Richard, Philip E - DNR

From: Sent: To: Cc: Subject: Attachments: Ree, Timothy <tree@craworld.com> Tuesday, September 16, 2014 11:37 AM Richard, Philip E - DNR Frehner, Ron; Storlie, Pete Penta Wood - WPDES Compliance Sampling 9/5/2014 ~COR-086165~ Lab Report-240-41599-1-086165-01-07-2014-09-16.pdf

Rec 9/16/18 Puton BRPD 9/17/14

Phil,

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Please find attached a copy of the laboratory report for the WPDES compliance samples collected at the Penta Wood site on 9/5/2014. The data indicates the system is treating and discharging water in accordance with the permit requirements.

Regards,

Tim Ree

1801 Old Highway 8 NW, Suite 114 St Paul, MN 55112 Phone: 651.639.0913 Direct: 651.639-0439 (ext. 338) Cell: 651.592.7697 Fax: 651.639.0923

Conestoga-Rovers & Associates (CRA)

Email: tree@CRAworld.com www.CRAworld.com Think before you print

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<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc. TestAmerica Canton 4101 Shuffel Street NW North Canton, OH 44720 Tel: (330)497-9396

TestAmerica Job ID: 240-41599-1 Client Project/Site: 86165-01, Penta Woods

For:

Conestoga-Rovers & Associates, Inc. 1801 Old Highway 8 NW Suite 114 St. Paul, Minnesota 55112

Attn: Mr. Grant Anderson

Jenuse DHeckler

Authorized for release by: 9/16/2014 9:18:12 AM

Denise Heckler, Project Manager II (330)966-9477 denise.heckler@testamericainc.com

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.

TestAmerica Job ID: 240-41599-1

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

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Table of Contents

Cover Page 1	
Table of Contents 2	
Definitions/Glossary 3	
Case Narrative 4	
Method Summary 6	
Sample Summary	
Detection Summary 8	
Client Sample Results 9	
Surrogate Summary 1	1
QC Sample Results 1	2
QC Association Summary 1	4
Lab Chronicle	5
Certification Summary 1	6
Chain of Custody 1	7
Receipt Checklists 2	1

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

Qualifiers

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Qualifiers		
GC/MS Semi V	ΙΟΑ	
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VOA		
Qualifier	Qualifier Description	
D X	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D. Surrogate is outside control limits	
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.	
U	Indicates the analyte was analyzed for but not detected.	
Glossary Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
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	

Duplicate error ratio (normalized absolute difference)
Dilution Factor
Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
Decision level concentration
Minimum detectable activity
Estimated Detection Limit
Minimum detectable concentration
Method Detection Limit
Minimum Level (Dioxin)
Not Calculated
Not detected at the reporting limit (or MDL or EDL if shown)
Practical Quantitation Limit
Quality Control
Relative error ratio
Reporting Limit or Requested Limit (Radiochemistry)
Relative Percent Difference, a measure of the relative difference between two points
Toxicity Equivalent Factor (Dioxin)
Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

Job ID: 240-41599-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 86165-01, Penta Woods

Report Number: 240-41599-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 09/06/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.6 C.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample W-140905-PS-EFF (240-41599-2) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 09/08/2014 and analyzed on 09/10/2014.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 145942.

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

WISCONSIN DRO

Sample W-140905-PS-EFF (240-41599-2) was analyzed for Wisconsin DRO in accordance with Wisconsin DNR Modified DRO. The samples were prepared on 09/10/2014 and analyzed on 09/11/2014.

Case Narrative

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods TestAmerica Job ID: 240-41599-1

Job ID: 240-41599-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 146312.

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

CHLORINATED HERBICIDES

Samples W-140905-PS-INF (240-41599-1) and W-140905-PS-EFF (240-41599-2) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 09/10/2014 and analyzed on 09/12/2014 and 09/15/2014.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

Samples W-140905-PS-INF (240-41599-1)[400X] and W-140905-PS-INF (240-41599-1)[4000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Method Summary

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

TestAmerica Job ID: 240-41599-1

Method	Method Description	Protocol	Laboratory
3270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
3151A	Herbicides (GC)	SW846	TAL PIT
WI-DRO	Wisconsin - Diesel Range Organics (GC)	WI-DRO	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates. WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396 TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

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TestAmerica Job ID: 240-41599-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-41599-1	W-140905-PS-INF	Water	09/05/14 11:00	09/06/14 09:50
240-41599-2	W-140905-PS-EFF	Water	09/05/14 11:15	09/06/14 09:50

Detection Summary

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods TestAmerica Job ID: 240-41599-1

Client Sample ID: W-140	905-PS-INF					L	ab	Sample ID): 240-41599-1
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	2400		95	15	ug/L	4000	-	8151A	Total/NA
Client Sample ID: W-140	905-PS-EFF					L	ab	Sample I): 240-41599-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.021	J	0.094	0.015	ug/L	4	_	8151A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods TestAmerica Job ID: 240-41599-1

Client Sample ID: W-140905-PS-INF Date Collected: 09/05/14 11:00 Date Received: 09/06/14 09:50

Lab Sample ID: 240-41599-1 Matrix: Water

Method: 8151A - Herbicides (GC) Result Qualifier RL MDL Unit D Prepared Analyzed Pentachlorophenol 2400 95 15 ug/L 09/10/14 16:30 09/15/14 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	0	XD	32 - 140	09/10/14 16:30	09/15/14 10:00	4000
2,4-Dichlorophenylacetic acid	0	XD	32 - 140	09/10/14 16:30	09/15/14 10:41	400

Dil Fac

4000

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

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TestAmerica Job ID: 240-41599-1

Client Sample ID: W-140905-PS-EFF Date Collected: 09/05/14 11:15 Date Received: 09/06/14 09:50

Lab Sample ID: 240-41599-2 Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.19	U	0.19	0.060	ug/L		09/08/14 07:21	09/10/14 15:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		29 - 110				09/08/14 07:21	09/10/14 15:09	1
2-Fluorophenol (Surr)	46		15 - 110				09/08/14 07:21	09/10/14 15:09	1
2,4,6-Tribromophenol (Surr)	88		21 - 128				09/08/14 07:21	09/10/14 15:09	1
Nitrobenzene-d5 (Surr)	77		31 - 110				09/08/14 07:21	09/10/14 15:09	1
Phenol-d5 (Surr)	29		10 - 110				09/08/14 07:21	09/10/14 15:09	1
Terphenyl-d14 (Surr)	79		31 - 115				09/08/14 07:21	09/10/14 15:09	1
Method: 8151A - Herbicides (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.021	J	0.094	0.015	ug/L		09/10/14 16:30	09/15/14 09:19	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	82		32 - 140				09/10/14 16:30	09/15/14 09:19	4
Method: WI-DRO - Wisconsin - Die	sel Range Or	ganics (GC	3						
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	0.096	U	0.096	0.077	mg/L		09/10/14 08:03	09/11/14 17:56	1

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Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

TestAmerica Job ID: 240-41599-1

Prep Type: Total/NA

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

latrix: Water								Prep Type: Total/NA
-				Percent Su	rogate Reco	very (Accept	ance Limits)
		FBP	2FP	TBP	NBZ	PHL	TPH	
Lab Sample ID	Client Sample ID	(29-110)	(15-110)	(21-128)	(31-110)	(10-110)	(31-115)	
240-41599-2	W-140905-PS-EFF	77	46	88	77	29	79	
LCS 240-145942/4-A	Lab Control Sample	79	54	100	80	39	88	
MB 240-145942/3-A	Method Blank	85	65	84	85	44	93	

Surrogate Legend FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

Method: 8151A - Herbicides (GC)

Matrix: Water

				Percent Surrogate Recovery (Acceptance Limits)
		DCPA1	DCPA2	
Lab Sample ID	Client Sample ID	(32-140)	(32-140)	
240-41599-1	W-140905-PS-INF	10105 X	2937 p X	and the second
240-41599-1	W-140905-PS-INF	0 X D	0 X D	
240-41599-1	W-140905-PS-INF	0 X D	OXD	
240-41599-2	W-140905-PS-EFF	80	76	
240-41599-2	W-140905-PS-EFF	82	77	
LCS 180-117655/2-A	Lab Control Sample	114	112	
MB 180-117655/1-A	Method Blank	81	80	

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

TestAmerica Job ID: 240-41599-1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

10

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-145942/3-A Matrix: Water Analysis Batch: 146107	мв	мв					Client Sa	mple ID: Metho Prep Type: 1 Prep Batch:	Total/NA
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.20	U	0.20	0.063	ug/L		09/08/14 07:21	09/09/14 10:41	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	85		29 - 110				09/08/14 07:21	09/09/14 10:41	1
2-Fluorophenol (Surr)	65		15 - 110				09/08/14 07:21	09/09/14 10:41	1
2,4,6-Tribromophenol (Surr)	84		21 - 128				09/08/14 07:21	09/09/14 10:41	1
Nitrobenzene-d5 (Surr)	85		31 - 110				09/08/14 07:21	09/09/14 10:41	1
Phenol-d5 (Surr)	44		10 - 110				09/08/14 07:21	09/09/14 10:41	1
Terphenyl-d14 (Surr)	93		31 - 115				09/08/14 07:21	09/09/14 10:41	1

Lab Sample ID: LCS 240-145942/4-A Matrix: Water

Analysis Batch: 146107			Spike	LCS	LCS				Prep Batch: 145942 %Rec.
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Naphthalene			20.0	14.6		ug/L		73	52 - 120
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
2-Fluorobiphenyl (Surr)	79		29 - 110						
2-Fluorophenol (Surr)	54		15 - 110						
2,4,6-Tribromophenol (Surr)	100		21 - 128						
Nitrobenzene-d5 (Surr)	80		31 - 110						
Phenol-d5 (Surr)	39		10 - 110						
Terphenyl-d14 (Surr)	88		31 - 115						

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-117655/1- Matrix: Water	A									Client Sa	ample ID: Meth Prep Type:	
Analysis Batch: 117827		IB MB									Prep Batc	h: 117655
Analyte		ult Qualifie	r R	L	MDL	Unit		D	Ρ	repared	Analyzed	Dil Fac
Pentachlorophenol	0.	50 U	0.5	0	0.078	ug/L			09/1	0/14 16:30	09/12/14 09:50	20
	/	1B MB										
Surrogate	%Recove	ry Qualifie	r Limits						P	repared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid		81	32 - 140	_					09/1	0/14 16:30	09/12/14 09:50	20
Lab Sample ID: LCS 180-117655/2 Matrix: Water	-A							С	lient	Sample	ID: Lab Contro Prep Type:	the second second
Analysis Batch: 117827			Spike	LCS	LCS						Prep Batch %Rec.	n: 11765
Analyte			Added	Result	Qual	ifier	Unit		D	%Rec	Limits	
Pentachlorophenol			2.00	2.69			ug/L		_	135	40 - 140	
	LCS L	cs										
Surrogate	Recovery G	ualifier	Limits									
2,4-Dichlorophenylacetic acid	114		32 - 140									

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

TestAmerica Job ID: 240-41599-1

Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

Lab Sample ID: MB 240-146312/2-A Matrix: Water Analysis Batch: 146605	МВ	МВ									Client Sa		Method ype: To Batch: 1	tal/NA
Analyte	Result	Qualifier		RL		MDL	Unit		D	Pr	epared	Analyz	ed	Dil Fac
WI Diesel Range Organics (C10-C28)	0.10	U		0.10	(0.080	mg/L		(09/10	0/14 08:03	09/11/14	17:14	1
Lab Sample ID: LCS 240-146312/3-A									Cli	ent	Sample	ID: Lab Co	ontrol S	ample
Matrix: Water												Prep T	ype: To	tal/NA
Analysis Batch: 146605												Prep I	Batch: 1	46312
			Spike		LCS	LCS						%Rec.		
Analyte			Added		Result	Qual	ifier	Unit		D	%Rec	Limits		
WI Diesel Range Organics			0.500		0.491			mg/L			98	75 - 115		
(C10-C28)														
Lab Sample ID: LCSD 240-146312/4-A								CI	ient S	Sam	ple ID: L	ab Contro	I Samp	e Dup
Matrix: Water												Prep T	ype: To	tal/NA
Analysis Batch: 146605												Prep I	Batch: 1	46312
			Spike		LCSD	LCS	D					%Rec.		RPD
Analyte			Added		Result	Qual	ifier	Unit		D	%Rec	Limits	RPD	Limit
WI Diesel Range Organics			0.500		0.552			mg/L			110	75 - 115	12	20
(C10-C28)														

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QC Association Summary

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

TestAmerica Job ID: 240-41599-1

GC/MS Semi VOA Prep Batch: 145942

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-41599-2	W-140905-PS-EFF	Total/NA	Water	3510C	
LCS 240-145942/4-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-145942/3-A	Method Blank	Total/NA	Water	3510C	
nalysis Batch: 14610	7				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-145942/4-A	Lab Control Sample	Total/NA	Water	8270C	145942
MB 240-145942/3-A	Method Blank	Total/NA	Water	8270C	145942
nalysis Batch: 14628	6				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-41599-2	W-140905-PS-EFF	Total/NA	Water	8270C	145942

GC Semi VOA

Prep Batch: 117655

GC Semi VOA					
Prep Batch: 117655					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-41599-1	W-140905-PS-INF	Total/NA	Water	8151A	
240-41599-2	W-140905-PS-EFF	Total/NA	Water	8151A	
LCS 180-117655/2-A	Lab Control Sample	Total/NA	Water	8151A	
MB 180-117655/1-A	Method Blank	Total/NA	Water	8151A	
Analysis Batch: 11782	7				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-41599-1	W-140905-PS-INF	Total/NA	Water	8151A	117655
240-41599-2	W-140905-PS-EFF	Total/NA	Water	8151A	117655
LCS 180-117655/2-A	Lab Control Sample	Total/NA	Water	8151A	117655
MB 180-117655/1-A	Method Blank	Total/NA	Water	8151A	117655

Analysis Batch: 118038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-41599-1	W-140905-PS-INF	Total/NA	Water	8151A	117655
240-41599-1	W-140905-PS-INF	Total/NA	Water	8151A	117655
240-41599-2	W-140905-PS-EFF	Total/NA	Water	8151A	117655

Prep Batch: 146312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-41599-2	W-140905-PS-EFF	Total/NA	Water	3510C	
LCS 240-146312/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 240-146312/4-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 240-146312/2-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 146605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-41599-2	W-140905-PS-EFF	Total/NA	Water	WI-DRO	146312
LCS 240-146312/3-A	Lab Control Sample	Total/NA	Water	WI-DRO	146312
LCSD 240-146312/4-A	Lab Control Sample Dup	Total/NA	Water	WI-DRO	146312
MB 240-146312/2-A	Method Blank	Total/NA	Water	WI-DRO	146312

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods TestAmerica Job ID: 240-41599-1

Lab Sample ID: 240-41599-1

Client Sample ID: W-140905-PS-INF Date Collected: 09/05/14 11:00 Date Received: 09/06/14 09:50

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			117655	09/10/14 16:30	CBY	TAL PIT
Total/NA	Analysis	8151A		4	117827	09/12/14 13:34	JMO	TAL PIT
Total/NA	Prep	8151A			117655	09/10/14 16:30	CBY	TAL PIT
Total/NA	Analysis	8151A		4000	118038	09/15/14 10:00	JMO	TAL PIT
Total/NA	Prep	8151A			117655	09/10/14 16:30	CBY	TAL PIT
Total/NA	Analysis	8151A		400	118038	09/15/14 10:41	JMO	TAL PIT

Client Sample ID: W-140905-PS-EFF Date Collected: 09/05/14 11:15 Date Received: 09/06/14 09:50

Batch Batch Dilution Batch Prepared Method Prep Type Type Run Factor Number or Analyzed Analyst Lab Prep 3510C TAL CAN Total/NA 145942 09/08/14 07:21 SDF Total/NA 8270C 146286 09/10/14 15:09 MRU TAL CAN Analysis 1 Total/NA Prep 8151A 117655 09/10/14 16:30 CBY TAL PIT Total/NA 8151A 09/12/14 13:55 TAL PIT Analysis 4 117827 JMO Total/NA Prep 8151A 117655 CBY TAL PIT 09/10/14 16:30 TAL PIT Total/NA Analysis 8151A 4 118038 09/15/14 09:19 JMO Total/NA Prep 3510C 146312 09/10/14 08:03 SDE TAL CAN WI-DRO TAL CAN Total/NA Analysis 146605 09/11/14 17:56 DEB 1

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

1 2 3 4 5 6 7 8 9

Lab Sample ID: 240-41599-2 Matrix: Water

Matrix: Water

12 13 14

Certification Summary

Client: Conestoga-Rovers & Associates, Inc. Project/Site: 86165-01, Penta Woods

TestAmerica Job ID: 240-41599-1

13

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date	
California	NELAP	9	01144CA	06-30-14 *	
California	State Program	9	2927	04-30-15	
Connecticut	State Program	1	PH-0590	12-31-14	
Florida	NELAP	4	E87225	06-30-15	
Georgia	State Program	4	N/A	06-30-15	
Illinois	NELAP	5	200004	07-31-15	
Kansas	NELAP	7	E-10336	01-31-15	
Kentucky (UST)	State Program	4	58	06-30-15	
L-A-B	DoD ELAP		L2315	07-18-16	
Minnesota	NELAP	5	039-999-348	12-31-14	
Nevada	State Program	9	OH-000482008A	07-31-15	
New Jersey	NELAP	2	OH001	06-30-15	
New York	NELAP	2	10975	03-31-15	
Ohio VAP	State Program	5	CL0024	10-31-15	
Pennsylvania	NELAP	3	68-00340	08-31-15	
Texas	NELAP	6		08-31-15	
USDA	Federal		P330-13-00319	11-26-16	
Virginia	NELAP	3	460175	09-14-14 *	
Washington	State Program	10	C971	01-12-15	
West Virginia DEP	State Program	3	210	12-31-14	
Wisconsin	State Program	5	999518190	08-31-14 *	

Laboratory: TestAmerica Pittsburgh

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-15
California	State Program	9	2891	03-31-15
Connecticut	State Program	1	PH-0688	09-30-14 *
Florida	NELAP	4	E871008	06-30-15
Illinois	NELAP	5	002602	06-30-15
Kansas	NELAP	7	E-10350	01-31-15
Louisiana	NELAP	6	04041	06-30-15
New Hampshire	NELAP	1	203011	04-04-15
New Jersey	NELAP	2	PA005	06-30-15
New York	NELAP	2	11182	03-31-15
North Carolina (WW/SW)	State Program	4	434	12-31-14
Pennsylvania	NELAP	3	02-00416	04-30-15
South Carolina	State Program	4	89014	04-30-15
Texas	NELAP	6	T104704528	03-31-15
JS Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	05-31-15
∕irginia	NELAP	3	460189	09-14-14 *
West Virginia DEP	State Program	3	142	01-31-15

* Certification renewal pending - certification considered valid.



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS



Pr	oject No/ Phase/Task Code: 086/65-01 oject Name: Perta Wood oject Location: Sinen, W: hemistry Contact:				orato		-	9-091					51) 63		Contractor (1999)	Loc	ation:							SSOW ID:	
Pr	oject Name: Perta Wood			Lab	Cont	act:	ga	nde	rsi	3700	DCI	rai	Dor	14	Lab	Quo	te No	:						Cooler No:	
Pr	oject Location: Sinen W:				IPLE PE		-	ONT	AINE	RQ		TY		1. S.			NAL) Back					ns)		Carrier:	
CI	hemistry Contact: Grant AnderSo	n 7			T		(HCI)				1	-		ample		- T								Airbill No:	
Sa	hemistry Contact: Grant Anderso ampler(s): P. Storla gander	son@cra	<i>kwor</i>)	Matrix Codo (see back of COC)	Grab (G) or Comp (C)	pon	Hydrochloric Acid (HCI)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	1ydroxide	Wwater (S	EnCores 3x5-g, 1x25-g		Total Containers/Sample	8151A	M	HEND 82						Requ	Date Shipped:	
	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd//yy)	TIME	Matrix C (see bac	Grab (G)	Unpreservod	Hydroch	Nitric Ac	Sulfuric ,	Sodium I (NaOH)	Methanol/Water (Soil VOC)	EnCores	Other:	Total Co	PCP - 815	DKO-	NATIFICAND - 8270						MS/MSD	Comme Special Inst	
	W-140905-PS-INF W-140905-PS-EFF	9/5/14 9/5/14		W	G	-								2	X	-								Zstanda	n
-	W-140905-PS-EFF	9/5/14	1115	W	Ģ	X	X		,			-	_	6	XY	< X	4		_			_		[]" ·T	TAT
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	AT Required in business days (use separate COCs 1 Day □ 2 Days □ 3 Days □ 1 Week □ 2 W							otal N ples i						8	Note	es/S	Specia	l Rec	uiren	nents	s:				
-		COMPANY		DATE	· · ·		TIME				r		ECEIV		Y			T		CON	APAN	Y		DATE	Тіме
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3.									3.			~													

TestAmerica Canton Sample Receipt Form/Narrative Login # : 41599
Canton Facility Canton Facility
Client CRA Site Name Denta Wood Cooler unpacked by:
Cooler Received on 216/14 Opened on 216/14 Headleround
FedEx: 1 st Grd (Exp) UPS, FAS Stetson Client Drop Off TestAmerica Courier Other
TestAmerica Cooler # 10 # Foam Box Client Cooler Box Other
Packing material used: Bubble Wrap Foam Plastic Bag None Other
COOLANT: Wet Ice Blue Ice Dry Ice Water None
1. Cooler temperature upon receipt
IR GUN# A (CF +2 °C) Observed Cooler Temp°C Corrected Cooler Temp°C
IR GUN# 4 (CF -2 °C) Observed Cooler Temp°C Corrected Cooler Temp°C 🗌 See Multiple
IR GUN# 5 (CF 0 °C) Observed Cooler Temp. °C Corrected Cooler Temp. °C Cooler Form
IR GUN# 8 (CF 0 °C) Observed Cooler Temp. 1.6 °C Corrected Cooler Temp. 1.6 °C 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (200) No
-Were custody seals on the outside of the cooler(s)? If res Quantity (res No Were custody seals on the outside of the cooler(s) signed & dated? (Yes No NA
-Were custody seals on the bottle(s)?
3. Shippers' packing slip attached to the cooler(s)?
4. Did custody papers accompany the sample(s)?
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)?
7. Could all bottle labels be reconciled with the COC?
8. Were correct bottle(s) used for the test(s) indicated?
9. Sufficient quantity received to perform indicated analyses?
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lo# <u>HC412469</u> 11. Were VOAs on the COC? Yes No
11. Were VOAs on the COC?Yes W12. Were air bubbles >6 mm in any VOA vials?Yes No HA
13. Was a trip blank present in the cooler(s)? Yes No.
Contacted PM Date by via Verbal Voice Mail Other
Concerning
14 CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Sample Opcessed by:
14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES
15. SAMPLE CONDITION
Sample(s) were received after the recommended holding time had expired.
Sample(s)
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)
16. SAMPLE PRESERVATION
Sample(s) were further preserved in the laboratory.
Time preserved: Preservative(s) added/Lot number(s):

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5

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Ref: SOP NC-SC-0005, Sample Receiving L:\QAQC\QA Department\QA TARDIS\Document Control\SOPs\Work Instructions\WI-NC-099K-072514 Cooler Receipt Form.doc djl

13 14 *****9/6/2014

Login Container Summary Report

Temperature readings: _____

Lab ID	Container Type	<u>Container</u> <u>pH</u>	Preservative Added (mls)	Lot #
240-41599-E-2	Amber Glass 1 liter - Hydrochloric	<2		
240-41599-F-2	Amber Glass 1 liter - Hydrochloric	<2		
	240-41599-E-2	240-41599-E-2 Amber Glass 1 liter - Hydrochloric	Lab IDContainer TypepH240-41599-E-2Amber Glass 1 liter - Hydrochloric<2	Lab IDContainer TypepHAdded (mls)240-41599-E-2Amber Glass 1 liter - Hydrochloric<2

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Login Number: 41599 List Number: 2 Creator: Butcher, Ryan M

4

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

Job Number: 240-41599-1

List Source: TestAmerica Pittsburgh

List Creation: 09/09/14 02:33 PM