier		PQL		MDL Unit		D	Prepared	Analyzed	Dil F
Analyte		10			20		10 mg/L			712/12 11:13		
Chemical Oxygen Demand		10	U		20		TO HIG/L		00	112/12 11.13	00/12/12 15,59	
-1- CIn 1D: L CC CC0 42E420/E A									Clies	nt Sample	ID: Lab Contro	al Samr
ab Sample ID: LCS 660-125420/5-A	١.								Olle	iit Gampic	Prep Type:	
Matrix: Water												
Analysis Batch: 125421											Prep Batc	n: 1294
				Spike			LCS		_		%Rec.	
Analyte				Added			Qualifier	Unit			Limits	
Chemical Oxygen Demand				50.0		53.5		mg/L		107	90 - 110	
	_									Clin-st	Caucala ID: Ma	talia Cal
.ab Sample ID: 660-48101-H-1-B MS	5									Client	Sample ID: Ma	
//atrix: Water											Prep Type:	
Analysis Batch: 125421											Prep Batc	h: 1254
	Sample	Sam	ple	Spike		MS	MS				%Rec.	
Analyte	Result	Qual	lifier	Added			Qualifier	Unit			Limits	
Chemical Oxygen Demand	33	J3		50.0		103	J3	mg/L	- "	141	90 - 110	
	en e								Client	Sample ID	: Matrix Spike	Duplica
ab Sample ID: 660-48101-H-1-C MS	,,,											
	,,,										Prep Type:	Total/
_ab Sample ID: 660-48101-H-1-C MS Matrix: Wate <i>r</i> Analysis Batch: 125421	,,,										Prep Type: Prep Batc	
Matrix: Water		Samı	ple	Spike		MSD	MSD					
	Sample Result			Spike Added			MSD Qualifier	Unit		) %Rec	Prep Batc %Rec.	h: 1254



#### QC Sample Results

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

TestAmerica Job ID: 660-48028-1

Lab Sample ID: MB 660-125382/1										•	Client S	ample ID: N Prep Ty		
Matrix: Water												1.00	μφ	
Analysis Batch: 125382	N	AB MB												
Analyte		ult Qualifier		PQL		MDL (	Unit		D	Pr	epared	Analyz	ed	Dil Fac
Total Dissolved Solids		5.0 U		5.0		5.0					·	06/11/12 1	4:49	1
Total Dissolved Conds	_													
Lab Sample ID: LCS 660-125382/2 Matrix: Water									Cli	ent	Sample	ID: Lab Co Prep Ty		
Analysis Batch: 125382													-	
Analysis Daton. 120002			Spike		LCS	LCS						%Rec.		
Aπalyte			Added		Result	Qualif	fier	Unit		D	%Rec	Limits		
Total Dissolved Solids			10000		9850			mg/L		_	99	80 - 120		
Lab Sample ID: 640-38915-A-1 DU Matrix: Water											Clie	ent Sample Prep T		
Analysis Batch: 125382														
•	Sample S	ample			DU	DU								RPI
Analyte	Result C	tualifier			Result	Qualif	Пег	Unit		D			RPD	Limi
Total Dissolved Solids	94				94.0			mg/L					0	2
•												ample ID: I Prep T	vpe: To	stal/N
Matrix: Water												Prep T	ype: To	otal/N/
Matrix: Water	ħ	мв мв										-	ype: To	
Matrix: Water Analysis Batch: 125181	Res	ult Qualifier		PQL		MDL			<b>D</b> _	P	repared	Prep T Analyz	ed	Dil Fa
Matrix: Water Analysis Batch: 125181 <sup>Analyte</sup>	Res			PQL		MDL 1.0			<u>D</u> -	P	repared	Prep T	ed	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2	Res	ult Qualifier										Prep T Analyz	ed 06:03	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water	Res	ult Qualifier										Analyz 06/06/12	ed 06:03	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water	Res	ult Qualifier	Spike		LCS							Analyz 06/06/12	ed 06:03	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181	Res	ult Qualifier	Spike Added			1.0	mg/L	Unit				Analyz 06/06/12 e ID: Lab Co Prep T	ed 06:03	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte	Res	ult Qualifier	-			1.0	mg/L	Unit mg/L		ient	: Sample	Analyz 06/06/12 e ID: Lab Co Prep T %Rec.	ed 06:03	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU	Res	ult Qualifier	Added		Result	1.0	mg/L			ient	%Rec	Analyz 06/06/12 e ID: Lab Co Prep T %Rec. Limits 80 - 120 ent Sample	ed 06:03 ontrol S ype: To	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU	Res	ult Qualifier	Added		Result	1.0	mg/L			ient	%Rec	Analyz 06/06/12 e ID: Lab Co Prep T %Rec. Limits 80 - 120 ent Sample	ed 06:03 ontrol S ype: To	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water	Res	ult Qualifier	Added		Result 111	LCS Quali	mg/L			ient	%Rec	Analyz 06/06/12 e ID: Lab Co Prep T %Rec. Limits 80 - 120 ent Sample	ed 06:03 ontrol S ype: To	Dil Fa Sampl otal/Na uplicat
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181	Res	ult Qualifier 1.0 Ü	Added		Result 111	1.0  LCS  Quali	mg/L	mg/L		D_	%Rec	Analyz 06/06/12 e ID: Lab Co Prep T %Rec. Limits 80 - 120 ent Sample	ed D6:03 Dontrol S ype: To	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181  Analyte Analysis Batch: 125181	Res Sample S Result C	ult Qualifier 1.0 Ü	Added		Result 111 DU Result	1.0  LCS  Quali	mg/L	mg/L		ient	%Rec	Analyz 06/06/12 e ID: Lab Co Prep T %Rec. Limits 80 - 120 ent Sample	ed D6:03  Dontrol S ype: To	Dil Fa Sample otal/N  iplicat otal/N  RP
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181	Res	ult Qualifier 1.0 Ü	Added		Result 111	1.0  LCS  Quali	mg/L	mg/L		D_	%Rec	Analyz 06/06/12 e ID: Lab Co Prep T %Rec. Limits 80 - 120 ent Sample	ed D6:03 Dontrol S ype: To	Dil Fa Sampl otal/Na uplicat otal/Na RP Llm
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids	Sample S Result 0	ult Qualifier 1.0 Ü	Added		Result 111 DU Result	1.0  LCS  Quali	mg/L	mg/L		D_	%Rec	Analyz 06/06/12 e ID: Lab Co Prep T %Rec. Limits 80 - 120 ent Sample	ed D6:03  Dontrol S ype: To	Dil Fa Sampl otal/Na uplicat otal/Na RP Llm
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Analyte Total Suspended Solids	Sample S Result C 35	ult Qualifier 1.0 Ü	Added		Result 111 DU Result	1.0  LCS  Quali	mg/L	mg/L		D_	%Rec 111	Analyz  Analyz  06/06/12  E ID: Lab C  Prep T  %Rec. Limits  80 - 120  ent Sample  Prep T	ed 06:03  Dontrol S ype: To  ID: Du ype: To  RPD 14	Dil Fa
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids	Sample S Result C 35	ult Qualifier 1.0 Ü	Added		Result 111 DU Result	1.0  LCS  Quali	mg/L	mg/L		D_	%Rec 111	Analyz  Analyz  06/06/12  E ID: Lab C  Prep T  %Rec. Limits  80 - 120  ent Sample  Prep T	ed 06:03  Dontrol S ype: To ID: Du ype: To RPD 14	Dil Fa Samplicatiotal/N  pplicatiotal/N  RP Lim 2
Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Method: SM 5210B - BOD, 5-D  Lab Sample ID: SCB 660-125204/2	Sample S Result 0 35	ult Qualifier 1.0 U  Sample Qualifier	Added		Result 111 DU Result	1.0  LCS  Quali	mg/L	mg/L		D_	%Rec 111	Analyz  Analyz  06/06/12  E ID: Lab C  Prep T  %Rec. Limits  80 - 120  ent Sample  Prep T	ed 06:03  Dontrol S ype: To  ID: Du ype: To  RPD 14	Dil Fa Sample otal/N/ uplicat otal/N/ RP LIm 2
Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: LCS 660-125181/2 Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Lab Sample ID: 660-48024-C-1 DU Matrix: Water Analysis Batch: 125181  Analyte Total Suspended Solids  Analyte Total Suspended Solids  Method: SM 5210B - BOD, 5-D  Lab Sample ID: SCB 660-125204/2 Matrix: Water	Sample S Result 0 35	ult Qualifier 1.0 Ü	Added		Result 111 DU Result	1.0  LCS  Quali	mg/L	mg/L		D D	%Rec 111	Analyz  Analyz  06/06/12  E ID: Lab C  Prep T  %Rec. Limits  80 - 120  ent Sample  Prep T	ed 06:03  Dontrol S ype: To  ID: Du ype: To  RPD 14  Method ype: To	Sample otal/NA uplicate otal/NA RPI Lim 2

#### **QC Sample Results**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

Analysis Batch: 125204

Biochemical Oxygen Demand

TestAmerica Job ID: 660-48028-1

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

Client Sample ID: Method Blank Lab Sample ID: USB 660-125204/1 USB

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 125204 USB USB

Analyzed Dil Fac Prepared Result Qualifier PQL MDL Unit Analyte 06/06/12 10:40 Biochemical Oxygen Demand 2.0 U 2.0 2.0 mg/L

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 660-125204/3

Prep Type: Total/NA Matrix: Water

216

mg/L

109

85 - 115

%Rec. Spike LCS LCS Result Qualifier Unit %Rec Limits Added Analyte

198

Client Sample ID: Duplicate Lab Sample ID: 660-48036-A-1 DU Prep Type: Total/NA Matrix: Water

Analysis Batch: 125204

RPD DU DU Sample Sample RPD Limit Result Qualifier Unit D Result Qualifier Analyte 24 U NC mg/L Biochemical Oxygen Demand 24 U

#### **QC Association Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

General Chemistry					
Analysis Batch: 93306					
 Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-48028-1	Leachate Effluent	Total/NA	Water	Nitrate by calc	
660-48028-2	Equipment Blank 48028	Total/NA	Water	Nitrate by calc	
Analysis Batch: 125181					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-48024-C-1 DU	Duplicate	Total/NA	Water	SM 2540D	
660-48028-1	Leachate Effluent	Total/NA	Water	SM 2540D	
660-48028-2	Equipment Blank 48028	Total/NA	Water	SM 2540D	
LCS 660-125181/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 660-125181/1	Method Blank	Total/NA	Water	SM 2540D	
Analysis Batch: 125204					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
660-48028-1	Leachate Effluent	Total/NA	Water	SM 5210B	
660-48028-2	Equipment Blank 48028	Total/NA	Water	SM 5210B	
660-48036-A-1 DU	Duplicate	Total/NA	Water	SM 5210B	
LCS 660-125204/3	Lab Control Sample	Total/NA	Water	SM 5210B	
SCB 660-125204/2 SCB	Method Blank	Total/NA	Water	SM 5210B	
USB 660-125204/1 USB	Method Blank	Total/NA	Water	SM 5210B	
rep Batch: 125228					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
660-48028-1	Leachate Effluent	Total/NA	Water	SM 5220	
660-48028-1 MS	Leachate Effluent	Total/NA	Water	SM 5220	
660-48028-1 MSD	Leachate Effluent	Total/NA	Water	SM 5220	
LCS 660-125228/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-125228/4-A	Method Blank	Total/NA	Water	SM 5220	
Analysis Batch: 125234					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batcl
660-48028-1	Leachate Effluent	Total/NA	Water	5220 D	12522
660-48028-1 MS	Leachate Effluent	Total/NA	Water	5220 D	12522
660-48028-1 MSD	Leachate Effluent	Total/NA	Water	5220 D	12522
LCS 660-125228/5-A	Lab Control Sample	Total/NA	Water	5220 D	1 <b>2</b> 522
MB 660-125228/4-A	Method Blank	Total/NA	Water .	5220 D	12522
Analysis Batch: 125382					
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
640-38915-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
660-48028-1	Leachate Effluent	Total/NA	Water	SM 2540C	
660-48028-2	Equipment Blank 48028	Total/NA	Water	SM 2540C	
LCS 660-125382/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 660-125382/1	Method Blank	Total/NA	Water	SM 2540C	
Prep Batch: 125420					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
660-48028-2	Equipment Blank 48028	Total/NA	Water	SM 5220	
660-48101-H-1-B MS	Matrix Spike	Total/NA	Water	SM 5220	
660-48101-H-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 5220	
LCS 660-125420/5-A	Lab Control Sample	Total/NA	Water	SM 5220	
MB 660-125420/4-A -	Method Blank	Total/NA	Water	SM 5220	

#### **QC Association Summary**

Client: Hillsborough County Public Utilities Dep

Client Sample ID

Leachate Effluent

Project/Site: Leachate Effluent

Lab Sample ID

660-48028-1

TestAmerica Job ID: 660-48028-1

Method

Field Sampling

nalysis Batch: 125421					
_ab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batc
60-48028-2	Equipment Blank 48028	Total/NA	Water	5220 D	12542
660-48101-H-1-B MS	Matrix Spike	Total/NA	Water	5220 D	12542
660-48101-H-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	5220 D	12542
CS 660-125420/5-A	Lab Control Sample	Total/NA	Water	5220 D	1254
ив 660-125420/4-А	Method Blank	Total/NA	Water	5220 D	1254
ield Service / Mob	ile Lab				

Prep Type

Total/NA

Matrix

Water

Prep Batch

#### Lab Chronicle

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Lab Sample ID: 660-48028-1

Matrix: Water

#### Client Sample ID: Leachate Effluent

Date Collected: 06/05/12 12:40 Date Received: 06/05/12 14:30

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Nitrate by calc	<del></del>		93306	06/11/12 18:07	TBW	TAL TAL
Total/NA	Analysis	SM 2540D		1	125181	06/06/12 06:03	TO	TAL TAM
Total/NA	Analysis	SM 5210B		1	125204	06/06/12 10:40	AG	TAL TAM
Total/NA	Prep	SM 5220			125228	06/06/12 12:00	RWF	TAL TAM
Total/NA	Analysis	5220 D		1	125234	06/06/12 16:30	RWF	TAL TAM
Total/NA	Analysis	SM 2540C		1	125382	06/11/12 14:53	TO	TAL TAM
Total/NA	Analysis	Field Sampling		1	125197	06/05/12 12:40		TAL TAM

Client Sample ID: Equipment Blank 48028

Date Collected: 06/05/12 12:30

Date Received: 06/05/12 14:30

Lab Sample ID: 660-48028-2

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	Nitrate by calc			93306	06/11/12 18:15	TBW	TAL TAL
Total/NA	Analysis	SM 2540D		1	125181	06/06/12 06:03	то	TAL TAM
Total/NA	Analysis	SM 5210B		1	125204	06/06/12 10:40	AG	TAL TAM
Total/NA	Analysis	SM 2540C		1	125382	06/11/12 14:55	TO	TAL TAM
Total/NA	Prep	SM 5220			125420	06/12/12 11:13	RWF	TAL TAM
Total/NA	Analysis	5220 D		1	125421	06/12/12 13:39	RWF	TAL TAM

#### Laboratory References:

TAL TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994 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: 660-48028-1

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
TestAmerica Tallahassee	Florida	NELAC	4	E81005
TestAmerica Tallahassee	Louisiana	NELAC	6	30663
TestAmerica Tallahassee	New Jersey	NELAC	2	FL012
TestAmerica Tallahassee	Oklahoma	State Program	6	9986
TestAmerica Tallahassee	Texas	NELAC	6	T104704459-11-2
TestAmerica Tallahassee	USDA	Federal		P330-08-00158

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.



#### **Method Summary**

Client: Hillsborough County Public Utilities Dep

Project/Site: Leachate Effluent

TestAmerica Job ID: 660-48028-1

Method	Method Description	Protocol	Laboratory
5220 D	Chemical Oxygen Demand	SM20	TAL TAM
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL TAL
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

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 TAL = TestAmerica Tallahassee, 2846 Industrial Plaza Drive, Tallahassee, FL 32301, TEL (850)878-3994
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

TestAmerica Job ID: 660-48028-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
660-48028-1	Leachate Effluent	Water	06/05/12 12:40	06/05/12 14:30
660-48028-2	Equipment Blank 48028	Water	06/05/12 12:30	06/05/12 14:30



## 660-48028

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

#### LEACHATE PLANT PRECLEANED SAMPLE CONTAINERS: DATE | TIME RELINQUISHED BY: REP. OF CONTRACT LAB. REP. OF SOLID WASTE DEPT. 6.4.12 | 4:00 ACCEPTED BY: LOCATION: LEACHATE EFFLUENT SAMPLE MATRIX: WATER OTHER MATRIX: PERSONAL ENGAGED IN SAMPLE COLLECTION: A.Balloon & S. Claufe D FIELD PARAMETERS: TURB COND 103891 21.5 8.00 12:40 SAMPLE CONTAINERS QTY CONTAINER DESCRIPTION OTY CONTAINER DESCRIPTION PRESERVED 40 ml VIAL 40 ml VIAL 125 ml. PLASTIC 125 ml. PLASTIC 125 ml GLASS 250 ml. PLASTIC 250 ml. GLASS 125 ml GLASS 250 ml. PLASTIC 250 ml. GLASS 500 ml. PLASTIC 500 ml. GLASS LITER PLASTIC 500 ml. PLASTIC 500 ml. GLASS LITER PLASTIC LITER GLASS LITER GLASS BACTERIAL BACTERIAL TOTAL No. OF SAMPLES COLLECTED: COLORS & SHEENS: YES N/A COLLECTED DATE | TIME 6.5.12 12:40 ANALYSIS REQUESTED: MONTHLY LEACHATE PLANT PARAMETERS TSS NITRATE TDS COD PRESERVED SAMPLES PH < 2.0 SAMPLE STORAGE: COOLER & ICE TO 4.0 c · ABOVE LISTED SAMPLES: DATE | TIME REP. OF SOLID WASTE DEPT. 4.5.12 2:30 RELINQUISHED BY: REP, OF CONTRACT LAB. 4.5.12 ACCEPTED BY:

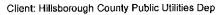
3.3°C 0107

COMMENT'S: Wote 0061

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

	LEACHATE	PLAN	T EQUIPMENT BLANK	
PREC RELI ACCE	LEANED SAMPLE CONTAINERS: NQUISHED BY: PTED BY:			DATE   TIME   G.4.12   4:0C
LOCA	TION: EQUIPMENT BLANK ONAL ENGAGED IN SAMPLE COL	LECT I	SAMPLE MATRIX: WATER OT	HER MATRIX:
			RAMETERS: N/A	
	<del></del>			
	<u> </u>	AMPLE	CONTAINERS	
QTY	CONTAINER DESCRIPTION	QTY		PRESERVED
	40 ml VIAL	}	40 ml VIAL	·
Ì	125 ml. PLASTIC		125 ml. PLASTIC	
	125 ml GLASS		125 ml GLASS	
1	250 ml. PLASTIC	1	250 ml. PLASTIC	
	250 ml. GLASS		250 ml. GLASS	
	500 ml. PLASTIC		500 ml. PLASTIC	
	500 ml. GLASS		500 ml. GLASS	
9	LITER PLASTIC		T.TTER PINSTIC	
	LITER GLASS		LITER GLASS	<u></u>
	BACTERIAL		BACTERIAL	
_<	TOTAL No. OF SAMPLES C	OLLEC'		
COLO	RS & SHEENS: YES N/A		NO IS REQUESTED:	COLLECTED
				DATE   TIME
				6, 5, 12 12:36
		ANALYS	IS REQUESTED:	
MONTH	LY LEACHATE PLANT PARAMETERS	BOD	TSS NITRATE TDS CO	<u>D</u>
PRES	ERVED SAMPLES PH < 2.0 📈		SAMPLE STORAGE: _COOLER	& ICE TO 4.0 c
ABOV RELI ACCE	E LISTED SAMPLES: NQUISHED BY:	Multy	REP. OF SOLID WASTE DEPT REP. OF CONTRACT LAB.	DATE   TIME . G.S.(2   2:30 G.S.(2   2:30
COMM	ENT'S: worood			

#### Login Sample Receipt Checklist



Job Number: 660-48028-1

List Source: TestAmerica Tampa

Login Number: 48028 List Number: 1

Creator: McNulty, Carol

Olyaton monary, varar		
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	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.3 deg C Cu-07
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.	True	



#### Login Sample Receipt Checklist

Answer

Comment

Client: Hillsborough County Public Utilities Dep

Job Number: 660-48028-1

Login Number: 48028

List Number: 1

Creator: Wallace, Tiffany B

List Source: TestAmerica Tallahassee List Creation: 06/07/12 03:52 PM

Question

Radioactivity either was not measured or, if measured, is at or below

background

The cooler's custody seal, if present, is intact.

The cooler or samples do not appear to have been compromised or tampered with.

Samples were received on ice.

Cooler Temperature is acceptable.

Cooler Temperature is recorded.

COC is present.

COC is filled out in ink and legible.

COC is filled out with all pertinent information.

Is the Field Sampler'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.

There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs

VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.

Multiphasic samples are not present.

Samples do not require splitting or compositing.

Residual Chlorine Checked.

