

Rec 2/25/15
PVA ON BRRTS
2/25/15

Richard, Philip E - DNR

From: Ree, Timothy <tree@croworld.com>
Sent: Wednesday, February 25, 2015 8:46 AM
To: Richard, Philip E - DNR
Cc: Frehner, Ron; Storlie, Pete; Sandberg, Brian
Subject: RE: Penta Wood - Pumping Strategy Update ~COR-086165~
Attachments: Lab Report-240-47410-1-086165-01-07-2015-02-24.pdf; Lab Report-240-47409-1-086165-01-06-2015-02-24.pdf; Penta Wood-Unconfined Contours.pdf; Penta Wood-Semiconfined Contours.pdf

(99)

Phil,

Please find attached a copy of the laboratory report for the WPDES compliance effluent sample collected at the Penta Wood site on 2/18/2015. PCP was detected at a concentration of 0.048 ug/L (estimated), which is less than the permit limit of 0.1 ug/L. This represents the third sample collected in February and the sample collected after implementing the modified pumping strategy on 2/13/2015. The average concentration of the three effluent samples collected in February is 0.088 ug/L, which is less than the permit limit. Although this result is favorable, PCP was still detected at an estimated concentration below the laboratory reporting/quantitation limit. We will continue to monitor this issue closely.

Also attached is a copy of the laboratory report for the influent sample collected on 2/18/2015. PCP was detected at a concentration of 480 ug/L, which represents a significant decrease and is attributed to the modified pumping strategy. Previous influent concentrations ranged between 1,800 ug/L and 4,600 ug/L.

As discussed below, we measured groundwater levels in the extraction wells and monitoring wells on 2/20/2015 to confirm hydraulic capture of the plume area under the modified pumping strategy at the Penta Wood site. Attached are groundwater contours for the unconfined (upper) aquifer and semiconfined (lower) aquifer during May and September 2014, 2/13/2015 (prior to implementing the modified pumping strategy), and 2/20/2015 (one week after implementing the modified pumping strategy). As indicated by the contours before and after the pumping adjustments, we are maintaining hydraulic capture of the plume with the modified pumping strategy. We plan to measure groundwater levels again in approximately one month.

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

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

Regards,
Tim

From: Ree, Timothy
Sent: Wednesday, February 18, 2015 4:12 PM
To: Richard, Philip E - DNR
Cc: Endsley, Erin A - DNR; Frehner, Ron; Storlie, Pete; Sandberg, Brian
Subject: RE: Penta Wood - Pumping Strategy ~COR-086165~

Phil,

CRA implemented the modified pumping strategy on 2/13/2015. The pumping rates were set at approximately 6 gpm per well with a total system pumping rate of approximately 30 gpm. We measured water levels in the pumping wells yesterday (2/17/2015). Since excessive drawdown was not observed in the extraction wells, we increased the pumping

rates to approximately 10 gpm in each well for a total system pumping rate of approximately 50 gpm. We will measure water levels in the extraction wells and monitoring wells on Friday (2/20/2015) to confirm that we are still maintaining capture of the plume area under the modified pumping strategy.

Regards,
Tim

From: Ree, Timothy
Sent: Thursday, February 12, 2015 10:59 AM
To: 'Richard, Philip E - DNR'
Cc: Endsley, Erin A - DNR; Bartilson, Kathy M - DNR
Subject: RE: Penta Wood - Pumping Strategy ~COR-086165~

Phil,

CRA will implement the modified pumping strategy tomorrow (Friday, 2/13/2015).

Thanks,
Tim

From: Richard, Philip E - DNR [<mailto:Philip.Richard@wisconsin.gov>]
Sent: Thursday, February 12, 2015 9:13 AM
To: Ree, Timothy
Cc: Endsley, Erin A - DNR; Bartilson, Kathy M - DNR
Subject: RE: Penta Wood - Pumping Strategy ~COR-086165~

Tim,

I talked to Linda yesterday, and she agrees with the proposed corrective action described below. Please proceed with the modified pumping strategy and let me know when it has been implemented.

Thanks,

Phil

Philip E. Richard

Hydrogeologist

Wisconsin Department of Natural Resources

Phone: 715 762 1352

Fax: 715 762 4348

philip.richard@wisconsin.gov

We are committed to service excellence.

Visit our survey at <http://dnr.wi.gov/customerurvey> to evaluate how I did.



From: Ree, Timothy [<mailto:tree@croworld.com>]
Sent: Tuesday, February 10, 2015 3:50 PM
To: Richard, Philip E - DNR
Cc: Endsley, Erin A - DNR; Frehner, Ron; Storlie, Pete; Sandberg, Brian
Subject: Penta Wood - Pumping Strategy ~COR-086165~

Phil,

Please find attached a copy of the laboratory report for the individual extraction well samples collected at the Penta Wood site on 2/3/2015.

CRA believes that the presence of small amounts of emulsified LNAPL in the influent water may be the cause of the increased PCP levels in the influent water. These small amounts of emulsified LNAPL may be preventing treatment to the substantive WPDES permit limit by utilizing activated carbon only. This sampling was conducted a part of troubleshooting and to identify extraction wells with the highest PCP concentrations and whether emulsified LNAPL is being extracted from the wells. A sample was collected from each extraction well that is being operated including EW04, EW05, EW06, EW07, EW10, EW12, EW13, and EW14. A sample was not collected from well EW03 since the pump was not operating at that time. Samples were not collected from wells EW02 and EW11, since those wells are not used for groundwater extraction.

The results were generally consistent with sampling performed in August 2014. The highest PCP concentrations (880 ug/L – 4,900 ug/L) and WI DRO concentrations (4.1 mg/L -12 mg/L) were detected in wells EW05, EW06, EW10, and EW12 where LNAPL is present. PCP (170 ug/L – 660 ug/L) and WI DRO concentrations (0.3 mg/L – 1.6 mg/L) were significantly lower in wells EW04, EW07, EW13, and EW14 where LNAPL was not present (or not present in significant amounts). Oil and grease were only detected in wells EW05 and EW06. Based on these results, CRA believes that emulsified LNAPL may be present in the water extracted from wells EW05, EW06, EW10, and EW12.

CRA recommends that the pumps in wells EW05, EW06, EW10, and EW12 be turned off on a temporary basis. Groundwater would be pumped from wells EW02, EW04, EW07, EW13, and EW14 at extraction rates of 6-10 gpm per well and treated using activated carbon. Well EW02 would be used to replace well EW03, since the pump in EW03 is not currently working. Effluent sampling would continue to be conducted in accordance with the substantive permit requirements. In addition, groundwater levels would be monitored within a week after this pumping strategy is implemented to confirm that the dissolved PCP plume capture is maintained. Pumping rates could be increased if necessary to maintain capture. In addition, well EW03 could be repaired and also be used for groundwater extraction, if necessary. Based on available aquifer data and aquifer capture calculations, CRA estimates that only 5 gpm is necessary to maintain capture at the site. Therefore, a total pumping rate of 30 gpm (5 wells x 6 gpm/well) is more than adequate.

Please provide these results and recommendations to Kathy Bartilson (WDNR) and Linda Martin (USEPA) and confirm that they agree with this pumping strategy for the site and as a corrective action to meet the substantive WPDES permit requirements.

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

Regards,

Tim Ree
Conestoga-Rovers & Associates (CRA)
1801 Old Highway 8 NW, Suite 114

St Paul, MN 55112

Phone: 651.639.0913


Direct: 651.639-0439 (ext. 338)

Cell: 651.592.7697

Fax: 651.639.0923

Email: tree@CRAworld.com

www.CRAworld.com

Think before you print 

Perform every task the safe way, the right way, every time!

This communication and any accompanying document(s) are confidential and are intended for the sole use of the addressee. If you are not the intended recipient, please notify me at the telephone number shown above or by return e-mail and delete this e-mail and any copies. You are advised that any disclosure, copying, distribution, or the taking of any action in reliance upon the communication without consent is strictly prohibited. Thank you.

CRA and GHD have merged! To learn more, visit www.CRAworld.com/ghd

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: 240-47410-1

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

For:

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

Attn: Mr. Grant Anderson



Authorized for release by:

2/24/2015 11:09:25 AM

Nathan Pietras, Project Manager II
(330)966-8296

nathan.pietras@testamericainc.com

Designee for

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

denise.heckler@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?

Ask
The
Expert

Visit us at:

www.testamericainc.com

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Table of Contents

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



Definitions/Glossary

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

TestAmerica Job ID: 240-47410-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

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

TestAmerica Job ID: 240-47410-1

Job ID: 240-47410-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 86165-01-01, Penta Wood

Report Number: 240-47410-1

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 Herbicide 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 sample was received on 2/19/2015 12:00 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

CHLORINATED HERBICIDES

Sample W-150218-PS-WE (240-47410-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The sample was prepared on 02/20/2015 and analyzed on 02/23/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

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



Method Summary

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

TestAmerica Job ID: 240-47410-1

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

Protocol References:

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

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058



Sample Summary

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

TestAmerica Job ID: 240-47410-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-47410-1	W-150218-PS-WE	Water	02/18/15 10:15	02/19/15 12:00

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

Detection Summary

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

TestAmerica Job ID: 240-47410-1

Client Sample ID: W-150218-PS-WE

Lab Sample ID: 240-47410-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	0.048	J	0.095	0.015	ug/L	4		8151A	Total/NA

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

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

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

TestAmerica Job ID: 240-47410-1

Client Sample ID: W-150218-PS-WE

Lab Sample ID: 240-47410-1

Date Collected: 02/18/15 10:15

Matrix: Water

Date Received: 02/19/15 12:00

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.048	J	0.095	0.015	ug/L		02/20/15 15:00	02/23/15 15:23	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	51		32 - 140				02/20/15 15:00	02/23/15 15:23	4



Surrogate Summary

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

TestAmerica Job ID: 240-47410-1

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)
240-47410-1	W-150218-PS-WE	51	48
LCS 180-133932/2-A	Lab Control Sample	65	58
LCSD 180-133932/3-A	Lab Control Sample Dup	66	58
MB 180-133932/1-A	Method Blank	69	62

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid



QC Sample Results

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

TestAmerica Job ID: 240-47410-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-133932/1-A
Matrix: Water
Analysis Batch: 133984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.10	0.016	ug/L		02/20/15 15:00	02/23/15 14:21	4
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	69		32 - 140				02/20/15 15:00	02/23/15 14:21	4

Lab Sample ID: LCS 180-133932/2-A
Matrix: Water
Analysis Batch: 133984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133932

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	0.500	0.447		ug/L		89	40 - 140
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2,4-Dichlorophenylacetic acid	65		32 - 140				

Lab Sample ID: LCSD 180-133932/3-A
Matrix: Water
Analysis Batch: 133984

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133932

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Pentachlorophenol	0.500	0.470		ug/L		94	40 - 140	5	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2,4-Dichlorophenylacetic acid	66		32 - 140						

QC Association Summary

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

TestAmerica Job ID: 240-47410-1

GC Semi VOA

Prep Batch: 133932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-47410-1	W-150218-PS-WE	Total/NA	Water	8151A	
LCS 180-133932/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-133932/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-133932/1-A	Method Blank	Total/NA	Water	8151A	

Analysis Batch: 133984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-47410-1	W-150218-PS-WE	Total/NA	Water	8151A	133932
LCS 180-133932/2-A	Lab Control Sample	Total/NA	Water	8151A	133932
LCSD 180-133932/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	133932
MB 180-133932/1-A	Method Blank	Total/NA	Water	8151A	133932



Lab Chronicle

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

TestAmerica Job ID: 240-47410-1

Client Sample ID: W-150218-PS-WE

Lab Sample ID: 240-47410-1

Date Collected: 02/18/15 10:15

Matrix: Water

Date Received: 02/19/15 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			133932	02/20/15 15:00	CBY	TAL PIT
Total/NA	Analysis	8151A		4	133984	02/23/15 15:23	JMO	TAL PIT

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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

Certification Summary

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

TestAmerica Job ID: 240-47410-1

Laboratory: TestAmerica Canton

The certifications listed below are applicable to this report.

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

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

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

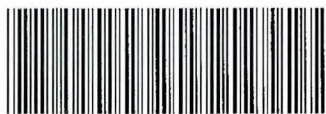
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-47410 Chain of Custody



TestAmerica Canton 3,2/C 3,7
4101 Shuffel Street, N. H.

Chain of Custody Record

043866

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Regulatory Program: DW NPDES RCRA Other: ganderson@craworld.com

Client Contact Company Name: <u>CRA, Inc.</u> Address: <u>1901 Old Hwy 8, #114</u> City/State/Zip: <u>St. Paul, MN, 55112</u> Phone: <u>651-639-10913</u> Fax:		Project Manager: Tel/Fax:		Site Contact: Lab Contact:		Date: <u>2-18-15</u> Carrier: <u>Fed Ex</u>		COC No: <u>1</u> of <u>1</u> COCs	
Project Name: <u>086165-01-01</u> Site: <u>Zenta Wood</u> P O #		Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from below <input type="checkbox"/> 2 weeks <u>5-DAY</u> <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day				Filtered Sample (Y/N) Perform MS/MSD (Y/N) <u>PCP-8151</u>		Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:		
<u>W-150218-PS-WE</u>		<u>2-18-15</u>	<u>1015</u>	<u>G</u>	<u>W</u>	<u>2</u>	<u>NM</u>	<u>X</u>	<u>Weekly Effluent</u>
Preservation Used: 1=Ice, 2=HCL, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other		Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
Special Instructions/QC Requirements & Comments: <u>5-DAY TAT</u>									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____		Therm ID No.: _____			
Relinquished by: <u>[Signature]</u>		Company: <u>CRA</u>		Date/Time: <u>2-18-15/1400</u>		Received by: _____		Company: _____ Date/Time: _____	
Relinquished by:		Company:		Date/Time:		Received by:		Company: _____ Date/Time: _____	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by: <u>[Signature]</u>		Company: <u>TAL/Canton</u> Date/Time: <u>2/19/15 1200</u>	

Page 15 of 17

2/24/2015

TestAmerica Canton Sample Receipt Form/Narrative Login #: 47410
Canton Facility

Client CRA Site Name _____ Cooler unpacked by: [Signature]
Cooler Received on 2/19/15 Opened on 2/19/15
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 +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. 3.2 °C Corrected Cooler Temp. 3.7 °C See Multiple Cooler Form
IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 3 Yes No
-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the sampler(s) clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC425511
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

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

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [Signature]

15. SAMPLE CONDITION
Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION
Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____



Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-47410-1

Login Number: 47410

List Number: 2

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 02/20/15 01:56 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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 240-47409-1
Client Project/Site: 86165-01-01, Penta Wood

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

Attn: Mr. Grant Anderson



Authorized for release by:
2/24/2015 11:07:31 AM
Nathan Pietras, Project Manager II
(330)966-8296
nathan.pietras@testamericainc.com
Designee for
Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

LINKS

Review your project
results through
Total Access

Have a Question?

 **Ask
The
Expert**

Visit us at:

www.testamericainc.com

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	12
Lab Chronicle	13
Certification Summary	14
Chain of Custody	15
Receipt Checklists	18

Definitions/Glossary

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

TestAmerica Job ID: 240-47409-1



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
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

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

TestAmerica Job ID: 240-47409-1

Job ID: 240-47409-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 86165-01-01, Penta Wood

Report Number: 240-47409-1

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 Herbicide 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 sample was received on 2/19/2015 12:00 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

CHLORINATED HERBICIDES

Sample W-150218-PS-INF (240-47409-1) was analyzed for chlorinated herbicides in accordance with EPA SW-846 Method 8151A. The sample was prepared on 02/20/2015 and analyzed on 02/24/2015.

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-150218-PS-INF (240-47409-1).

Sample W-150218-PS-INF (240-47409-1)[4000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8151A: The following sample(s) was diluted due to the abundance of target analytes: W-150218-PS-INF (240-47409-1)



Case Narrative

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

TestAmerica Job ID: 240-47409-1

Job ID: 240-47409-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

Method Summary

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

TestAmerica Job ID: 240-47409-1

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

Protocol References:

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

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058



Sample Summary

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

TestAmerica Job ID: 240-47409-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-47409-1	W-150218-PS-INF	Water	02/18/15 10:20	02/19/15 12:00

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

Detection Summary

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

TestAmerica Job ID: 240-47409-1

Client Sample ID: W-150218-PS-INF

Lab Sample ID: 240-47409-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	480		97	15	ug/L	4000		8151A	Total/NA

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

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

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

TestAmerica Job ID: 240-47409-1

Client Sample ID: W-150218-PS-INF

Lab Sample ID: 240-47409-1

Date Collected: 02/18/15 10:20

Matrix: Water

Date Received: 02/19/15 12:00

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	480		97	15	ug/L		02/20/15 15:00	02/24/15 07:58	4000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	0	X D	32 - 140				02/20/15 15:00	02/24/15 07:58	4000



Surrogate Summary

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

TestAmerica Job ID: 240-47409-1

Method: 8151A - Herbicides (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCPA1 (32-140)	DCPA2 (32-140)
240-47409-1	W-150218-PS-INF	0 X D	0 X D
LCS 180-133932/2-A	Lab Control Sample	65	58
LCSD 180-133932/3-A	Lab Control Sample Dup	66	58
MB 180-133932/1-A	Method Blank	69	62

Surrogate Legend

DCPA = 2,4-Dichlorophenylacetic acid

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

QC Sample Results

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

TestAmerica Job ID: 240-47409-1

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 180-133932/1-A
Matrix: Water
Analysis Batch: 133984

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133932

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.10	U	0.10	0.016	ug/L		02/20/15 15:00	02/23/15 14:21	4
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	69		32 - 140				02/20/15 15:00	02/23/15 14:21	4

Lab Sample ID: LCS 180-133932/2-A
Matrix: Water
Analysis Batch: 133984

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133932

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	0.500	0.447		ug/L		89	40 - 140
Surrogate	%Recovery	LCS Qualifier	Limits				
2,4-Dichlorophenylacetic acid	65		32 - 140				

Lab Sample ID: LCSD 180-133932/3-A
Matrix: Water
Analysis Batch: 133984

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 133932

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Pentachlorophenol	0.500	0.470		ug/L		94	40 - 140	5	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
2,4-Dichlorophenylacetic acid	66		32 - 140						

QC Association Summary

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

TestAmerica Job ID: 240-47409-1

GC Semi VOA

Prep Batch: 133932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-47409-1	W-150218-PS-INF	Total/NA	Water	8151A	
LCS 180-133932/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 180-133932/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	
MB 180-133932/1-A	Method Blank	Total/NA	Water	8151A	

Analysis Batch: 133984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-47409-1	W-150218-PS-INF	Total/NA	Water	8151A	133932
LCS 180-133932/2-A	Lab Control Sample	Total/NA	Water	8151A	133932
LCSD 180-133932/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	133932
MB 180-133932/1-A	Method Blank	Total/NA	Water	8151A	133932

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

Lab Chronicle

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

TestAmerica Job ID: 240-47409-1

Client Sample ID: W-150218-PS-INF

Lab Sample ID: 240-47409-1

Date Collected: 02/18/15 10:20

Matrix: Water

Date Received: 02/19/15 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			133932	02/20/15 15:00	CBY	TAL PIT
Total/NA	Analysis	8151A		4000	133984	02/24/15 07:58	JMO	TAL PIT

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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

Certification Summary

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

TestAmerica Job ID: 240-47409-1

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

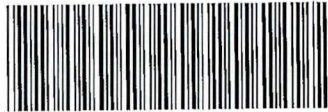
Laboratory: TestAmerica Pittsburgh

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



**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-47409 Chain of Custody



3,2/C3.7

North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Regulatory Program: DW NPDES RCRA Other: 5

ganderson@craworld.com

Grant Anderson

Client Contact		Project Manager:		Site Contact:		Date: <u>2-18-15</u>		COC No:			
Company Name: <u>CRA, Inc.</u>		Tel/Fax:		Lab Contact:		Carrier: <u>FEDEX</u>		1 of 1 COCs			
Address: <u>1801 Old Hwy 8, #114</u>		Analysis Turnaround Time						Sampler:			
City/State/Zip: <u>St Paul, MN 55112</u>		<input type="checkbox"/> CALENDAR DAYS		<input checked="" type="checkbox"/> WORKING DAYS				For Lab Use Only:			
Phone: <u>651-639-0913</u>		TAT if different from Below		5-DAY				Walk-in Client:			
Fax:		<input type="checkbox"/> 2 weeks				Filtered Sample (Y/N)		Lab Sampling:		Job / SDG No.:	
Project Name: <u>OR6165-01-01</u>		<input type="checkbox"/> 1 week				Perform MS / MSD (Y/N)					
Site: <u>Penta Wood</u>		<input type="checkbox"/> 2 days									
P O #		<input type="checkbox"/> 1 day									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sample Specific Notes:
<u>W-150218-PS-INF</u>	<u>2-18-15</u>	<u>1020</u>	<u>G</u>	<u>W</u>	<u>2</u>	<u>Y</u>	<u>N</u>	<u>influent</u>
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/

Preservation Used: 1=Ice/ 2=HCl/ 3=H2SO4/ 4=HNO3/ 5=NaOH/ 6=Other

Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Special Instructions/QC Requirements & Comments: 5-DAY TAT

Custody Seals Intact: Yes No

Custody Seal No.: _____ Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by: <u>[Signature]</u>	Company: <u>CRA</u>	Date/Time: <u>2-18-15/1400</u>	Received by: _____	Company: _____	Date/Time: _____
Relinquished by: _____	Company: _____	Date/Time: _____	Received by: _____	Company: _____	Date/Time: _____
Relinquished by: _____	Company: _____	Date/Time: _____	Received in Laboratory by: <u>[Signature]</u>	Company: <u>T4/Canton</u>	Date/Time: <u>2/19/15 12:00</u>

Page 16 of 18
7/24/2015

TestAmerica Canton Sample Receipt Form/Narrative Login # : 47409
 Canton Facility: _____

Client CRA Site Name _____ Cooler unpacked by: _____
 Cooler Received on 2/19/15 Opened on 2/19/15
 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 +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. 3.2 °C Corrected Cooler Temp. 3.7 °C See Multiple Cooler Form
 IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 3 Yes No
 -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No
 4. Did custody papers accompany the sample(s)? Yes No
 5. Were the custody papers relinquished & signed in the appropriate place? Yes No
 6. Was/were the sampler(s) clearly identified on the COC? Yes No
 7. Did all bottles arrive in good condition (Unbroken)? Yes No
 8. Could all bottle labels be reconciled with the COC? Yes No
 9. Were correct bottle(s) used for the test(s) indicated? Yes No
 10. Sufficient quantity received to perform indicated analyses? Yes No
 11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC425511
 12. Were VOAs on the COC? Yes No
 13. Were air bubbles >6 mm in any VOA vials? Yes No NA
 14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

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

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

15. SAMPLE CONDITION
 Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

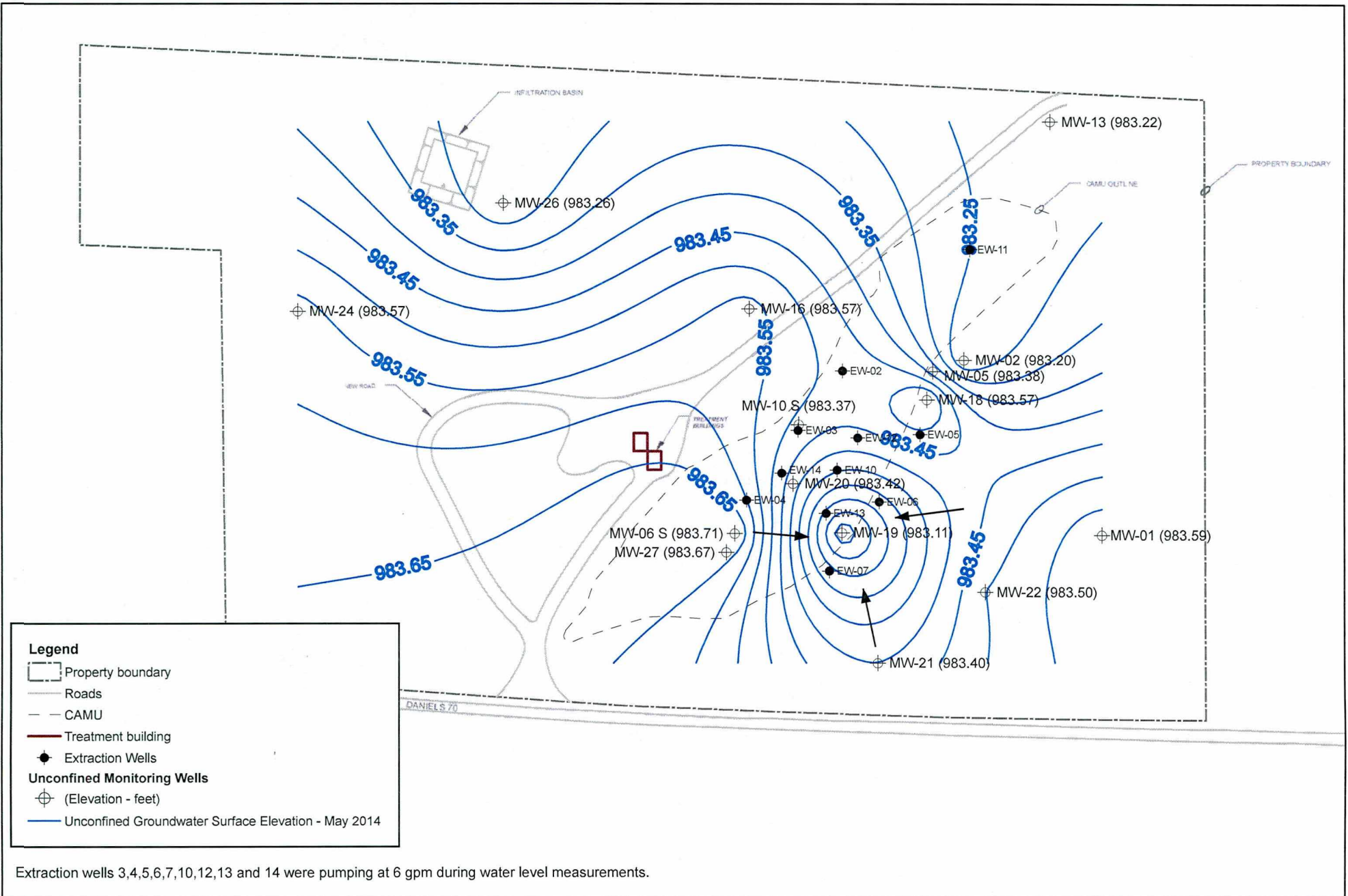
Job Number: 240-47409-1

Login Number: 47409
List Number: 2
Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh
List Creation: 02/20/15 01:56 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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





\\hercules\pro\EP\151745-Penta Wood\GIS\Annual_Report_Figs\2014\Fig_4_PW_UC_GW_5-2014

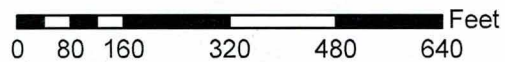
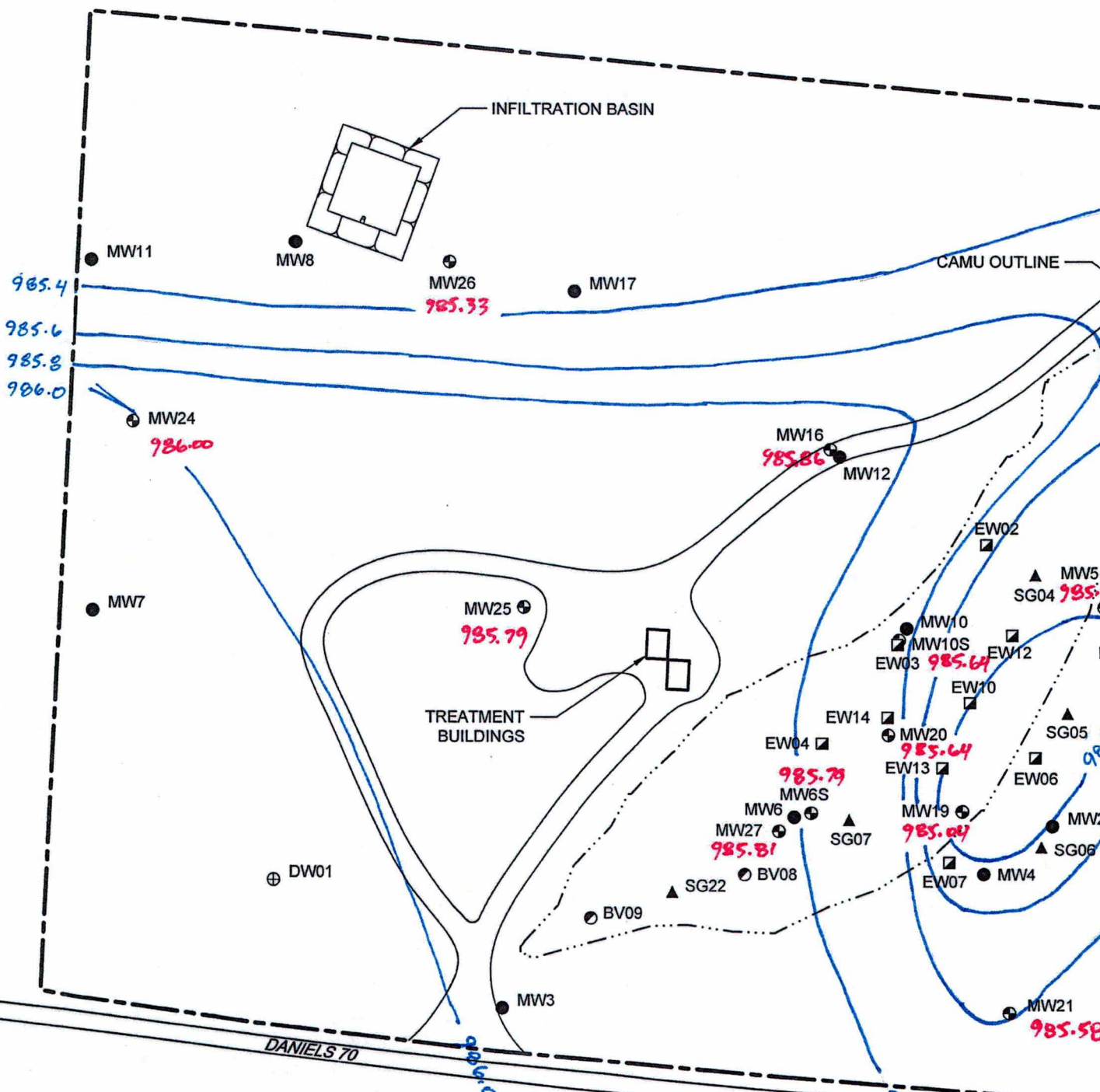
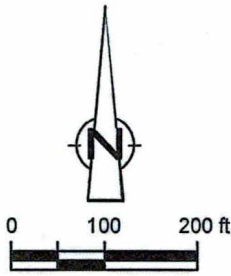
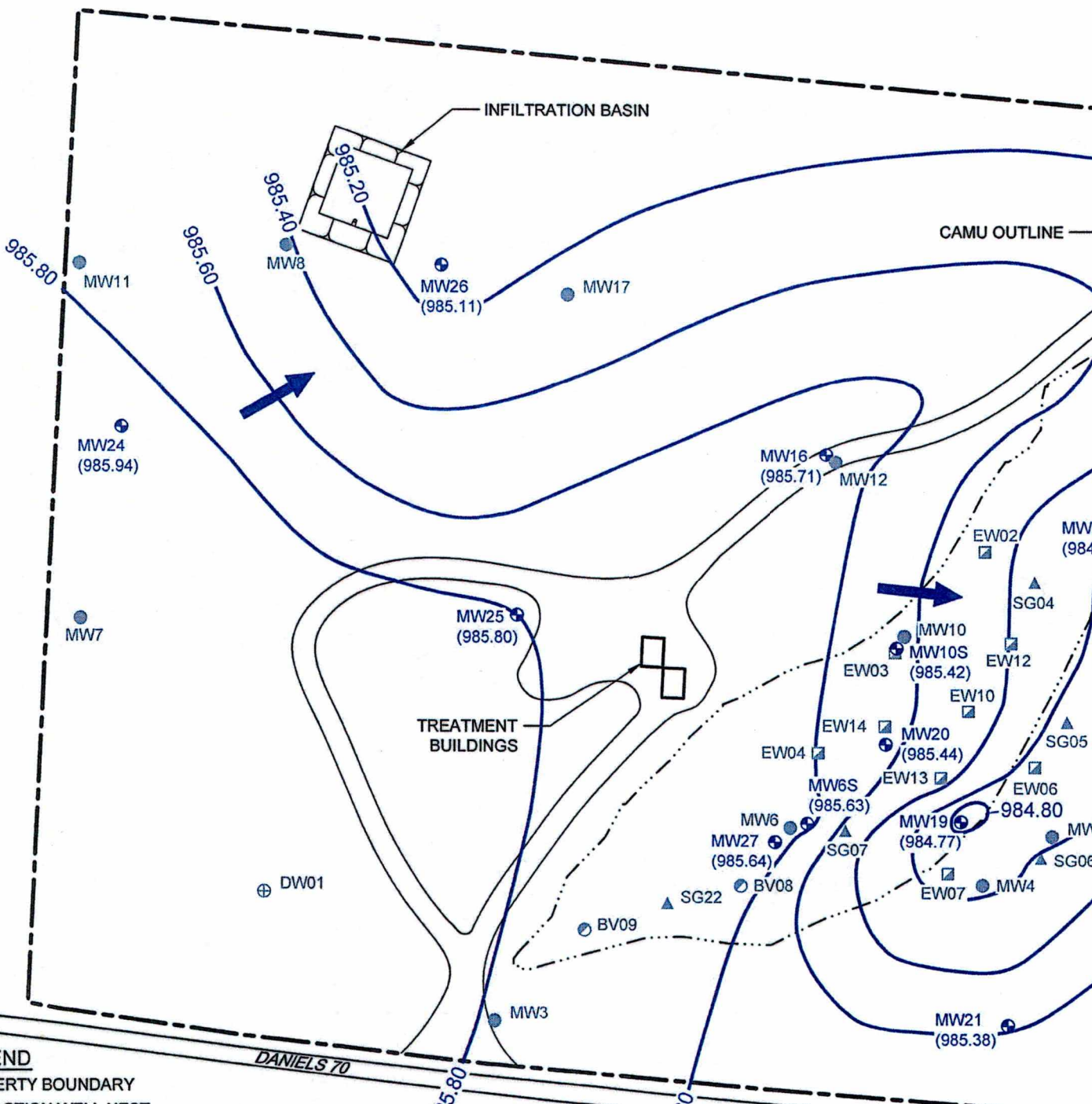
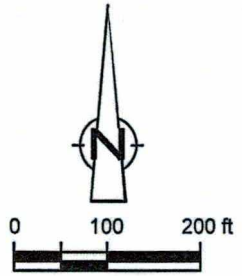


Figure 4

Unconfined Groundwater Elevation - May 2014
 2014 Semiannual Report
 Penta Wood Products Superfund Site
 Siren, Wisconsin





LEGEND
 - - - - - PROPERTY BOUNDARY
 - - - - - EXTRACTION WELL NEET

DANIELS 70

985.80

984.77

MW21
(985.38)

MW19
(984.77)

MW10
(985.42)

MW20
(985.44)

MW6S
(985.63)

MW27
(985.64)

MW25
(985.80)

MW26
(985.11)

MW24
(985.94)

MW11
(985.80)

MW8
(985.40)

MW17

MW16
(985.71)

MW12

MW5
(984.80)

EW02

EW12

EW03

EW04

EW14

EW06

EW13

EW07

MW4

EW06

EW10

SG04

SG05

SG06

SG07

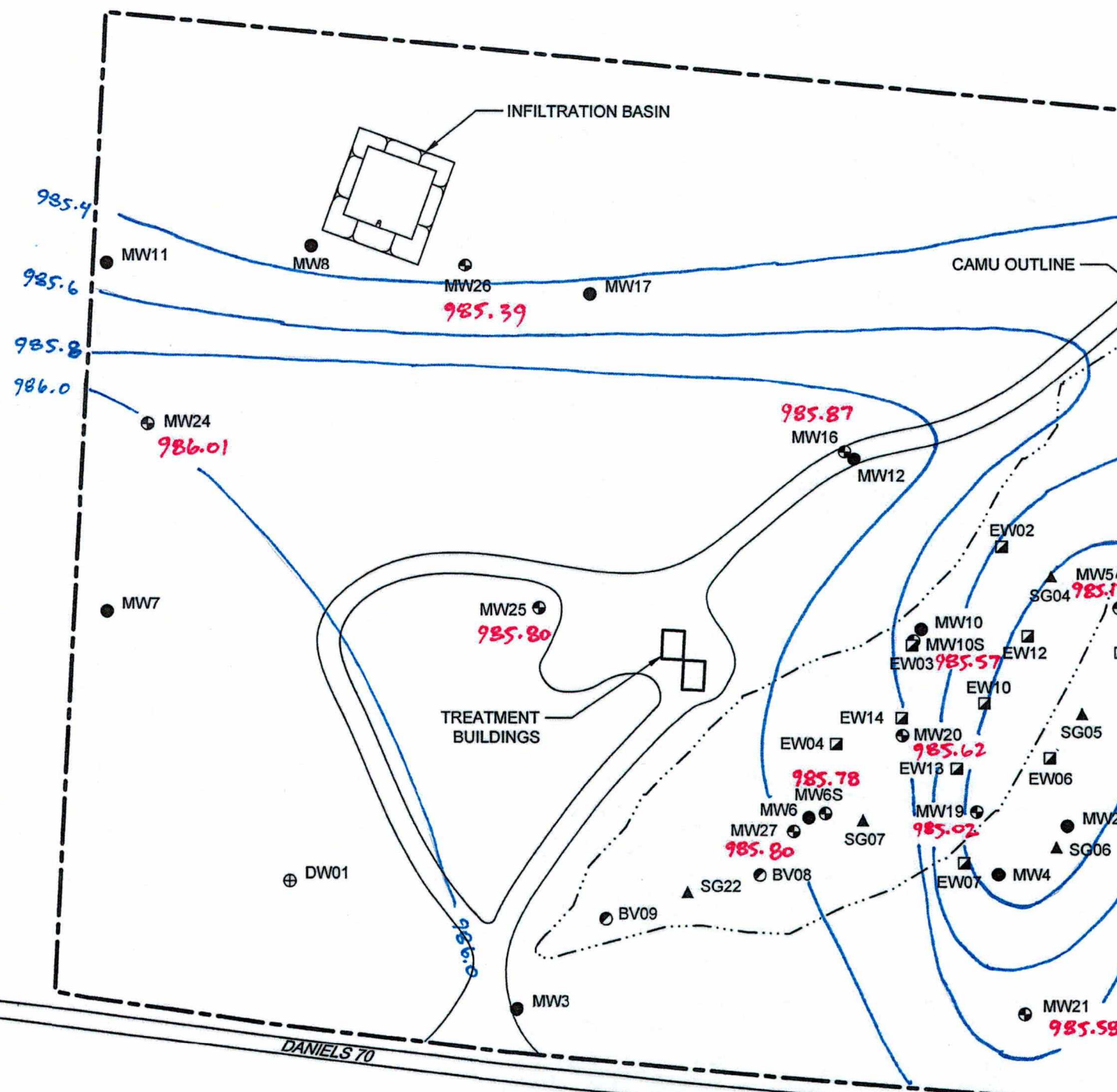
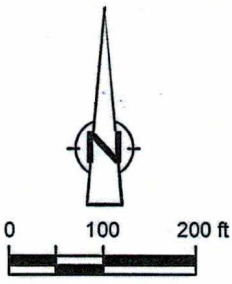
BV08

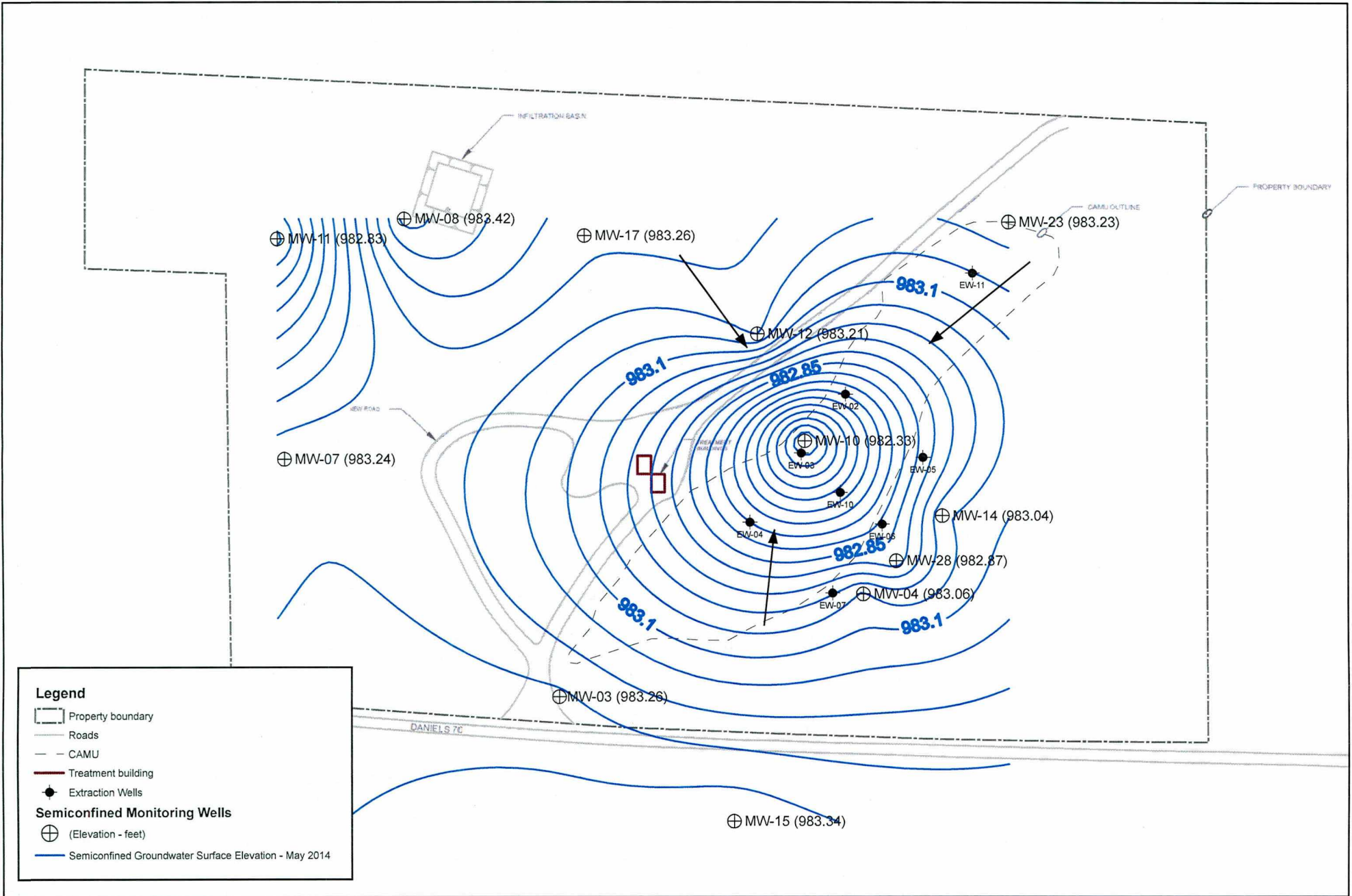
BV09

DW01

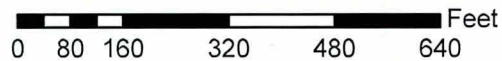
MW7

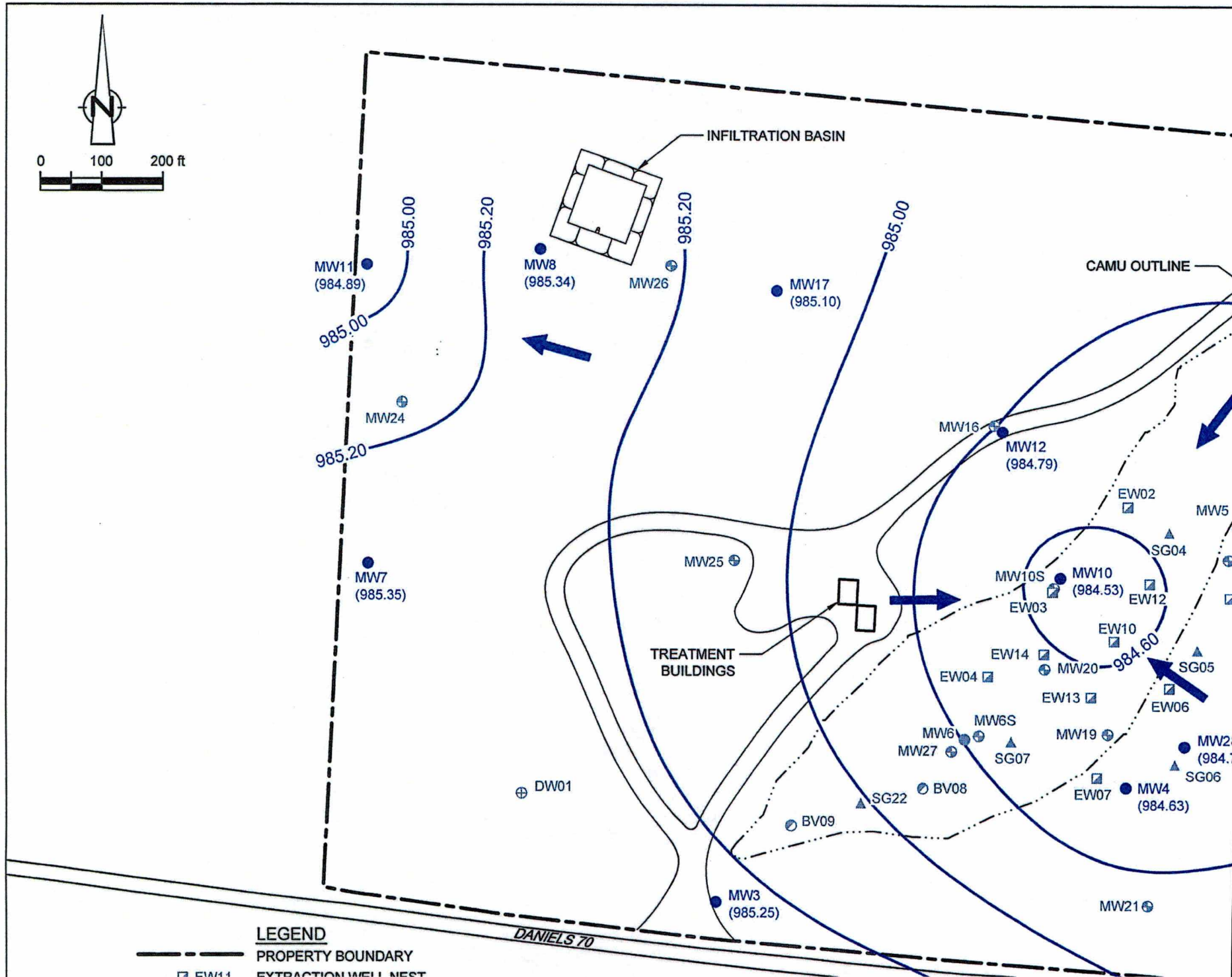
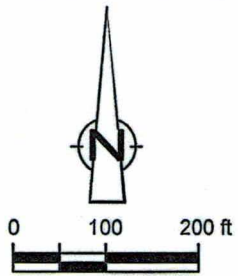
MW3





\\hercules\proj\NEPA\151745-Penta Wood\GIS\Annual_Report_Figs\2014\Fig_7_PW_SC_5-2014





LEGEND

- PROPERTY BOUNDARY
- EW04 EXTRACTION WELL NEST

