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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-88487-1

Client Project/Site: Clean Harbors - Norwell, MA

For:

Clean Harbors Environmental Services Inc 42 Longwater Drive Norwell, Massachusetts 02061

Attn: Mr. Paul Pukk

Authorized for release by: 10/7/2015 3:37:34 PM

John Schove, Project Manager II (716)504-9838

john.schove@testamericainc.com

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

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

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

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Definitions/Glossary

Client: Clean Harbors Environmental Services Inc

Toxicity Equivalent Quotient (Dioxin)

Project/Site: Clean Harbors - Norwell, MA

TestAmerica Job ID: 480-88487-1

Glossary

TEQ

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

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Case Narrative

Client: Clean Harbors Environmental Services Inc

Project/Site: Clean Harbors - Norwell, MA

TestAmerica Job ID: 480-88487-1

Job ID: 480-88487-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-88487-1

Comments

No additional comments.

Receipt

The sample was received on 10/6/2015 3:15 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 13.1° C.

Receipt Exceptions

The following sample was received at the laboratory outside the required temperature criteria. The sample is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Clean Harbors Environmental Services Inc Project/Site: Clean Harbors - Norwell, MA TestAmerica Job ID: 480-88487-1

Client Sample ID: W001 Lab Sample ID: 480-88487-1

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
PCB-1260	0.060	0.057	ug/L	1 608	Total/NA

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Client Sample Results

Client: Clean Harbors Environmental Services Inc

Project/Site: Clean Harbors - Norwell, MA

Client Sample ID: W001

Lab Sample ID: 480-88487-1

TestAmerica Job ID: 480-88487-1

Date Collected: 10/06/15 14:00 Matrix: Water Date Received: 10/06/15 15:15

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
PCB-1016	ND		0.057		ug/L		10/06/15 18:10	10/07/15 13:25	1	
PCB-1221	ND		0.057		ug/L		10/06/15 18:10	10/07/15 13:25	1	
PCB-1232	ND		0.057		ug/L		10/06/15 18:10	10/07/15 13:25	1	
PCB-1242	ND		0.057		ug/L		10/06/15 18:10	10/07/15 13:25	1	
PCB-1248	ND		0.057		ug/L		10/06/15 18:10	10/07/15 13:25	1	
PCB-1254	ND		0.057		ug/L		10/06/15 18:10	10/07/15 13:25	1	
PCB-1260	0.060		0.057		ug/L		10/06/15 18:10	10/07/15 13:25	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
DCB Decachlorobiphenyl	67		26 - 135				10/06/15 18:10	10/07/15 13:25	1	
Tetrachloro-m-xvlene	84		27 - 159				10/06/15 18:10	10/07/15 13:25	1	

Surrogate Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: Clean Harbors - Norwell, MA

TestAmerica Job ID: 480-88487-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water Prep Type: Total/NA

			Percent S	Surrogate Recovery (Acceptance Limits)
		DCB1	TCX1	
Lab Sample ID	Client Sample ID	(26-135)	(27-159)	
480-88487-1	W001	67	84	
LCS 480-267226/2-A	Lab Control Sample	66	101	
MB 480-267226/1-A	Method Blank	76	94	
Surrogate Legend				
DCB = DCB Decachlo	robiphenyl			
TCX = Tetrachloro-m-	xylene			

TestAmerica Buffalo

QC Sample Results

Client: Clean Harbors Environmental Services Inc Project/Site: Clean Harbors - Norwell, MA TestAmerica Job ID: 480-88487-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-267226/1-A	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 267385	Prep Batch: 267226
MR MR	

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.060		ug/L		10/06/15 14:34	10/07/15 11:02	1
ND		0.060		ug/L		10/06/15 14:34	10/07/15 11:02	1
ND		0.060		ug/L		10/06/15 14:34	10/07/15 11:02	1
ND		0.060		ug/L		10/06/15 14:34	10/07/15 11:02	1
ND		0.060		ug/L		10/06/15 14:34	10/07/15 11:02	1
ND		0.060		ug/L		10/06/15 14:34	10/07/15 11:02	1
ND		0.060		ug/L		10/06/15 14:34	10/07/15 11:02	1
MB	МВ							
	Result ND	ND ND ND ND ND ND	Result Qualifier RL ND 0.060 ND 0.060	Result Qualifier RL MDL ND 0.060 0.060 ND 0.060 0.060	Result Qualifier RL MDL Unit ND 0.060 ug/L ND 0.060 ug/L	Result Qualifier RL MDL Unit D ND 0.060 ug/L ug	Result Qualifier RL MDL Unit D Prepared ND 0.060 ug/L 10/06/15 14:34 ND 0.060 ug/L 10/06/15 14:34	MB Result Qualifier RL MDL Unit D Prepared Analyzed ND 0.060 ug/L 10/06/15 14:34 10/07/15 11:02 ND 0.060 ug/L 10/06/15 14:34 10/07/15 11:02

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	76		26 - 135	10/06/15 14:34	10/07/15 11:02	1
Tetrachloro-m-xylene	94		27 - 159	10/06/15 14:34	10/07/15 11:02	1

Lab Sample ID: LCS 480-267226/2-A

Client Sample ID: Lab Control Sample
Matrix: Water

Prep Type: Total/NA

Prep Type: Total/NA Analysis Batch: 267385 Prep Batch: 267226 Spike LCS LCS %Rec. Analyte Added Result Qualifier Unit Limits D %Rec PCB-1016 1.00 40 - 142 1.10 ug/L 110

1.07

ug/L

107

67 - 148

1.00

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	66		26 - 135
Tetrachloro-m-xylene	101		27 - 159

PCB-1260

TestAmerica Buffalo

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QC Association Summary

Client: Clean Harbors Environmental Services Inc Project/Site: Clean Harbors - Norwell, MA TestAmerica Job ID: 480-88487-1

GC Semi VOA

Prep Batch: 267226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-88487-1	W001	Total/NA	Water	3510C	
LCS 480-267226/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-267226/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 267385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-88487-1	W001	Total/NA	Water	608	267226
LCS 480-267226/2-A	Lab Control Sample	Total/NA	Water	608	267226
MB 480-267226/1-A	Method Blank	Total/NA	Water	608	267226

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Lab Chronicle

Client: Clean Harbors Environmental Services Inc Project/Site: Clean Harbors - Norwell, MA

TestAmerica Job ID: 480-88487-1

Client Sample ID: W001 Lab Sample ID: 480-88487-1

Date Collected: 10/06/15 14:00 Matrix: Water

Date Received: 10/06/15 15:15

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			267226	10/06/15 18:10	CPH	TAL BUF
Total/NA	Analysis	608		1	267385	10/07/15 13:25	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: Clean Harbors - Norwell, MA

TestAmerica Job ID: 480-88487-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: Clean Harbors Environmental Services Inc Project/Site: Clean Harbors - Norwell, MA

TestAmerica Job ID: 480-88487-1

Method	Method Description	Protocol	Laboratory
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Sample Summary

Client: Clean Harbors Environmental Services Inc Project/Site: Clean Harbors - Norwell, MA

TestAmerica Job ID: 480-88487-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-88487-1	W001	Water	10/06/15 14:00	10/06/15 15:15

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CAT 2. TO THE AN EXECUTABLE TO THE TENTING Chain of Custody Record **TestAmerica Buffalo**10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Client Information	Sampler.	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-72787-18509.1
Client Contact:	l	E-Mail: iohn schove@testamericainc.com	moo o	Page: Page 1 of 1
Company:				
Clean Harbors Environmental Services Inc			Analysis Requested	ナっての
Address: 42 Longwater Drive	Due Date Requested:			Preservation Cod
City: Norwell	TAT Requested (days):		23	A - not B - NaOH C - Zn Acetate
State, Zip: MA, 02061	1			
Phone:	Po #: Advance Payment Required	(0		F - MeOH K - NaZSZSO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate
Email: Nelson.ChristopherB@cleanharbors.com	WO#:	. (on		
Project Name: Clean Harbors - Norwell, MA	Project #. 48011848	10 80		K - EDIA W - pn 4-5 L - EDA Z - other (specify)
Site:	SSOW#:	Y) Oğl	or to	Other:
Samole Identification	Sample Date Time G=crah	Matrix (vi-wetry (vi-wetry (vi-wetry (vi-wetry (vi-wetry (vi-wetry (vi-vi) vi-vi-vi) (vi-vi-vi-vi-vi) (vi-vi-vi-vi-vi-vi) (vi-vi-vi-vi-vi-vi-vi-vi-vi-vi-vi-vi-vi-v	łedmuM lejo	Special Instructions Myster
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T 00 M	10/6/15 1400 6	Water NN2	2	
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7, 27, 111, 111, 12			Large Control	
Possible Hazard Identification Non-Hazard Hammable Skin Irritant Poison B	son B Thknown Radiological	Sample Disposal (A1	Sample Disposal (A fee may be assessed it samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mon	longer than 1 month) For Months
		Special Instructions	Requirements:	
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment, pp. p) O FC
Relinquished by:	115e 1518	Received W.	white parenting 1/3/16/15	SOLDERY JUST
Relinquished by:		Company Received by:	Date/fune: *	Company
I	Date/Time:	Company Received by:	Date/Time:	Company
Custody Seals Intact Custody Seal No.: Δ Yes Δ No	7.	Cooler Temperatur	Cooler Temperature(s) $^{\circ}$ C and Other Remarks: $\left(\beta_{s}/\right) _{r}W/ccE$	大林 >
		1 1	andis - 1	ne VAU
		3 4 5		1 2 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1

Login Sample Receipt Checklist

Client: Clean Harbors Environmental Services Inc Job Number: 480-88487-1

Login Number: 88487 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

Creator: Kinecki, Kenneth P		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	13.1 C, same day, w/ice
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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AECOM
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-89474-1 Client Project/Site: GE Tonawanda

For:

Clean Harbors Environmental Services Inc 42 Longwater Drive Norwell, Massachusetts 02061

Attn: Chris Nelson

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Authorized for release by: 10/22/2015 4:53:10 PM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for John Schove, Project Manager II (716)504-9838

john.schove@testamericainc.com

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QC Association Summary	9
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Certification Summary	11
Method Summary	12
Sample Summary	13
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Receipt Checklists	15

Definitions/Glossary

Client: Clean Harbors Environmental Services Inc

Toxicity Equivalent Quotient (Dioxin)

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

Glossary

TEQ

Listed under the "D" column to designate that the result is reported on a dry weight basis Repercent Recovery CFL Contains Free Liquid CNF Contains no Free Liquid DER Duplicate error ratio (normalized absolute difference) Dil Fac Dilution Factor DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DLC Decision level concentration MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin) NC Not Calculated	
CFL Contains Free Liquid CNF Contains no Free Liquid DER Duplicate error ratio (normalized absolute difference) Dil Fac Dilution Factor DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DLC Decision level concentration MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
CNF Contains no Free Liquid DER Duplicate error ratio (normalized absolute difference) Dil Fac Dilution Factor DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DLC Decision level concentration MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
DER Duplicate error ratio (normalized absolute difference) Dil Fac Dilution Factor DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DLC Decision level concentration MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
Dil Fac Dilution Factor DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DLC Decision level concentration MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample DLC Decision level concentration MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
DLC Decision level concentration MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
MDA Minimum detectable activity EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
EDL Estimated Detection Limit MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
MDC Minimum detectable concentration MDL Method Detection Limit ML Minimum Level (Dioxin)	
MDL Method Detection Limit ML Minimum Level (Dioxin)	
ML Minimum Level (Dioxin)	
NC Not Calculated	
ND Not detected at the reporting limit (or MDL or EDL if shown)	
PQL Practical Quantitation Limit	
QC Quality Control	
RER Relative error ratio	
RL Reporting Limit or Requested Limit (Radiochemistry)	
RPD Relative Percent Difference, a measure of the relative difference between two points	
TEF Toxicity Equivalent Factor (Dioxin)	

TestAmerica Buffalo

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10/22/2015

Case Narrative

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

Job ID: 480-89474-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-89474-1

Comments

No additional comments.

Receipt

The sample was received on 10/20/2015 5:50 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

Client Sample ID: W002

TestAmerica Job ID: 480-89474-1

Lab Sample ID: 480-89474-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	0.15		0.057		ug/L		_	608	Total/NA
PCB-1260	0.14		0.057		ug/L	1		608	Total/NA

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Client Sample Results

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

Lab Sample ID: 480-89474-1

Matrix: Water

Client Sample ID: W002
Date Collected: 10/20/15 15:45
Date Received: 10/20/15 17:50

Method: 608 - Polychloria	nated Biphenyls	(PCBs) (G	C)						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.057		ug/L		10/21/15 11:17	10/21/15 21:53	1
PCB-1221	ND		0.057		ug/L		10/21/15 11:17	10/21/15 21:53	1
PCB-1232	ND		0.057		ug/L		10/21/15 11:17	10/21/15 21:53	1
PCB-1242	ND		0.057		ug/L		10/21/15 11:17	10/21/15 21:53	1
PCB-1248	ND		0.057		ug/L		10/21/15 11:17	10/21/15 21:53	1
PCB-1254	0.15		0.057		ug/L		10/21/15 11:17	10/21/15 21:53	1
PCB-1260	0.14		0.057		ug/L		10/21/15 11:17	10/21/15 21:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	31		26 - 135				10/21/15 11:17	10/21/15 21:53	1
Tetrachloro-m-xylene	65		27 - 159				10/21/15 11:17	10/21/15 21:53	1

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Surrogate Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		DCB1	TCX1				
Lab Sample ID	Client Sample ID	(26-135)	(27-159)				
480-89474-1	W002	31	65				
LCS 480-270095/2-A	Lab Control Sample	68	85				
LCSD 480-270095/3-A	Lab Control Sample Dup	72	90				
MB 480-270095/1-A	Method Blank	73	91				

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

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TestAmerica Job ID: 480-89474-1

Project/Site: GE Tonawanda

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Client: Clean Harbors Environmental Services Inc

Lab Sample ID: MB 480-270095/1-A

Matrix: Water Analysis Batch: 270202 Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 270095

	,									
		MB	MB							
Analy	rte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	1016	ND		0.060		ug/L		10/21/15 11:17	10/21/15 20:49	1
PCB-1	1221	ND		0.060		ug/L		10/21/15 11:17	10/21/15 20:49	1
PCB-1	1232	ND		0.060		ug/L		10/21/15 11:17	10/21/15 20:49	1
PCB-1	1242	ND		0.060		ug/L		10/21/15 11:17	10/21/15 20:49	1
PCB-1	1248	ND		0.060		ug/L		10/21/15 11:17	10/21/15 20:49	1
PCB-1	1254	ND		0.060		ug/L		10/21/15 11:17	10/21/15 20:49	1
PCB-1	1260	ND		0.060		ug/L		10/21/15 11:17	10/21/15 20:49	1
						-				

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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	73		26 - 135	10/21/15 11:17	10/21/15 20:49	1
Tetrachloro-m-xylene	91		27 - 159	10/21/15 11:17	10/21/15 20:49	1

Lab Sample ID: LCS 480-270095/2-A

Matrix: Water

Analysis Batch: 270202

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

Prep Batch: 270095 %Rec.

LCS LCS Spike Added Analyte Result Qualifier Unit D %Rec Limits PCB-1016 0.974 1.00 ug/L 97 40 - 142 67 - 148 PCB-1260 1.00 0.958 ug/L 96

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	68		26 - 135
Tetrachloro-m-xylene	85		27 - 159

Lab Sample ID: LCSD 480-270095/3-A

Matrix: Water

Analysis Batch: 270202

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 270095 %Rec. RPD

	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
PCB-1016	 1.00	0.989	-	ug/L		99	40 - 142	1	30	
PCB-1260	1.00	0.965		ug/L		97	67 - 148	1	30	

	LCSD LCSD	
Surrogate	%Recovery Qualific	er Limits
DCB Decachlorobiphenyl	72	26 - 135
Tetrachloro-m-xylene	90	27 - 159

TestAmerica Buffalo

10/22/2015

QC Association Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

GC Semi VOA

Prep Batch: 270095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89474-1	W002	Total/NA	Water	3510C	
LCS 480-270095/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-270095/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-270095/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 270202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89474-1	W002	Total/NA	Water	608	270095
LCS 480-270095/2-A	Lab Control Sample	Total/NA	Water	608	270095
LCSD 480-270095/3-A	Lab Control Sample Dup	Total/NA	Water	608	270095
MB 480-270095/1-A	Method Blank	Total/NA	Water	608	270095

Lab Chronicle

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

Client Sample ID: W002

TestAmerica Job ID: 480-89474-1

Lab Sample ID: 480-89474-1

Matrix: Water

Date Collected: 10/20/15 15:45 Date Received: 10/20/15 17:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			270095	10/21/15 11:17	RMZ	TAL BUF
Total/NA	Analysis	608		1	270202	10/21/15 21:53	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Certification Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

Method	Method Description	Protocol	Laboratory
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Sample Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89474-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-89474-1	W002	Water	10/20/15 15:45	10/20/15 17:50

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Drinking Water? Yes□ No□

Temperature on Receipt

Custody Record

Chain of

Conditions of Receipt Special Instructions/ (A fee may be assessed if samples are retained longer than 1 month) Time chain of Custody Number 290888 ð Page Date مل 15 とな Analysis (Attach list if more space is needed) at/0/ 480-89474 Chain of Custody Lab Number Months Archive For 800) QC Requirements (Specify) 15 US \oAnZ HOBN Disposal By Lab Containers & Preservatives 781-561-6053 HOBN 3. Received By 2. Received By ЮH Telephone Number (Area Code)/Fax Number EONH †OSZH seudun Project Manager Chris ☐ Return To Client 525 J Leisin Sample Disposal 1105 Time Time Carrier/Waybill Number Matrix pes snoenby Sije Contact Date 30 Other_ ☐ Unknown 3.45pm Time Date ☐ 21 Days 10/20/15 ☐ Poison B Date State Zip Code ☐ 14 Days (Containers for each sample may be combined on one line) Skin Irritant Project # 1502455134 Sample I.D. No. and Description ☐ 7 Days マイナウト Contract Purchase Grant No. - Fiammable Project Name and Location (State) 10 navarola 24 Hours | 48 Hours Possible Hazard Identification Turn Around Time Required 2. Relinquished By TAL-4124 (1007)
Client C E 1. Relinquished By 3. Relinquished By 561 WOOD Non-Hazard Address 10/22/2015 Page 14 of 15

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Clean Harbors Environmental Services Inc Job Number: 480-89474-1

Login Number: 89474 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Creator. Janush, Carr W		
Question	Answer	Commen
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ch
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-89828-1 Client Project/Site: GE Tonawanda

For:

Clean Harbors Environmental Services Inc 42 Longwater Drive Norwell, Massachusetts 02061

Attn: Chris Nelson

T

Authorized for release by: 10/27/2015 6:12:53 PM

Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II (716)504-9838

john.schove@testamericainc.com

.....LINKS

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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: Clean Harbors Environmental Services Inc

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Glossary

TEF

TEQ

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

Page 3 of 15

Case Narrative

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Job ID: 480-89828-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-89828-1

Comments

No additional comments.

Receipt

The sample was received on 10/26/2015 9:05 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

GC Semi VOA

Method(s) 608: The opening continuing calibration verification (CCV) associated with the following sample in batch 480-271143 was slightly increased and outside %D criteria for the surrogate Decachlorobiphenyl: W003 (480-89828-1). All associated sample recoveries and quality control are within acceptance limits for this compound, therefore the data has been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with 271083.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Detection Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

Client Sample ID: W003

TestAmerica Job ID: 480-89828-1

Lab Sam	ple ID:	480-	89828-1
EUN OUIII	P		UUULU .

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac [Method	Prep Type
PCB-1260	0.088	0.063	ug/L	1	608	Total/NA

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Client Sample Results

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Lab Sample ID: 480-89828-1

Matrix: Water

Client Sample ID: W003

Date Collected: 10/26/15 08:15

Date Received: 10/26/15 09:05

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.063		ug/L		10/26/15 09:51	10/26/15 16:38	1
PCB-1221	ND		0.063		ug/L	10/26/15 09:51 10/26/15 09:51		10/26/15 16:38 10/26/15 16:38	1 1
PCB-1232	ND		0.063		ug/L				
PCB-1242	ND		0.063		ug/L		10/26/15 09:51	10/26/15 16:38	1
PCB-1248	ND		0.063		ug/L		10/26/15 09:51	10/26/15 16:38	1
PCB-1254	ND		0.063		ug/L		10/26/15 09:51	10/26/15 16:38	1
PCB-1260	0.088		0.063		ug/L		10/26/15 09:51	10/26/15 16:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	58		26 - 135				10/26/15 09:51	10/26/15 16:38	1
Tetrachloro-m-xylene	93		27 - 159				10/26/15 09:51	10/26/15 16:38	1

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Surrogate Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water Prep Type: Total/NA

			Percen	t Surrogate Recovery (Acceptance Limits)
		DCB1	TCX1	
Lab Sample ID	Client Sample ID	(26-135)	(27-159)	
480-89828-1	W003	58	93	
LCS 480-271083/2-A	Lab Control Sample	90	103	
LCSD 480-271083/3-A	Lab Control Sample Dup	83	106	
MB 480-271083/1-A	Method Blank	124	83	

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

TestAmerica Buffalo

TestAmerica Job ID: 480-89828-1

Project/Site: GE Tonawanda

Client: Clean Harbors Environmental Services Inc

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-271083/1-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA Analysis Batch: 271143 **Prep Batch: 271083**

	MB I	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND ND		0.060		ug/L		10/26/15 09:51	10/26/15 15:34	1
PCB-1221	ND		0.060		ug/L		10/26/15 09:51	10/26/15 15:34	1
PCB-1232	ND		0.060		ug/L		10/26/15 09:51	10/26/15 15:34	1
PCB-1242	ND		0.060		ug/L		10/26/15 09:51	10/26/15 15:34	1
PCB-1248	ND		0.060		ug/L		10/26/15 09:51	10/26/15 15:34	1
PCB-1254	ND		0.060		ug/L		10/26/15 09:51	10/26/15 15:34	1
PCB-1260	ND		0.060		ug/L		10/26/15 09:51	10/26/15 15:34	1

	МВ	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	124		26 - 135	10/26/15 09:51	10/26/15 15:34	1
Tetrachloro-m-xylene	83		27 - 159	10/26/15 09:51	10/26/15 15:34	1

Lab Sample ID: LCS 480-271083/2-A **Client Sample ID: Lab Control Sample**

Matrix: Water Prep Type: Total/NA **Analysis Batch: 271143 Prep Batch: 271083**

		Spike	LCS	LCS				%Rec.	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1016	 	1.00	1.05		ug/L		105	40 - 142	 -
PCB-1260		1.00	1.13		ug/L		113	67 - 148	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	90	-	26 - 135
Tetrachloro-m-xylene	103		27 - 159

Lab Sample ID: LCSD 480-271083/3-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Water

Analysis Batch: 2/1143							Prep Ba	atcn: 2/	71083	
-	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
PCB-1016	1.00	1.08		ug/L		108	40 - 142	2	30	
PCB-1260	1.00	1.09		ug/L		109	67 - 148	4	30	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	83		26 - 135
Tetrachloro-m-xylene	106		27 - 159

TestAmerica Buffalo

10/27/2015

Prep Type: Total/NA

QC Association Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

GC Semi VOA

Prep Batch: 271083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89828-1	W003	Total/NA	Water	3510C	
LCS 480-271083/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-271083/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-271083/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 271143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-89828-1	W003	Total/NA	Water	608	271083
LCS 480-271083/2-A	Lab Control Sample	Total/NA	Water	608	271083
LCSD 480-271083/3-A	Lab Control Sample Dup	Total/NA	Water	608	271083
MB 480-271083/1-A	Method Blank	Total/NA	Water	608	271083

Lab Chronicle

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Lab Sample ID: 480-89828-1

Matrix: Water

Client Sample ID: W003

Date Collected: 10/26/15 08:15

Date Received: 10/26/15 09:05

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			271083	10/26/15 09:51	MCZ	TAL BUF
Total/NA	Analysis	608		1	271143	10/26/15 16:38	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Certification Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Method	Method Description	Protocol	Laboratory
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Sample Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-89828-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-89828-1	W003	Water	10/26/15 08:15	10/26/15 09:05

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Chain of Custody Record

Temperature on Receipt ...

Drinking Water? Yes□ NoK

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THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)		•			١
CHEM HARDENS	Project Manager NEISON	W	Date 0/26 /15	Chain of Custody Number	
Address	Telephone Number (Area Code)/Fax Number 781 - 561 - 60 53	60 S 3	Lab Number	Page (of /	l [
Gity State Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)		
Project Name and Location (State) GE TON HWAND A	Carrier/Waybill Number	18 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		Special Instructions	<i>`</i>
Contract/Purchase Order/Quote No.	Matrix	Containers & Containers & Containers & Containers		Conditions of Receipt	ot.
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Time Air Air I Air I I I I I I I I I I I I I I I I I I I	ATTY SO P HOBN HOBN HOBN EONH FOSTH FOSTH		C	
W 003 10/26/15	0815 /	2		24 m. 74	
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			480-89828 Chain of Custody	ustody	1
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Possible Hazard Identification Non-Hazard	Sample Disposal Unknown	t Disposal By Lab	/ Months	(A fee may be assessed if samples are retained longer than 1 month)	
me Required		, QC Requirements (Specify)			
V 24 Hours 48 Hours 7 Days 14 Days 21 Days	U Other	-		ļ	1
1. Relinquished By GGBG Laxfor	10/26/15 0905	1. Hecewed By		- 10/16/17 050	
Hd By	Date Time	2. Received By		Date Time	
3. Relinquished By	Date	3. Received By		Date Time	Ì
Comments	-		78.2		I

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Clean Harbors Environmental Services Inc Job Number: 480-89828-1

Login Number: 89828 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	Johnnett
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ch
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-90358-1

Client Project/Site: GE - Tonawanda, NY

For:

Clean Harbors Environmental Services Inc 42 Longwater Drive Norwell, Massachusetts 02061

Attn: Chris Nelson

7

Authorized for release by: 11/4/2015 1:34:49 PM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II (716)504-9838 john.schove@testamericainc.com

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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: Clean Harbors Environmental Services Inc

Toxicity Equivalent Quotient (Dioxin)

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Glossary

TEQ

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

TestAmerica Buffalo

11/4/2015

Page 3 of 15

Case Narrative

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Job ID: 480-90358-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-90358-1

Comments

No additional comments.

Receipt

The sample was received on 11/3/2015 11:58 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Detection Summary

Client: Clean Harbors Environmental Services Inc Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Client Sample ID: W004

Lab Sample ID: 480-90358-1

No Detections.

Client Sample Results

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Lab Sample ID: 480-90358-1

Matrix: Water

Client Sample ID: W004

Date Collected: 11/03/15 11:45

Date Received: 11/03/15 11:58

Method: 8082A - Polychlo	orinated Biphenyls	(PCBs) by C	as Chro	matogr	aphy				
Analyte	Result Qu	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		11/03/15 13:18	11/03/15 17:05	1
PCB-1221	ND		0.50		ug/L		11/03/15 13:18	11/03/15 17:05	1
PCB-1232	ND		0.50		ug/L		11/03/15 13:18	11/03/15 17:05	1
PCB-1242	ND		0.50		ug/L		11/03/15 13:18	11/03/15 17:05	1
PCB-1248	ND		0.50		ug/L		11/03/15 13:18	11/03/15 17:05	1
PCB-1254	ND		0.50		ug/L		11/03/15 13:18	11/03/15 17:05	1
PCB-1260	ND		0.50		ug/L		11/03/15 13:18	11/03/15 17:05	1
Surrogate	%Recovery Qu	ualifier Lii	mits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86	19	- 125				11/03/15 13:18	11/03/15 17:05	
Tetrachloro-m-xylene	87	24	- 137				11/03/15 13:18	11/03/15 17:05	1

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Surrogate Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water Prep Type: Total/NA

_			Percen	t Surrogate Recovery (Acceptance Limits)
		DCB2	TCX2	
Lab Sample ID	Client Sample ID	(19-125)	(24-137)	
480-90358-1	W004	86	87	
LCS 480-272701/2-A	Lab Control Sample	38	82	
MB 480-272701/1-A	Method Blank	65	81	
Surrogate Legend				
DCB = DCB Decachlo	robiphenyl			
TCX = Tetrachloro-m-	xylene			

TestAmerica Buffalo

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QC Sample Results

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-272701/1-A

Matrix: Water

Analysis Batch: 272853

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 272701

	MIR	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		11/03/15 07:52	11/03/15 15:30	1
PCB-1221	ND		0.50		ug/L		11/03/15 07:52	11/03/15 15:30	1
PCB-1232	ND		0.50		ug/L		11/03/15 07:52	11/03/15 15:30	1
PCB-1242	ND		0.50		ug/L		11/03/15 07:52	11/03/15 15:30	1
PCB-1248	ND		0.50		ug/L		11/03/15 07:52	11/03/15 15:30	1
PCB-1254	ND		0.50		ug/L		11/03/15 07:52	11/03/15 15:30	1
PCB-1260	ND		0.50		ug/L		11/03/15 07:52	11/03/15 15:30	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	65		19 - 125	11/03/15 07:52	11/03/15 15:30	1
Tetrachloro-m-xylene	81		24 - 137	11/03/15 07:52	11/03/15 15:30	1

Lab Sample ID: LCS 480-272701/2-A

Matrix: Water

Analysis Batch: 272853

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

Prep Batch: 272701

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
PCB-1016	4.00	3.19		ug/L		80	62 - 130	_
PCB-1260	4.00	2.59		ug/L		65	56 - 123	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	38		19 - 125
Tetrachloro-m-xylene	82		24 - 137

TestAmerica Buffalo

QC Association Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

GC Semi VOA

Prep Batch: 272701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-90358-1	W004	Total/NA	Water	3510C	
LCS 480-272701/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-272701/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 272853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-90358-1	W004	Total/NA	Water	8082A	272701
LCS 480-272701/2-A	Lab Control Sample	Total/NA	Water	8082A	272701
MB 480-272701/1-A	Method Blank	Total/NA	Water	8082A	272701

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Lab Chronicle

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Lab Sample ID: 480-90358-1

Matrix: Water

Date Collected: 11/03/15 11:45 Date Received: 11/03/15 11:58

Client Sample ID: W004

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			272701	11/03/15 13:18	RMZ	TAL BUF
Total/NA	Analysis	8082A		1	272853	11/03/15 17:05	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Certification Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE - Tonawanda, NY

TestAmerica Job ID: 480-90358-1

Method	Method Description	Protocol	Laboratory
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Clean Harbors Environmental Services Inc

TestAmerica Job ID: 480-90358-1

Project/Site: GE - Tonawanda, NY

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-90358-1	W004	Water	11/03/15 11:45	11/03/15 11:58

Chain of Custody Record

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Drinking Water? Yes□ NoM

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THE LEADER IN ENVIRONMENTAL TESTING

Date Chain of Custody Number	15	Lab Number Page Of	Analysis (Attach list if more space is needed)		Special Instructions/	Conditions of Receipt		24 HOVE T.A.T					480-90358 Chain of Custody			(A fee may be assessed if samples are retained Months tonger than 1 month)		Date Date 11/8/15 11 58	٠	Date Time	
		Area Code)/Pax Number (Area Code)/Pax Number	Lab Contact	7	723	rix Containers & 💸	SSS NAON NAON NAON NAON NAON NAON NAON N	×								ient 🔲 Disposal By Lab 🔲 Archive For	OC Requirements (Sp	11:58 Heceived By Kull	14	Time 3. Received By	
Project Manager	5777	20 Box 9149 (781	Zip Code Site Confact	Carrier/Way	2	Matrix	ne line) Date Time At Aqueous Sed.	X SH:111 S1-8-11								□ Poison B □ Unknown	4 Days 21 Days Other	1	Date	Date 7	
TAL-4124 (1007)	Cooper LAPOS	42 LONGINATED DR.	State	4	(JE-TOJANA-DA, N	Contractifurchase Order/Quote No.	Sample I.D. No. and Description (Containers for each sample may be combined on one line)	WOOL	Pa	age	14 c	of 15				Possible Hazard Identification Non-Hazard	e Required Reduired Reduired Reduired	1.16	hed By	7/ 3. Relinquished By	201

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

on ice

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Login Sample Receipt Checklist

Client: Clean Harbors Environmental Services Inc Job Number: 480-90358-1

Login Number: 90358 List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish. Carl M

Creator: Janish, Carl M		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ch
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

TestAmerica Job ID: 480-90899-1 Client Project/Site: GE Tonawanda

For:

Clean Harbors Environmental Services Inc 42 Longwater Drive Norwell, Massachusetts 02061

Attn: Chris Nelson

7

Authorized for release by: 11/12/2015 3:24:40 PM Rebecca Jones, Project Management Assistant I rebecca.jones@testamericainc.com

Designee for John Schove, Project Manager II (716)504-9838 john.schove@testamericainc.com

..... Links

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

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

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

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Method Summary	12
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Definitions/Glossary

Client: Clean Harbors Environmental Services Inc

Toxicity Equivalent Quotient (Dioxin)

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Glossary

TEQ

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

TestAmerica Buffalo

Case Narrative

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Job ID: 480-90899-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-90899-1

Comments

No additional comments.

Receipt

The sample was received on 11/11/2015 4:19 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 480-274427.

 $No \ additional \ analytical \ or \ quality \ issues \ were \ noted, \ other \ than \ those \ described \ above \ or \ in \ the \ Definitions/Glossary \ page.$

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Detection Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

Client Sample ID: W-005

TestAmerica Job ID: 480-90899-1

Lab Sample ID: 480-90899-1

No Detections.

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Client Sample Results

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Lab Sample ID: 480-90899-1

Matrix: Water

Client Sample ID: W-005
Date Collected: 11/11/15 15:50
Date Received: 11/11/15 16:19

Analyte	Result Q	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.057		ug/L		11/11/15 19:15	11/12/15 13:36	1
PCB-1221	ND		0.057		ug/L		11/11/15 19:15	11/12/15 13:36	1
PCB-1232	ND		0.057		ug/L		11/11/15 19:15	11/12/15 13:36	1
PCB-1242	ND		0.057		ug/L		11/11/15 19:15	11/12/15 13:36	1
PCB-1248	ND		0.057		ug/L		11/11/15 19:15	11/12/15 13:36	1
PCB-1254	ND		0.057		ug/L		11/11/15 19:15	11/12/15 13:36	1
PCB-1260	ND		0.057		ug/L		11/11/15 19:15	11/12/15 13:36	1
Surrogate	%Recovery Q	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	34		26 - 135				11/11/15 19:15	11/12/15 13:36	1
Tetrachloro-m-xylene	68		27 - 159				11/11/15 19:15	11/12/15 13:36	1

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Surrogate Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		DCB1	TCX1				
Lab Sample ID	Client Sample ID	(26-135)	(27-159)				
480-90899-1	W-005	34	68				
LCS 480-274427/2-A	Lab Control Sample	74	90				
LCSD 480-274427/3-A	Lab Control Sample Dup	78	94				
MB 480-274427/1-A	Method Blank	78	82				
Surrogate Legend							

Surrogate Legend

DCB = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

TestAmerica Buffalo

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TestAmerica Job ID: 480-90899-1

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

Method: 608 - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 480-274427/1-A **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA Analysis Batch: 274625 Prep Batch: 274427

	MR N	NB							
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND ND		0.060		ug/L		11/11/15 14:13	11/12/15 11:13	1
PCB-1221	ND		0.060		ug/L		11/11/15 14:13	11/12/15 11:13	1
PCB-1232	ND		0.060		ug/L		11/11/15 14:13	11/12/15 11:13	1
PCB-1242	ND		0.060		ug/L		11/11/15 14:13	11/12/15 11:13	1
PCB-1248	ND		0.060		ug/L		11/11/15 14:13	11/12/15 11:13	1
PCB-1254	ND		0.060		ug/L		11/11/15 14:13	11/12/15 11:13	1
PCB-1260	ND		0.060		ug/L		11/11/15 14:13	11/12/15 11:13	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	78		26 - 135	11/11/15 14:13	11/12/15 11:13	1
Tetrachloro-m-xylene	82		27 - 159	11/11/15 14:13	11/12/15 11:13	1

Lab Sample ID: LCS 480-274427/2-A Client Sample ID: Lab Control Sample **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 274625 Prep Batch: 274427 Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits

l <u> </u>	a	_ ··-						
	LC	S LCS						
PCB-1260			1.00	1.01	ug/L	101	67 - 148	
PCB-1016			1.00	1.02	ug/L	102	40 - 142	

Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	74		26 - 135
Tetrachloro-m-xylene	90		27 - 159

Lab Sample ID: LCSD 480-274427/3-A **Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 274625 **Prep Batch: 274427** LCSD LCSD Spike %Rec. **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit PCB-1016 1.00 104 40 - 142 30 1.04 ug/L 3 PCB-1260 1.00 0.999 ug/L 100 67 - 148 30

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	78		26 - 135
Tetrachloro-m-xylene	94		27 - 159

QC Association Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

GC Semi VOA

Prep Batch: 274427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-90899-1	W-005	Total/NA	Water	3510C	
LCS 480-274427/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-274427/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-274427/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 274625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-90899-1	W-005	Total/NA	Water	608	274427
LCS 480-274427/2-A	Lab Control Sample	Total/NA	Water	608	274427
LCSD 480-274427/3-A	Lab Control Sample Dup	Total/NA	Water	608	274427
MB 480-274427/1-A	Method Blank	Total/NA	Water	608	274427

Lab Chronicle

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Lab Sample ID: 480-90899-1

Matrix: Water

Date Collected: 11/11/15 15:50 Date Received: 11/11/15 16:19

Client Sample ID: W-005

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			274427	11/11/15 19:15	CPH	TAL BUF
Total/NA	Analysis	608		1	274625	11/12/15 13:36	KS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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Method Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Method	Method Description	Protocol	Laboratory
608	Polychlorinated Biphenyls (PCBs) (GC)	40CFR136A	TAL BUF

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Sample Summary

Client: Clean Harbors Environmental Services Inc

Project/Site: GE Tonawanda

TestAmerica Job ID: 480-90899-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-90899-1	W-005	Water	11/11/15 15:50	11/11/15 16:19

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Chain of	Temperature on Receipt	on Receipt		<u>0</u>	S t Ar	TestAmerica		
Custody Record	Drinking Water? Yes⊟ Not	Dsey, Jes	Note	THE LE	ADER IN EN	THE LEADER IN ENVIRONMENTAL TESTING	· (5	-
Client (1000) Client (1000)	Project Manage	115/20	٠			Date 11 15	Chair of Custody Number	1
2	Telephone Number	11 L W 3	Area Code) Fax Number 36 1-6053			Lab Number	Page of	
City State Zip Code	Site Contact		Lab Contact	Shore	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Analysis (Attach list if more space is needed)		
Project Name and Location (State)	Carrier/Waybill Number				800		Soecial Instruction	/50
Contract/Purchase Order/Quote No.		Matrix	Containers & Preservatives		7 ba		Conditions of Receipt	seipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Time	llos pes	HOI HSSO¢	HO _B N \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	કુ કુર ્			
11/11/15	1		4	1	U		24 W (AT.	
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						Custody Chain of Custody	A MINISTRALIA	
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Possible Hazard Identification Non-Hazard Teammable Skin Irritant Poison B 🗹	Unknown	Sample Disposal Return To Client	Disposal By Lab		Archive For	(A fee may be Months longer than 1 r	(A fee may be assessed if samples are retained longer than 1 month)	
Required 7 Days 14 D	Other.		OC Require	18	*			
Jul Ship	Date 11/15	7 16 19	1. Beceived	Ag par	3		Date Time	
2. Relinquished By	Date	Time	2. Received By	3 (9)			Date Time	1
3. Relinquished By	Date	Time	3. Received By	1By			Date	
Comments				7	3	43		
DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy	th the Sample; PIN	K - Field Copy		,)				

Login Sample Receipt Checklist

Client: Clean Harbors Environmental Services Inc Job Number: 480-90899-1

Login Number: 90899 List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

oranion minoring manifestra		
Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AECOM/URS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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