

Part of BELTS
6/3/15
(99)

Richard, Philip E - DNR

From: Ree, Timothy <tree@croworld.com>
Sent: Wednesday, June 03, 2015 9:14 AM
To: Richard, Philip E - DNR
Cc: Frehner, Ron; Sandberg, Brian; Storlie, Pete
Subject: Penta Wood - WPDES Compliance Sampling 5/21/2015 and 5/26/2015 ~COR-086165~
Attachments: Lab Report-240-51100-1-086165-01-07-2015-05-29.pdf; Lab Report-240-51102-1-086165-01-06-2015-05-29.pdf; Lab Report-240-51188-1-086165-01-07-2015-06-02.pdf

Phil,

Please find attached the results for the effluent samples collected at the Penta Wood site on 5/21/2015 and 5/26/2015. PCP was detected in the effluent sample at a concentration of 0.11 ug/L on 5/21/2015, which exceeds the criteria. PCP was detected in the effluent sample at a concentration of 0.087 ug/L (estimated), which meets the permit criteria. Even though PCP was detected above the criteria during one effluent sampling event (5/21/2015), a noncompliance notification is not required since the average PCP effluent concentration (0.086 ug/L) for the samples collected in May 2015 meets the criteria.

PCP was detected in the influent sample at a concentration of 510 ug/L on 5/21/2015, which indicates that the pumping modification on 4/30/2015 continues to help keep the influent concentrations at reasonable levels for treatment and that emulsified oil is not likely being removed with the extracted groundwater.

PCP was detected at a concentration of 0.072 ug/L (estimated) in the sample collected between the carbon units on 5/21/2015. This indicates that a carbon change-out is not required at this time.

Please update Kathy Bartilson (WDNR) and Linda Martin (USEPA).

Should you have questions, please do not hesitate to contact me.

Regards,
Tim

Tim Ree
Conestoga-Rovers & Associates (CRA)
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
Email: tree@CRAworld.com
www.CRAworld.com

Think before you print 
Perform every task the safe way, the right way, every time!

This communication and any accompanying document(s) are confidential and are intended for the sole use of the addressee. If you are not the intended recipient, please notify me at the telephone number shown above or by return e-

TestAmerica

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: 240-51100-1

Client Project/Site: 86165-01-01, Penta Wood

For:

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

Attn: Mr. Grant Anderson



Authorized for release by:
5/29/2015 2:45:41 PM

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

LINKS

Review your project
results through

Total Access

Have a Question?

Ask
The
Expert

Visit us at:

www.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.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Chain of Custody	14
Receipt Checklists	17

Definitions/Glossary

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

TestAmerica Job ID: 240-51100-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
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.
α	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)
TEQ	Toxicity Equivalent Quotient (Dioxin)



Case Narrative

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

TestAmerica Job ID: 240-51100-1

Job ID: 240-51100-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 86165-01-01, Penta Wood

Report Number: 240-51100-1

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 05/22/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

CHLORINATED HERBICIDES

Sample W-150521-TB-WE (240-51100-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 05/23/2015 and analyzed on 05/28/2015.

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.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 180-142666.

No 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: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-51100-1

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL PIT

Protocol References:

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

Laboratory References:

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: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-51100-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-51100-1	W-150521-TB-WE	Water	05/21/15 15:00	05/22/15 09:30

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Detection Summary

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

TestAmerica Job ID: 240-51100-1

Client Sample ID: W-150521-TB-WE

Lab Sample ID: 240-51100-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Pentachlorophenol	0.11		0.10	0.016	ug/L	4			8151A	Total/NA

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

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

TestAmerica Job ID: 240-51100-1

Client Sample ID: W-150521-TB-WE

Lab Sample ID: 240-51100-1

Date Collected: 05/21/15 15:00

Matrix: Water

Date Received: 05/22/15 09:30

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.11		0.10	0.016	ug/L		05/23/15 13:00	05/28/15 13:35	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	60		32 - 140				05/23/15 13:00	05/28/15 13:35	4



Surrogate Summary

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

TestAmerica Job ID: 240-51100-1

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPA1 (32-140)	DCPA2 (32-140)
240-51100-1	W-150521-TB-WE	60	49
LCS 180-142666/2-A	Lab Control Sample	55	58
LCSD 180-142666/3-A	Lab Control Sample Dup	65	68
MB 180-142666/1-A	Method Blank	47	41

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid



QC Sample Results

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

TestAmerica Job ID: 240-51100-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-142666/1-A
Matrix: Water
Analysis Batch: 143042

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 142666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.10	0.016	ug/L		05/23/15 13:00	05/28/15 13:15	4
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	47		32 - 140				05/23/15 13:00	05/28/15 13:15	4

Lab Sample ID: LCS 180-142666/2-A
Matrix: Water
Analysis Batch: 143042

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 142666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Pentachlorophenol	0.500	0.448		ug/L		90	40 - 140
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2,4-Dichlorophenylacetic acid	58		32 - 140				

Lab Sample ID: LCSD 180-142666/3-A
Matrix: Water
Analysis Batch: 143042

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 142666

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Pentachlorophenol	0.500	0.496		ug/L		99	40 - 140	10	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2,4-Dichlorophenylacetic acid	68		32 - 140						

QC Association Summary

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

TestAmerica Job ID: 240-51100-1

GC Semi VOA

Prep Batch: 142666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-51100-1	W-150521-TB-WE	Total/NA	Water	8151A	
LCS 180-142666/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-142666/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-142666/1-A	Method Blank	Total/NA	Water	8151A	

Analysis Batch: 143042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-51100-1	W-150521-TB-WE	Total/NA	Water	8151A	142666
LCS 180-142666/2-A	Lab Control Sample	Total/NA	Water	8151A	142666
LCSD 180-142666/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	142666
MB 180-142666/1-A	Method Blank	Total/NA	Water	8151A	142666



Lab Chronicle

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

TestAmerica Job ID: 240-51100-1

Client Sample ID: W-150521-TB-WE

Lab Sample ID: 240-51100-1

Date Collected: 05/21/15 15:00

Matrix: Water

Date Received: 05/22/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			142666	05/23/15 13:00	CBY	TAL PIT
Total/NA	Analysis	8151A		4	143042	05/28/15 13:35	JMO	TAL PIT

Laboratory References:

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
- 10
- 11
- 12
- 13
- 14
- 15

Certification Summary

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

TestAmerica Job ID: 240-51100-1

Laboratory: TestAmerica Canton

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999518190	08-31-15

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998027800	08-31-15

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-51100 Chain of Custody

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



3.8/C26
CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

1801 Old Highway 8 Northwest, Suite 114
 St. Paul, Minnesota 55112 United States
 Phone: (651) 639-0913 Fax: (651) 639-0923

COC NO.: **SP-01640**

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 086165-01-01			Laboratory Name: TEST AMERICA			Lab Location: - NORTH CAMP			SSOW ID:																																						
Project Name: PENTAWOOD			Lab Contact:			Lab Quote No:			Cooler No:																																						
Project Location: SIREN, WI			SAMPLE TYPE			CONTAINER QUANTITY & PRESERVATION			ANALYSIS REQUESTED (See Back of COC for Definitions)																																						
Chemistry Contact: GRANT ANDERSON GANDERSON@CRAWORLD.COM			Matrix Code (see back of COC)			Grab (G) or Comp (C)			MS/MSD Request			Carrier:																																			
Sampler(s): T. BRAUN												Unpreserved			Hydrochloric Acid (HCl)			Nitric Acid (HNO ₃)			Sulfuric Acid (H ₂ SO ₄)			Sodium Hydroxide (NaOH)			Methanol/Water (Soil VOC)			EnCores 3x5-g, 1x25-g			Other:			Total Containers/Sample 2 X			Airbill No:								
SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)			DATE (mm/dd/yy)			TIME (hh:mm)			Matrix Code			Grab (G) or Comp (C)			Unpreserved			Hydrochloric Acid (HCl)			Nitric Acid (HNO ₃)			Sulfuric Acid (H ₂ SO ₄)			Sodium Hydroxide (NaOH)			Methanol/Water (Soil VOC)			EnCores 3x5-g, 1x25-g			Other:			Total Containers/Sample			MS/MSD Request			COMMENTS/ SPECIAL INSTRUCTIONS:		
1 W-150521-TB-WE			05/21/15			1500			W G 2																														STANDARD TAT CONTACT GRANT ANDERSON								
TAT Required in business days (use separate COCs for different TATs): <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week <input checked="" type="checkbox"/> Other:			Total Number of Containers: 2			Notes/ Special Requirements:			All Samples in Cooler must be on COC																																						
RELINQUISHED BY			COMPANY			DATE			TIME			RECEIVED BY			COMPANY			DATE			TIME																										
Tim Braun			CRA			5/21/15			1700			[Signature]			[Signature]			5-22-15			930																										

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (CRA) YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampling Crew CRA Form: COC-10A (20110804)



TestAmerica Canton Sample Receipt Form/Narrative

Login #: 51100

Canton Facility

Client CRA Site Name _____ Cooler unpacked by: _____

Cooler Received on 5-22-15 Opened on 5-22-15

FedEx: 1st Grd UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ 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 +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C See Multiple

IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C Cooler Form

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. 3.8 °C Corrected Cooler Temp. 2.6 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Was/were the sampler(s) clearly identified on the COC? Yes No

7. Did all bottles arrive in good condition (Unbroken)? Yes No

8. Could all bottle labels be reconciled with the COC? Yes No

9. Were correct bottle(s) used for the test(s) indicated? Yes No

10. Sufficient quantity received to perform indicated analyses? Yes No

11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC432654

12. Were VOAs on the COC? Yes No

13. Were air bubbles >6 mm in any VOA vials? Yes No NA

14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: _____

Redd 2x2 labeled W-150521-TB-WE 5-21-15 @ not time
N/A Not on COC will log at end of lot

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

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): _____

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-51100-1

Login Number: 51100
List Number: 2
Creator: Lonzo, Michael A

List Source: TestAmerica Pittsburgh
List Creation: 05/23/15 01:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	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	



TestAmerica

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: 240-51102-1
Client Project/Site: 86165-01-01, Penta Wood

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

Attn: Mr. Grant Anderson



Authorized for release by:
5/29/2015 2:51:19 PM

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

LINKS

Review your project
results through

Total Access

Have a Question?

? Ask
The
Expert

Visit us at:

www.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.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	12
Lab Chronicle	13
Certification Summary	14
Chain of Custody	15
Receipt Checklists	18



Definitions/Glossary

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

TestAmerica Job ID: 240-51102-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
D	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.
X	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.
α	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)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

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

TestAmerica Job ID: 240-51102-1

Job ID: 240-51102-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 86165-01-01, Penta Wood

Report Number: 240-51102-1

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 05/22/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

CHLORINATED HERBICIDES

Samples W-150521-TB-INF (240-51102-1) and W-150521-TB-BG (240-51102-2) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 05/23/2015 and analyzed on 05/28/2015 and 05/29/2015.

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.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 180-142666.

Sample W-150521-TB-INF (240-51102-1)[2000X] 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: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-51102-1

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL PIT

Protocol References:

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

Laboratory References:

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: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-51102-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-51102-1	W-150521-TB-INF	Water	05/21/15 14:40	05/22/15 09:30
240-51102-2	W-150521-TB-BG	Water	05/21/15 14:50	05/22/15 09:30



Detection Summary

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

TestAmerica Job ID: 240-51102-1

Client Sample ID: W-150521-TB-INF

Lab Sample ID: 240-51102-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	510		50	7.8	ug/L	2000		8151A	Total/NA

Client Sample ID: W-150521-TB-BG

Lab Sample ID: 240-51102-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.072	J	0.095	0.015	ug/L	4		8151A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton



Client Sample Results

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

TestAmerica Job ID: 240-51102-1

Client Sample ID: W-150521-TB-INF

Lab Sample ID: 240-51102-1

Date Collected: 05/21/15 14:40

Matrix: Water

Date Received: 05/22/15 09:30

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	510		50	7.8	ug/L		05/23/15 13:00	05/29/15 07:10	2000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	0	X D	32 - 140				05/23/15 13:00	05/29/15 07:10	2000

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

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

TestAmerica Job ID: 240-51102-1

Client Sample ID: W-150521-TB-BG

Lab Sample ID: 240-51102-2

Date Collected: 05/21/15 14:50

Matrix: Water

Date Received: 05/22/15 09:30

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.072	J	0.095	0.015	ug/L		05/23/15 13:00	05/28/15 14:57	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	57		32 - 140				05/23/15 13:00	05/28/15 14:57	4



Surrogate Summary

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

TestAmerica Job ID: 240-51102-1

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPA1 (32-140)	DCPA2 (32-140)
240-51102-1	W-150521-TB-INF	0 X D	0 X D
240-51102-2	W-150521-TB-BG	57	50
LCS 180-142666/2-A	Lab Control Sample	55	58
LCSD 180-142666/3-A	Lab Control Sample Dup	65	68
MB 180-142666/1-A	Method Blank	47	41

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid



QC Sample Results

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

TestAmerica Job ID: 240-51102-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-142666/1-A
Matrix: Water
Analysis Batch: 143042

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 142666

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.10	0.016	ug/L		05/23/15 13:00	05/28/15 13:15	4
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	47		32 - 140				05/23/15 13:00	05/28/15 13:15	4

Lab Sample ID: LCS 180-142666/2-A
Matrix: Water
Analysis Batch: 143042

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 142666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Pentachlorophenol	0.500	0.448		ug/L		90	40 - 140
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2,4-Dichlorophenylacetic acid	58		32 - 140				

Lab Sample ID: LCSD 180-142666/3-A
Matrix: Water
Analysis Batch: 143042

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 142666

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Pentachlorophenol	0.500	0.496		ug/L		99	40 - 140	10	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2,4-Dichlorophenylacetic acid	68		32 - 140						

QC Association Summary

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

TestAmerica Job ID: 240-51102-1

GC Semi VOA

Prep Batch: 142666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-51102-1	W-150521-TB-INF	Total/NA	Water	8151A	
240-51102-2	W-150521-TB-BG	Total/NA	Water	8151A	
LCS 180-142666/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-142666/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-142666/1-A	Method Blank	Total/NA	Water	8151A	

Analysis Batch: 143042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-51102-1	W-150521-TB-INF	Total/NA	Water	8151A	142666
240-51102-2	W-150521-TB-BG	Total/NA	Water	8151A	142666
LCS 180-142666/2-A	Lab Control Sample	Total/NA	Water	8151A	142666
LCSD 180-142666/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	142666
MB 180-142666/1-A	Method Blank	Total/NA	Water	8151A	142666



Lab Chronicle

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

TestAmerica Job ID: 240-51102-1

Client Sample ID: W-150521-TB-INF

Lab Sample ID: 240-51102-1

Date Collected: 05/21/15 14:40

Matrix: Water

Date Received: 05/22/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			142666	05/23/15 13:00	CBY	TAL PIT
Total/NA	Analysis	8151A		2000	143042	05/29/15 07:10	JMO	TAL PIT

Client Sample ID: W-150521-TB-BG

Lab Sample ID: 240-51102-2

Date Collected: 05/21/15 14:50

Matrix: Water

Date Received: 05/22/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			142666	05/23/15 13:00	CBY	TAL PIT
Total/NA	Analysis	8151A		4	143042	05/28/15 14:57	JMO	TAL PIT

Laboratory References:

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
- 10
- 11
- 12
- 13
- 14
- 15

Certification Summary

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

TestAmerica Job ID: 240-51102-1

Laboratory: TestAmerica Canton

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999518190	08-31-15

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998027800	08-31-15

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-51102 Chain of Custody

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15



3.8/C26
**CONESTOGA-ROVERS
 & ASSOCIATES**

CHAIN OF CUSTODY RECORD

1801 Old Highway 8 Northwest, Suite 114
 St. Paul, Minnesota 55112 United States
 Phone: (651) 639-0913 Fax: (651) 639-0923

COC NO.: **SP-01641**

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 06165-01			Laboratory Name: TEST AMERICA			Lab Location: NORTH CANTON			SSOW ID:						
Project Name: PENTAWOOD			Lab Contact:			Lab Quote No:			Cooler No:						
Project Location: SIREN, WI			CONTAINER QUANTITY & PRESERVATION			ANALYSIS REQUESTED (See Back of COC for Definitions)			Carrier:						
Chemistry Contact: GRANT ANDERSON G.ANDERSON@CRAWOOD.COM			SAMPLE TYPE			MS/MSD Request			Airbill No:						
Sampler(s): T. BRAUN									Date Shipped:						
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	COMMENTS/ SPECIAL INSTRUCTIONS:
1	W-150521-TB-INF	05/21/15	14:40	W	G	2								2	STANDARD TAT
2	W-150521-TB-BG	05/21/15	14:50	W	G	2								2	CONTACT GRANT ANDERSON
3															
4															
5															
TAT Required in business days (use separate COCs for different TATs): <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week <input checked="" type="checkbox"/> Other:						Total Number of Containers: 4		Notes/ Special Requirements:							
All Samples in Cooler must be on COC															
RELINQUISHED BY		COMPANY		DATE		TIME		RECEIVED BY		COMPANY		DATE		TIME	
Tim Braun		CRA		5/21/15		1700		[Signature]		TA		5-22-15		930	

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (CRA) YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampling Crew CRA Form: COC-10A (20110804)



Client CRM Site Name _____ Cooler-unpacked by: _____

Cooler Received on 5-22-15 Opened on 5-22-15

FedEx: 1st Grd Expd UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ 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

- Cooler temperature upon receipt

IR GUN# 1 (CF +4.0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	<input type="checkbox"/> See Multiple Cooler Form
IR GUN# 4 (CF +0.5 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5 (CF +0.4 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8 (CF -1.2 °C)	Observed Cooler Temp. <u>3.8</u> °C	Corrected Cooler Temp. <u>2.6</u> °C	
- Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were custody seals on the bottle(s)? Yes No
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Was/were the sampler(s) clearly identified on the COC? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels be reconciled with the COC? Yes No
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC432654
- Were VOAs on the COC? Yes No
- Were air bubbles >6 mm in any VOA vials? Yes No NA
- Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: _____

Redd 2xL (labeled) W-150521-TB-WE 5-21-15 @ riotime
N/A Act on COC with log at end of lot

15. SAMPLE CONDITION
 Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 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): _____

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-51102-1

Login Number: 51102
List Number: 2
Creator: Lonzo, Michael A

List Source: TestAmerica Pittsburgh
List Creation: 05/23/15 01:04 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 240-51188-1

Client Project/Site: 86165-01-01, Penta Wood

For:

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

Attn: Mr. Grant Anderson



Authorized for release by:

6/2/2015 2:35:38 PM

Denise Heckler, Project Manager II
(330)966-9477

denise.heckler@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.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.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	5
Sample Summary	6
Detection Summary	7
Client Sample Results	8
Surrogate Summary	9
QC Sample Results	10
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Chain of Custody	14
Receipt Checklists	17

Definitions/Glossary

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

TestAmerica Job ID: 240-51188-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
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.
α	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)
TEQ	Toxicity Equivalent Quotient (Dioxin)



Case Narrative

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

TestAmerica Job ID: 240-51188-1

Job ID: 240-51188-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 86165-01-01, Penta Wood

Report Number: 240-51188-1

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 05/27/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.2 C.

CHLORINATED HERBICIDES

Sample W-150526-TB-WE (240-51188-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 05/30/2015 and analyzed on 06/01/2015.

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.

No 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: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-51188-1

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL PIT

Protocol References:

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

Laboratory References:

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: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-51188-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-51188-1	W-150526-TB-WE	Water	05/26/15 14:20	05/27/15 10:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Detection Summary

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

TestAmerica Job ID: 240-51188-1

Client Sample ID: W-150526-TB-WE

Lab Sample ID: 240-51188-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.087	J	0.10	0.016	ug/L	4		8151A	Total/NA

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

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

TestAmerica Job ID: 240-51188-1

Client Sample ID: W-150526-TB-WE

Lab Sample ID: 240-51188-1

Date Collected: 05/26/15 14:20

Matrix: Water

Date Received: 05/27/15 10:00

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.087	J	0.10	0.016	ug/L		05/30/15 10:00	06/01/15 13:47	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	74		32 - 140				05/30/15 10:00	06/01/15 13:47	4

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Surrogate Summary

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

TestAmerica Job ID: 240-51188-1

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPA1 (32-140)	DCPA2 (32-140)
240-51188-1	W-150526-TB-WE	74	69
LCS 180-143311/2-A	Lab Control Sample	102	97
MB 180-143311/1-A	Method Blank	53	49
MB 180-143311/1-A	Method Blank	70	74

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid



QC Sample Results

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

TestAmerica Job ID: 240-51188-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-143311/1-A
Matrix: Water
Analysis Batch: 143437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 143311

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.10	0.016	ug/L		05/30/15 10:00	06/01/15 13:26	4
Surrogate	%Recovery	MB Qualifier	MB Limits						
2,4-Dichlorophenylacetic acid	53		32 - 140						
							Prepared	Analyzed	Dil Fac
							05/30/15 10:00	06/01/15 13:26	4

Lab Sample ID: MB 180-143311/1-A
Matrix: Water
Analysis Batch: 143437

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 143311

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.50	U	0.50	0.078	ug/L		05/30/15 10:00	06/01/15 14:07	20
Surrogate	%Recovery	MB Qualifier	MB Limits						
2,4-Dichlorophenylacetic acid	74		32 - 140						
							Prepared	Analyzed	Dil Fac
							05/30/15 10:00	06/01/15 14:07	20

Lab Sample ID: LCS 180-143311/2-A
Matrix: Water
Analysis Batch: 143437

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 143311
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Pentachlorophenol	5.00	5.07		ug/L		101	40 - 140
Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits				
2,4-Dichlorophenylacetic acid	102		32 - 140				

QC Association Summary

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

TestAmerica Job ID: 240-51188-1

GC Semi VOA

Prep Batch: 143311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-51188-1	W-150526-TB-WE	Total/NA	Water	8151A	
LCS 180-143311/2-A	Lab Control Sample	Total/NA	Water	8151A	
MB 180-143311/1-A	Method Blank	Total/NA	Water	8151A	

Analysis Batch: 143437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-51188-1	W-150526-TB-WE	Total/NA	Water	8151A	143311
LCS 180-143311/2-A	Lab Control Sample	Total/NA	Water	8151A	143311
MB 180-143311/1-A	Method Blank	Total/NA	Water	8151A	143311
MB 180-143311/1-A	Method Blank	Total/NA	Water	8151A	143311



Lab Chronicle

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

TestAmerica Job ID: 240-51188-1

Client Sample ID: W-150526-TB-WE

Lab Sample ID: 240-51188-1

Date Collected: 05/26/15 14:20

Matrix: Water

Date Received: 05/27/15 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			143311	05/30/15 10:00	CBY	TAL PIT
Total/NA	Analysis	8151A		4	143437	06/01/15 13:47	JMO	TAL PIT

Laboratory References:

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
- 10
- 11
- 12
- 13
- 14
- 15

Certification Summary

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

TestAmerica Job ID: 240-51188-1

Laboratory: TestAmerica Canton

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999518190	08-31-15

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	998027800	08-31-15

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-51188 Chain of Custody



CONESTOGA-ROVERS & ASSOCIATES

CHAIN OF CUSTODY RECORD

1801 Old Highway 8 Northwest, Suite 114
St. Paul, Minnesota 55112 United States

Phone: (651) 639-0913 Fax: (651) 639-0923

COC NO.: **SP-01642**

PAGE 1 OF 1

(See Reverse Side for Instructions)

540042

Project No/ Phase/Task Code: 086165-01			Laboratory Name: TEST AMERICA				Lab Location: NORTH CANTON, OH				SSOW ID:																																																																																																																																																																																																																																																																																			
Project Name: PENTA WOOD			Lab Contact:				Lab Quote No:				Cooler No:																																																																																																																																																																																																																																																																																			
Project Location: SIREN, WI			CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)				Carrier:																																																																																																																																																																																																																																																																																			
Chemistry Contact: GRANT ANDERSON GANDERSON@CRAWORLD.COM			<table border="1"> <tr> <th>SAMPLE TYPE</th> <th>Unpreserved</th> <th>Hydrochloric Acid (HCl)</th> <th>Nitric Acid (HNO₃)</th> <th>Sulfuric Acid (H₂SO₄)</th> <th>Sodium Hydroxide (NaOH)</th> <th>Methanol/Water (Soil VOC)</th> <th>EnCores 3x5-g, 1x25-g</th> <th>Other:</th> <th>Total Containers/Sample</th> </tr> <tr> <td>W G</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 X</td> </tr> </table>				SAMPLE TYPE	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	W G	2								2 X	Airbill No:				Date Shipped:																																																																																																																																																																																																																																																															
SAMPLE TYPE	Unpreserved	Hydrochloric Acid (HCl)					Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample																																																																																																																																																																																																																																																																																	
W G	2								2 X																																																																																																																																																																																																																																																																																					
Sampler(s): TIM BRAN			Matrix Code (see back of COC)				MS/MSD Request				COMMENTS/ SPECIAL INSTRUCTIONS:																																																																																																																																																																																																																																																																																			
<table border="1"> <thead> <tr> <th>Item</th> <th>SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)</th> <th>DATE (mm/dd/yy)</th> <th>TIME (hh:mm)</th> <th>Matrix Code</th> <th>Grab (G) or Comp (C)</th> <th>Unpreserved</th> <th>Hydrochloric Acid (HCl)</th> <th>Nitric Acid (HNO₃)</th> <th>Sulfuric Acid (H₂SO₄)</th> <th>Sodium Hydroxide (NaOH)</th> <th>Methanol/Water (Soil VOC)</th> <th>EnCores 3x5-g, 1x25-g</th> <th>Other:</th> <th>Total Containers/Sample</th> <th>MS/MSD Request</th> <th>COMMENTS/ SPECIAL INSTRUCTIONS:</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>W-150526-TB-WE</td> <td>05/26/15</td> <td>14:20</td> <td>WG</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 X</td> <td></td> <td>STANDARD TAT CONTACT GRANT ANDERSON</td> </tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>			Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:	1	W-150526-TB-WE	05/26/15	14:20	WG	2									2 X		STANDARD TAT CONTACT GRANT ANDERSON	2																	3																	4																	5																	6																	7																	8																	9																	10																	11																	12																	13																	14																	15																	TAT Required in business days (use separate COCs for different TATs): <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Days <input type="checkbox"/> 3 Days <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week <input checked="" type="checkbox"/> Other: STANDARD				Total Number of Containers: 2				Notes/ Special Requirements:			
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:																																																																																																																																																																																																																																																																														
1	W-150526-TB-WE	05/26/15	14:20	WG	2									2 X		STANDARD TAT CONTACT GRANT ANDERSON																																																																																																																																																																																																																																																																														
2																																																																																																																																																																																																																																																																																														
3																																																																																																																																																																																																																																																																																														
4																																																																																																																																																																																																																																																																																														
5																																																																																																																																																																																																																																																																																														
6																																																																																																																																																																																																																																																																																														
7																																																																																																																																																																																																																																																																																														
8																																																																																																																																																																																																																																																																																														
9																																																																																																																																																																																																																																																																																														
10																																																																																																																																																																																																																																																																																														
11																																																																																																																																																																																																																																																																																														
12																																																																																																																																																																																																																																																																																														
13																																																																																																																																																																																																																																																																																														
14																																																																																																																																																																																																																																																																																														
15																																																																																																																																																																																																																																																																																														
RELINQUISHED BY: TIM BRAN			COMPANY: CRA		DATE: 5/26/15		TIME: 14:34		RECEIVED BY: [Signature]		COMPANY: TALCOTON		DATE: 5/27/15		TIME: 10:00																																																																																																																																																																																																																																																																															

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE - Fully Executed Copy (CRA)

YELLOW - Receiving Laboratory Copy

PINK - Shipper

GOLDENROD - Sampling Crew

CRA Form: COC-10A (20110804)



Client CRA Site Name Pontalwood Cooler unpacked by: [Signature]
 Cooler Received on 5/27/15 Opened on 5/27/15
 FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____
 TestAmerica Cooler # 4541 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 +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C See Multiple
 IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C Cooler Form
 IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. 5.4 °C Corrected Cooler Temp. 4.2 °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the sampler(s) clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC432654
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	Samples processed by:
_____ _____ _____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____

15. SAMPLE CONDITION
 Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 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): _____

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-51188-1

Login Number: 51188
List Number: 2
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh
List Creation: 05/28/15 02:12 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	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.	False	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Samples are received within Holding Time.	N/A	
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	

