

Post on BRPTS
8/13/15

Richard, Philip E - DNR

From: Ree, Timothy <Tim.Ree@ghd.com>
Sent: Thursday, August 13, 2015 3:06 PM
To: Richard, Philip E - DNR
Cc: Frehner, Ron; Storlie, Pete
Subject: FW: Penta Wood - WPDES Compliance Sampling 8/4/2015 ~COR-086165~
Attachments: Lab Report-240-53949-1-086165-01-06-2015-08-13.pdf

Phil,

Please find attached the results for the influent and effluent samples collected at the Penta Wood site on 8/4/2015. PCP was detected in the effluent at a concentration of 0.099 ug/L, which is below the permit criteria of 0.1 ug/L. WI-DRO and naphthalene were not detected in the effluent sample.

PCP was detected in the influent sample at a concentration of 370 ug/L, which is significantly less than the influent PCP concentration of 1,100 ug/L on 7/8/2015. This indicates that the corrective action (pumping modification on 7/23/2015) was successful.

No further corrective actions are necessary at this time. However, we will continue to monitor the effluent concentrations closely and re-assess as appropriate.

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

Regards,
Tim

From: Ree, Timothy
Sent: Tuesday, August 11, 2015 3:41 PM
To: Philip Richard (Philip.Richard@wisconsin.gov)
Cc: Frehner, Ron; Storlie, Pete
Subject: FW: Penta Wood - Between Carbon Unit Sampling 8/4/2015 ~COR-086165~

Phil,

Please find attached the results for the sample collected between the carbon units on 8/4/2015. PCP was detected at a concentration of 0.14 ug/L, which is approximately the same as during July 2015 (0.18 ug/L) and indicates that a carbon exchange is not required. The results of the influent and effluent compliance samples collected on 8/4/2015 are not available, yet.

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

Regards,
Tim

From: Ree, Timothy
Sent: Tuesday, August 11, 2015 10:57 AM
To: Philip Richard (Philip.Richard@wisconsin.gov)

Cc: Frehner, Ron; Storlie, Pete

Subject: Penta Wood - WPDES Compliance Sampling 7/29/2015 ~COR-086165~

Phil,

Please find attached the results for the effluent sample collected at the Penta Wood site on 7/29/2015. PCP was detected at a concentration of 0.064 ug/L (estimated), which is below the permit criteria of 0.1 ug/L. The average effluent concentration for the five samples collected in July 2015 is 0.11 ug/L and represents a non-compliance with the substantive WPDES permit criteria.

PCP was detected at a concentration of 0.16 ug/L in the effluent sample collected on 7/21/2015. As part of a previous corrective action implemented on 7/23/2015 to reduce the influent concentrations and improve treatment, the pumping rate at well EW06 was decreased and the pumping rates at EW02 and EW04 were increased. The 7/29/2014 effluent PCP concentration was less than half of the 7/21/2015 effluent PCP concentration, which indicates that the corrective action was successful.

Sampling between the carbon units in June and July indicated that a carbon exchange was not necessary. We collected an influent sample and a sample between the carbon units on 8/4/2015 to assess the timing of a carbon exchange and assess whether additional pumping modifications are required. The results of this sampling should be available by 8/19/2015.

GHD recommends that we continue to operate the system and re-assess following the receipt of the 8/4/2015 sample results.

Section 3.2.1 of the substantive permit states that the non-compliance shall be reported to the Department's regional office (Spooner) within 24 hours and that a written report describing the noncompliance be submitted to the Department within 5 days. We will document these results and the corrective action on the monthly discharge monitoring form. Please update Kathy Bartilson (WDNR) and Linda Martin (USEPA), and ask Kathy Bartilson whether a more detailed/formal notification is necessary to document the July 2015 non-compliance.

Regards,

Tim Ree

GHD

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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: 240-53949-1
Client Project/Site: 86165-01-01, Penta Wood

For:
GHD Services Inc.
1801 Old Highway 8 NW
Suite 114
St. Paul, Minnesota 55112

Attn: Mr. Grant Anderson



Authorized for release by:
8/13/2015 2:59:54 PM

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

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

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

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Definitions/Glossary

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

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

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: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Job ID: 240-53949-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: GHD Services Inc.

Project: 86165-01-01, Penta Wood

Report Number: 240-53949-1

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 08/05/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.2 C.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample W-150804-TB-ME (240-53949-2) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 08/06/2015 and analyzed on 08/10/2015.

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).

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

WISCONSIN DRO

Sample W-150804-TB-ME (240-53949-2) was analyzed for Wisconsin DRO in accordance with Wisconsin DNR Modified DRO. The samples were prepared on 08/06/2015 and analyzed on 08/07/2015.

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



Case Narrative

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Job ID: 240-53949-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

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

CHLORINATED HERBICIDES

Samples W-150804-TB-MI (240-53949-1) and W-150804-TB-ME (240-53949-2) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 08/07/2015 and analyzed on 08/10/2015 and 08/12/2015.

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.

Sample W-150804-TB-MI (240-53949-1)[400X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

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



Method Summary

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8151A	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: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-53949-1	W-150804-TB-MI	Water	08/04/15 11:00	08/05/15 09:30
240-53949-2	W-150804-TB-ME	Water	08/04/15 11:05	08/05/15 09:30

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- 12
- 13
- 14
- 15

Detection Summary

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Client Sample ID: W-150804-TB-MI

Lab Sample ID: 240-53949-1

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	370		9.8	1.5	ug/L	400		8151A	Total/NA

Client Sample ID: W-150804-TB-ME

Lab Sample ID: 240-53949-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.099		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: GHD Services Inc.
 Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Client Sample ID: W-150804-TB-MI

Lab Sample ID: 240-53949-1

Date Collected: 08/04/15 11:00

Matrix: Water

Date Received: 08/05/15 09:30

Method: 8151A - Herbicides (GC)										
Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac	
Pentachlorophenol	370		9.8	1.5	ug/L		08/07/15 17:00	08/12/15 16:25	400	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
2,4-Dichlorophenylacetic acid	0	XD	32 - 140				08/07/15 17:00	08/12/15 16:25	400	



Client Sample Results

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Client Sample ID: W-150804-TB-ME

Lab Sample ID: 240-53949-2

Date Collected: 08/04/15 11:05

Matrix: Water

Date Received: 08/05/15 09:30

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.060		0.19	0.060	ug/L		08/06/15 08:21	08/10/15 15:58	1
Surrogate									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	75		29 - 110				08/06/15 08:21	08/10/15 15:58	1
2-Fluorophenol (Surr)	39		15 - 110				08/06/15 08:21	08/10/15 15:58	1
2,4,6-Tribromophenol (Surr)	71		21 - 128				08/06/15 08:21	08/10/15 15:58	1
Nitrobenzene-d5 (Surr)	72		31 - 110				08/06/15 08:21	08/10/15 15:58	1
Phenol-d5 (Surr)	22		10 - 110				08/06/15 08:21	08/10/15 15:58	1
Terphenyl-d14 (Surr)	70		31 - 115				08/06/15 08:21	08/10/15 15:58	1

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.099		0.095	0.015	ug/L		08/07/15 17:00	08/10/15 14:23	4
Surrogate									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	54		32 - 140				08/07/15 17:00	08/10/15 14:23	4

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<0.050		0.10	0.050	mg/L		08/06/15 06:24	08/07/15 19:53	1



Surrogate Summary

Client: GHD Services Inc.
 Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		FBP (29-110)	2FP (15-110)	TBP (21-128)	NBZ (31-110)	PHL (10-110)	TPH (31-115)
240-53949-2	W-150804-TB-ME	75	39	71	72	22	70
LCS 240-192100/12-A	Lab Control Sample	76	74	83	74	57	88
MB 240-192100/11-A	Method Blank	84	84	80	81	71	95

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

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DCPA1 (32-140)	DCPA2 (32-140)
240-53949-1	W-150804-TB-MI	0 X D	0 X D
240-53949-2	W-150804-TB-ME	54	47
LCS 180-150167/2-A	Lab Control Sample	58	51
LCS 180-150167/3-A	Lab Control Sample Dup	65	58
MB 180-150167/1-A	Method Blank	61	56

Surrogate Legend

- DCPA = 2,4-Dichlorophenylacetic acid



QC Sample Results

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

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

Lab Sample ID: MB 240-192100/11-A

Matrix: Water

Analysis Batch: 192548

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 192100

Analyte	MB MB		LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	<0.063		0.20	0.063	ug/L		08/06/15 08:21	08/10/15 13:10	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl (Surr)	84		29 - 110	08/06/15 08:21	08/10/15 13:10	1
2-Fluorophenol (Surr)	84		15 - 110	08/06/15 08:21	08/10/15 13:10	1
2,4,6-Tribromophenol (Surr)	80		21 - 128	08/06/15 08:21	08/10/15 13:10	1
Nitrobenzene-d5 (Surr)	81		31 - 110	08/06/15 08:21	08/10/15 13:10	1
Phenol-d5 (Surr)	71		10 - 110	08/06/15 08:21	08/10/15 13:10	1
Terphenyl-d14 (Surr)	95		31 - 115	08/06/15 08:21	08/10/15 13:10	1

Lab Sample ID: LCS 240-192100/12-A

Matrix: Water

Analysis Batch: 192548

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 192100

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Naphthalene	20.0	15.3		ug/L		76	52 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl (Surr)	76		29 - 110
2-Fluorophenol (Surr)	74		15 - 110
2,4,6-Tribromophenol (Surr)	83		21 - 128
Nitrobenzene-d5 (Surr)	74		31 - 110
Phenol-d5 (Surr)	57		10 - 110
Terphenyl-d14 (Surr)	88		31 - 115

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-150167/1-A

Matrix: Water

Analysis Batch: 150322

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 150167

Analyte	MB MB		LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Pentachlorophenol	<0.078		0.50	0.078	ug/L		08/07/15 17:00	08/10/15 13:09	20

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4-Dichlorophenylacetic acid	61		32 - 140	08/07/15 17:00	08/10/15 13:09	20

Lab Sample ID: LCS 180-150167/2-A

Matrix: Water

Analysis Batch: 150322

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 150167

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Pentachlorophenol	5.00	3.50		ug/L		70	40 - 140

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4-Dichlorophenylacetic acid	58		32 - 140

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QC Sample Results

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Method: 8151A - Herbicides (GC) (Continued)

Lab Sample ID: LCSD 180-150167/3-A			Client Sample ID: Lab Control Sample Dup							
Matrix: Water			Prep Type: Total/NA							
Analysis Batch: 150322			Prep Batch: 150167							
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
Pentachlorophenol	5.00	4.09		ug/L		82	40 - 140	15	30	
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits							
2,4-Dichlorophenylacetic acid	65		32 - 140							

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

Lab Sample ID: MB 240-192083/2-A			Client Sample ID: Method Blank							
Matrix: Water			Prep Type: Total/NA							
Analysis Batch: 192323			Prep Batch: 192083							
Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac	
WI Diesel Range Organics (C10-C28)	<0.050		0.10	0.050	mg/L		08/06/15 06:24	08/07/15 18:58	1	

Lab Sample ID: LCS 240-192083/3-A			Client Sample ID: Lab Control Sample							
Matrix: Water			Prep Type: Total/NA							
Analysis Batch: 192323			Prep Batch: 192083							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits			
WI Diesel Range Organics (C10-C28)	0.500	0.506		mg/L		101	75 - 115			

Lab Sample ID: LCSD 240-192083/4-A			Client Sample ID: Lab Control Sample Dup							
Matrix: Water			Prep Type: Total/NA							
Analysis Batch: 192323			Prep Batch: 192083							
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit	
WI Diesel Range Organics (C10-C28)	0.500	0.549		mg/L		110	75 - 115	8	20	

QC Association Summary

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

GC/MS Semi VOA

Prep Batch: 192100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-53949-2	W-150804-TB-ME	Total/NA	Water	3510C	
LCS 240-192100/12-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-192100/11-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 192548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-53949-2	W-150804-TB-ME	Total/NA	Water	8270C	192100
LCS 240-192100/12-A	Lab Control Sample	Total/NA	Water	8270C	192100
MB 240-192100/11-A	Method Blank	Total/NA	Water	8270C	192100

GC Semi VOA

Prep Batch: 150167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-53949-1	W-150804-TB-MI	Total/NA	Water	8151A	
240-53949-2	W-150804-TB-ME	Total/NA	Water	8151A	
LCS 180-150167/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-150167/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-150167/1-A	Method Blank	Total/NA	Water	8151A	

Analysis Batch: 150322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-53949-2	W-150804-TB-ME	Total/NA	Water	8151A	150167
LCS 180-150167/2-A	Lab Control Sample	Total/NA	Water	8151A	150167
LCSD 180-150167/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	150167
MB 180-150167/1-A	Method Blank	Total/NA	Water	8151A	150167

Analysis Batch: 150605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-53949-1	W-150804-TB-MI	Total/NA	Water	8151A	150167

Prep Batch: 192083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-53949-2	W-150804-TB-ME	Total/NA	Water	3510C	
LCS 240-192083/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 240-192083/4-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 240-192083/2-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 192323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-53949-2	W-150804-TB-ME	Total/NA	Water	WI-DRO	192083
LCS 240-192083/3-A	Lab Control Sample	Total/NA	Water	WI-DRO	192083
LCSD 240-192083/4-A	Lab Control Sample Dup	Total/NA	Water	WI-DRO	192083
MB 240-192083/2-A	Method Blank	Total/NA	Water	WI-DRO	192083

TestAmerica Canton



Lab Chronicle

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

Client Sample ID: W-150804-TB-MI

Lab Sample ID: 240-53949-1

Date Collected: 08/04/15 11:00

Matrix: Water

Date Received: 08/05/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			150167	08/07/15 17:00	CBY	TAL PIT
Total/NA	Analysis	8151A		400	150605	08/12/15 16:25	DFE	TAL PIT

Client Sample ID: W-150804-TB-ME

Lab Sample ID: 240-53949-2

Date Collected: 08/04/15 11:05

Matrix: Water

Date Received: 08/05/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			192100	08/06/15 08:21	JDR	TAL CAN
Total/NA	Analysis	8270C		1	192548	08/10/15 15:58	JMG	TAL CAN
Total/NA	Prep	8151A			150167	08/07/15 17:00	CBY	TAL PIT
Total/NA	Analysis	8151A		4	150322	08/10/15 14:23	DFE	TAL PIT
Total/NA	Prep	3510C			192083	08/06/15 06:24	CSC	TAL CAN
Total/NA	Analysis	WI-DRO		1	192323	08/07/15 19:53	DEB	TAL CAN

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



Certification Summary

Client: GHD Services Inc.
Project/Site: 86165-01-01, Penta Wood

TestAmerica Job ID: 240-53949-1

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



* Certification renewal pending - certification considered valid.

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**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-53949 Chain of Custody



CONESTOGA-ROVERS & ASSOCIATES

3.2104.2
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-01646**

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 086165-01			Laboratory Name: TEST AMERICA				Lab Location: NORTH CANTON, OH				SSOW ID:																																																											
Project Name: PENTAWOOD			Lab Contact:				Lab Quote No:				Cooler No:																																																											
Project Location: S, REN, WI			CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)				Carrier:																																																											
Chemistry Contact: GRANT.ANDERSON@GHD.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>Matrix Code (see back of COC)</td> <td>Grab (G) or Comp (C)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></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	Matrix Code (see back of COC)	Grab (G) or Comp (C)									MS/MSD Request				Airbill No:																																							
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Sampler(s): TIM BRAUN							PCP-8151				Date Shipped:																																																											
							NAPHTHALENE																																																															
							W.F.D.R.O																																																															
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			*STANDARD TAT CONTACT GRANT ANDERSON																																																																			
			*3 BOTTLES TOTAL FOR PCP & NAPHTHALENE ON "ME" SAMPLE																																																																			
TAT Required in business days (use separate COCs for different TATs):			Total Number of Containers: 17				Notes/ Special Requirements:																																																															
<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: SEE RIGHT			All Samples in Cooler must be on COC																																																																			
RELINQUISHED BY		COMPANY		DATE		TIME		RECEIVED BY		COMPANY		DATE		TIME																																																								
1. Tim Braun		GHD		8/4/15		14:00		1. [Signature]		TA Center		8/5/15		9:30																																																								

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
Canton Facility

Login # : 853070

Client GHD Site Name _____ Cooler unpacked by: [Signature]
 Cooler Received on 8/5/15 Opened on 8/5/15
 FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____
 TestAmerica Cooler # _____ 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 +1.0 °C) Observed Cooler Temp. 3.2 °C Corrected Cooler Temp. 4.2
 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 -1.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °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) or bottle kits (LLHg/MeHg)? 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 person(s) who collected the samples 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 NA
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 NA

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): _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
W-150804-TB-ME	240-53949-D-2	Amber Glass 1 liter - Hydrochloric	<2	_____	_____
W-150804-TB-ME	240-53949-E-2	Amber Glass 1 liter - Hydrochloric	<2	_____	_____

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Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 240-53949-1

Login Number: 53949
List Number: 2
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh
List Creation: 08/06/15 12:34 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	

