#### Richard, Philip E - DNR

PHON BRRTS 7/19/15 (99)

From:

Ree, Timothy <Tim.Ree@ghd.com>

Sent:

Monday, July 13, 2015 2:57 PM

To:

Richard, Philip E - DNR Frehner, Ron; Storlie, Pete

Cc: Subject:

Penta Wood - WPDES Compliance Sampling 7/3/2015 ~COR-086165~

**Attachments:** 

Lab Report-240-52860-1-086165-01-07-2015-07-10.pdf

Phil,

Please find attached the results for the effluent sample collected at the Penta Wood site on 7/3/2015. PCP was detected in the effluent sample at a concentration of 0.13 ug/L, which exceeds the permit criteria of 0.1 ug/L. This is the first effluent sample collected in July 2015 and does not represent a non-compliance with the substantive WPDES permit criteria since additional weekly effluent samples are required to be collected to determine the average concentration for the month.

Based on the 7/3/2015 effluent result and since it has been approximately a month since collecting a sample between the carbon units, we will collect another sample between the units this week to assess the need for a carbon exchange.

CRA recommends that we continue to operate the system and re-assess following the receipt of these sample results.

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

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

#### Tim Ree

#### GHD

T: +1 651 639 0913 | M: +1 651 592 7697 | E: <a href="mailto:tim.ree@ghd.com">tim.ree@ghd.com</a> 1801 Old Highway 8 NW Suite 114 St. Paul Minnesota 55112 USA | <a href="https://www.ghd.com">www.ghd.com</a>

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

Please consider our environment before printing this email



# <u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

## **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 240-52860-1

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: 7/10/2015 10:24:28 AM

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

Jenuse DHeckler

denise.heckler@testamericainc.com

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

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

# **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: GHD Services Inc.

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

Toxicity Equivalent Quotient (Dioxin)

TestAmerica Job ID: 240-52860-1

### Glossary

TEQ

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

#### **Case Narrative**

Client: GHD Services Inc.

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

Job ID: 240-52860-1

**Laboratory: TestAmerica Canton** 

**Narrative** 

#### **CASE NARRATIVE**

Client: GHD Services Inc.

Project: 86165-01-01, Penta Wood

Report Number: 240-52860-1

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 07/07/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.6 C.

#### **CHLORINATED HERBICIDES**

Sample W-150703-PS-WE (240-52860-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 07/08/2015 and analyzed on 07/09/2015.

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 180-147185.

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

1

TestAmerica Job ID: 240-52860

## **Method Summary**

Client: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

MethodMethod DescriptionProtocolLaboratory8151AHerbicides (GC)SW846TAL 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: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-52860-1	W-150703-PS-WE	Water	07/03/15 20:10	07/07/15 09:40

## **Detection Summary**

Client: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

Client Sample ID: W-150703-PS-WE	Lab Sample ID: 240-52860-1
----------------------------------	----------------------------

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	<b>Prep Type</b>
Pentachlorophenol	0.13	***************************************	0.095	0.015	ug/L	4	*****	8151A	Total/NA

## **Client Sample Results**

Client: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

Client Sample ID: W-150703-PS-WE

Lab Sample ID: 240-52860-1 Date Collected: 07/03/15 20:10

Matrix: Water

Date Received: 07/07/15 09:40

Method: 8151A - Herbicides (C	i()									
Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac	
Pentachlorophenol	0.13	***************************************	0.095	0.015	ug/L		07/08/15 15:15	07/09/15 10:46	4	

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 2,4-Dichlorophenylacetic acid 32-140 07/08/15 15:15 07/09/15 10:46

## **Surrogate Summary**

Client: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

Method: 8151A - Herbicides (GC)

Matrix: Water Prep Type: Total/NA

			Percen	t Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DCPA1 (32-140)	DCPA2 (32-140)	
240-52860-1	W-150703-PS-WE	74	72	
LCS 180-147185/2-A	Lab Control Sample	82	77	
LCSD 180-147185/3-A	Lab Control Sample Dup	76	72	
MB 180-147185/1-A	Method Blank	58	63	
Surrogate Legend				

#### QC Sample Results

Client: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

Client Sample ID: Method Blank

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-147185/1-A

**Matrix: Water** 

Analysis Batch: 147262

Prep Type: Total/NA

Prep Batch: 147185

Analyte Result Qualifier LOQ LOD Unit Prepared Analyzed Dil Fac <0.016 0.10 07/08/15 15:15 07/09/15 10:22 Pentachlorophenol 0.016 ug/L

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 2,4-Dichlorophenylacetic acid 32 - 140 07/08/15 15:15 07/09/15 10:22 63

Lab Sample ID: LCS 180-147185/2-A

Matrix: Water

Analysis Batch: 147262

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

Prep Batch: 147185

LCS LCS Spike %Rec. **Analyte** Added Result Qualifier Unit %Rec Limits Pentachlorophenol 5.00 5.41 ug/L 108 40 - 140

LCS LCS

MB MB

Surrogate %Recovery Qualifier Limits 2,4-Dichlorophenylacetic acid 82 32 - 140

Lab Sample ID: LCSD 180-147185/3-A

**Matrix: Water** 

Analysis Batch: 147262

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 147185 %Rec. RPD

Added Result Qualifier Limits RPD Limit Analyte Unit %Rec 5.00 5.19 104 40 - 140 30 Pentachlorophenol ug/L

Spike

LCSD LCSD

LCSD LCSD

Limits %Recovery Qualifier Surrogate 76 32 - 140 2,4-Dichlorophenylacetic acid

## **QC Association Summary**

Client: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

#### GC Semi VOA

#### Prep Batch: 147185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-52860-1	W-150703-PS-WE	Total/NA	Water	8151A	
LCS 180-147185/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-147185/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-147185/1-A	Method Blank	Total/NA	Water	8151A	

#### Analysis Batch: 147262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-52860-1	W-150703-PS-WE	Total/NA	Water	8151A	147185
LCS 180-147185/2-A	Lab Control Sample	Total/NA	Water	8151A	147185
LCSD 180-147185/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	147185
MB 180-147185/1-A	Method Blank	Total/NA	Water	8151A	147185

### **Lab Chronicle**

Client: GHD Services Inc.

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

TestAmerica Job ID: 240-52860-1

Client Sample ID: W-150703-PS-WE Lab Sample ID: 240-52860-1

Date Collected: 07/03/15 20:10 Date Received: 07/07/15 09:40 Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		(4)
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8151A	***************************************	*****************	147185	07/08/15 15:15	CBY	TAL PIT
Total/NA	Analysis	8151A		4	147262	07/09/15 10:46	JMO	TAL PIT

#### Laboratory References:

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: 240-52860-1

#### 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	<b>EPA Region</b>	Certification ID	<b>Expiration Date</b>
Wisconsin	State Program	5	998027800	08-31-15

TestAmerica Canton

<sup>\*</sup> Certification renewal pending - certification considered valid.



Test America Laboratories, Inc.

# CHAIN OF CUSTODY AND RECEIVING DOCUMENTS



240-52860 Chain of Custody

# CONESTOGA-ROVERS & ASSOCIATES

Distribution:

WHITE-Fully Executed Copy (CRA) ·

## CHAIN OF CUSTODY RECORD

3.6104.6

GOLDENROD - Sampling Crew

COC NO. **SP-** 01715

(See Reverse Side for Instructions)

CRA Form: COC-10A (20110804)

PAGE ( OF )

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

Laboratory Name: Project No/ Phase/Task Code: Lab Location: Test America SSOW ID: 086165-01-01 Project Name: Lab Contact: Denise H. Pentawood Lab Quote No: Cooler No: Project Location: Sixen, WI ganderson@craworld.com P. Storlie **CONTAINER QUANTITY &** Carrier: SAMPLE ANALYSIS REQUESTED TYPE **PRESERVATION** (See Back of COC for Definitions) Chemistry Contact: Airbill No: Total Containers/Sample Hydrochloric Acid (HCI) Grab (G) or Comp (C) EnCores 3x5-g, 1x25-g Methanol/Water (Soil VOC) Sodium Hydroxide (NaOH) Vitric Acid (HNO<sub>3</sub>) Sampler(s): Date Shipped: MS/MSD COMMENTS/ SAMPLE IDENTIFICATION DATE TIME (Containers for each sample may be combined on one line) SPECIAL INSTRUCTIONS: W-150763-FS-WE 73.15 2010 WGX 2 Weekly 15 Hart S Total Number of Containers: 2 TAT Required in business days (use separate COCs for different TATs): Notes/ Special Requirements: ☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: All Samples in Cooler must be on COC RELINQUISHED BY COMPANY DATE TIME RECEIVED BY COMPANY DATE 600 THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

PINK-Shipper

YELLOW - Receiving Laboratory Copy

TestAmerica Canton Sample Receipt I Canton Facility			gin#: <u>&gt;286</u>	<i>,</i> U	
Client	Site_Name_le.	Hawarel	Cooler unpac	ked by:	
Cooler Received on 71715	Opened on	17/15	Hass	IM igre	
FedEx: 1st Grd Exp UPS FAS Ste	etson Client Drop Off				
Receipt After-hours: Drop-off Date/Time		Storage Location			
TestAmerica Cooler # For Packing material used: Bubble Wrag	m Box Client Cooler Foam Plastic Ba			_	
COOLANT: Wet Ite Blue					
1. Cooler temperature upon receipt	21, 200 11 41	210110			
IR GUN# A (CF +1.0 °C) Obser				And - March 2014 Administration 1 and 1 April - March 2014 April - Mar	
IR GUN#4 (CF +0.5 °C) Obser				☐ See Multiple ·	
IR GUN# 5 (CF +0.4 °C) Obser IR GUN# 8 (CF -1.5 °C) Observ	ved Cooler Temp	C Corrected Cooler	Temp. °C	Cooler Form	
2. Were custody seals on the outside of the		<del></del>	ess No		
-Were custody seals on the outside of			es No NA		
-Were custody seals on the bottle(s) or	bottle kits (LLHg/MeH		Tes No		
3. Shippers' packing slip attached to the c			€ No		
4. Did custody papers accompany the sam			e No		
<ul><li>5. Were the custody papers relinquished &amp;</li><li>6. Was/were the person(s) who collected to</li></ul>			No Res No		
7. Did all bottles arrive in good condition	_		es No	994 SF SF SF	
8. Could all bottle labels be reconciled wi			es No		
9. Were correct bottle(s) used for the test(		/	es No	*	
10. Sufficient quantity received to perform	n indicated analyses?	C	es No		
11. Were sample(s) at the correct pH upon	receipt?		es No MA pHS	trip Lot# <u>HC432654</u>	
12. Were VOAs on the COC?	. 1.0		es 🚳		
13. Were air bubbles >6 mm in any VOA v 14. Was a trip blank present in the cooler(s			es No Ma		
14. Was a trip blank present in the cooler(s	): Imp Blank Lot #	1	CS (NOS)		
Contacted PM Date	by	via Verbal	Voice Mail Other		
Concerning					
14. CHAIN OF CUSTODY & SAMPLE	DISCREPANCIES		Samples pr	ocessed by:	
and the state of t	ar value 10 caractilities according an arbitrary and the condition of a security and the conditions of the caracteristics and the conditions are conditions as the caracteristics and the caracteristics are conditions as the caracteristics are carefully as the carefully are carefully ar	e construite construite construite and determinate of the construite construi	Mar	and the state of the state of the second of	
		***************************************			
-					
15. SAMPLE CONDITION			I din a tim - 1 - 1		
Sample(s) were received after the recommended holding time had expired.  Sample(s) were received in a broken container.					
Sample(s)				4	
16. SAMPLE PRESERVATION	Well 10001	The Will Subject of Hill.	(110111	J/	
6 14		were f	further preserved in	the laboratory	
Time preserved:	e(s) edded/I of number(s)		He broson you in	mo moonicory.	

## Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 240-52860-1

Login Number: 52860

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh List Creation: 07/08/15 12:33 PM

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