From: Anna Beckman <anna.beckman@cedarcorp.com>

Sent: Monday, December 16, 2019 10:33 AM

To: Stoltz, Carrie R - DNR

Cc: Mitch Evenson

Subject: Olson Corners Residential Confirmation Sample **Attachments:** J173998-1 UDS Level 2 Report Final Report.pdf

Good morning Carrie,

Attached are the confirmation results for the water samples collected for the Webster and Olson wells at Olson Corners. Looks like the Webster well (utilized by the Witkowski residence) has exceeded the PAL for benzene again. Please let me know how you'd like to proceed.

Thanks,

Anna Beckman

Staff Geologist
Cedar Corporation
604 Wilson Avenue | Menomonie | WI | 54751
Office: 715-235-9081 | TF: 800-472-7372
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www.cedarcorp.com | LinkedIn | Facebook | Twitter

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ANALYTICAL REPORT

Eurofins TestAmerica, Chicago 2417 Bond Street University Park, IL 60484 Tel: (708)534-5200

Laboratory Job ID: 500-173998-1 Client Project/Site: Olson Corners

For:

Cedar Corporation 604 Wilson Avenue Menomonie, Wisconsin 54751

Attn: Mitch Evenson

Authorized for release by: 12/3/2019 9:29:40 PM

Sandie Fredrick, Project Manager II (920)261-1660

sandie.fredrick@testamericainc.com

·····LINKS ······

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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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Case Narrative

Client: Cedar Corporation

Job ID: 500-173998-1

Project/Site: Olson Corners

Job ID: 500-173998-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative 500-173998-1

Comments

No additional comments.

Receipt

The samples were received on 11/22/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5° C.

GC/MS VOA

Method 8260B: The method blank for analytical batch 518320 contained Naphthalene above the Method dectection limit (MDL) but below reporting limit (RL). Naphthalene was non-dectect in the samples: therefore, no re-analysis was done and the data has been reported.

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

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Detection Summary

Client: Cedar Corporation Job ID: 500-173998-1

Project/Site: Olson Corners

Client Sample ID: Webster Lab Sample ID: 500-173998-1

No Detections.

Client Sample ID: Witkowski Lab Sample ID: 500-173998-2

Analyte	Result Qualifier	LOQ	DL Unit	Dil Fac D Method	Prep Type
Benzene	1.1	0.50	0.15 ug/L	1 8260B	Total/NA

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Method Summary

Client: Cedar Corporation Project/Site: Olson Corners Job ID: 500-173998-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
5030B	Purge and Trap	SW846	TAL CHI

Protocol References:

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

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Sample Summary

Client: Cedar Corporation Project/Site: Olson Corners

Job ID: 500-173998-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-173998-1	Webster	Water	11/20/19 09:30	11/22/19 09:00	
500-173998-2	Witkowski	Water	11/20/19 09:45	11/22/19 09:00	

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Client Sample Results

Client: Cedar Corporation Job ID: 500-173998-1

Project/Site: Olson Corners

Client Sample ID: Webster Lab Sample ID: 500-173998-1

Date Collected: 11/20/19 09:30 Matrix: Water Date Received: 11/22/19 09:00

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/03/19 11:57	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/03/19 11:57	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/03/19 11:57	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/03/19 11:57	1
Toluene	<0.15		0.50	0.15	ug/L			12/03/19 11:57	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/03/19 11:57	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/03/19 11:57	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/03/19 11:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		72 - 124			•		12/03/19 11:57	1
Dibromofluoromethane (Surr)	99		75 - 120					12/03/19 11:57	1
1,2-Dichloroethane-d4 (Surr)	100		75 - 126					12/03/19 11:57	1
Toluene-d8 (Surr)	112		75 - 120					12/03/19 11:57	1

Client Sample ID: Witkowski Lab Sample ID: 500-173998-2

Date Collected: 11/20/19 09:45

Date Received: 11/22/19 09:00

Matrix: Water

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.1		0.50	0.15	ug/L			12/03/19 12:21	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/03/19 12:21	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/03/19 12:21	1
Naphthalene	<0.34		1.0	0.34	ug/L			12/03/19 12:21	1
Toluene	<0.15		0.50	0.15	ug/L			12/03/19 12:21	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/03/19 12:21	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/03/19 12:21	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/03/19 12:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1 Promofluorobonzono (Surr)			72 124					12/02/10 12:21	

- 4	_				
	Toluene-d8 (Surr)	118	75 - 120	12/03/19 12:21 1	
	1,2-Dichloroethane-d4 (Surr)	101	75 - 126	12/03/19 12:21 1	
	Dibromofluoromethane (Surr)	99	75 - 120	12/03/19 12:21 1	
	4-Bromonuorobenzene (Sum)	90	12 - 124	12/03/19 12.21	

12/3/2019

Definitions/Glossary

Client: Cedar Corporation Job ID: 500-173998-1

Project/Site: Olson Corners

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

J Reported value was between the limit of detection and the limit of quantitation.

Glossary

Abbreviation	These common	ly used abbreviat	ions may or may	not be present in this report.	
			4 41 441		

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 Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MDA Minimum Detectable Activity (Radiochemistry)
MDC Minimum Detectable Concentration (Radiochemistry)

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 (Radiochemistry)

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)

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QC Association Summary

Client: Cedar Corporation

Project/Site: Olson Corners

Job ID: 500-173998-1

GC/MS VOA

Analysis Batch: 518320

Lab San	nple ID Clier	nt Sample ID	Prep Type	Matrix	Method	Prep Batch
500-173	998-1 Web	ster	Total/NA	Water	8260B	
500-173	998-2 Witke	owski	Total/NA	Water	8260B	
MB 500-	518320/6 Meth	nod Blank	Γotal/NA	Water	8260B	
LCS 500)-518320/4 Lab	Control Sample	Total/NA	Water	8260B	

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Surrogate Summary

Client: Cedar Corporation Job ID: 500-173998-1

Project/Site: Olson Corners

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water Prep Type: Total/NA

_			Pe	ercent Surre	ogate Reco
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
500-173998-1	Webster	89	99	100	112
500-173998-2	Witkowski	90	99	101	118
LCS 500-518320/4	Lab Control Sample	76	103	105	113
MB 500-518320/6	Method Blank	89	106	111	102

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

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QC Sample Results

Client: Cedar Corporation Job ID: 500-173998-1 Project/Site: Olson Corners

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-518320/6

Matrix: Water

Analysis Batch: 518320

Client Samp	ole ID:	Meth	od Blank	
	Prep '	Type:	Total/NA	

	MB	МВ							
Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			12/03/19 10:22	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			12/03/19 10:22	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			12/03/19 10:22	1
Naphthalene	0.412	J	1.0	0.34	ug/L			12/03/19 10:22	1
Toluene	<0.15		0.50	0.15	ug/L			12/03/19 10:22	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			12/03/19 10:22	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			12/03/19 10:22	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			12/03/19 10:22	1
• • •					•				

MB MB %Recovery Qualifier Surrogate Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 89 72 - 124 12/03/19 10:22 Dibromofluoromethane (Surr) 106 75 - 120 12/03/19 10:22 1,2-Dichloroethane-d4 (Surr) 111 75 - 126 12/03/19 10:22 Toluene-d8 (Surr) 102 75 - 120 12/03/19 10:22

Lab Sample ID: LCS 500-518320/4

Matrix: Water

Toluene-d8 (Surr)

Analysis Batch: 518320

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

	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	50.0	48.8		ug/L		98	70 - 120	
Ethylbenzene	50.0	54.8		ug/L		110	70 - 123	
Methyl tert-butyl ether	50.0	50.1		ug/L		100	55 - 123	
Naphthalene	50.0	41.7		ug/L		83	53 - 144	
Toluene	50.0	51.7		ug/L		103	70 - 125	
1,2,4-Trimethylbenzene	50.0	46.1		ug/L		92	70 - 123	
1,3,5-Trimethylbenzene	50.0	41.2		ug/L		82	70 - 123	
Xylenes, Total	100	107		ug/L		107	70 - 125	

75 - 120

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	76		72 - 124
Dibromofluoromethane (Surr)	103		75 - 120
1,2-Dichloroethane-d4 (Surr)	105		75 - 126

Lab Chronicle

Client: Cedar Corporation

Job ID: 500-173998-1

Project/Site: Olson Corners

Client Sample ID: Webster
Date Collected: 11/20/19 09:30

Lab Sample ID: 500-173998-1

Matrix: Water

Date Received: 11/22/19 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B			518320	12/03/19 11:57	JLC	TAL CHI

Client Sample ID: Witkowski Lab Sample ID: 500-173998-2

Date Collected: 11/20/19 09:45 Matrix: Water

Date Received: 11/22/19 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	518320	12/03/19 12:21	JLC	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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Accreditation/Certification Summary

Client: Cedar Corporation Job ID: 500-173998-1

Project/Site: Olson Corners

Laboratory: Eurofins TestAmerica, Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State Program	999580010	08-31-20

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Eurofins TestAmerica, Chicago

2417 Bond Street

University Park, IL 60484 Phone: 708-534-5200 Fax: 708-534-5211

Chain of Custody Record

💸 eurofins

Environment Testing TestAmerica

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SHIP DATE: 12NOV19 ACTWGT: 20.00 LB MAN CAD: 525155/CAFE3211

MENOMONIE, WI 54751 UNITED STATES US

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TESTAMERICA CHICAGO 2417 BOND STREET

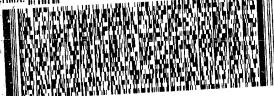
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Fed Exx.

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PRITIRNS MON - SAT FRI - 22 NOV 10:30A PRIORITY OVERNIGHT

GE JOTA

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FID 543099 21NOV19 EAUA 56AC1/F330/05A2



500-173998 Waybill

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Client: Cedar Corporation Job Number: 500-173998-1

Login Number: 173998 List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Buckley, Paula M

Creator. Buckley, Paula W		
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	5.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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 (excluding tests with immediate HTs)	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	

Eurofins TestAmerica, Chicago