

Put on SPETS  
11/11/15 (gg)

**Richard, Philip E - DNR**

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**From:** Ree, Timothy <Tim.Ree@ghd.com>  
**Sent:** Tuesday, November 10, 2015 11:00 AM  
**To:** Richard, Philip E - DNR  
**Cc:** Frehner, Ron; Storlie, Pete  
**Subject:** Penta Wood - WPDES Compliance Sampling 10/27/2015 ~COR-086165~  
**Attachments:** Lab Report-240-57187-1-086165-02-07-2015-11-10.pdf

Phil,

Please find attached the results for the effluent sample collected at the Penta Wood site on 10/27/2015. PCP was detected at a concentration of 0.067 ug/L (estimated), which meets the permit criteria of 0.1 ug/L. This represents the fourth and final sample collected during October 2015. The average PCP concentration of the October 2015 effluent samples is 0.049 ug/L, which meets the permit criteria.

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

Regards,

**Tim Ree**

**GHD**  
T: +1 651 639 0913 | M: +1 651 592 7697 | E: [tim.ree@ghd.com](mailto:tim.ree@ghd.com)  
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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: 240-57187-1

Client Project/Site: 86165-02-07, 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:  
11/10/2015 9:32:46 AM

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

[denise.heckler@testamericainc.com](mailto:denise.heckler@testamericainc.com)



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[www.testamericainc.com](http://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.*

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# Definitions/Glossary

Client: GHD Services Inc.  
Project/Site: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
<sup>^</sup> c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

**Job ID: 240-57187-1**

**Laboratory: TestAmerica Canton**

Narrative

## CASE NARRATIVE

**Client: GHD Services Inc.**

**Project: 86165-02-07, Penta Wood**

**Report Number: 240-57187-1**

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 10/28/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.1 C.

### CHLORINATED HERBICIDES

Sample W-102715-TB-WE (240-57187-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 10/30/2015 and analyzed on 11/04/2015.

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 180-158851.

No 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: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

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

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**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: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-57187-1	W-102715-TB-WE	Water	10/27/15 14:45	10/28/15 09:40

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- 2
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# Detection Summary

Client: GHD Services Inc.  
Project/Site: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

**Client Sample ID: W-102715-TB-WE**

**Lab Sample ID: 240-57187-1**

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.067	J	0.10	0.016	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: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

**Client Sample ID: W-102715-TB-WE**

**Lab Sample ID: 240-57187-1**

Date Collected: 10/27/15 14:45

Matrix: Water

Date Received: 10/28/15 09:40

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.067	J	0.10	0.016	ug/L		10/30/15 17:15	11/04/15 16:51	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	87	^c	32 - 140				10/30/15 17:15	11/04/15 16:51	4

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# Surrogate Summary

Client: GHD Services Inc.  
Project/Site: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

## 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)
240-57187-1	W-102715-TB-WE	87 ^c	79
LCS 180-158851/2-A	Lab Control Sample	57	53
LCSD 180-158851/3-A	Lab Control Sample Dup	59	55
MB 180-158851/1-A	Method Blank	60	55

### Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid



# QC Sample Results

Client: GHD Services Inc.  
Project/Site: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

## Method: 8151A - Herbicides (GC)

<b>Lab Sample ID: MB 180-158851/1-A</b>						<b>Client Sample ID: Method Blank</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 159291</b>						<b>Prep Batch: 158851</b>			

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.078		0.50	0.078	ug/L		10/30/15 17:15	11/04/15 16:27	20

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	60		32 - 140	10/30/15 17:15	11/04/15 16:27	20

<b>Lab Sample ID: LCS 180-158851/2-A</b>						<b>Client Sample ID: Lab Control Sample</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 159291</b>						<b>Prep Batch: 158851</b>			

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
Pentachlorophenol	5.00	3.60		ug/L		72	40 - 140

Surrogate	LCS	LCS	Limits
2,4-Dichlorophenylacetic acid	57		32 - 140

<b>Lab Sample ID: LCSD 180-158851/3-A</b>						<b>Client Sample ID: Lab Control Sample Dup</b>			
<b>Matrix: Water</b>						<b>Prep Type: Total/NA</b>			
<b>Analysis Batch: 159291</b>						<b>Prep Batch: 158851</b>			

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
Pentachlorophenol	5.00	3.45		ug/L		69	40 - 140	4	30

Surrogate	LCSD	LCSD	Limits
2,4-Dichlorophenylacetic acid	59		32 - 140

# QC Association Summary

Client: GHD Services Inc.  
Project/Site: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

## GC Semi VOA

### Prep Batch: 158851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-57187-1	W-102715-TB-WE	Total/NA	Water	8151A	
LCS 180-158851/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-158851/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-158851/1-A	Method Blank	Total/NA	Water	8151A	

### Analysis Batch: 159291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-57187-1	W-102715-TB-WE	Total/NA	Water	8151A	158851
LCS 180-158851/2-A	Lab Control Sample	Total/NA	Water	8151A	158851
LCSD 180-158851/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	158851
MB 180-158851/1-A	Method Blank	Total/NA	Water	8151A	158851





# Lab Chronicle

Client: GHD Services Inc.  
Project/Site: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

**Client Sample ID: W-102715-TB-WE**

**Lab Sample ID: 240-57187-1**

Date Collected: 10/27/15 14:45

Matrix: Water

Date Received: 10/28/15 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			158851	10/30/15 17:15	CBY	TAL PIT
Total/NA	Analysis	8151A		4	159291	11/04/15 16:51	DFE	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: 86165-02-07, Penta Wood

TestAmerica Job ID: 240-57187-1

## 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	08-31-16

## 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	08-31-16

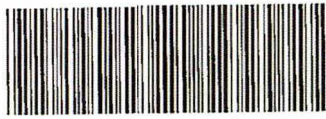


**TestAmerica**

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TestAmerica Laboratories, Inc.

**CHAIN OF CUSTODY  
AND  
RECEIVING DOCUMENTS**



240-57187 Chain of Custody







2.6/C2.1  
**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-01665**

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: <u>086165-02-07</u>			Laboratory Name: <u>TESTAMERICA</u>			Lab Location: <u>N. Cannon</u>			SSOW ID:								
Project Name: <u>PENTAWOOD</u>			Lab Contact:			Lab Quote No:			Cooler No:								
Project Location: <u>S. REN, WI</u>			SAMPLE TYPE			CONTAINER QUANTITY & PRESERVATION			ANALYSIS REQUESTED (See Back of COC for Definitions)								
Chemistry Contact: <u>GRANT. ANDERSON @ GHD. COM</u>			Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO <sub>3</sub> )	Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample <u>2 X</u>	MS/MSD Request	Carrier:		
Sampler(s): <u>T. BRAUN</u>															Airbill No:		
DATE (mm/dd/yy)			TIME (hh:mm)			COMMENTS/ SPECIAL INSTRUCTIONS:			Date Shipped:								
1	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)		<u>W-102715-TB-WE</u>	<u>10/27/15</u>	<u>14:45</u>	<u>WG</u>	<u>2</u>										
2																	
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TAT Required in business days (use separate COCs for different TATs):			Total Number of Containers: <u>2</u>			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: <u>STANDARD</u>			All Samples in Cooler must be on COC														
RELINQUISHED BY		COMPANY		DATE		TIME		RECEIVED BY		COMPANY		DATE		TIME			
1. <u>D. Imbrano</u>		<u>GHD</u>		<u>10/27/15</u>		<u>1700</u>		1. <u>Alex Alb.</u>		<u>TA</u>		<u>10/28/15</u>		<u>940</u>			
								2.									
								3.									

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)







## Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 240-57187-1

**Login Number: 57187**  
**List Number: 2**  
**Creator: Kovitch, Christina M**

**List Source: TestAmerica Pittsburgh**  
**List Creation: 10/29/15 11:05 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> 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	

