Richard, Philip E - DNR

From: Sent: To: Cc: Subject: Attachments: Ree, Timothy <Tim.Ree@ghd.com> Wednesday, October 21, 2015 7:48 AM Richard, Philip E - DNR Frehner, Ron; Storlie, Pete Penta Wood - WPDES Compliance Sampling 10/7/2015 ~COR-086165~ Lab Report-240-56348-1-086165-02-06-2015-10-14.pdf; Lab Report-240-56349-1-086165-02-06-2015-10-20.pdf

Phil,

Please find attached the results for the influent, effluent, and between the carbon unit samples collected at the Penta Wood site on 10/7/2015.

PCP, WI-DRO, and naphthalene were not detected in the effluent sample.

PCP was detected in the influent sample at a concentration of 600 ug/L, which is lower than the influent PCP concentration of 750 ug/L during September 2015.

PCP was detected in the sample collected between the carbon units at a concentration of 0.30 ug/L, which is slightly higher than during September 2015 (0.15 ug/L) and indicates that a carbon exchange is not required.

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

Regards,

Tim Ree

GHD

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

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

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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: 240-56348-1 Client Project/Site: 86165-02-01, Penta Wood

For:

·· LINKS ······

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The

www.testamericainc.com

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Expert

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

Attn: Mr. Grant Anderson

Jenuse DHeckler

Authorized for release by: 10/14/2015 4:11:57 PM

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

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

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

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Definitions/Glossary

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

TestAmerica Job ID: 240-56348-1

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)

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood TestAmerica Job ID: 240-56348-1

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Job ID: 240-56348-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: GHD Services Inc.

Project: 86165-02-01, Penta Wood

Report Number: 240-56348-1

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 10/08/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.7 C.

CHLORINATED HERBICIDES

Sample W-151007-TB-BG (240-56348-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 10/10/2015 and analyzed on 10/13/2015.

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 180-156588.

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: 86165-02-01, Penta Wood

E LA

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: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood TestAmerica Job ID: 240-56348-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-56348-1	W-151007-TB-BG	Water	10/07/15 15:00	10/08/15 09:30

TestAmerica Canton

Detection Summary

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood TestAmerica Job ID: 240-56348-1

1

Client Sample ID: W-15	1007-TB-BG					Lab	Sa	mple ID: 24	0-56348-1
Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.30		0.096	0.015	ug/L	4		8151A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood TestAmerica Job ID: 240-56348-1

lient Sample ID: W-151007-TB-BG ate Collected: 10/07/15 15:00 ate Received: 10/08/15 09:30 Method: 8151A - Herbicides (GC) Analyte Result Qualifier LOQ LOD Unit Pentachlorophenol 0.30 0.096 0.015 Surrogate %Recovery Qualifier Limits		-			Matrix	Water		
GC) Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
0.30		0.096	0.015	ug/L		10/10/15 09:00	10/13/15 13:31	4
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	3C) Result 0.30 <u>%Recovery</u> 79	GC) <u>Result</u> Qualifier 0.30 <u>%Recovery</u> Qualifier 79	3C) <u>Result</u> Qualifier LOQ 0.30 0.096 <u>%Recovery</u> Qualifier Limits <u>79</u> 32 - 140	SC)ResultQualifierLOQLOD0.300.0960.015%RecoveryQualifierLimits7932 - 140	SC) Result Qualifier LOQ LOD Unit 0.30 0.096 0.015 ug/L %Recovery Qualifier Limits 79 32 - 140	SC) Result Qualifier LOQ LOD Unit D 0.30 0.096 0.015 ug/L 0.015 ug/L 0.015	SC) Result Qualifier LOQ LOD Unit D Prepared 0.30 0.096 0.015 ug/L 10/10/15 09:00 %Recovery Qualifier Limits Prepared 79 32 - 140 10/10/15 09:00	SC) D Prepared Analyzed 0.30 0.096 0.015 ug/L D Prepared Analyzed %Recovery Qualifier Limits Prepared Analyzed 79 32-140 10/10/15 09:00 10/13/15 13:31

Surrogate Summary

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

Ş

1

			Per	cent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DCPA1 (32-140)	DCPA2 (32-140)	
240-56348-1	W-151007-TB-BG	79	67 ^c	
LCS 180-156588/2-A	Lab Control Sample	81	65	
LCSD 180-156588/3-A	Lab Control Sample Dup	89	76	
MB 180-156588/1-A	Method Blank	51	47	
O				

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

TestAmerica Canton

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Method: 8151A - Herbig	cides (GC)												
Lab Sample ID: MB 180-15 Matrix: Water Analysis Batch: 156813	6588/1-A								Clie	ent Samj	ple ID: M Prep Typ Prep Ba	ethod be: Tot itch: 1	Blank al/NA 56588
				1.00			11				A		D11 F
Analyte	Res	uit Quali	ner			LOD	Unit		U P	repared	Analyz	42:07	DIFac
Pentachiorophenoi	<0.0	110		0.50	U	.070	ug/L		10/1	0/15 09.00	10/13/15	13.07	20
	1	MB MB											
Surrogate	%Recove	ery Quali	fier	Limits					P	repared	Analyz	ed	Dil Fac
2,4-Dichlorophenylacetic acid		51		32-140					10/1	0/15 09:00	10/13/15	13:07	20
Lab Sample ID: LCS 180-1 Matrix: Water Analysis Batch: 156813 Analyte Pentachlorophenol Surrogate 2,4-Dichlorophenylacetic acid	56588/2-A LCS I %Recovery 0 81	LCS Qualifier	Spi Add 5. Limia 32 - 1	ke ed 00 s 40	LCS Result 4.52	LCS Qua	lifier	Clie Unit ug/L	nt Sa	Mple ID:	Lab Con Prep Typ Prep Ba %Rec. Limits 40_140	atrol Sa be: Tot atch: 1	ample al/NA 56588
Lab Sample ID: LCSD 180- Matrix: Water Analysis Batch: 156813 Analyte Pentachlorophenol	156588/3-A		Spi Add 5.	ke ed	LCSD Result 5.26	LCS Qua	C D lifier	Unit ug/L	ample D	ID: Lab	Control S Prep Typ Prep Ba %Rec. Limits 40 - 140	Sampl be: Tot itch: 1 <u>RPD</u> 15	e Dup tal/NA 56588 RPD Limit 30
	1000	000											
	LCSD I	CSD											
Surrogate	%Recovery	Jualifier	Limit	S									
2,4-Dichlorophenylacetic acid	89		32 - 1	40									

QC Association Summary

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

Lab Control Sample

Method Blank

Lab Control Sample Dup

TestAmerica Job ID: 240-56348-1

8151A

8151A

8151A

Water

Water

Water

156588

156588

156588

5

GC Semi VOA

Prep Batch: 156588

LCS 180-156588/2-A

LCSD 180-156588/3-A

MB 180-156588/1-A

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56348-1	W-151007-TB-BG	Total/NA	Water	8151A	
LCS 180-156588/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-156588/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-156588/1-A	Method Blank	Total/NA	Water	8151A	
Analysis Batch: 1568	13				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56348-1	W-151007-TB-BG	Total/NA	Water	8151A	156588

Total/NA

Total/NA

Total/NA

Matrix: Water

1

1

Client Sample ID: W-151007-TB-BG Lab Sample ID: 240-56348-1 Date Collected: 10/07/15 15:00 Date Received: 10/08/15 09:30

	Batch	Batch		Dilution	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	8151A			156588	10/10/15 09:00	CBY	TAL PIT	
Total/NA	Analysis	8151A		4	156813	10/13/15 13:31	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: 86165-02-01, Penta Wood

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1

Laboratory: Test The certifications listed be	America Canton ow are applicable to this report.				
Authority	Program State Program	EPA Region	Certification ID	Expiration Date	
Laboratory: Test	America Pittsburgh ow are applicable to this report.				
Authority	Program	EPA Region	Certification ID	Expiration Date	
Wisconsin	State Program	5	998027800	08-31-16	



THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY AND **RECEIVING DOCUMENTS**



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		Site Name		Cool	er unpacked by:
Cooler Received on	181.15	Opened on 1917	115	Ally	c lost
FedEx: 1 st Grd	UPS FAS Stets	ion Client Drop Off	TestAmerica Co	urier Other	
Receipt After-hours:	Drop-off Date/Time	3 2	Storage Loca	ation	
TestAmerica Cooler #	Foam	Box Client Cooler	Box Oth	er	
Packing material	ised: Bubble Wrap-	FoamPlastic Bag	-None-Oth	ler	
COOLANT:	Wet Ice) Blue Ic	ce Dry Ice Water	None		
1. Cooler temperatur	upon receipt			2003	e
IR GUN# A (F+1.0 °C) Observe	d Cooler Temp.	C Corrected Co	oler Temp.	• •°C
IR GUN# 4 ((F +0.5 °C) Observe	d Cooler Tempº	C Corrected Ce	oler Temp	°C □ See Mult
IR GUN# 5 ((F +0.4 °C) Observe	d Cooler Tempº	C Corrected Ce	oler Temp	<u> </u>
IR GUN# 8 ((F -1.5 °C) Observed	d Cooler Temp. 2, 2 °(Corrected Cor	oler Temp. Ø.	Z°C
2. Were custody seal	on the outside of the	cooler(s)? If Yes Qu	antity	_ Yes No	
-Were custody sea	ls on the outside of the	e cooler(s) signed & dated	1?	Ne No NA	A
-Were custody sea	ls on the bottle(s) or b	ottle kits (LLHg/MeHg)?		Yes NO	
3. Shippers' packing	lip attached to the coo	ler(s)?		No No	
Did custody paper	accompany the sampl	le(s)?		Kes No	
5. Were the custody j	apers relinquished & s	signed in the appropriate j	place?	Ves No	
6. Was/were the pers	on(s) who collected the	e samples clearly identifie	d on the COC?	Kes No	
7. Did all bottles arri	e in good condition (U	Jnbroken)?		(es No	
8. Could all bottle lab	els be reconciled with	the COC?		No No	
9. Were correct bottle	(s) used for the test(s)	indicated?		No No	10
10. Sufficient quantit	received to perform i	ndicated analyses?		Ves No V	ĸ
11. Were sample(s) at	he correct pH upon re	ceipt?		Ves No NA	PH Strip Lot# HC5546
12. Were VOAs on the	COC?			Yes No	
13. Were air bubbles >	5 mm in any VOA via	ls? /		Yes No NA	L
14. was a trip blank p	esent in the cooler(s)?	Trip Blank Lot #		_ res NO	
Contacted PM	Date	hy	Via Ver	thal Voice Mail	Other
Concerning	Date	0y	via vci	ioar voice man	Other
9					
14. CHAIN OF CUST	ODY & SAMPLE D	ISCREPANCIES		Sam	ples processed by:
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15. SAMPLE COND	TION			1 L - 1 J	1
Sample(S)		were received after th	ie recommended	i holding time ha	a expired.
Sample(S)			were rec	ceived in a broke	en container.
1 1 1 1		were received	with bubble >6	mm in diameter	. (Notify PM)
Sample(s)					
Sample(s)	RVATION				

•

Login Sample Receipt Checklist

Client: GHD Services Inc.

Login Number: 56348 List Number: 2 Creator: Watson, Debbie

Job Number: 240-56348-1

1

List Source: TestAmerica Pittsburgh List Creation: 10/09/15 11:36 AM

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	



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: 240-56349-1 Client Project/Site: 86165-02-01, Penta Wood

1

For:

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

Attn: Mr. Grant Anderson

Att Pit

Authorized for release by: 10/20/2015 4:38:04 PM Nathan Pietras, Project Manager II (330)966-8296 nathan.pietras@testamericainc.com

Designee for

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www.testamericainc.com

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Expert

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

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

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

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Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
х	Surrogate is outside control limits

Glossary

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
Percent Recovery
Contains Free Liquid
Contains no Free Liquid
Duplicate error ratio (normalized absolute difference)
Dilution Factor
Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
Decision level concentration
Minimum detectable activity
Estimated Detection Limit
Minimum detectable concentration
Method Detection Limit
Minimum Level (Dioxin)
Not Calculated
Not detected at the reporting limit (or MDL or EDL if shown)
Practical Quantitation Limit
Quality Control
Relative error ratio
Reporting Limit or Requested Limit (Radiochemistry)
Relative Percent Difference, a measure of the relative difference between two points
Toxicity Equivalent Factor (Dioxin)
Toxicity Equivalent Quotient (Dioxin)

1

Job ID: 240-56349-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: GHD Services Inc.

Project: 86165-02-01, Penta Wood

Report Number: 240-56349-1

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.

The 8151A Chlorinated Herbicides analysis was performed at the TestAmerica Pittsburgh Laboratory.

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 10/8/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample W-151007-TB-ME (240-56349-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The sample was prepared on 10/12/2015 and analyzed on 10/13/2015.

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.

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

WISCONSIN DRO

Sample W-151007-TB-ME (240-56349-1) was analyzed for Wisconsin DRO in accordance with Wisconsin DNR Modified DRO. The sample was prepared on 10/10/2015 and analyzed on 10/14/2015.

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

Job ID: 240-56349-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

CHLORINATED HERBICIDES

Samples W-151007-TB-ME (240-56349-1) and W-151007-TB-MI (240-56349-2) were analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The samples were prepared on 10/10/2015 and analyzed on 10/13/2015 and 10/14/2015.

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.

2,4-Dichlorophenylacetic acid failed the surrogate recovery criteria low for W-151007-TB-MI (240-56349-2).

Sample W-151007-TB-MI (240-56349-2)[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.

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

Method	Method Description	Pro	otocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW	846	TAL CAN
8151A	Herbicides (GC)	SW	/846	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

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Sample Summary

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-56349-1	W-151007-TB-ME	Water	10/07/15 15:10	10/08/15 09:30
240-56349-2	W-151007-TB-MI	Water	10/07/15 15:20	10/08/15 09:30

Detection Summary

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

Client Sample ID: W-151007-TB-ME

No Detections.

Lab Sample ID: 240-56349-1

Client Sample ID: W-151007-TB-MI Lab Sample ID: 240-56349-2

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	600		49	7.5	ug/L	2000		8151A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

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Client Sample Results

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood TestAmerica Job ID: 240-56349-1

Client Sample ID: W-151007-TB-ME Date Collected: 10/07/15 15:10 Date Received: 10/08/15 09:30

Lab Sample ID: 240-56349-1 Matrix: Water

Method: 8270C - Semivolatile	Organic Co	mpounds	(GC/MS)						
Analyte	Result	Qualifier	LÓQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.060		0.19	0.060	ug/L		10/12/15 09:37	10/13/15 13:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	51		29-110				10/12/15 09:37	10/13/15 13:41	1
2-Fluorophenol (Surr)	23		15-110				10/12/15 09:37	10/13/15 13:41	1
2,4,6-Tribromophenol (Surr)	51		21 - 128				10/12/15 09:37	10/13/15 13:41	1
Nitrobenzene-d5 (Surr)	51		31-110				10/12/15 09:37	10/13/15 13:41	1
Phenol-d5 (Surr)	13		10-110				10/12/15 09:37	10/13/15 13:41	1
Terphenyl-d14 (Surr)	55		31 - 115				10/12/15 09:37	10/13/15 13:41	1
Method: 8151A - Herbicides (GC)								
Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.015		0.095	0.015	ug/L		10/10/15 09:00	10/13/15 14:18	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	54		32 - 140				10/10/15 09:00	10/13/15 14:18	4
Method: WI-DRO - Wisconsin	- Diesel Ra	nge Organ	ics (GC)						
Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	< 0.051		0.10	0.051	ma/L		10/10/15 08:06	10/14/15 00:02	1

Client Sample Results

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood TestAmerica Job ID: 240-56349-1

Client Sample ID: W-15	1007-TB-MI					Lab Sample	e ID: 240-56	349-2
Date Collected: 10/07/15 15:	20						Matrix	Water
Date Received: 10/08/15 09:3	30					 		n
Method: 8151A - Herbicides Analyte	s (GC) Result	Qualifier	LOQ	LOD	Unit	D Prepared	Analyzed	Dil Fac
Pentachlorophenol	600		49	7.5	ug/L	 10/10/15 09:00	10/14/15 10:55	2000
Surrogate 2,4-Dichlorophenylacetic acid	%Recovery 0	Qualifier X ^c	Limits 32 - 140			Prepared 10/10/15 09:00	Analyzed 10/14/15 10:55	Dil Fac 2000

10/20/2015

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

M	atr	ix:	W	at	er
	~				••

Prep Type: Total/NA

			Pe	otance Limits)				
		FBP	2FP	TBP	NBZ	PHL	TPH	
Lab Sample ID	Client Sample ID	(29-110)	(15-110)	(21-128)	(31-110)	(10-110)	(31-115)	
240-56349-1	W-151007-TB-ME	51	23	51	51	13	55	2
LCS 240-201407/21-A	Lab Control Sample	64	58	69	85	48	75	
MB 240-201407/20-A	Method Blank	75	69	78	74	57	85	
Surrogate Legend								

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

			Percent Surrogate Recovery (Acceptance Limits)								
		DCPA1	DCPA2								
Lab Sample ID	Client Sample ID	(32-140)	(32-140)								
240-56349-1	W-151007-TB-ME	54	45 ^c								
240-56349-2	W-151007-TB-MI	0 X ^c	0 X ^c								
LCS 180-156588/2-A	Lab Control Sample	81	65								
LCSD 180-156588/3-A	Lab Control Sample Dup	89	76								
MB 180-156588/1-A	Method Blank	51	47								
MB 180-156588/1-A	Method Blank	43	41								
Surrogate Legend											

DCPA = 2,4-Dichlorophenylacetic acid

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

Lab Sample ID: MB 240-201 Matrix: Water Analysis Batch: 201594	407/20-A MB	MB							Client Samp	le ID: Method Prep Type: To Prep Batch: 2	l Blank otal/NA 201407
Analyte	Result	Qualifier	LOQ	L	OD	Unit		D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.063		0.20	0.	.063	ug/L		-	10/12/15 09:37	10/13/15 10:49	1
	MB	MB									
Surrogate	%Recovery	Qualifier	Limits						Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	75		29 - 110						10/12/15 09:37	10/13/15 10:49	1
2-Fluorophenol (Surr)	69		15-110						10/12/15 09:37	10/13/15 10:49	1
2,4,6-Tribromophenol (Surr)	78		21 - 128						10/12/15 09:37	10/13/15 10:49	1
Nitrobenzene-d5 (Surr)	74		31 - 110						10/12/15 09:37	10/13/15 10:49	1
Phenol-d5 (Surr)	57		10_110						10/12/15 09:37	10/13/15 10:49	1
Terphenyl-d14 (Surr)	85		31_115						10/12/15 09:37	10/13/15 10:49	1
Lab Sample ID: LCS 240-20 Matrix: Water Analysis Batch: 201594	1407/21-A		Spike	LCS	LCS		Clie	ent	Sample ID:	Lab Control S Prep Type: To Prep Batch: 2 %Rec.	Sample otal/NA 201407

Analyte Naphthalene			Added	Result 12.6	Qualifier	Unit ug/L	D	%Rec 63	Limits 52 - 120	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
2-Fluorobiphenyl (Surr)	64		29 - 110							
2-Fluorophenol (Surr)	58		15 - 110							
2,4,6-Tribromophenol (Surr)	69		21 - 128							
Nitrobenzene-d5 (Surr)	85		31 - 110							
Phenol-d5 (Surr)	48		10 - 110							
Terphenyl-d14 (Surr)	75		31 - 115							

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-1565 Matrix: Water Analysis Batch: 156813	588/1-A	MD					Client Samp I	le ID: Method Prep Type: To Prep Batch:	l Blank otal/NA 156588
No Late	Desult	MD Outsliffer	100		11		Drenered	Analyzed	
Analyte	Result	Quaimer	LUQ	LOD	Unit	U	Prepared	Analyzed	DirFac
Pentachlorophenol	<0.078		0.50	0.078	ug/L		10/10/15 09:00	10/13/15 13:07	20
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	51		32 - 140				10/10/15 09:00	10/13/15 13:07	20
Lab Sample ID: MB 180-1565 Matrix: Water Analysis Batch: 156813	588/1-А мв	МВ					Client Samp I	le ID: Methoo Prep Type: To Prep Batch:	l Blank otal/NA 156588
Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.016		0.10	0.016	ug/L		10/10/15 09:00	10/13/15 13:54	4
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	43		32 - 140				10/10/15 09:00	10/13/15 13:54	4

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

Matrix: Water Analysis Batch: 156813 Analyte	156588/2-A		Spike Added	LCS Result	LCS Qualifier	Unit	nt Sa	mple ID	2: Lab Cor Prep Ty Prep Ba %Rec. Limits	ntrol Sa pe: Tot atch: 1	ample al/NA 56588
Fentachiorophenor			5.00	4.52		ug/L		90	40 - 140		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
2,4-Dichlorophenylacetic acid	81		32 - 140								
Lah Cample ID: LCCD 49	AECE00/2 A					Nie wet Ca		1D. 1 -1	Orntrol	0l.	D
Lab Sample ID: LCSD 18 Matrix: Water Analysis Batch: 156813	0-156588/3-A		Spike	LCSD	LCSD	Client Sa	ample	ID: Lal	Prep Ty Prep Ty Prep Ba %Rec.	Sample pe: Tot atch: 1	e Dup al/NA 56588 RPD
Lab Sample ID: LCSD 18 Matrix: Water Analysis Batch: 156813 Analyte	D-156588/3-A		Spike Added	LCSD Result	C LCSD Qualifier	Client Sa	ample D	ID: Lal	D Control Prep Ty Prep Ba %Rec. Limits	Sample pe: Tot atch: 1 RPD	e Dup al/NA 56588 RPD Limit
Lab Sample ID: LCSD 180 Matrix: Water Analysis Batch: 156813 Analyte Pentachlorophenol	D-156588/3-A		Spike Added 5.00	LCSD Result 5.26	C LCSD Qualifier	Unit ug/L	ample D	ID: Lab	Control Prep Ty Prep Ba %Rec. Limits 40 - 140	Sample pe: Tot atch: 1 RPD 15	e Dup al/NA 56588 RPD Limit 30
Lab Sample ID: LCSD 180 Matrix: Water Analysis Batch: 156813 Analyte Pentachlorophenol	D-156588/3-A	LCSD	Spike Added 5.00	LCSD Result 5.26	C LCSD Qualifier	Unit ug/L	ample D	ID: Lab %Rec 105	Prep Ty Prep Ba %Rec. Limits 40 - 140	Sample pe: Tot atch: 19 <u>RPD</u> 15	e Dup al/NA 56588 RPD Limit 30
Lab Sample ID: LCSD 180 Matrix: Water Analysis Batch: 156813 Analyte Pentachlorophenol Surrogate	D-156588/3-A	LCSD Qualifier	Spike Added 5.00	LCSD Result 5.26	CLCSD Qualifier	Unit ug/L	D	ID: Lat %Rec 105	Prep Ty Prep Ba %Rec. Limits 40 - 140	Sample pe: Tot atch: 19 <u>RPD</u> 15	e Dup al/NA 56588 RPD Limit 30

		<u> </u>	<u> </u>	. ,					
Lab Sample ID: MB 240-201291/ Matrix: Water Analysis Batch: 201687	7-A						Client Samp	le ID: Method Prep Type: To Prep Batch: :	l Blank otal/NA 201291
	MB	MB							
Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
WI Diesel Range Organics (C10-C28)	<0.050		0.10	0.050	ma/L		10/10/15 08:06	10/13/15 20:52	1

Lab Sample ID: LCS 240-201291/8-A				Clier	nt Sai	mple ID	: Lab Control Sample
Analysis Batch: 201687							Prep Type: Total/NA Prep Batch: 201291
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
WI Diesel Range Organics (C10-C28)	0.500	0.449		mg/L		90	75 - 115

Lab Sample ID: LCSD 240-201291/9-A	ab Sample ID: LCSD 240-201291/9-A			Client Sample ID: Lab Control Sample						
Matrix: Water							Prep Ty	pe: Tot	al/NA	
Analysis Batch: 201687							Prep Ba	atch: 20	01291	
	Spike	LCSD	LCSD				%Rec.		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
WI Diesel Range Organics	0.500	0.489		mg/L		98	75-115	8	20	

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GC/MS Semi VOA

Prep Batch: 201407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56349-1	W-151007-TB-ME	Total/NA	Water	3510C	
LCS 240-201407/21-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-201407/20-A	Method Blank	Total/NA	Water	3510C	
Analysis Batch: 2015	94				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56349-1	W-151007-TB-ME	Total/NA	Water	8270C	201407
LCS 240-201407/21-A	Lab Control Sample	Total/NA	Water	8270C	201407
MB 240-201407/20-A	Method Blank	Total/NA	Water	8270C	201407
GC Semi VOA					
Prep Batch: 156588					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56349-1	W-151007-TB-ME	Total/NA	Water	8151A	

240-56349-1	W-151007-TB-ME	Total/NA	Water	8151A
240-56349-2	W-151007-TB-MI	Total/NA	Water	8151A
LCS 180-156588/2-A	Lab Control Sample	Total/NA	Water	8151A
LCSD 180-156588/3-A	Lab Control Sample Dup	Total/NA	Water	8151A
MB 180-156588/1-A	Method Blank	Total/NA	Water	8151A

Analysis Batch: 156813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56349-1	W-151007-TB-ME	Total/NA	Water	8151A	156588
LCS 180-156588/2-A	Lab Control Sample	Total/NA	Water	8151A	156588
LCSD 180-156588/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	156588
MB 180-156588/1-A	Method Blank	Total/NA	Water	8151A	156588
MB 180-156588/1-A	Method Blank	Total/NA	Water	8151A	156588

Analysis Batch: 156949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56349-2	W-151007-TB-MI	Total/NA	Water	8151A	156588

Prep Batch: 201291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56349-1	W-151007-TB-ME	Total/NA	Water	3520C	
LCS 240-201291/8-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 240-201291/9-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 240-201291/7-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 201687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56349-1	W-151007-TB-ME	Total/NA	Water	WI-DRO	201291
LCS 240-201291/8-A	Lab Control Sample	Total/NA	Water	WI-DRO	201291
LCSD 240-201291/9-A	Lab Control Sample Dup	Total/NA	Water	WI-DRO	201291
MB 240-201291/7-A	Method Blank	Total/NA	Water	WI-DRO	201291

Lab Chronicle

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

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Client Sam Date Collecte Date Receive	ple ID: W- d: 10/07/15 d: 10/08/15 (151007-TB- 15:10 09:30	ME				Lab	Sample II): 240-56349-1 Matrix: Water
Ргер Туре	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab	
Total/NA	Prep	3510C			201407	10/12/15 09:37	JDR	TAL CAN	
Total/NA	Analysis	8270C		1	201594	10/13/15 13:41	JMG	TAL CAN	
Total/NA Total/NA	Prep Analysis	8151A 8151A		4	156588 156813	10/10/15 09:00 10/13/15 14:18	CBY JMO	TAL PIT TAL PIT	
Total/NA Total/NA	Prep Analysis	3520C WI-DRO		1	201291 201687	10/10/15 08:06 10/14/15 00:02	CSC DEB	TAL CAN TAL CAN	

Client Sample ID: W-151007-TB-MI Date Collected: 10/07/15 15:20

Lab Sample ID: 240-56349-2 Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			156588	10/10/15 09:00	CBY	TAL PIT
Total/NA	Analysis	8151A		2000	156949	10/14/15 10:55	JMO	TAL PIT

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

TestAmerica Canton

Date Conected: 10/07/15 15:20 Date Received: 10/08/15 09:30

Certification Summary

Client: GHD Services Inc. Project/Site: 86165-02-01, Penta Wood

Laboratory: TestAmerica Canton The certifications listed below are applicable to this report.

WisconsinState Program599951819008-31-16	Authority Wisconsin	Program State Program	EPA Region	Certification ID 999518190	Expiration Date 08-31-16
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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

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS



240-56349 Chain of Custody

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& ASSOCIATES	S	t. Paul, Mir	nnesota 55112	2 United States		:	PAGE OF
	Phone	: (651) 639-	-0913	Fax: (651) 639-0	0923	(3	se Neverse Side for Instructions
O8616K-02		ry Name:	TEST A	MERILA	Lab Location:	CANTER MAN	SSOW ID:
Project Name:	Lab Con	tact:			Lab Quote No:	1 1	Cooler No:
Project Location:		- Co	ONTAINER OU	IANTITY &	6	0	Carrier
S,REN, WI	SAMPLE TYPE		PRESERVA	TION	ANALYSIS	COC for Definitions)	Samer.
Chemistry Contact:	Û	HCI)	3	mple	N		Airbill No:
Sampler(s):		Acid (VO ₃) (H ₂ SO)	er (Sc 3, 1x2! ers/Sa	12 奏3	l i i i i i i i i i i i i i i i i i i i	Date Shinned:
T.BRAW	Code cck of ick of	hloric	cid (HI Acid Hydro	s 3x5-9	2 EO	Requi	
SAMPLE IDENTIFICATION DATE (Containers for each sample may be combined on one line) (mm/dd//yy) (hh.mm	Matrix (see ba Grab (0	Unprese	Nitric A Sulfuric Sodium (NaOH)	Methano VOC) EnCores Other: Total Co	N Z BCC	QSW/SW	COMMENTS/ SPECIAL INSTRUCTIONS
W-151007-118-ME 10/01/15 15:11	SWG	42		6	XXX		
N-15 WUZ TR-MZ 10/07/15/15:2	6 WG	2		2	X		
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TAT Required in business days/use senarate COCs for different TATel			to/ Number of	Cantoinum			·
1 Day 2 Days 3 Days 11 Week □ 2 Week Xi Other: 51	ANDRED	All Same	les in Cooler	whethe an COC	Notes/ Special Re	equirements:	
	DATE			RECEIVED D		Coursest	· · · · · · · · · · · · · · · · · · ·
JUNBRAN ADD _ CLA I	17/15	1417	0 1. /	TIM C. M.		TA TA	MO18/15 OR-
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The Chain Of Cu.	STODY IS A LE	GAL DOCUME	ENT-ALL FIFI D	S MUST BE COMPL	TED ACCUPATELY		
Distribution: WHITE - Fully Executed Copy (CRA) YELLOW -	-Receiving La	boratory Co	ppy F	PINK - Shipper	GOLDENROD	-Sampling Crew	CRA Form: COC 104 (20110004)
							300 Form. 000-10A (20110804)

Client (1) A-Site Name	Cooler unpacked by:
Chemina 10/ZIIS	- Bley lof.
Cooler Received on 0/6/2 Opened on 10/6/2	arice Courier Other
Peceint After-hours: Drop off Date/Time	rage Location
TestAmerica Cooler # Form Box Client Cooler Box	Other
Packing material used: BubbleWrap Foam Plastic Bag None	Other
COOLANT: Wet Ice) Blue Ice Dry Ice Water None	B
1. Cooler temperature upon receipt	
IR GUN# A (CF +1.0 °C) Observed Cooler Temp. °C Corre	ected Cooler Temp°C
IR-GUN#4 (CF +0.5 °C) Observed Cooler Temp °C Corr	eeted Cooler Temp°C 🛛 See Multiple
IR GUN# 5- (CF +0.4 °C) Observed Cooler Temp°C Corr	eeted Cooler Temp°C Cooler Form
IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp. 2. C Corre	ected Cooler Temp. O- 7 °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?	Kej No NA
- were custody sears on the bottle(s) or bottle kits (LLHg/MeHg)?	IES NO
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	e COC? Kes No
7. Did all bottles arrive in good condition (Unbroken)?	res No
8. Could all bottle labels be reconciled with the COC?	YES No
9. Were correct bottle(s) used for the test(s) indicated?	Res No
10. Sufficient quantity received to perform indicated analyses?	Ves No Val
 Were sample(s) at the correct pH upon receipt? 	Kes No NA pH Strip Lot# HC554612
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
Contracted DM Data hu	via Verbal Voice Mail Other
Concerning	
14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES	Samples processed by:
	·
	*
15. SAMPLE CONDITION	mmended holding time had expired.
15. SAMPLE CONDITION Sample(s) were received after the recor	
15. SAMPLE CONDITION Sample(s) were received after the recor Sample(s)	were=received=in=a=broken=container-
15. SAMPLE CONDITION Sample(s)	were-received-in-a-broken-container. ubble_>6.mm in diameter. (Notify PM)
15. SAMPLE CONDITION Sample(s)	were-received-in-a-broken-container. ubble >6.mm in diameter. (Notify PM)

Ref: SOP NC-SC-0005, Sample Receiving X:\X-Drive Document Control\SOPs\Work Instructions\Word Version Work Instructions\WI-NC-099U-082815 Cooler Receipt Form.doc djl

TestAmerica Canton 4101 Shuffel Street NW	C	hain (ofCus	tody F	2000	ord								n and anna Tà tha anna anna	alle Alle	-sta	me	rica
North Canton, OH 44720 Phone (330) 497-9396 Fax (330) 497-0772	onall of ouslouy Neco					nu										DER HT	ENVIRONMEN	TAL TESTING
Client Information (Sub Contract Lab)	Sampler: Lab P				PM:	onico	D	<u> </u>										
Client Contact	Phone:			E-M	ail:	enise	0	<u>-</u> -	240-	56349	Chain o	of Cust	ody			92.1		11.10
Shipping/Receiving Company:				der	ise.hec	kler@	testame	erica.			-				. T.U.S.	of 1	į	Thew
TestAmerica Laboratories, Inc.	In							A	nalysi	s Re	queste	d			240	-56349-1		SEB
301 Alpha Drive, RIDC Park,	10/20/2015	ed:			1.5	1									Pre	servation Co	odes:	
City: Pittsburgh	TAT Requested (da	iys):				*									A- B-	HCL NaOH Zn Acetate	M - Hexane N - None	
State, Zip: PA, 15238									-						D- E-	Nitric Acid	P - Na2O4: Q - Na2SO	3
Phone: 412-963-7058(Tel) 412-963-2468(Fax)	PO #:					pheno								_	F- G-	NeOH Amchlor	R - Na2S23 S - H2SO4	603
Email:	WO #.				or Ne	achlor) - -	ie JI Water	U - Acetone V - MCAA	ecanydrate
Project Name: 86165-02-01, Penta Wood	Project #: 24012755				e (Yee) Pent									K-	EDTA EDA	W - ph 4-5 Z - other (s	becify)
Site:	SSOW#:				SD, N	dom)								CAC.	Oth	r:		
		Sample	Sample Type	Matrix (W=water, S=solid,	d Filtêrediê opni MS/M	A/8151A_AF											ŭ	
Sample Identification - Client ID (Lab ID)	Sample Date	Time	G=grab)	BT=Tissue, A*Ali) [1]	8151									1019	Special	nstructions	/Note:
			Preserva	tion Code:	XX		27		incus (cu	1 Po	August and		- 12 a		\times	Contraction of the second		- Van Berger
W-151007-TB-ME (240-56349-1)	10/7/15	15:10 Eastern		Water		x									2 WI	Jse 200 ul sp	oike; and x4 d	ilution
W-151007-TB-MI (240-56349-2)	10/7/15	15:20 Eastern		Water		x	-								2-WI	Jse 200 ul sp	oike; and x4 d	ilution
-																		
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Possible Hazard Identification							Dianaa							1				
Unconfirmed							Dispos		tee ma	y be a	ssesse	d if san	nples	are reta	ined Ic	nger than	1 month)	
Deliverable Requested: I, II, III, IV, Other (specify)					Sp	ecial I	Instructio	ons/Q(C Requ	ireme	nts:	Ву Lab		Ar	chive F	or	Months	
Empty Kit Relinquished by:		Date:			Time:						Me	thod of S	hipmen	t				
Relinquished by:	Date/Time:	15 11	24	Company	>	Recei	iver by	Và	ile	32	2	1	Date/Til	ng) -	9-	15	Company	91
Relinquished by:	Date/Time:			Company		Recei	ived by.						Date/Tin	ne:	1	nde	Company	·
Relinquished by:	Date/Time:			Сотрапу		Recei	ived by:					ľ	Date/Tin	ne:	-2	10	Company	
Custody Seals Intact: Custody Seal No	···		a electrication pro-			Coole	er Tempera	ature(s)	°C and (Other Re	marks:			a tè	- 		ne di se ne di se	· · · · · · · · · · · · · · · · · · ·

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Login Sample Receipt Checklist

Client: GHD Services Inc.

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Login Number: 56349 List Number: 2 Creator: Watson, Debbie

Job Number: 240-56349-1

1

List Source: TestAmerica Pittsburgh List Creation: 10/09/15 11:36 AM

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