From: Anna Beckman <anna.beckman@cedarcorp.com>
Sent: Thursday, July 18, 2019 3:56 PM
To: Stoltz, Carrie R - DNR
Subject: Olsons Corners Groundwater Analytical Data
Attachments: Table 1 - Groundwater Analytical Data.pdf; J166351-1 UDS Level 2 Report Final Report.pdf; J161417-1 UDS Level 2 Report Final Report.pdf

Good afternoon Carrie,

We've completed another round of sampling at the Olsons Corners site in Hannibal, WI. Attached please find the updated groundwater analytical results. I believe we have just completed the 2nd of our 4 rounds of monitoring approved in November 2018, but as we discussed previously, I am sending you these results so we might discuss what additional work might be necessary. Please feel free to give me a call at your convenience. I should be available most of tomorrow (Friday) morning before 11 and I'll be in the field early next week.

Thank you,

Anna Beckman
Staff Geologist
Cedar Corporation
604 Wilson Avenue | Menomonie | WI | 54751
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anna.beckman@cedarcorp.com
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eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 500-161417-1
Client Project/Site: Olson's Corner

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson

Authorized for release by:
4/22/2019 12:47:49 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

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Case Narrative

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Job ID: 500-161417-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-161417-1

Comments
No additional comments.

Receipt
The samples were received on 4/11/2019 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1º C.

GC VOA
Method(s) WI-GRO: Surrogate recovery for the following samples were outside control limits: MW-1 (500-161417-1), MW-2P (500-161417-2) and MW-4 (500-161417-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) WI-GRO: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 490-588475/589042.

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Client Sample ID: MW-1 — Lab Sample ID: 500-161417-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	250		0.50	0.30	ug/L	1		WDNR	Total/NA
1,3,5-Trimethylbenzene	45		0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	74		0.50	0.36	ug/L	1		WDNR	Total/NA
Ethylbenzene	520		2.5	1.9	ug/L	5		WDNR	Total/NA
Methyl tert-butyl ether	160		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	130		5.0	2.4	ug/L	1		WDNR	Total/NA
Toluene	240		0.50	0.33	ug/L	1		WDNR	Total/NA
Xylenes, Total	1300		7.5	2.9	ug/L	5		WDNR	Total/NA

Client Sample ID: MW-2P — Lab Sample ID: 500-161417-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	160		0.50	0.30	ug/L	1		WDNR	Total/NA
1,3,5-Trimethylbenzene	91		0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	5700		10	7.2	ug/L	20		WDNR	Total/NA
Ethylbenzene	310		0.50	0.37	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	300		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	91		5.0	2.4	ug/L	1		WDNR	Total/NA
Toluene	180		0.50	0.33	ug/L	1		WDNR	Total/NA
Xylenes, Total	460		1.5	0.58	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-3D — Lab Sample ID: 500-161417-3

No Detections.

Client Sample ID: MW-4 — Lab Sample ID: 500-161417-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1500		10	6.0	ug/L	20		WDNR	Total/NA
1,3,5-Trimethylbenzene	1000		10	6.0	ug/L	20		WDNR	Total/NA
Benzene	4600		10	7.2	ug/L	20		WDNR	Total/NA
Ethylbenzene	1000		10	7.4	ug/L	20		WDNR	Total/NA
Methyl tert-butyl ether	130		10	4.8	ug/L	20		WDNR	Total/NA
Naphthalene	1400		100	48	ug/L	20		WDNR	Total/NA
Toluene	700		10	6.6	ug/L	20		WDNR	Total/NA
Xylenes, Total	2800		30	12	ug/L	20		WDNR	Total/NA

Client Sample ID: MW-4P — Lab Sample ID: 500-161417-5

No Detections.

Client Sample ID: MW-6 — Lab Sample ID: 500-161417-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.41	J	0.50	0.36	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	1.0		0.50	0.24	ug/L	1		WDNR	Total/NA
Xylenes, Total	3.2		1.5	0.58	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-6P — Lab Sample ID: 500-161417-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2.9		0.50	0.30	ug/L	1		WDNR	Total/NA
1,3,5-Trimethylbenzene	1.1		0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	3.5		0.50	0.36	ug/L	1		WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-6P (Continued) — Lab Sample ID: 500-161417-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	6.5		0.50	0.37	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	0.51		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	63		5.0	2.4	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-6D — Lab Sample ID: 500-161417-8

No Detections.

Client Sample ID: MW-7 — Lab Sample ID: 500-161417-9

No Detections.

Client Sample ID: MW-8P — Lab Sample ID: 500-161417-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.31	J	0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	140		0.50	0.36	ug/L	1		WDNR	Total/NA
Ethylbenzene	120		0.50	0.37	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	66		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	6.0		5.0	2.4	ug/L	1		WDNR	Total/NA
Toluene	2.2		0.50	0.33	ug/L	1		WDNR	Total/NA
Xylenes, Total	4.3		1.5	0.58	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-10 — Lab Sample ID: 500-161417-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.60		0.50	0.30	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-11 — Lab Sample ID: 500-161417-12

No Detections.

Client Sample ID: MW-12P — Lab Sample ID: 500-161417-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.3		0.50	0.36	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	23		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-12D — Lab Sample ID: 500-161417-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.34	J	0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 500-161417-15

No Detections.

Client Sample ID: MW-13D — Lab Sample ID: 500-161417-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.43	J	0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: Webster — Lab Sample ID: 500-161417-17

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Client Sample ID: Witkowski — Lab Sample ID: 500-161417-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	4.9		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 500-161417-19

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Method	Method Description	Protocol	Laboratory
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH

Protocol References:

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

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

Laboratory References:

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-161417-1	MW-1	Water	04/09/19 10:15	04/11/19 09:20
500-161417-2	MW-2P	Water	04/09/19 12:00	04/11/19 09:20
500-161417-3	MW-3D	Water	04/09/19 11:45	04/11/19 09:20
500-161417-4	MW-4	Water	04/09/19 12:30	04/11/19 09:20
500-161417-5	MW-4P	Water	04/09/19 12:15	04/11/19 09:20
500-161417-6	MW-6	Water	04/09/19 13:00	04/11/19 09:20
500-161417-7	MW-6P	Water	04/09/19 12:45	04/11/19 09:20
500-161417-8	MW-6D	Water	04/09/19 12:30	04/11/19 09:20
500-161417-9	MW-7	Water	04/09/19 10:45	04/11/19 09:20
500-161417-10	MW-8P	Water	04/09/19 10:30	04/11/19 09:20
500-161417-11	MW-10	Water	04/09/19 11:00	04/11/19 09:20
500-161417-12	MW-11	Water	04/09/19 11:15	04/11/19 09:20
500-161417-13	MW-12P	Water	04/09/19 11:30	04/11/19 09:20
500-161417-14	MW-12D	Water	04/09/19 11:00	04/11/19 09:20
500-161417-15	MW-13	Water	04/09/19 13:15	04/11/19 09:20
500-161417-16	MW-13D	Water	04/09/19 13:30	04/11/19 09:20
500-161417-17	Webster	Water	04/09/19 09:45	04/11/19 09:20
500-161417-18	Witkowski	Water	04/09/19 13:45	04/11/19 09:20
500-161417-19	Trip Blank	Water	04/09/19 00:00	04/11/19 09:20

Client Sample ID: MW-1

Lab Sample ID: 500-161417-1

Date Collected: 04/09/19 10:15

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	250		0.50	0.30	ug/L			04/17/19 15:11	1
1,3,5-Trimethylbenzene	45		0.50	0.30	ug/L			04/17/19 15:11	1
Benzene	74		0.50	0.36	ug/L			04/17/19 15:11	1
Ethylbenzene	520		2.5	1.9	ug/L			04/18/19 22:58	5
Methyl tert-butyl ether	160		0.50	0.24	ug/L			04/17/19 15:11	1
Naphthalene	130		5.0	2.4	ug/L			04/17/19 15:11	1
Toluene	240		0.50	0.33	ug/L			04/17/19 15:11	1
Xylenes, Total	1300		7.5	2.9	ug/L			04/18/19 22:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*225*	*X*	*80 - 120*		*04/17/19 15:11*	*1*
a,a,a-Trifluorotoluene	*121*	*X*	*80 - 120*		*04/18/19 22:58*	*5*

Client Sample ID: MW-2P

Lab Sample ID: 500-161417-2

Date Collected: 04/09/19 12:00

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	160		0.50	0.30	ug/L			04/17/19 15:42	1
1,3,5-Trimethylbenzene	91		0.50	0.30	ug/L			04/17/19 15:42	1
Benzene	5700		10	7.2	ug/L			04/19/19 10:00	20
Ethylbenzene	310		0.50	0.37	ug/L			04/17/19 15:42	1
Methyl tert-butyl ether	300		0.50	0.24	ug/L			04/17/19 15:42	1
Naphthalene	91		5.0	2.4	ug/L			04/17/19 15:42	1
Toluene	180		0.50	0.33	ug/L			04/17/19 15:42	1
Xylenes, Total	460		1.5	0.58	ug/L			04/17/19 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*234*	*X*	*80 - 120*		*04/17/19 15:42*	*1*
a,a,a-Trifluorotoluene	*90*		*80 - 120*		*04/19/19 10:00*	*20*

Client Sample ID: MW-3D

Lab Sample ID: 500-161417-3

Date Collected: 04/09/19 11:45

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 11:59	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 11:59	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 11:59	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 11:59	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 11:59	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 11:59	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 11:59	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*80 - 120*		*04/18/19 11:59*	*1*

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Client Sample ID: MW-4

Lab Sample ID: 500-161417-4

Date Collected: 04/09/19 12:30
Matrix: Water
Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1500		10	6.0	ug/L			04/18/19 08:29	20
1,3,5-Trimethylbenzene	1000		10	6.0	ug/L			04/18/19 08:29	20
Benzene	4600		10	7.2	ug/L			04/18/19 08:29	20
Ethylbenzene	1000		10	7.4	ug/L			04/18/19 08:29	20
Methyl tert-butyl ether	130		10	4.8	ug/L			04/18/19 08:29	20
Naphthalene	1400		100	48	ug/L			04/18/19 08:29	20
Toluene	700		10	6.6	ug/L			04/18/19 08:29	20
Xylenes, Total	2800		30	12	ug/L			04/18/19 08:29	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*121*	*X*	*80 - 120*		*04/18/19 08:29*	*20*

Client Sample ID: MW-4P

Lab Sample ID: 500-161417-5

Date Collected: 04/09/19 12:15
Matrix: Water
Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 20:53	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 20:53	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 20:53	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 20:53	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 20:53	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 20:53	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 20:53	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*80 - 120*		*04/18/19 20:53*	*1*

Client Sample ID: MW-6

Lab Sample ID: 500-161417-6

Date Collected: 04/09/19 13:00
Matrix: Water
Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 21:24	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 21:24	1
Benzene	0.41	J	0.50	0.36	ug/L			04/18/19 21:24	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 21:24	1
Methyl tert-butyl ether	1.0		0.50	0.24	ug/L			04/18/19 21:24	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 21:24	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 21:24	1
Xylenes, Total	3.2		1.5	0.58	ug/L			04/18/19 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*92*		*80 - 120*		*04/18/19 21:24*	*1*

Client Sample ID: MW-6P

Lab Sample ID: 500-161417-7

Date Collected: 04/09/19 12:45

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	2.9		0.50	0.30	ug/L			04/18/19 07:10	1
1,3,5-Trimethylbenzene	1.1		0.50	0.30	ug/L			04/18/19 07:10	1
Benzene	3.5		0.50	0.36	ug/L			04/18/19 07:10	1
Ethylbenzene	6.5		0.50	0.37	ug/L			04/18/19 07:10	1
Methyl tert-butyl ether	0.51		0.50	0.24	ug/L			04/18/19 07:10	1
Naphthalene	63		5.0	2.4	ug/L			04/18/19 07:10	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 07:10	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*		*04/18/19 07:10*	*1*

Client Sample ID: MW-6D

Lab Sample ID: 500-161417-8

Date Collected: 04/09/19 12:30

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 10:25	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 10:25	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 10:25	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 10:25	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 10:25	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 10:25	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 10:25	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 10:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*80 - 120*		*04/18/19 10:25*	*1*

Client Sample ID: MW-7

Lab Sample ID: 500-161417-9

Date Collected: 04/09/19 10:45

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 12:30	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 12:30	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 12:30	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 12:30	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 12:30	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 12:30	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 12:30	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*82*		*80 - 120*		*04/18/19 12:30*	*1*

Client Sample ID: MW-8P

Lab Sample ID: 500-161417-10

Date Collected: 04/09/19 10:30

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**0.31**	**J**	0.50	0.30	ug/L			04/18/19 13:02	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 13:02	1
Benzene	**140**		0.50	0.36	ug/L			04/18/19 13:02	1
Ethylbenzene	**120**		0.50	0.37	ug/L			04/18/19 13:02	1
Methyl tert-butyl ether	**66**		0.50	0.24	ug/L			04/18/19 13:02	1
Naphthalene	**6.0**		5.0	2.4	ug/L			04/18/19 13:02	1
Toluene	**2.2**		0.50	0.33	ug/L			04/18/19 13:02	1
Xylenes, Total	**4.3**		1.5	0.58	ug/L			04/18/19 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*112*		*80 - 120*		*04/18/19 13:02*	*1*

Client Sample ID: MW-10

Lab Sample ID: 500-161417-11

Date Collected: 04/09/19 11:00

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**0.60**		0.50	0.30	ug/L			04/18/19 14:04	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 14:04	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 14:04	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 14:04	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 14:04	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 14:04	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 14:04	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*87*		*80 - 120*		*04/18/19 14:04*	*1*

Client Sample ID: MW-11

Lab Sample ID: 500-161417-12

Date Collected: 04/09/19 11:15

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 14:36	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 14:36	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 14:36	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 14:36	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 14:36	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 14:36	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 14:36	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*80*		*80 - 120*		*04/18/19 14:36*	*1*

Client Sample ID: MW-12P

Lab Sample ID: 500-161417-13

Date Collected: 04/09/19 11:30

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 15:07	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 15:07	1
Benzene	**8.3**		0.50	0.36	ug/L			04/18/19 15:07	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 15:07	1
Methyl tert-butyl ether	**23**		0.50	0.24	ug/L			04/18/19 15:07	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 15:07	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 15:07	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*101*		*80 - 120*		*04/18/19 15:07*	*1*

Client Sample ID: MW-12D

Lab Sample ID: 500-161417-14

Date Collected: 04/09/19 11:00

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 15:39	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 15:39	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 15:39	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 15:39	1
Methyl tert-butyl ether	**0.34**	**J**	0.50	0.24	ug/L			04/18/19 15:39	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 15:39	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 15:39	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*80 - 120*		*04/18/19 15:39*	*1*

Client Sample ID: MW-13

Lab Sample ID: 500-161417-15

Date Collected: 04/09/19 13:15

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 16:10	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 16:10	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 16:10	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 16:10	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 16:10	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 16:10	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 16:10	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*88*		*80 - 120*		*04/18/19 16:10*	*1*

Client Sample ID: MW-13D

Lab Sample ID: 500-161417-16

Date Collected: 04/09/19 13:30

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 16:42	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 16:42	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 16:42	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 16:42	1
Methyl tert-butyl ether	**0.43**	**J**	0.50	0.24	ug/L			04/18/19 16:42	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 16:42	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 16:42	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*81*		*80 - 120*		*04/18/19 16:42*	*1*

Client Sample ID: Webster

Lab Sample ID: 500-161417-17

Date Collected: 04/09/19 09:45

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 17:13	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 17:13	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 17:13	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 17:13	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 17:13	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 17:13	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 17:13	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*80 - 120*		*04/18/19 17:13*	*1*

Client Sample ID: Witkowski

Lab Sample ID: 500-161417-18

Date Collected: 04/09/19 13:45

Matrix: Water

Date Received: 04/11/19 09:20

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/17/19 14:39	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/17/19 14:39	1
Benzene	<0.36		0.50	0.36	ug/L			04/17/19 14:39	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/17/19 14:39	1
Methyl tert-butyl ether	**4.9**		0.50	0.24	ug/L			04/17/19 14:39	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/17/19 14:39	1
Toluene	<0.33		0.50	0.33	ug/L			04/17/19 14:39	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/17/19 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*		*04/17/19 14:39*	*1*

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Client Sample ID: Trip Blank

Date Collected: 04/09/19 00:00
Date Received: 04/11/19 09:20

Lab Sample ID: 500-161417-19

Matrix: Water

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/19/19 16:06	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/19/19 16:06	1
Benzene	<0.36		0.50	0.36	ug/L			04/19/19 16:06	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/19/19 16:06	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/19/19 16:06	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/19/19 16:06	1
Toluene	<0.33		0.50	0.33	ug/L			04/19/19 16:06	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/19/19 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*93*		*80 - 120*		*04/19/19 16:06*	*1*

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.
X	Surrogate is outside control limits

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	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)

QC Association Summary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

GC VOA

Analysis Batch: 588475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-161417-1	MW-1	Total/NA	Water	WDNR	
500-161417-1	MW-1	Total/NA	Water	WDNR	
500-161417-2	MW-2P	Total/NA	Water	WDNR	
500-161417-3	MW-3D	Total/NA	Water	WDNR	
500-161417-4	MW-4	Total/NA	Water	WDNR	
500-161417-5	MW-4P	Total/NA	Water	WDNR	
500-161417-6	MW-6	Total/NA	Water	WDNR	
500-161417-7	MW-6P	Total/NA	Water	WDNR	
500-161417-8	MW-6D	Total/NA	Water	WDNR	
500-161417-9	MW-7	Total/NA	Water	WDNR	
500-161417-10	MW-8P	Total/NA	Water	WDNR	
500-161417-11	MW-10	Total/NA	Water	WDNR	
500-161417-12	MW-11	Total/NA	Water	WDNR	
500-161417-13	MW-12P	Total/NA	Water	WDNR	
500-161417-14	MW-12D	Total/NA	Water	WDNR	
500-161417-15	MW-13	Total/NA	Water	WDNR	
500-161417-16	MW-13D	Total/NA	Water	WDNR	
500-161417-17	Webster	Total/NA	Water	WDNR	
500-161417-18	Witkowski	Total/NA	Water	WDNR	
MB 490-588475/35	Method Blank	Total/NA	Water	WDNR	
MB 490-588475/4	Method Blank	Total/NA	Water	WDNR	
LCS 490-588475/3	Lab Control Sample	Total/NA	Water	WDNR	
LCS 490-588475/34	Lab Control Sample	Total/NA	Water	WDNR	
LCSD 490-588475/30	Lab Control Sample Dup	Total/NA	Water	WDNR	
LCSD 490-588475/41	Lab Control Sample Dup	Total/NA	Water	WDNR	

Analysis Batch: 589042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-161417-2	MW-2P	Total/NA	Water	WDNR	
500-161417-19	Trip Blank	Total/NA	Water	WDNR	
MB 490-589042/16	Method Blank	Total/NA	Water	WDNR	
MB 490-589042/4	Method Blank	Total/NA	Water	WDNR	
LCS 490-589042/15	Lab Control Sample	Total/NA	Water	WDNR	
LCS 490-589042/3	Lab Control Sample	Total/NA	Water	WDNR	
LCSD 490-589042/11	Lab Control Sample Dup	Total/NA	Water	WDNR	
LCSD 490-589042/39	Lab Control Sample Dup	Total/NA	Water	WDNR	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TFT (80-120)
500-161417-1	MW-1	121 X
500-161417-1	MW-1	225 X
500-161417-2	MW-2P	234 X
500-161417-2	MW-2P	90
500-161417-3	MW-3D	88
500-161417-4	MW-4	121 X
500-161417-5	MW-4P	94
500-161417-6	MW-6	92
500-161417-7	MW-6P	95
500-161417-8	MW-6D	88
500-161417-9	MW-7	82
500-161417-10	MW-8P	112
500-161417-11	MW-10	87
500-161417-12	MW-11	80
500-161417-13	MW-12P	101
500-161417-14	MW-12D	88
500-161417-15	MW-13	88
500-161417-16	MW-13D	81
500-161417-17	Webster	94
500-161417-18	Witkowski	95
500-161417-19	Trip Blank	93
LCS 490-588475/3	Lab Control Sample	87
LCS 490-588475/34	Lab Control Sample	96
LCS 490-589042/15	Lab Control Sample	87
LCS 490-589042/3	Lab Control Sample	93
LCSD 490-588475/30	Lab Control Sample Dup	90
LCSD 490-588475/41	Lab Control Sample Dup	88
LCSD 490-589042/11	Lab Control Sample Dup	95
LCSD 490-589042/39	Lab Control Sample Dup	95
MB 490-588475/35	Method Blank	95
MB 490-588475/4	Method Blank	94
MB 490-589042/16	Method Blank	92
MB 490-589042/4	Method Blank	92

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: MB 490-588475/35
Matrix: Water
Analysis Batch: 588475

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 20:22	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/18/19 20:22	1
Benzene	<0.36		0.50	0.36	ug/L			04/18/19 20:22	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/18/19 20:22	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/18/19 20:22	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/18/19 20:22	1
Toluene	<0.33		0.50	0.33	ug/L			04/18/19 20:22	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/18/19 20:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*		*04/18/19 20:22*	*1*

Lab Sample ID: MB 490-588475/4
Matrix: Water
Analysis Batch: 588475

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/17/19 13:58	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/17/19 13:58	1
Benzene	<0.36		0.50	0.36	ug/L			04/17/19 13:58	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/17/19 13:58	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/17/19 13:58	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/17/19 13:58	1
Toluene	<0.33		0.50	0.33	ug/L			04/17/19 13:58	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/17/19 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*94*		*80 - 120*		*04/17/19 13:58*	*1*

Lab Sample ID: LCS 490-588475/3
Matrix: Water
Analysis Batch: 588475

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	20.0	21.6		ug/L		108	60 - 131
1,3,5-Trimethylbenzene	20.0	21.6		ug/L		108	70 - 130
Benzene	20.0	20.8		ug/L		104	69 - 129
Ethylbenzene	20.0	21.1		ug/L		106	70 - 130
Methyl tert-butyl ether	20.0	21.1		ug/L		105	57 - 138
m-Xylene & p-Xylene	40.0	43.0		ug/L		107	65 - 127
Naphthalene	20.0	21.2		ug/L		106	69 - 133
o-Xylene	20.0	21.2		ug/L		106	64 - 128
Toluene	20.0	21.0		ug/L		105	66 - 127
Xylenes, Total	60.0	64.2		ug/L		107	

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*87*		*80 - 120*

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Lab Sample ID: LCS 490-588475/34
Matrix: Water
Analysis Batch: 588475

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trimethylbenzene			20.0	18.9		ug/L		95	60 - 131		
1,3,5-Trimethylbenzene			20.0	19.0		ug/L		95	70 - 130		
Benzene			20.0	18.2		ug/L		91	69 - 129		
Ethylbenzene			20.0	18.5		ug/L		92	70 - 130		
Methyl tert-butyl ether			20.0	19.1		ug/L		95	57 - 138		
m-Xylene & p-Xylene			40.0	37.8		ug/L		94	65 - 127		
Naphthalene			20.0	20.1		ug/L		100	69 - 133		
o-Xylene			20.0	18.7		ug/L		93	64 - 128		
Toluene			20.0	18.5		ug/L		92	66 - 127		
Xylenes, Total			60.0	56.5		ug/L		94			

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*96*		*80 - 120*

Lab Sample ID: LCSD 490-588475/30
Matrix: Water
Analysis Batch: 588475

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene			20.0	19.2		ug/L		96	60 - 131	12	43
1,3,5-Trimethylbenzene			20.0	19.2		ug/L		96	70 - 130	12	20
Benzene			20.0	18.8		ug/L		94	69 - 129	10	33
Ethylbenzene			20.0	18.9		ug/L		94	70 - 130	11	35
Methyl tert-butyl ether			20.0	19.8		ug/L		99	57 - 138	6	40
m-Xylene & p-Xylene			40.0	38.4		ug/L		96	65 - 127	11	39
Naphthalene			20.0	20.2		ug/L		101	69 - 133	5	48
o-Xylene			20.0	19.0		ug/L		95	64 - 128	11	35
Toluene			20.0	18.9		ug/L		95	66 - 127	10	34
Xylenes, Total			60.0	57.4		ug/L		96		11	

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*90*		*80 - 120*

Lab Sample ID: LCSD 490-588475/41
Matrix: Water
Analysis Batch: 588475

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene			20.0	18.8		ug/L		94	60 - 131	1	43
1,3,5-Trimethylbenzene			20.0	18.7		ug/L		94	70 - 130	1	20
Benzene			20.0	18.0		ug/L		90	69 - 129	1	33
Ethylbenzene			20.0	18.5		ug/L		92	70 - 130	0	35
Methyl tert-butyl ether			20.0	18.3		ug/L		92	57 - 138	4	40
m-Xylene & p-Xylene			40.0	37.9		ug/L		95	65 - 127	0	39
Naphthalene			20.0	19.6		ug/L		98	69 - 133	3	48
o-Xylene			20.0	18.6		ug/L		93	64 - 128	0	35
Toluene			20.0	18.2		ug/L		91	66 - 127	1	34
Xylenes, Total			60.0	56.5		ug/L		94		0	

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	*88*		*80 - 120*

Lab Sample ID: MB 490-589042/16
Matrix: Water
Analysis Batch: 589042

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/19/19 15:35	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/19/19 15:35	1
Benzene	<0.36		0.50	0.36	ug/L			04/19/19 15:35	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/19/19 15:35	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/19/19 15:35	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/19/19 15:35	1
Toluene	<0.33		0.50	0.33	ug/L			04/19/19 15:35	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/19/19 15:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*92*		*80 - 120*		*04/19/19 15:35*	*1*

Lab Sample ID: MB 490-589042/4
Matrix: Water
Analysis Batch: 589042

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/19/19 08:51	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			04/19/19 08:51	1
Benzene	<0.36		0.50	0.36	ug/L			04/19/19 08:51	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			04/19/19 08:51	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			04/19/19 08:51	1
Naphthalene	<2.4		5.0	2.4	ug/L			04/19/19 08:51	1
Toluene	<0.33		0.50	0.33	ug/L			04/19/19 08:51	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			04/19/19 08:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	*92*		*80 - 120*		*04/19/19 08:51*	*1*

Lab Sample ID: LCS 490-589042/15
Matrix: Water
Analysis Batch: 589042

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	20.0	18.6		ug/L		93	60 - 131
1,3,5-Trimethylbenzene	20.0	18.6		ug/L		93	70 - 130
Benzene	20.0	17.8		ug/L		89	69 - 129
Ethylbenzene	20.0	18.0		ug/L		90	70 - 130
Methyl tert-butyl ether	20.0	17.8		ug/L		89	57 - 138
m-Xylene & p-Xylene	40.0	36.9		ug/L		92	65 - 127
Naphthalene	20.0	18.2		ug/L		91	69 - 133
o-Xylene	20.0	18.2		ug/L		91	64 - 128
Toluene	20.0	18.0		ug/L		90	66 - 127
Xylenes, Total	60.0	55.1		ug/L		92	

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	87		80 - 120

Lab Sample ID: LCS 490-589042/3
Matrix: Water
Analysis Batch: 589042

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	20.0	18.8		ug/L		94	60 - 131
1,3,5-Trimethylbenzene	20.0	18.8		ug/L		94	70 - 130
Benzene	20.0	18.0		ug/L		90	69 - 129
Ethylbenzene	20.0	18.2		ug/L		91	70 - 130
Methyl tert-butyl ether	20.0	18.4		ug/L		92	57 - 138
m-Xylene & p-Xylene	40.0	37.2		ug/L		93	65 - 127
Naphthalene	20.0	18.7		ug/L		94	69 - 133
o-Xylene	20.0	18.4		ug/L		92	64 - 128
Toluene	20.0	18.1		ug/L		91	66 - 127
Xylenes, Total	60.0	55.6		ug/L		93	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	93		80 - 120

Lab Sample ID: LCSD 490-589042/11
Matrix: Water
Analysis Batch: 589042

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	20.0	18.7		ug/L		94	60 - 131	0	43
1,3,5-Trimethylbenzene	20.0	18.7		ug/L		94	70 - 130	0	20
Benzene	20.0	18.0		ug/L		90	69 - 129	0	33
Ethylbenzene	20.0	18.1		ug/L		91	70 - 130	0	35
Methyl tert-butyl ether	20.0	18.7		ug/L		94	57 - 138	2	40
m-Xylene & p-Xylene	40.0	37.2		ug/L		93	65 - 127	0	39
Naphthalene	20.0	18.8		ug/L		94	69 - 133	0	48
o-Xylene	20.0	18.4		ug/L		92	64 - 128	0	35
Toluene	20.0	18.1		ug/L		90	66 - 127	0	34
Xylenes, Total	60.0	55.6		ug/L		93		0	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	95		80 - 120

Lab Sample ID: LCSD 490-589042/39
Matrix: Water
Analysis Batch: 589042

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	20.0	19.2		ug/L		96	60 - 131	3	43
1,3,5-Trimethylbenzene	20.0	19.3		ug/L		96	70 - 130	4	20
Benzene	20.0	18.2		ug/L		91	69 - 129	3	33
Ethylbenzene	20.0	18.5		ug/L		92	70 - 130	2	35
Methyl tert-butyl ether	20.0	18.5		ug/L		92	57 - 138	4	40
m-Xylene & p-Xylene	40.0	38.3		ug/L		96	65 - 127	4	39

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Lab Sample ID: LCSD 490-589042/39
Matrix: Water
Analysis Batch: 589042

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			20.0	18.2		ug/L		91	69 - 133	0	48
o-Xylene			20.0	18.9		ug/L		94	64 - 128	4	35
Toluene			20.0	18.6		ug/L		93	66 - 127	3	34
Xylenes, Total			60.0	57.2		ug/L		95		4	

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*95*		*80 - 120*

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Client Sample ID: MW-1
Lab Sample ID: 500-161417-1
Date Collected: 04/09/19 10:15
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/17/19 15:11	S1S	TAL NSH
Total/NA	Analysis	WDNR		5	588475	04/18/19 22:58	S1S	TAL NSH

Client Sample ID: MW-2P
Lab Sample ID: 500-161417-2
Date Collected: 04/09/19 12:00
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/17/19 15:42	S1S	TAL NSH
Total/NA	Analysis	WDNR		20	589042	04/19/19 10:00	GWM	TAL NSH

Client Sample ID: MW-3D
Lab Sample ID: 500-161417-3
Date Collected: 04/09/19 11:45
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 11:59	S1S	TAL NSH

Client Sample ID: MW-4
Lab Sample ID: 500-161417-4
Date Collected: 04/09/19 12:30
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		20	588475	04/18/19 08:29	S1S	TAL NSH

Client Sample ID: MW-4P
Lab Sample ID: 500-161417-5
Date Collected: 04/09/19 12:15
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 20:53	S1S	TAL NSH

Client Sample ID: MW-6
Lab Sample ID: 500-161417-6
Date Collected: 04/09/19 13:00
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 21:24	S1S	TAL NSH

Client Sample ID: MW-6P
Lab Sample ID: 500-161417-7
Date Collected: 04/09/19 12:45
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 07:10	S1S	TAL NSH

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Client Sample ID: MW-6D
Lab Sample ID: 500-161417-8
Date Collected: 04/09/19 12:30
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 10:25	S1S	TAL NSH

Client Sample ID: MW-7
Lab Sample ID: 500-161417-9
Date Collected: 04/09/19 10:45
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 12:30	S1S	TAL NSH

Client Sample ID: MW-8P
Lab Sample ID: 500-161417-10
Date Collected: 04/09/19 10:30
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 13:02	S1S	TAL NSH

Client Sample ID: MW-10
Lab Sample ID: 500-161417-11
Date Collected: 04/09/19 11:00
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 14:04	S1S	TAL NSH

Client Sample ID: MW-11
Lab Sample ID: 500-161417-12
Date Collected: 04/09/19 11:15
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 14:36	S1S	TAL NSH

Client Sample ID: MW-12P
Lab Sample ID: 500-161417-13
Date Collected: 04/09/19 11:30
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 15:07	S1S	TAL NSH

Client Sample ID: MW-12D
Lab Sample ID: 500-161417-14
Date Collected: 04/09/19 11:00
Matrix: Water
Date Received: 04/11/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 15:39	S1S	TAL NSH

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Client Sample ID: MW-13
Date Collected: 04/09/19 13:15
Date Received: 04/11/19 09:20

Lab Sample ID: 500-161417-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 16:10	S1S	TAL NSH

Client Sample ID: MW-13D
Date Collected: 04/09/19 13:30
Date Received: 04/11/19 09:20

Lab Sample ID: 500-161417-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 16:42	S1S	TAL NSH

Client Sample ID: Webster
Date Collected: 04/09/19 09:45
Date Received: 04/11/19 09:20

Lab Sample ID: 500-161417-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/18/19 17:13	S1S	TAL NSH

Client Sample ID: Witkowski
Date Collected: 04/09/19 13:45
Date Received: 04/11/19 09:20

Lab Sample ID: 500-161417-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	588475	04/17/19 14:39	S1S	TAL NSH

Client Sample ID: Trip Blank
Date Collected: 04/09/19 00:00
Date Received: 04/11/19 09:20

Lab Sample ID: 500-161417-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	589042	04/19/19 16:06	GWM	TAL NSH

Laboratory References:

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Olson's Corner

Job ID: 500-161417-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19

Laboratory: Eurofins TestAmerica, Nashville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-19
Alaska (UST)	State Program	10	UST-087	06-30-19
Arizona	State Program	9	AZ0473	05-05-19
Arkansas DEQ	State Program	6	88-0737	04-25-20
California	State Program	9	2938	06-30-19
Connecticut	State Program	1	PH-0220	12-31-19
Florida	NELAP	4	E87358	06-30-19
Georgia	State Program	4	NA: NELAP & A2LA	12-31-19
Illinois	NELAP	5	200010	12-09-19
Iowa	State Program	7	131	04-01-20
Kansas	NELAP	7	E-10229	10-31-19
Kentucky (UST)	State Program	4	19	06-30-19
Kentucky (WW)	State Program	4	90038	12-31-19
Louisiana	NELAP	6	30613	06-30-19
Maine	State Program	1	TN00032	11-03-19
Maryland	State Program	3	316	03-31-20
Massachusetts	State Program	1	M-TN032	06-30-19
Minnesota	NELAP	5	047-999-345	12-31-19
Mississippi	State Program	4	N/A	06-30-19
Nevada	State Program	9	TN00032	07-31-19
New Hampshire	NELAP	1	2963	10-09-19
New Jersey	NELAP	2	TN965	06-30-19
New York	NELAP	2	11342	03-31-20
North Carolina (WW/SW)	State Program	4	387	12-31-19
North Dakota	State Program	8	R-146	06-30-19
Ohio VAP	State Program	5	CL0033	07-06-19
Oklahoma	State Program	6	9412	08-31-19
Oregon	NELAP	10	TN200001	04-26-19
Pennsylvania	NELAP	3	68-00585	07-31-19
Rhode Island	State Program	1	LAO00268	12-30-19
South Carolina	State Program	4	84009 (001)	02-28-19 *
Tennessee	State Program	4	2008	02-23-20
Texas	NELAP	6	T104704077	08-31-19
USDA	Federal		P330-13-00306	04-10-20
Utah	NELAP	8	TN00032	07-31-19
Virginia	NELAP	3	460152	06-14-19
Washington	State Program	10	C789	07-19-19
West Virginia DEP	State Program	3	219	02-28-19 *
Wisconsin	State Program	5	998020430	08-31-19
Wyoming (UST)	A2LA	8	453.07	12-31-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL T

2417 Bond Street, University Park, IL 604
Phone: 708.534.5200 Fax: 708.534.5

500-161417 COC

(optional)

Report To
Contact: Mitch Evenson + Anna Beckman
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)

Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-161417

Chain of Custody Number:

Page 1 of 2

Temperature °C of Cooler: 5.1

Client: Cedar Corp
Client Project #:
Project Name: Olson's Corner
Project Location/State: Hannibal, WI
Lab Project #:
Sampler: AMB
Lab PM: Sandie Fredrick

Preservative:
Parameter: 8VOCs + Naphthalene

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	8VOCs + Naphthalene	Comments
1		MW-1	4/9/19	1015	2	W	X	
2		MW-2P		1200				
3		MW-3D		1145				
4		MW-4		1230				
5		MW-4P		1215				
6		MW-6		1300				
7		MW-6P		1245				
8		MW-6D		1230				
9		MW-7		1045				
10		MW-8P		1030				

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Anna Beckman	Cedar	4/10/19	0800	Allen Scott	TA-CRL	4/11/19	0920
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier:
Shipped: FedEx
Hand Delivered:

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments: PECFA pricing

Lab Comments:

4/22/2019

TAL-4124-506 (1209)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

Chain of Custody Record

Lab Job #: 500-16147

Chain of Custody Number:

Page 2 of 2

Temperature °C of Cooler:

(optional) Report To		(optional) Bill To	
Contact:	Mitch Evenson + Anna Beckman	Contact:	
Company:		Company:	
Address:		Address:	
Address:		Address:	
Phone:		Phone:	
Fax:		Fax:	
E-Mail:		PO#/Reference#	

Client	Cedar Corp
Client Project #	
Project Name	Olson's Corner
Project Location/State	Hannibal, WI
Lab Project #	
Sampler	AMB
Lab PM	Sandie Fredrick

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: PAHs + Naphthalene								Comments
11		mw-10	4/9/19	1100	2	W		X								
12		mw-11		1115												
13		mw-12P		1130												
14		mw-12D		1100												
15		mw-13		1315												
16		mw-13D		1330												
17		Webster		0945												
18		Witkowski		1345												
19		Trip Blank														

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Anna Beckman	Cedar	4/10/19	0800	Shri Scott	TA-CHI	4/11/19	0920
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped Fed X
Hand Delivered

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments: PECFA pricing

Lab Comments:

TAL-4124-500 (1209)

4/22/2019

500-161417 Waybill

ORIGIN ID:PHDA (715) 235-9081
MITCH EVENSON
CEDAR CORPORATION
604 WILSON AVENUE

MENOMONIE, WI 54751
UNITED STATES US

SHIP DATE: 18JAN19
ACTWGT: 10.00 LB MAN
CAD: 0562071/CAFE3211

TO SAMPLE RECEIVING
TESTAMERICA CHICAGO
2417 BOND STREET

UNIVERSITY PARK IL 604843101
(708) 534-6200
REF: S500-69149

RMA:

FedEx Express

FedEx
TRK# 0221 4761 6868 3166

THU - 11 APR 10:30A
PRIORITY OVERNIGHT

GE JOTA

60484
IL-US
ORD

FID 152427 10APR19 EAUA 563C1/D7E5/0C8A

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

500-161417 Chain of Custody

Cooler Received/Opened On 04-13-2019 @ 09:00

Time Samples Removed From Cooler 1600 Time Samples Placed In Storage 1250 (2 Hour Window)

1. Tracking # 4810 (last 4 digits, FedEx) Courier: FedEx

IR Gun ID 31470368 pH Strip Lot _____ Chlorine Strip Lot _____

2. Temperature of rep. sample or temp blank when opened: 3.0 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA Blank

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) KD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this. .

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) 2.2

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) 2.2

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) 2.2

I certify that I attached a label with the unique LIMS number to each container (intial) 2.2

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 8/23/17

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record

500-161417

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	COC No: 500-119642.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandie.fredrick@testamericainc.com	Page: Page 1 of 3
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Wisconsin	Job #: 500-161417-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/23/2019		
City: Nashville	TAT Requested (days):		
State, Zip: TN, 37204			
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:		
Email:	WO #:		
Project Name: General Projects	Project #: 50006556		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	WI_GRO/5030B (MOD) WISC PVOC + Nap	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-1 (500-161417-1)	4/9/19	10:15 Central		Water			X	2	
MW-2P (500-161417-2)	4/9/19	12:00 Central		Water			X	2	
MW-3D (500-161417-3)	4/9/19	11:45 Central		Water			X	2	
MW-4 (500-161417-4)	4/9/19	12:30 Central		Water			X	2	
MW-4P (500-161417-5)	4/9/19	12:15 Central		Water			X	2	
MW-6 (500-161417-6)	4/9/19	13:00 Central		Water			X	2	
MW-6P (500-161417-7)	4/9/19	12:45 Central		Water			X	2	
MW-6D (500-161417-8)	4/9/19	12:30 Central		Water			X	2	
MW-7 (500-161417-9)	4/9/19	10:45 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/11/19 1620	TA	Jameria Jordan	04/13/19 09:00	TA-WAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0

Ver: 01/16/2019

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record

Loc: 500
161417

fins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	42.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandie.fredrick@testamericainc.com	State of Origin: Wisconsin	
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Wisconsin		Job #: 500-161417-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/23/2019			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: General Projects	Project #: 50006556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - Di Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	WI_GRO/5030B (MOD) WISC PVOC + Nap	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-8P (500-161417-10)	4/9/19	10:30 Central		Water			X	2	
MW-10 (500-161417-11)	4/9/19	11:00 Central		Water			X	2	
MW-11 (500-161417-12)	4/9/19	11:15 Central		Water			X	2	
MW-12P (500-161417-13)	4/9/19	11:30 Central		Water			X	2	
MW-12D (500-161417-14)	4/9/19	11:00 Central		Water			X	2	
MW-13 (500-161417-15)	4/9/19	13:15 Central		Water			X	2	
MW-13D (500-161417-16)	4/9/19	13:30 Central		Water			X	2	
Webster (500-161417-17)	4/9/19	09:45 Central		Water			X	2	
Witkowski (500-161417-18)	4/9/19	13:45 Central		Water			X	2	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	4/11/19 1620	TA	[signature]	04/13/19 09:00	TA-WAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0

Ver: 01/16/2019

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Phone (708) 534-5200 Fax (708) 534-5211

Chain of Custody Record

Loc: 500
161417

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Track	OC No: 00-119642.3
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandie.fredrick@testamericainc.com	State of Orig. Wisconsin	age: Page 3 of 3
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Wisconsin		Job #: 500-161417-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 4/23/2019			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: General Projects	Project #: 50006556			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	WI_GRO/5030B (MOD) WISC PVOC + Nap	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
Trip Blank (500-161417-19)	4/9/19	Central		Water			X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 4/10/19 1620	Company TA	Received by:		Date/Time: 04/13/19 09:00	Company TA-WAS	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:		Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.0

Ver: 01/16/2019

4/22/2019

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-161417-1

Login Number: 161417
List Number: 1
Creator: Scott, Sherri L

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	5.1
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 (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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-166351-1
Client Project/Site: Olson Corners

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson

Authorized for release by:
7/16/2019 4:11:58 PM

Sandie Fredrick, Project Manager II
(920)261-1660
sandie.fredrick@testamericainc.com

Table of Contents

Case Narrative

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Job ID: 500-166351-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-166351-1

Comments
No additional comments.

Receipt
The samples were received on 7/9/2019 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2º C.

GC VOA
Method(s) WI-GRO: Surrogate recovery for the following samples were outside control limits: MW-1 (500-166351-1) and MW-4P (500-166351-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) WI-GRO: The sample duplicate (MSD) precision for analytical batch 490-606482 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method(s) WI-GRO: Ph less than 2. Ph paper lot no. 857466. MW-2P (500-166351-2)

Method(s) WI-GRO: Surrogate recovery for the following sample was outside control limits: MW-2P (500-166351-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Client Sample ID: MW-1 — Lab Sample ID: 500-166351-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	130		0.50	0.30	ug/L	1		WDNR	Total/NA
1,3,5-Trimethylbenzene	90		0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	39		0.50	0.36	ug/L	1		WDNR	Total/NA
Ethylbenzene	280		0.50	0.37	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	33		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	76		5.0	2.4	ug/L	1		WDNR	Total/NA
Toluene	18		0.50	0.33	ug/L	1		WDNR	Total/NA
Xylenes, Total	380		1.5	0.58	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-2P — Lab Sample ID: 500-166351-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	580		5.0	3.0	ug/L	10		WDNR	Total/NA
1,3,5-Trimethylbenzene	130		5.0	3.0	ug/L	10		WDNR	Total/NA
Benzene	16000		50	36	ug/L	100		WDNR	Total/NA
Ethylbenzene	1300		5.0	3.7	ug/L	10		WDNR	Total/NA
Methyl tert-butyl ether	850		5.0	2.4	ug/L	10		WDNR	Total/NA
Naphthalene	280		50	24	ug/L	10		WDNR	Total/NA
Toluene	570		5.0	3.3	ug/L	10		WDNR	Total/NA
Xylenes, Total	1600		15	5.8	ug/L	10		WDNR	Total/NA

Client Sample ID: MW-3D — Lab Sample ID: 500-166351-3

No Detections.

Client Sample ID: MW-4 — Lab Sample ID: 500-166351-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	900		13	7.5	ug/L	25		WDNR	Total/NA
1,3,5-Trimethylbenzene	620		13	7.5	ug/L	25		WDNR	Total/NA
Benzene	2900		13	9.0	ug/L	25		WDNR	Total/NA
Ethylbenzene	800		13	9.3	ug/L	25		WDNR	Total/NA
Methyl tert-butyl ether	91		13	6.0	ug/L	25		WDNR	Total/NA
Naphthalene	830		130	60	ug/L	25		WDNR	Total/NA
Toluene	320		13	8.3	ug/L	25		WDNR	Total/NA
Xylenes, Total	2100		38	15	ug/L	25		WDNR	Total/NA

Client Sample ID: MW-4P — Lab Sample ID: 500-166351-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	61		0.50	0.30	ug/L	1		WDNR	Total/NA
1,3,5-Trimethylbenzene	22		0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	620		5.0	3.6	ug/L	10		WDNR	Total/NA
Ethylbenzene	1400		5.0	3.7	ug/L	10		WDNR	Total/NA
Methyl tert-butyl ether	59		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	200		5.0	2.4	ug/L	1		WDNR	Total/NA
Toluene	41		0.50	0.33	ug/L	1		WDNR	Total/NA
Xylenes, Total	230		1.5	0.58	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-6 — Lab Sample ID: 500-166351-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		0.50	0.36	ug/L	1		WDNR	Total/NA
Ethylbenzene	1.0		0.50	0.37	ug/L	1		WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Detection Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Client Sample ID: MW-6 (Continued) — Lab Sample ID: 500-166351-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.72		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-6P — Lab Sample ID: 500-166351-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2.6		0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	5.3		0.50	0.36	ug/L	1		WDNR	Total/NA
Ethylbenzene	13		0.50	0.37	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	0.52		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	70		5.0	2.4	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-6D — Lab Sample ID: 500-166351-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.87		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-7 — Lab Sample ID: 500-166351-9

No Detections.

Client Sample ID: MW-8P — Lab Sample ID: 500-166351-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzene	92		0.50	0.36	ug/L	1		WDNR	Total/NA
Ethylbenzene	90		0.50	0.37	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	28		0.50	0.24	ug/L	1		WDNR	Total/NA
Naphthalene	5.5		5.0	2.4	ug/L	1		WDNR	Total/NA
Toluene	1.2		0.50	0.33	ug/L	1		WDNR	Total/NA
Xylenes, Total	2.9		1.5	0.58	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-9 — Lab Sample ID: 500-166351-11

No Detections.

Client Sample ID: MW-10 — Lab Sample ID: 500-166351-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.3		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-11 — Lab Sample ID: 500-166351-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.44	J	0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-12P — Lab Sample ID: 500-166351-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.50		0.50	0.30	ug/L	1		WDNR	Total/NA
Benzene	31		0.50	0.36	ug/L	1		WDNR	Total/NA
Ethylbenzene	1.1		0.50	0.37	ug/L	1		WDNR	Total/NA
Methyl tert-butyl ether	23		0.50	0.24	ug/L	1		WDNR	Total/NA
Toluene	0.81		0.50	0.33	ug/L	1		WDNR	Total/NA
Xylenes, Total	2.4		1.5	0.58	ug/L	1		WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Client Sample ID: MW-12D — Lab Sample ID: 500-166351-15

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.65		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 500-166351-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.61		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: MW-13D — Lab Sample ID: 500-166351-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.2		0.50	0.24	ug/L	1		WDNR	Total/NA

Client Sample ID: WEBSTER — Lab Sample ID: 500-166351-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.25	J	0.50	0.24	ug/L	1		WDNR	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Method	Method Description	Protocol	Laboratory
WDNR	Wisconsin - Gasoline Range Organics (GC)	WI-GRO	TAL NSH
5030B	Purge and Trap	SW846	TAL NSH

Protocol References:

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

WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

Laboratory References:

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-166351-1	MW-1	Water	07/03/19 10:15	07/09/19 09:45	
500-166351-2	MW-2P	Water	07/03/19 08:45	07/09/19 09:45	
500-166351-3	MW-3D	Water	07/03/19 09:00	07/09/19 09:45	
500-166351-4	MW-4	Water	07/03/19 09:10	07/09/19 09:45	
500-166351-5	MW-4P	Water	07/03/19 09:20	07/09/19 09:45	
500-166351-6	MW-6	Water	07/03/19 09:45	07/09/19 09:45	
500-166351-7	MW-6P	Water	07/03/19 09:50	07/09/19 09:45	
500-166351-8	MW-6D	Water	07/03/19 10:00	07/09/19 09:45	
500-166351-9	MW-7	Water	07/03/19 10:40	07/09/19 09:45	
500-166351-10	MW-8P	Water	07/03/19 10:30	07/09/19 09:45	
500-166351-11	MW-9	Water	07/03/19 08:50	07/09/19 09:45	
500-166351-12	MW-10	Water	07/03/19 08:30	07/09/19 09:45	
500-166351-13	MW-11	Water	07/03/19 11:00	07/09/19 09:45	
500-166351-14	MW-12P	Water	07/03/19 11:10	07/09/19 09:45	
500-166351-15	MW-12D	Water	07/03/19 10:50	07/09/19 09:45	
500-166351-16	MW-13	Water	07/03/19 11:45	07/09/19 09:45	
500-166351-17	MW-13D	Water	07/03/19 12:00	07/09/19 09:45	
500-166351-18	WEBSTER	Water	07/03/19 10:10	07/09/19 09:45	

Client Sample Results

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Client Sample ID: MW-1

Lab Sample ID: 500-166351-1

Date Collected: 07/03/19 10:15

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	130		0.50	0.30	ug/L			07/15/19 10:48	1
1,3,5-Trimethylbenzene	90		0.50	0.30	ug/L			07/15/19 10:48	1
Benzene	39		0.50	0.36	ug/L			07/15/19 10:48	1
Ethylbenzene	280		0.50	0.37	ug/L			07/15/19 10:48	1
Methyl tert-butyl ether	33		0.50	0.24	ug/L			07/15/19 10:48	1
Naphthalene	76		5.0	2.4	ug/L			07/15/19 10:48	1
Toluene	18		0.50	0.33	ug/L			07/15/19 10:48	1
Xylenes, Total	380		1.5	0.58	ug/L			07/15/19 10:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*138*	*X*	*80 - 120*		*07/15/19 10:48*	*1*

Client Sample ID: MW-2P

Lab Sample ID: 500-166351-2

Date Collected: 07/03/19 08:45

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	580		5.0	3.0	ug/L			07/16/19 08:38	10
1,3,5-Trimethylbenzene	130		5.0	3.0	ug/L			07/16/19 08:38	10
Benzene	16000		50	36	ug/L			07/16/19 13:17	100
Ethylbenzene	1300		5.0	3.7	ug/L			07/16/19 08:38	10
Methyl tert-butyl ether	850		5.0	2.4	ug/L			07/16/19 08:38	10
Naphthalene	280		50	24	ug/L			07/16/19 08:38	10
Toluene	570		5.0	3.3	ug/L			07/16/19 08:38	10
Xylenes, Total	1600		15	5.8	ug/L			07/16/19 08:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*139*	*X*	*80 - 120*		*07/16/19 08:38*	*10*
a,a,a-Trifluorotoluene	*98*		*80 - 120*		*07/16/19 13:17*	*100*

Client Sample ID: MW-3D

Lab Sample ID: 500-166351-3

Date Collected: 07/03/19 09:00

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 12:25	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 12:25	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 12:25	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 12:25	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			07/15/19 12:25	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 12:25	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 12:25	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*		*07/15/19 12:25*	*1*

Client Sample ID: MW-4

Lab Sample ID: 500-166351-4

Date Collected: 07/03/19 09:10

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	900		13	7.5	ug/L			07/16/19 10:43	25
1,3,5-Trimethylbenzene	620		13	7.5	ug/L			07/16/19 10:43	25
Benzene	2900		13	9.0	ug/L			07/16/19 10:43	25
Ethylbenzene	800		13	9.3	ug/L			07/16/19 10:43	25
Methyl tert-butyl ether	91		13	6.0	ug/L			07/16/19 10:43	25
Naphthalene	830		130	60	ug/L			07/16/19 10:43	25
Toluene	320		13	8.3	ug/L			07/16/19 10:43	25
Xylenes, Total	2100		38	15	ug/L			07/16/19 10:43	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*117*		*80 - 120*		*07/16/19 10:43*	*25*
a,a,a-Trifluorotoluene	*101*		*80 - 120*		*07/16/19 12:17*	*100*

Client Sample ID: MW-4P

Lab Sample ID: 500-166351-5

Date Collected: 07/03/19 09:20

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	61		0.50	0.30	ug/L			07/15/19 20:40	1
1,3,5-Trimethylbenzene	22		0.50	0.30	ug/L			07/15/19 20:40	1
Benzene	620		5.0	3.6	ug/L			07/15/19 21:43	10
Ethylbenzene	1400		5.0	3.7	ug/L			07/15/19 21:43	10
Methyl tert-butyl ether	59		0.50	0.24	ug/L			07/15/19 20:40	1
Naphthalene	200		5.0	2.4	ug/L			07/15/19 20:40	1
Toluene	41		0.50	0.33	ug/L			07/15/19 20:40	1
Xylenes, Total	230		1.5	0.58	ug/L			07/15/19 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*159*	*X*	*80 - 120*		*07/15/19 20:40*	*1*
a,a,a-Trifluorotoluene	*116*		*80 - 120*		*07/15/19 21:43*	*10*

Client Sample ID: MW-6

Lab Sample ID: 500-166351-6

Date Collected: 07/03/19 09:45

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 22:14	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 22:14	1
Benzene	1.5		0.50	0.36	ug/L			07/15/19 22:14	1
Ethylbenzene	1.0		0.50	0.37	ug/L			07/15/19 22:14	1
Methyl tert-butyl ether	0.72		0.50	0.24	ug/L			07/15/19 22:14	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 22:14	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 22:14	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*80 - 120*		*07/15/19 22:14*	*1*

Client Sample ID: MW-6P

Lab Sample ID: 500-166351-7

Date Collected: 07/03/19 09:50

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**2.6**		0.50	0.30	ug/L			07/15/19 23:48	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 23:48	1
Benzene	**5.3**		0.50	0.36	ug/L			07/15/19 23:48	1
Ethylbenzene	**13**		0.50	0.37	ug/L			07/15/19 23:48	1
Methyl tert-butyl ether	**0.52**		0.50	0.24	ug/L			07/15/19 23:48	1
Naphthalene	**70**		5.0	2.4	ug/L			07/15/19 23:48	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 23:48	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*80 - 120*		*07/15/19 23:48*	*1*

Client Sample ID: MW-6D

Lab Sample ID: 500-166351-8

Date Collected: 07/03/19 10:00

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 14:56	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 14:56	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 14:56	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 14:56	1
Methyl tert-butyl ether	**0.87**		0.50	0.24	ug/L			07/15/19 14:56	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 14:56	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 14:56	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*80 - 120*		*07/15/19 14:56*	*1*

Client Sample ID: MW-7

Lab Sample ID: 500-166351-9

Date Collected: 07/03/19 10:40

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 15:28	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 15:28	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 15:28	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 15:28	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			07/15/19 15:28	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 15:28	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 15:28	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*80 - 120*		*07/15/19 15:28*	*1*

Client Sample ID: MW-8P

Lab Sample ID: 500-166351-10

Date Collected: 07/03/19 10:30

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/16/19 01:22	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/16/19 01:22	1
Benzene	**92**		0.50	0.36	ug/L			07/16/19 01:22	1
Ethylbenzene	**90**		0.50	0.37	ug/L			07/16/19 01:22	1
Methyl tert-butyl ether	**28**		0.50	0.24	ug/L			07/16/19 01:22	1
Naphthalene	**5.5**		5.0	2.4	ug/L			07/16/19 01:22	1
Toluene	**1.2**		0.50	0.33	ug/L			07/16/19 01:22	1
Xylenes, Total	**2.9**		1.5	0.58	ug/L			07/16/19 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*108*		*80 - 120*		*07/16/19 01:22*	*1*

Client Sample ID: MW-9

Lab Sample ID: 500-166351-11

Date Collected: 07/03/19 08:50

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 15:59	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 15:59	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 15:59	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 15:59	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			07/15/19 15:59	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 15:59	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 15:59	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*		*07/15/19 15:59*	*1*

Client Sample ID: MW-10

Lab Sample ID: 500-166351-12

Date Collected: 07/03/19 08:30

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 16:30	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 16:30	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 16:30	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 16:30	1
Methyl tert-butyl ether	**1.3**		0.50	0.24	ug/L			07/15/19 16:30	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 16:30	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 16:30	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*96*		*80 - 120*		*07/15/19 16:30*	*1*

Client Sample ID: MW-11

Lab Sample ID: 500-166351-13

Date Collected: 07/03/19 11:00

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 17:02	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 17:02	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 17:02	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 17:02	1
Methyl tert-butyl ether	**0.44**	**J**	0.50	0.24	ug/L			07/15/19 17:02	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 17:02	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 17:02	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*98*		*80 - 120*		*07/15/19 17:02*	*1*

Client Sample ID: MW-12P

Lab Sample ID: 500-166351-14

Date Collected: 07/03/19 11:10

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**0.50**		0.50	0.30	ug/L			07/16/19 02:55	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/16/19 02:55	1
Benzene	**31**		0.50	0.36	ug/L			07/16/19 02:55	1
Ethylbenzene	**1.1**		0.50	0.37	ug/L			07/16/19 02:55	1
Methyl tert-butyl ether	**23**		0.50	0.24	ug/L			07/16/19 02:55	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/16/19 02:55	1
Toluene	**0.81**		0.50	0.33	ug/L			07/16/19 02:55	1
Xylenes, Total	**2.4**		1.5	0.58	ug/L			07/16/19 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*120*		*80 - 120*		*07/16/19 02:55*	*1*

Client Sample ID: MW-12D

Lab Sample ID: 500-166351-15

Date Collected: 07/03/19 10:50

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 17:33	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 17:33	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 17:33	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 17:33	1
Methyl tert-butyl ether	**0.65**		0.50	0.24	ug/L			07/15/19 17:33	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 17:33	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 17:33	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*80 - 120*		*07/15/19 17:33*	*1*

Client Sample ID: MW-13

Lab Sample ID: 500-166351-16

Date Collected: 07/03/19 11:45

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 18:04	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 18:04	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 18:04	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 18:04	1
Methyl tert-butyl ether	**0.61**		0.50	0.24	ug/L			07/15/19 18:04	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 18:04	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 18:04	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*80 - 120*		*07/15/19 18:04*	*1*

Client Sample ID: MW-13D

Lab Sample ID: 500-166351-17

Date Collected: 07/03/19 12:00

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 18:35	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 18:35	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 18:35	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 18:35	1
Methyl tert-butyl ether	**1.2**		0.50	0.24	ug/L			07/15/19 18:35	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 18:35	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 18:35	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*		*07/15/19 18:35*	*1*

Client Sample ID: WEBSTER

Lab Sample ID: 500-166351-18

Date Collected: 07/03/19 10:10

Matrix: Water

Date Received: 07/09/19 09:45

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/16/19 08:07	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/16/19 08:07	1
Benzene	<0.36		0.50	0.36	ug/L			07/16/19 08:07	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/16/19 08:07	1
Methyl tert-butyl ether	**0.25**	**J**	0.50	0.24	ug/L			07/16/19 08:07	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/16/19 08:07	1
Toluene	<0.33		0.50	0.33	ug/L			07/16/19 08:07	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/16/19 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*95*		*80 - 120*		*07/16/19 08:07*	*1*

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Reported value was between the limit of detection and the limit of quantitation.
X	Surrogate is outside control limits

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	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)

QC Association Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

GC VOA

Analysis Batch: 606482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-166351-1	MW-1	Total/NA	Water	WDNR	
500-166351-2	MW-2P	Total/NA	Water	WDNR	
500-166351-2	MW-2P	Total/NA	Water	WDNR	
500-166351-3	MW-3D	Total/NA	Water	WDNR	
500-166351-4	MW-4	Total/NA	Water	WDNR	
500-166351-4	MW-4	Total/NA	Water	WDNR	
500-166351-5	MW-4P	Total/NA	Water	WDNR	
500-166351-5	MW-4P	Total/NA	Water	WDNR	
500-166351-6	MW-6	Total/NA	Water	WDNR	
500-166351-7	MW-6P	Total/NA	Water	WDNR	
500-166351-8	MW-6D	Total/NA	Water	WDNR	
500-166351-9	MW-7	Total/NA	Water	WDNR	
500-166351-10	MW-8P	Total/NA	Water	WDNR	
500-166351-11	MW-9	Total/NA	Water	WDNR	
500-166351-12	MW-10	Total/NA	Water	WDNR	
500-166351-13	MW-11	Total/NA	Water	WDNR	
500-166351-14	MW-12P	Total/NA	Water	WDNR	
500-166351-15	MW-12D	Total/NA	Water	WDNR	
500-166351-16	MW-13	Total/NA	Water	WDNR	
500-166351-17	MW-13D	Total/NA	Water	WDNR	
500-166351-18	WEBSTER	Total/NA	Water	WDNR	
MB 490-606482/4	Method Blank	Total/NA	Water	WDNR	
MB 490-606482/44	Method Blank	Total/NA	Water	WDNR	
LCS 490-606482/3	Lab Control Sample	Total/NA	Water	WDNR	
LCS 490-606482/43	Lab Control Sample	Total/NA	Water	WDNR	
LCSD 490-606482/38	Lab Control Sample Dup	Total/NA	Water	WDNR	
LCSD 490-606482/55	Lab Control Sample Dup	Total/NA	Water	WDNR	
500-166351-3 MS	MW-3D	Total/NA	Water	WDNR	
500-166351-3 MSD	MW-3D	Total/NA	Water	WDNR	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	**Client Sample ID**	**TFT (80-120)**
500-166351-1	MW-1	138 X
500-166351-2	MW-2P	139 X
500-166351-2	MW-2P	98
500-166351-3	MW-3D	95
500-166351-3 MS	MW-3D	97
500-166351-3 MSD	MW-3D	97
500-166351-4	MW-4	117
500-166351-4	MW-4	101
500-166351-5	MW-4P	159 X
500-166351-5	MW-4P	116
500-166351-6	MW-6	97
500-166351-7	MW-6P	97
500-166351-8	MW-6D	96
500-166351-9	MW-7	96
500-166351-10	MW-8P	108
500-166351-11	MW-9	95
500-166351-12	MW-10	96
500-166351-13	MW-11	98
500-166351-14	MW-12P	120
500-166351-15	MW-12D	97
500-166351-16	MW-13	97
500-166351-17	MW-13D	95
500-166351-18	WEBSTER	95
LCS 490-606482/3	Lab Control Sample	100
LCS 490-606482/43	Lab Control Sample	98
LCSD 490-606482/38	Lab Control Sample Dup	97
LCSD 490-606482/55	Lab Control Sample Dup	97
MB 490-606482/4	Method Blank	97
MB 490-606482/44	Method Blank	97

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: WDNR - Wisconsin - Gasoline Range Organics (GC)

Lab Sample ID: MB 490-606482/4
Matrix: Water
Analysis Batch: 606482

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 09:48	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/15/19 09:48	1
Benzene	<0.36		0.50	0.36	ug/L			07/15/19 09:48	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/15/19 09:48	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			07/15/19 09:48	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/15/19 09:48	1
Toluene	<0.33		0.50	0.33	ug/L			07/15/19 09:48	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/15/19 09:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*80 - 120*		*07/15/19 09:48*	*1*

Lab Sample ID: MB 490-606482/44
Matrix: Water
Analysis Batch: 606482

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/16/19 07:36	1
1,3,5-Trimethylbenzene	<0.30		0.50	0.30	ug/L			07/16/19 07:36	1
Benzene	<0.36		0.50	0.36	ug/L			07/16/19 07:36	1
Ethylbenzene	<0.37		0.50	0.37	ug/L			07/16/19 07:36	1
Methyl tert-butyl ether	<0.24		0.50	0.24	ug/L			07/16/19 07:36	1
Naphthalene	<2.4		5.0	2.4	ug/L			07/16/19 07:36	1
Toluene	<0.33		0.50	0.33	ug/L			07/16/19 07:36	1
Xylenes, Total	<0.58		1.5	0.58	ug/L			07/16/19 07:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*97*		*80 - 120*		*07/16/19 07:36*	*1*

Lab Sample ID: LCS 490-606482/3
Matrix: Water
Analysis Batch: 606482

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	20.0	19.0		ug/L		95	60 - 131
1,3,5-Trimethylbenzene	20.0	19.1		ug/L		95	70 - 130
Benzene	20.0	18.7		ug/L		94	69 - 129
Ethylbenzene	20.0	18.7		ug/L		94	70 - 130
Methyl tert-butyl ether	20.0	18.7		ug/L		93	57 - 138
m-Xylene & p-Xylene	40.0	38.0		ug/L		95	65 - 127
Naphthalene	20.0	17.9		ug/L		90	69 - 133
o-Xylene	20.0	18.8		ug/L		94	64 - 128
Toluene	20.0	18.7		ug/L		93	66 - 127
Xylenes, Total	60.0	56.8		ug/L		95	

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*100*		*80 - 120*

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Lab Sample ID: LCS 490-606482/43
Matrix: Water
Analysis Batch: 606482

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,4-Trimethylbenzene			20.0	18.7		ug/L		94	60 - 131		
1,3,5-Trimethylbenzene			20.0	18.8		ug/L		94	70 - 130		
Benzene			20.0	18.8		ug/L		94	69 - 129		
Ethylbenzene			20.0	18.6		ug/L		93	70 - 130		
Methyl tert-butyl ether			20.0	18.6		ug/L		93	57 - 138		
m-Xylene & p-Xylene			40.0	37.8		ug/L		94	65 - 127		
Naphthalene			20.0	18.0		ug/L		90	69 - 133		
o-Xylene			20.0	18.8		ug/L		94	64 - 128		
Toluene			20.0	18.7		ug/L		94	66 - 127		
Xylenes, Total			60.0	56.6		ug/L		94			

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*98*		*80 - 120*

Lab Sample ID: LCSD 490-606482/38
Matrix: Water
Analysis Batch: 606482

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene			20.0	18.5		ug/L		93	60 - 131	3	43
1,3,5-Trimethylbenzene			20.0	18.5		ug/L		93	70 - 130	3	20
Benzene			20.0	18.7		ug/L		93	69 - 129	0	33
Ethylbenzene			20.0	18.4		ug/L		92	70 - 130	1	35
Methyl tert-butyl ether			20.0	18.7		ug/L		93	57 - 138	0	40
m-Xylene & p-Xylene			40.0	37.4		ug/L		93	65 - 127	2	39
Naphthalene			20.0	18.1		ug/L		90	69 - 133	1	48
o-Xylene			20.0	18.6		ug/L		93	64 - 128	1	35
Toluene			20.0	18.5		ug/L		92	66 - 127	1	34
Xylenes, Total			60.0	56.0		ug/L		93		1	

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*97*		*80 - 120*

Lab Sample ID: LCSD 490-606482/55
Matrix: Water
Analysis Batch: 606482

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene			20.0	19.0		ug/L		95	60 - 131	2	43
1,3,5-Trimethylbenzene			20.0	19.2		ug/L		96	70 - 130	2	20
Benzene			20.0	19.7		ug/L		98	69 - 129	5	33
Ethylbenzene			20.0	19.1		ug/L		96	70 - 130	3	35
Methyl tert-butyl ether			20.0	19.3		ug/L		97	57 - 138	4	40
m-Xylene & p-Xylene			40.0	38.6		ug/L		97	65 - 127	2	39
Naphthalene			20.0	19.2		ug/L		96	69 - 133	7	48
o-Xylene			20.0	19.2		ug/L		96	64 - 128	2	35
Toluene			20.0	19.1		ug/L		96	66 - 127	2	34
Xylenes, Total			60.0	57.8		ug/L		96		2	

Method: WDNR - Wisconsin - Gasoline Range Organics (GC) (Continued)

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	97		80 - 120

Lab Sample ID: 500-166351-3 MS
Matrix: Water
Analysis Batch: 606482

Client Sample ID: MW-3D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	<0.30		20.0	19.0		ug/L		95	40 - 165
1,3,5-Trimethylbenzene	<0.30		20.0	19.2		ug/L		96	60 - 140
Benzene	<0.36		20.0	18.7		ug/L		94	29 - 176
Ethylbenzene	<0.37		20.0	19.0		ug/L		95	30 - 170
Methyl tert-butyl ether	<0.24		20.0	17.4		ug/L		87	23 - 165
m-Xylene & p-Xylene	<0.29		40.0	38.4		ug/L		96	27 - 165
Naphthalene	<2.4		20.0	16.5		ug/L		82	10 - 175
o-Xylene	<0.29		20.0	18.6		ug/L		93	23 - 169
Toluene	<0.33		20.0	18.7		ug/L		94	30 - 167
Xylenes, Total	<0.58		60.0	57.0		ug/L		95	

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene	97		80 - 120

Lab Sample ID: 500-166351-3 MSD
Matrix: Water
Analysis Batch: 606482

Client Sample ID: MW-3D
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	<0.30		20.0	14.8		ug/L		74	40 - 165	25	43
1,3,5-Trimethylbenzene	<0.30		20.0	14.9	F2	ug/L		75	60 - 140	25	20
Benzene	<0.36		20.0	14.8		ug/L		74	29 - 176	23	33
Ethylbenzene	<0.37		20.0	14.8		ug/L		74	30 - 170	25	35
Methyl tert-butyl ether	<0.24		20.0	14.2		ug/L		71	23 - 165	20	40
m-Xylene & p-Xylene	<0.29		40.0	30.1		ug/L		75	27 - 165	24	39
Naphthalene	<2.4		20.0	13.1		ug/L		65	10 - 175	23	48
o-Xylene	<0.29		20.0	14.6		ug/L		73	23 - 169	24	35
Toluene	<0.33		20.0	14.7		ug/L		73	30 - 167	24	34
Xylenes, Total	<0.58		60.0	44.7		ug/L		75		24	

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	97		80 - 120

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Client Sample ID: MW-1
Date Collected: 07/03/19 10:15
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 10:48	S1S	TAL NSH

Client Sample ID: MW-2P
Date Collected: 07/03/19 08:45
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		10	606482	07/16/19 08:38	S1S	TAL NSH
Total/NA	Analysis	WDNR		100	606482	07/16/19 13:17	S1S	TAL NSH

Client Sample ID: MW-3D
Date Collected: 07/03/19 09:00
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 12:25	S1S	TAL NSH

Client Sample ID: MW-4
Date Collected: 07/03/19 09:10
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		25	606482	07/16/19 10:43	S1S	TAL NSH
Total/NA	Analysis	WDNR		100	606482	07/16/19 12:17	S1S	TAL NSH

Client Sample ID: MW-4P
Date Collected: 07/03/19 09:20
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 20:40	S1S	TAL NSH
Total/NA	Analysis	WDNR		10	606482	07/15/19 21:43	S1S	TAL NSH

Client Sample ID: MW-6
Date Collected: 07/03/19 09:45
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 22:14	S1S	TAL NSH

Client Sample ID: MW-6P
Date Collected: 07/03/19 09:50
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 23:48	S1S	TAL NSH

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Client Sample ID: MW-6D
Lab Sample ID: 500-166351-8
Date Collected: 07/03/19 10:00
Matrix: Water
Date Received: 07/09/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 14:56	S1S	TAL NSH

Client Sample ID: MW-7
Lab Sample ID: 500-166351-9
Date Collected: 07/03/19 10:40
Matrix: Water
Date Received: 07/09/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 15:28	S1S	TAL NSH

Client Sample ID: MW-8P
Lab Sample ID: 500-166351-10
Date Collected: 07/03/19 10:30
Matrix: Water
Date Received: 07/09/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/16/19 01:22	S1S	TAL NSH

Client Sample ID: MW-9
Lab Sample ID: 500-166351-11
Date Collected: 07/03/19 08:50
Matrix: Water
Date Received: 07/09/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 15:59	S1S	TAL NSH

Client Sample ID: MW-10
Lab Sample ID: 500-166351-12
Date Collected: 07/03/19 08:30
Matrix: Water
Date Received: 07/09/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 16:30	S1S	TAL NSH

Client Sample ID: MW-11
Lab Sample ID: 500-166351-13
Date Collected: 07/03/19 11:00
Matrix: Water
Date Received: 07/09/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 17:02	S1S	TAL NSH

Client Sample ID: MW-12P
Lab Sample ID: 500-166351-14
Date Collected: 07/03/19 11:10
Matrix: Water
Date Received: 07/09/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/16/19 02:55	S1S	TAL NSH

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Client Sample ID: MW-12D
Date Collected: 07/03/19 10:50
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 17:33	S1S	TAL NSH

Client Sample ID: MW-13
Date Collected: 07/03/19 11:45
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 18:04	S1S	TAL NSH

Client Sample ID: MW-13D
Date Collected: 07/03/19 12:00
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/15/19 18:35	S1S	TAL NSH

Client Sample ID: WEBSTER
Date Collected: 07/03/19 10:10
Date Received: 07/09/19 09:45

Lab Sample ID: 500-166351-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	WDNR		1	606482	07/16/19 08:07	S1S	TAL NSH

Laboratory References:

TAL NSH = Eurofins TestAmerica, Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Olson Corners

Job ID: 500-166351-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999580010	08-31-19 *

Laboratory: Eurofins TestAmerica, Nashville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	998020430	08-31-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact: Mitch Evenson & Anna Beckman
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

500-166351 COC

Chain of Custody Record

Lab Job #: 500-166351
Chain of Custody Number:
Page 1 of 2
Temperature °C of Cooler: 2c 2

Client	Client Project #	Preservative												
Cedar Corp														
Project Name: Olson Corners		Parameter												
Project Location/State: Hannibal, WI	Lab Project #													
Sampler: AMB	Lab PM: Sandie Fredrick													

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	1,4 Dioxane + Naphthalene							
1		MW-1	7/3/19	1015	3	W	X							
2		MW-2P		0845										
3		MW-3D		0900										
4		MW-4		0910										
5		MW-4P		0920										
6		MW-6		0945										
7		MW-6P		0950										
8		MW-6D		1000										
9		MW-7		1040										
10		MW-8P		1030										

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Comments

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Anna Beckman	Cedar	7/8/19	0730		TA	7/8/19	0945
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments
PECFA Pricing

Lab Comments:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
Contact: Mitch Evenson & Anna Beckman
Company:
Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-16635-1
Chain of Custody Number:
Page 2 of 2
Temperature °C of Cooler:

Client: Cedar Corp
Client Project #:
Project Name: Olson Corners
Project Location/State: Hannibal, WI
Lab Project #:
Sampler: AB
Lab PM: Sandie Fredrick

Preservative
Parameter: PVOC's + Naphthalene

Preservative Key
1. HCL, Cool to 4°
2. H_2SO_4, Cool to 4°
3. HNO_3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. $NaHSO_4$
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	PVOC's + Naphthalene	Comments
11		mw-9	7/3/19	0860	3	W	X	
12		mw-10		0830				
13		mw-11		1100				
14		mw-12P		1110				
15		mw-12D		1050				
16		mw-13		1145				
17		mw-13D		1200				
18		Webster		1010				
		Trip Blank						

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

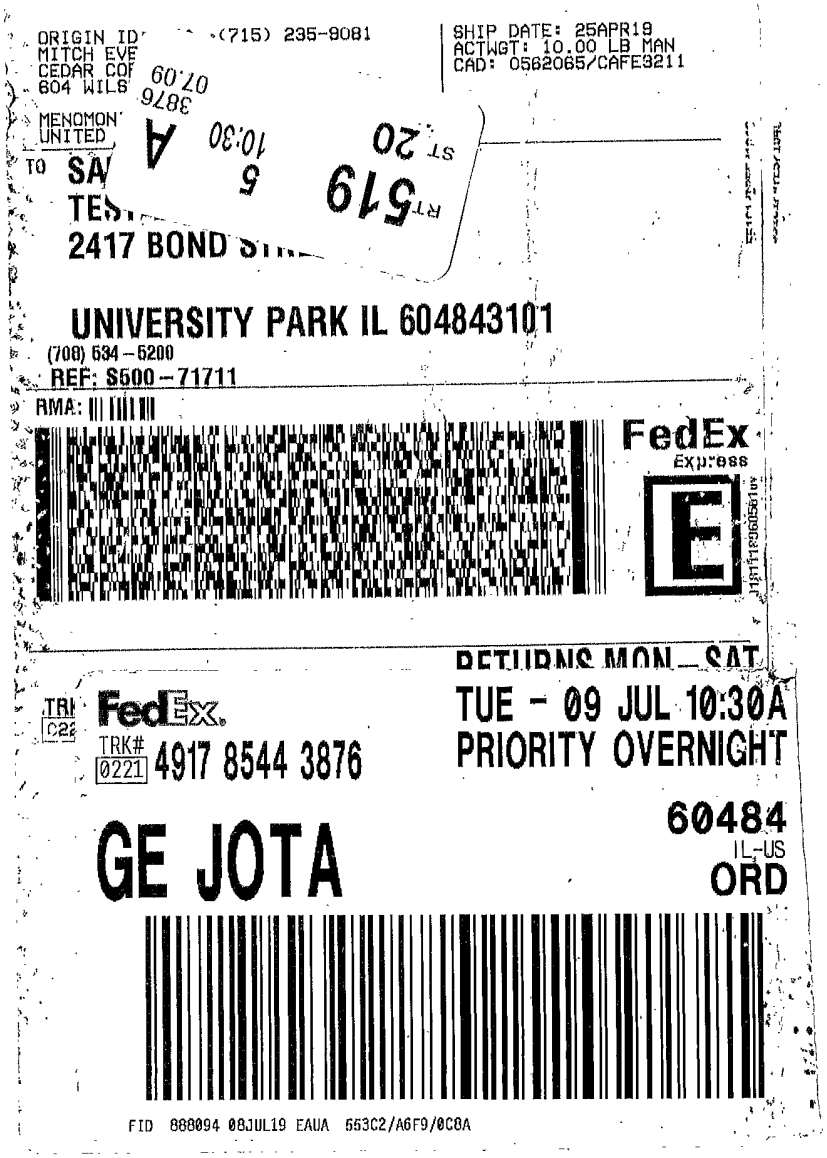
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Anna Beckman	Cedar	7/8/19	0730	Jeff Jones	TA	7/9/19	0745
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped
Hand Delivered

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments
PECFA Pricing

Lab Comments:



48qt.

500-166351 Waybill

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

500-166351 Chain of Custody

Cooler Received/Opened On 07-10-2019 @ 09:25

Time Samples Removed From Cooler _____ Time Samples Placed In Storage _____ (2 Hour Window)

1. Tracking # 8519 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 17960353 pH Strip Lot N/A Chlorine Strip Lot N/A

2. Temperature of rep. sample or temp blank when opened: 6.4 7-10-19 Degrees Celsius 5.6

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES (NO) NA

4. Were custody seals on outside of cooler? (YES)...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO...(NA)

Were these signed and dated correctly? YES...NO...(NA)

8. Packing mat'l used? (Bubblewrap) Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: (Ice) Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13a. Were VOA vials received? (YES)...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...(NO)...NA

● ⬅ Larger than this.

14. Was there a Trip Blank in this cooler? YES...(NO)...NA If multiple coolers, sequence # _____

I certify that I unloaded the cooler and answered questions 7-14 (intial) KI

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...(NA)

b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO...(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) KI

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)...NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) KI

I certify that I attached a label with the unique LIMS number to each container (intial) KI

21. Were there Non-Conformance issues at login? YES...(NO) Was a NCM generated? YES...(NO)...#_____

BIS = Broken in shipment

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

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie		COC No: 500-123071.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandie.fredrick@testamericainc.com	Wisconsin	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Wisconsin		Job #: 500-166351-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 7/19/2019			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Olson Corners	Project #: 50006556			
Site:	SSOW#:			

Analysis Requested

Loc: 500
166351

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	WI_GRO/5030B (MOD) WISC PVOC + Nap	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-1 (500-166351-1)	7/3/19	10:15 Central		Water			X	3	
MW-2P (500-166351-2)	7/3/19	08:45 Central		Water			X	3	
MW-3D (500-166351-3)	7/3/19	09:00 Central		Water			X	3	
MW-4 (500-166351-4)	7/3/19	09:10 Central		Water			X	3	
MW-4P (500-166351-5)	7/3/19	09:20 Central		Water			X	3	
MW-6 (500-166351-6)	7/3/19	09:45 Central		Water			X	3	
MW-6P (500-166351-7)	7/3/19	09:50 Central		Water			X	3	
MW-6D (500-166351-8)	7/3/19	10:00 Central		Water			X	3	
MW-7 (500-166351-9)	7/3/19	10:40 Central		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 7/9/19 1500	Company: TA	Received by:	Date/Time: 07-10-2019 09:25	Company: TAWI		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: S.G

Ver: 01/16/2019

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

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Fredrick, Sandie	Carrier Tracking No(s):	COC No: 500-123071.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: sandie.fredrick@testamericainc.com	State of Origin: Wisconsin	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note): State Program - Wisconsin		Job #: 500-166351-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 7/19/2019			
City: Nashville	TAT Requested (days):			
State, Zip: TN, 37204				
Phone: 615-726-0177(Tel) 615-726-3404(Fax)	PO #:			
Email:	WO #:			
Project Name: Olson Corners	Project #: 50006556			
Site:	SSOW#:			

Analysis Requested

Loc: 500
166351

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - Di Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	WI_GRO/5030B (MOD) WISC PVOC + Nap	Total Number of containers	Special Instructions/Note:
			Preservation Code						
MW-8P (500-166351-10)	7/3/19	10:30 Central		Water			X	3	
MW-9 (500-166351-11)	7/3/19	08:50 Central		Water			X	3	
MW-10 (500-166351-12)	7/3/19	08:30 Central		Water			X	3	
MW-11 (500-166351-13)	7/3/19	11:00 Central		Water			X	3	
MW-12P (500-166351-14)	7/3/19	11:10 Central		Water			X	3	
MW-12D (500-166351-15)	7/3/19	10:50 Central		Water			X	3	
MW-13 (500-166351-16)	7/3/19	11:45 Central		Water			X	3	
MW-13D (500-166351-17)	7/3/19	12:00 Central		Water			X	3	
WEBSTER (500-166351-18)	7/3/19	10:10 Central		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. I

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 7/9/19 1500	Company TA	Received by:	Date/Time: 07-10-2019 09:25	Company TAMS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 5.6

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-166351-1

Login Number: 166351
List Number: 1
Creator: James, Jeff A

List Source: Eurofins TestAmerica, Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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	2.2
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 (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").	False	see ncm
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Table 1: Groundwater Analytical Data
Perrys Corner
Hannibal, WI

Results reported in ug/L		Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	Total TMB	Xylenes
Wis Adm. Code NR140, Table 1 PAL		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*
Wis Adm. Code NR140, Table 1 ES		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
Monitoring Well	**Sample Date**							
MW-1	05/31/07	**11000**	**2,200**	<80	**460**	**1,500**	**1,170**	*4,100*
	08/15/07	**5800**	**1,500**	*<23*	**340**	**3,900**	**1,660**	*6,300*
	10/23/07	**8000**	**1,700**	<0.23	**390**	**1,300**	**1,530**	*4,900*
	1/9/2008	**8000**	**1,500**	<5	**270**	*770*	**1,160**	*4,000*
	3/25/2009	**5900**	**1,900**	<23	**340**	*550*	**1,250**	*2,900*
	6/1/2009	**2200**	**790**	<0.50	**130**	*900*	**550**	*1,400*
	4/15/2010	**7000**	**1,900**	*<23*	**360**	*640*	**1,390**	*3,200*
	7/13/2010	**3900**	**1,300**	<23	**250**	*330*	**740**	*1,700*
	10/6/2010	**1600**	*620*	<4.6	**140**	120	*249*	*510*
	6/3/2011	**27**	43	<0.23	9	4	12	29
	10/4/2011	**41**	120	<0.23	24	7.4	15.5	30
	4/24/2012	**29.6**	**88.6**	*27.4*	*16.8*	41.2	34.4	100
	5/16/2013	**200**	*330*	**130**	*86*	*280*	*168*	*520*
	10/14/2013	**15**	41	*13*	*31*	6.8	60	36
	6/23/2015	**56**	*220*	*15*	*52*	14	*197*	270
	11/19/2015	*4.1*	17	*20*	*16*	2.4	3.9	18
	4/7/2016	**13**	98	*22*	*35*	160	67.8	300
	8/25/2016	*3.8*	19	7.1	*13*	1.8	15.3	26
	11/30/2018	**20**	*220*	**72**	*72*	*180*	*230*	*470*
	4/9/2019	**74**	*520*	**160**	**130**	*240*	*295*	*1300*
	7/3/2019	**39**	*280*	*33*	**76**	18	*120*	380
MW-2	05/31/07							
	08/15/07	**21000**	**3,700**	*<23*	**1,200**	**41,000**	**6,400**	**20,000**
	10/23/07	**13000**	**3,500**	<92	**1,100**	**38,000**	**5,200**	**21,000**
	1/9/2008	**12000**	**2,400**	<9.2	**710**	**22,000**	**4,400**	**17,000**
	3/25/2009	**10000**	**2,000**	<92	**910**	**28,000**	**4,100**	**21,000**
	6/1/2009	**26000**	**1,900**	<2.0	**440**	**40,000**	**2,540**	**15,000**
	4/15/2010	FREE PRODUCT						
	7/14/2010	FREE PRODUCT						
	10/6/2010	FREE PRODUCT						
	6/3/2011	**17000**	**2,600**	*<23*	**910**	*41,000*	**4,460**	*17,000*
	10/4/2011	FREE PRODUCT						
	4/24/2012	FREE PRODUCT						
	5/16/2013	FREE PRODUCT						
	10/14/2013	**17,000**	**2,700**	**75**	**1,900**	**39,000**	**11,500**	**26,000**
	6/23/2015	**19,000**	**3,800**	**290**	**1,600**	**43,000**	**6,600**	**26,000**
	11/19/2015	**16,000**	**4,600**	**980**	**3,300**	**92,000**	**9,300**	**31,000**
	4/7/2016	**16000**	**3400**	**630**	**1700**	**35000**	**5400**	**24000**
	8/25/2016	**15000**	**3400**	**970**	**2400**	**35000**	**6000**	**25000**
	11/30/2018	Well Destroyed						
	4/9/2019	Well Destroyed						
	7/3/2019	Well Destroyed						
MW-2P	3/25/2009	**70**	5.8	<0.50	0.84	39	7.1	31
	6/1/2009	**570**	71	<0.50	9.6	160	85	460
	4/15/2010	**400**	6	<1.8	<4	<2	6	9.4
	7/14/2010	**1800**	160	<1.2	26	41	105	150
	10/6/2010	**1100**	49	<4.6	*20*	14	37	53
	6/3/2011	**2500**	*140*	<0.23	*23*	55	68	130
	10/4/2011	**620**	**25**	<2.3	6	54	15.9	52
	4/24/2012	**2180**	**164**	**175**	*32.8*	66.4	88.3	151
	5/16/2013	**3800**	19	**210**	*56*	61	*111*	200
	10/14/2013	**1400**	58	*14*	*12*	33	45	63
	6/23/2015	**2800**	96	*16*	*33*	86	65.9	120
	11/19/2015	**33**	3.3	1.3	<2.4	2.4	2.77	4.1
	4/7/2016	**390**	17	*16*	<24	27	12	31
	8/25/2016	**1500**	*180*	**98**	*61*	*220*	*108*	260
	11/30/2018	*0.85*	<0.37	0.40 J	<2.4	0.41 J	0.48 J	<0.58
	4/9/2019	**5700**	*310*	**300**	*91*	*180*	*251*	*460*
	7/3/2019	**16,000**	**1300**	**850**	**280**	*570*	**710**	*1600*

Table 1: Groundwater Analytical Data
Perrys Corner
Hannibal, WI

Results reported in ug/L		Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	Total TMB	Xylenes
Wis Adm. Code NR140, Table 1 PAL		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*
Wis Adm. Code NR140, Table 1 ES		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
Monitoring Well	**Sample Date**							
MW-3	05/31/07	**110**	4.40	<0.50	<0.25	0.61	0.49	2.50
	08/15/07	**100**	3.80	<0.23	<0.5	0.79	1.14	3.20
	10/23/07	**64**	2.10	<0.23	<0.5	1.10	<0.44	2.20
	1/9/2008	**190**	6	<0.23	<0.5	1	0.24	5.5
	3/25/2009	**220**	8.4	<1.2	<2.5	<1.2	<2.15	6.8
	6/1/2009	**230**	16	<0.50	1.7	2.6	22.3	6.3
	4/15/2010	**310**	36	<0.92	<2	3.1	<1.76	8.3
	7/14/2010	**330**	66	<0.92	<2.0	6.8	<1.76	8.9
	10/6/2010	**420**	*160*	<1.2	**130**	*540*	**560**	*2,300*
	6/3/2011	**200**	*330*	<0.23	*69*	*300*	*434*	*1,200*
	10/4/2011	**130**	*570*	<2.3	*67*	67	**540**	*950*
	4/24/2012	**161**	*475*	**94.5**	**115**	26.5	*264*	*655*
	5/16/2013	**110**	*370*	**110**	**190**	13	**610**	*1,700*
	10/14/2013	**180**	*360*	**67**	*61*	7.1	**480**	350
	6/23/2015	**28**	120	*32*	*20*	4.7	63	88
	11/19/2015	**60**	62	*98*	*94*	13	*396*	310
	4/7/2016	**19**	84	*48*	*48*	6.5	23.8	70
	8/25/2016	*4.9*	35	*16*	*17*	2.7	38.8	49
	11/30/2018	Well Destroyed						
	4/9/2019	Well Destroyed						
	7/3/2019	Well Destroyed						
MW-3D	4/15/2010	<0.25	<0.25	<0.25	<0.25	0.49	<0.25	<0.25
	7/14/2010	<0.25	<0.22	<0.23	<0.50	0.83	<0.44	<0.39
	10/6/2010	<0.25	<0.22	<0.23	<0.50	1.7	<0.44	<0.39
	6/3/2011	0.43	0.41	4.7	3.7	1.60	1.06	2
	10/4/2011	0.26	<0.22	1.7	<0.50	1.7	<0.44	<0.39
	4/24/2012	0.44	0.49	0.37	<2.5	0.51	0.72	0.36
	5/16/2013	*0.7*	<0.37	0.86	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	0.87	<2.4	<0.33	<0.67	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
MW-4	05/31/07	**5000**	**2,100**	<40	**580**	86	**760**	*1,700*
	08/15/07	**4300**	**3,700**	*<23*	**1,800**	*340*	**10,100**	*7,500*
	10/23/07	**4700**	**1,800**	<9.2	**790**	*330*	**2,680**	*3,900*
	1/9/2008	**4400**	**1,500**	<9.2	**650**	*250*	**1910**	*3200*
	3/25/2009	**2000**	**910**	<9.2	**490**	*240*	**1430**	*2300*
	6/1/2009	**3200**	**1400**	<25	**440**	*240*	**1590**	*3200*
	4/15/2010	**FREE PRODUCT**						
	7/14/2010	**FREE PRODUCT**						
	10/6/2010	**FREE PRODUCT**						
	6/3/2011	**2500**	**880**	<0.23	**450**	*340*	**1,680**	*3,100*
	10/4/2011	**FREE PRODUCT**						
	4/24/2012	**3340**	**1,580**	**200**	**840**	*393*	**2,422**	*4,210*
	5/16/2013	**FREE PRODUCT**						
	10/14/2013	**4200**	**710**	*38*	**550**	**920**	**2100**	**2700**
	6/23/2015	**6300**	**1300**	*46*	**570**	**1700**	**2150**	**3900**
	11/19/2015	**3300**	*540*	**72**	**1000**	*710*	**1520**	**2100**
	4/7/2016	**2900**	490	**98**	**1100**	*530*	**1380**	**2100**
	8/25/2016	**4500**	**770**	**74**	**970**	**890**	**1460**	**2400**
	11/30/2018	**5000**	*580*	**80**	**670**	*490*	**1130**	*1700*
	4/9/2019	**4600**	**1000**	**130**	**1400**	*700*	**2500**	**2800**
	7/3/2019	**290**	**800**	**91**	**830**	*320*	**1520**	**2100**

Table 1: Groundwater Analytical Data
Perrys Corner
Hannibal, WI

Results reported in ug/L		Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	Total TMB	Xylenes
Wis Adm. Code NR140, Table 1 PAL		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*
Wis Adm. Code NR140, Table 1 ES		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
Monitoring Well	**Sample Date**							
MW-4P	3/25/2009	**180**	110	0.77	*26*	9.3	4.7	8.5
	6/1/2009	**980**	*560*	<0.50	*93*	35	13.9	29
	4/15/2010	**290**	*34*	<0.92	*6.5*	9.4	<1.76	4.1
	7/14/2010	**470**	*120*	<0.92	*17*	15	<1.76	5
	10/6/2010	**300**	*150*	<0.92	*38*	8.9	<1.76	3.2
	6/3/2011	**190**	86	<0.23	*19*	3.50	0.35	2.40
	10/4/2011	**780**	*260*	<0.46	*69*	25	7.4	44
	4/24/2012	**737**	*223*	**100**	*38.5*	16	3.1	24.7
	5/16/2013	**1600**	*210*	**130**	*41*	21	6.8	23
	10/14/2013	**920**	*350*	*21*	*59*	28	14.3	53
	6/23/2015	**1700**	*460*	*13*	*47*	41	11	81
	11/19/2015	**140**	63	*16*	*20*	17	9.3	17
	4/7/2016	**32**	11	2.3	4.9	3.2	0.86	4.2
	8/25/2016	**360**	*280*	**81**	*98*	30	73	230
	11/30/2018	**800**	**1400**	*34*	**150**	43	*123*	210
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	7/3/2019	**620**	**1400**	*59*	**200**	41	83	230
MW-5	05/31/07	**13000**	**2,700**	<100	**590**	**35,000**	**2,630**	**17,000**
	08/15/07	**12000**	**2,600**	<46	**670**	**31,000**	**2,360**	**15,000**
	10/23/07	**10000**	**2,700**	<92	**630**	**31,000**	**2,420**	**16,000**
	1/9/2008	**13000**	**2500**	<400	**740**	**35000**	**2150**	**15,000**
	6/1/2009	**11000**	**3000**	<2.0	**700**	**38000**	**2500**	**18,000**
	4/15/2010	**9700**	**2800**	<46	**800**	**34000**	**3960**	**20,000**
	7/12/2010	Not Sampled						
MW-6	05/31/07	<0.20	<0.50	<0.50	1.20	0.25	0.27	0.53
	08/15/07	0.45	0.29	<0.23	2.20	0.13	<0.44	0.44
	10/23/07	*1*	<0.22	<0.23	2.20	<0.11	0.19	0.45
	1/9/2008							
	6/1/2009	NS	NS	NS	NS	NS	NS	NS
	4/15/2010	*3.2*	0.26	<0.23	<0.50	<0.25	<0.44	<0.39
	7/13/2010	*2.3*	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	10/6/2010	*2.4*	0.27	<0.23	<0.50	<0.25	<0.44	<0.39
	6/3/2011							
	10/4/2011	*3.3*	3.1	<0.23	6.2	<0.25	<0.44	0.54
	4/24/2012	<0.25	5.73	0.33	*11*	<0.25	<0.50	0.88
	5/16/2013	**26**	2.4	<0.24	*44*	<0.33	1.9	<0.58
	10/14/2013	*3.7*	5.5	1.2	*44*	<0.33	5.4	<0.58
	6/23/2015	**11**	5.4	<0.24	*20*	<0.33	<0.60	<0.58
	11/19/2015	*3*	6.7	0.42	*91*	<0.33	5.9	<0.58
	4/7/2016	*2.3*	3.9	<0.24	*74*	<0.33	2	<0.58
	8/25/2016	*2.1*	4.2	<0.24	*62*	<0.33	4.4	<0.58
	11/30/2018	**6.1**	9.6	1.7 J	*48*	<1.7	<1.5	<1.9
	4/9/2019	0.41 J	<0.37	1	<2.4	<0.33	<0.30	3.2
	7/3/2019	1.5	1.0	0.72	<2.4	<0.33	<0.30	<0.58
MW-6P	3/25/2009	**820**	1.4	5.6	2.2	2.6	2.6	18
	6/1/2009	**7.9**	<0.50	11	<0.25	<0.50	<0.40	<0.50
	4/15/2010	**330**	<0.88	13	<2	<1	<1.76	<1.6
	7/13/2010	**57**	<0.22	8.3	<0.50	<0.25	<0.44	<0.39
	10/6/2010	*3.9*	<0.22	7.3	<0.50	<0.25	<0.44	<0.39
	6/3/2011							
	10/4/2011	**100**	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	4/24/2012	**1060**	<0.50	*36.8*	<2.5	1.9	<0.50	<0.25
	5/16/2013	**40**	<0.37	0.36	<2.4	<0.33	<0.60	<0.58
	10/14/2013	**73**	<0.37	2.8	<2.4	<0.33	0.6	<0.58
	6/23/2015	**6**	<0.37	0.98	<2.4	<0.33	<0.60	<0.58
	11/19/2015	**5.4**	<0.37	0.35	<2.4	<0.33	<0.60	<0.58
	4/7/2016	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	8/25/2016	*2.5*	<0.37	0.7	<2.4	<0.33	<0.60	<0.58
	11/30/2018	*<0.36*	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	4/9/2019	*3.5*	6.5	0.51	*63*	<0.33	4	<0.58
	7/3/2019	**5.3**	13	0.52	*70*	<0.33	2.6	<0.58

Table 1: Groundwater Analytical Data
Perrys Corner
Hannibal, WI

Results reported in ug/L		**Benzene**	**Ethylbenzene**	**MTBE**	**Naphthalene**	**Toluene**	**Total TMB**	**Xylenes**
Wis Adm. Code NR140, Table 1 PAL		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*
Wis Adm. Code NR140, Table 1 ES		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
Monitoring Well	**Sample Date**							
MW-6D	4/15/2010	**26**	<0.22	0.57	0.57	<0.25	1.1	<0.39
	7/13/2010	**9.7**	<0.22	0.55	<0.50	0.57	<0.44	<0.39
	10/6/2010	**8.6**	<0.22	0.52	<0.50	0.56	<0.44	<0.39
	6/3/2011							
	10/4/2011	**11**	<0.22	1.3	<0.50	0.54	<0.44	<0.39
	4/24/2012	*2.52*	0.29	0.69	<2.5	<0.25	0.32	0.26
	5/16/2013	<0.36	<0.37	0.81	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	2.1	<2.4	<0.33	<0.60	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	Not Sampled; under parked car						
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	0.87	<2.4	<0.33	<0.30	<0.58
MW-7	5/31/2007	0.28	<0.50	<0.50	<0.25	<0.20	<0.40	<0.50
	8/15/2007	0.54	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	10/23/2007	<0.25	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	1/9/2008	0.48	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	6/1/2009	NS	NS	NS	NS	NS	NS	NS
	4/15/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	7/13/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	10/6/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	6/3/2011	*0.69*	<0.22	0.63	1.2	<0.25	<0.44	<0.39
	10/4/2011	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	4/24/2012	<0.25	<0.25	<0.25	<2.5	<0.25	<0.50	<0.25
	5/16/2013	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	2.4	<2.4	<0.33	<0.60	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
MW-8P	05/31/07	**3600**	*160*	*22.00*	2.80	27	6.40	15
	08/15/07	**3500**	<8.8	*29.00*	<20	9.20	<17.6	<16
	10/23/07	**5000**	*480*	<9.2	*61*	62	31.00	34
	1/9/2008	**3900**	5.7	*26*	1	11	1.66	5.8
	3/25/2009	**3400**	<18	*26*	*98*	<20	<35	<1.9
	6/1/2009	**5900**	*170*	<20	*24*	51	13.2	<20
	4/15/2010	**6400**	*350*	<23	*53*	63	<44	54
	7/13/2010	**5700**	*430*	<0.92	*16*	69	14.2	57
	10/6/2010	**4200**	63	<0.23	*13*	52	10.9	45
	6/3/2011	**890**	3.70	6.40	0.72	*3.10*	0.29	*2*
	10/4/2011	**1400**	11	11	4.9	6	<3.5	8.8
	4/24/2012	**4700**	9.25	**289**	*3.89*	14.3	0.67	4.4
	5/16/2013	**5200**	77	**120**	3.1	15	0.96	5.8
	10/14/2013	**4600**	8.7	**260**	<2.4	15	<0.60	3.4
	6/23/2015	**5200**	*530*	**68**	*20*	14	46	170
	11/19/2015	**620**	*380*	**510**	6.4	14	7.5	34
	4/7/2016	**2600**	120	<0.24	<2.4	7.2	<0.60	8
	8/25/2016	**2500**	*140*	<0.24	<2.4	7.9	<0.60	5.8
	11/30/2018	**13**	<0.37	1.8	<2.4	<0.33	<0.30	<0.58
	4/9/2019	**140**	120	**66**	6	2.2	0.31 J	4.3
	7/3/2019	**92**	90	*28*	5.5	1.2	<0.30	2.9

Table 1: Groundwater Analytical Data
Perrys Corner
Hannibal, WI

Results reported in ug/L		Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	Total TMB	Xylenes
Wis Adm. Code NR140, Table 1 PAL		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*
Wis Adm. Code NR140, Table 1 ES		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
Monitoring Well	**Sample Date**							
MW-9	10/23/07	<0.20	<0.50	<0.50	<0.25	<0.20	<0.40	<0.50
	1/9/2008	<0.25	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	6/1/2009	NS	NS	NS	NS	NS	NS	NS
	4/15/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	7/13/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	10/6/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	6/3/2011	0.28	<0.22	1.7	<0.50	<0.25	<0.44	<0.39
	10/4/2011	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	4/24/2012	<0.25	<0.25	<0.25	<2.5	<0.25	<0.50	<0.25
	5/16/2013	<0.36	<0.37	0.53	<2.4	<0.33	0.4	<0.58
	10/14/2013	<0.36	<0.37	0.61	<2.4	<0.33	<0.60	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	4/9/2019	Not Sampled						
	7/3/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
MW-10	10/23/07	<0.20	<0.50	<0.50	<0.25	<0.20	<0.40	<0.50
	1/9/2008	0.41	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	6/1/2009	NS	NS	NS	NS	NS	NS	NS
	4/15/2010	<0.25	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	7/13/2010	<0.25	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	10/6/2010	<0.25	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	6/3/2011	<0.25	<0.22	1.3	<0.50	<0.11	<0.44	<0.39
	10/4/2011	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	4/24/2012	<0.25	<0.25	<0.25	<2.5	<0.25	<0.50	<0.25
	5/16/2013	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	1.7	<2.4	<0.33	<0.60	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	0.6	<0.58
	7/3/2019	<0.36	<0.37	1.3	<2.4	<0.33	<0.30	<0.58
MW-11	10/23/07	<0.20	<0.50	<0.50	<0.25	<0.20	<0.40	<0.50
	1/9/2008	<0.25	<0.22	<0.23	<0.50	<0.11	<0.44	<0.39
	6/1/2009	NS	NS	NS	NS	NS	NS	NS
	4/15/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	7/13/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	10/6/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	6/3/2011	<0.25	<0.22	1.4	<0.50	<0.11	<0.44	<0.39
	10/4/2011	<0.25	<0.22	0.99	<0.50	<0.25	<0.44	<0.39
	4/24/2012	<0.25	<0.25	<0.25	<2.5	<0.25	<0.50	<0.25
	5/16/2013	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	0.49	<2.4	<0.33	<0.60	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	<0.36	<0.37	<0.24	<2.4	<0.33	<0.33	<0.58
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	0.44 J	<2.4	<0.33	<0.30	<0.58

Table 1: Groundwater Analytical Data
Perrys Corner
Hannibal, WI

Results reported in ug/L		Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	Total TMB	Xylenes
Wis Adm. Code NR140, Table 1 PAL		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*
Wis Adm. Code NR140, Table 1 ES		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
Monitoring Well	**Sample Date**							
MW-12P	10/23/07	**1800**	<2.0	*22*	<1.0	6.60	<0.80	4.70
	1/9/2008	**1500**	<0.22	*22*	<0.50	4.2	0.85	4.7
	3/25/2009	**820**	<2.2	10	<5.0	<0.25	<4.4	<3.9
	6/1/2009	**660**	<0.50	7.2	<0.25	0.94	16.1	1.4
	4/15/2010	**1000**	<4.4	<4.6	<10	7.2	<8.8	<7.8
	7/13/2010	**960**	<2.2	<2.3	<5.0	<.25	<0.44	<0.39
	10/6/2010	**940**	19	<0.23	<0.50	5.9	3.3	8.5
	6/3/2011	**460**	38	<0.92	3	5.4	<0.44	5
	10/4/2011	**390**	51	<0.92	9.5	4.2	<1.76	4.9
	4/24/2012	<0.25	26.8	*36.1*	<2.5	<0.25	1.13	1.2
	5/16/2013	**23**	<0.37	11	<2.4	0.48	<0.60	<0.58
	10/14/2013	**17**	1.1	15	<2.4	0.69	0.43	0.79
	6/23/2015	**110**	0.58	*33*	<2.4	0.41	<0.60	1.2
	11/19/2015	**210**	1.2	**65**	4.1	1.1	0.45	2
	4/7/2016	**320**	0.91	**63**	<2.4	0.81	<0.60	<0.58
	8/25/2016	**360**	0.57	**64**	<2.4	0.94	<0.60	0.99
	11/30/2018	**11**	<0.37	7.4	<2.4	<0.33	<0.30	<0.58
	4/9/2019	**8.3**	<0.37	*23*	<2.4	<0.33	<0.30	<0.58
	7/3/2019	**31**	1.1	*23*	<2.4	0.81	0.5	2.4
MW-12D	4/15/2010	*3.5*	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	7/13/2010	**27**	<0.22	0.79	<0.50	<0.25	<0.44	<0.39
	10/6/2010	0.36	<0.22	0.64	<0.50	<0.25	<0.44	<0.39
	6/3/2011	<0.25	<0.22	2.2	<0.50	<0.25	<0.44	<0.39
	10/4/2011	<0.25	<0.22	2.7	<0.50	<0.25	<0.44	<0.39
	4/24/2012	<0.25	<0.25	0.48	<2.5	<0.25	<0.50	<0.25
	5/16/2013	*1.3*	<0.37	0.26	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	2	<2.4	<0.33	<0.60	<0.58
	6/23/2015	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	11/19/2015	<0.36	<0.37	<0.24	<2.4	<0.33	0.53	1.2
	4/7/2016	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	8/25/2016	<0.36	<0.37	0.29	<2.4	<0.33	<0.60	<0.58
	11/30/2018	<0.36	<0.37	0.49 J	<2.4	<0.33	<0.30	<0.58
	4/9/2019	<0.36	<0.37	0.34 J	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	0.65	<2.4	<0.33	<0.30	<0.58
MW-13	4/15/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	7/13/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	10/6/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	6/3/2011	<0.25	<0.22	3.4	<0.50	<0.25	<0.44	<0.39
	10/4/2011	<0.25	<0.22	1	<0.50	<0.25	<0.44	<0.39
	4/24/2012	<0.25	<0.25	<0.25	<2.5	<0.25	<0.50	<0.25
	5/16/2013	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	3.4	<2.4	<0.33	<0.60	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	0.61	<2.4	<0.33	<0.30	<0.58
MW-13D	4/15/2010	0.69	<0.22	2.2	<0.50	<0.25	<0.44	<0.39
	7/13/2010	*2.7*	<0.22	2.1	<0.50	0.26	<0.44	<0.39
	10/6/2010	0.83	<0.22	1.9	<0.50	0.29	<0.44	<0.39
	6/3/2011	0.36	<0.22	2.2	<0.50	<0.25	1.2	<0.39
	10/4/2011	*0.97*	<0.22	3.6	<0.50	0.29	<0.44	<0.39
	4/24/2012	<0.25	<0.25	1.65	<2.5	0.27	<0.50	<0.25
	5/16/2013	<0.36	<0.37	0.82	<2.4	<0.33	<0.60	<0.58
	10/14/2013	<0.36	<0.37	3.2	<2.4	<0.33	<0.60	<0.58
	6/23/2015	Not Sampled						
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	<0.36	<0.37	0.57	<2.4	<0.33	<0.30	<0.58
	4/9/2019	<0.36	<0.37	0.43 J	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	1.2	<2.4	<0.33	<0.30	<0.58

Table 1: Groundwater Analytical Data
Perrys Corner
Hannibal, WI

Results reported in ug/L		Benzene	Ethylbenzene	MTBE	Naphthalene	Toluene	Total TMB	Xylenes
Wis Adm. Code NR140, Table 1 PAL		*0.5*	*140*	*12*	*10*	*160*	*96*	*400*
Wis Adm. Code NR140, Table 1 ES		**5**	**700**	**60**	**100**	**800**	**480**	**2000**
Monitoring Well	**Sample Date**							
N. Sump	10/6/2010	Not Sampled						
	6/3/2011	Not Sampled						
	10/4/2011	Not Sampled						
	4/24/2012	Not Sampled						
	5/16/2013	Not Sampled						
	10/14/2013	Not Sampled						
	6/23/2015	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	Not Sampled						
	4/9/2019	Not Sampled						
	7/3/2019	Not Sampled						
S. Sump	10/6/2010	Not Sampled						
	6/3/2011	Not Sampled						
	10/4/2011	Not Sampled						
	4/24/2012	Not Sampled						
	5/16/2013	Not Sampled						
	10/14/2013	Not Sampled						
	6/23/2015	**60**	18	<0.24	<2.4	1.3	6.8	50
	11/19/2015	Not Sampled						
	4/7/2016	Not Sampled						
	8/25/2016	Not Sampled						
	11/30/2018	Not Sampled						
	4/9/2019	Not Sampled						
	7/3/2019	Not Sampled						
Olson's Well	3/25/2009	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	6/1/2009	<0.20	<0.50	<0.50	<0.25	<0.50	<0.40	<0.50
	4/15/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	7/13/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	10/6/2010	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	10/4/2011	<0.25	<0.22	<0.23	<0.50	<0.25	<0.44	<0.39
	4/24/2012	<0.25	<0.25	<0.25	<2.5	<0.25	<0.50	<0.25
	5/16/2013	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	6/23/2015	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
	4/7/2016	<0.36	<0.37	<0.24	<2.4	<0.33	<0.60	<0.58
Webster Well	6/1/2016	<0.15	<0.18	<0.39	<0.34	<0.15	<0.61	<0.22
	10/31/2016	<0.15	<0.18	<0.39	<0.34	<0.15	<0.61	<0.22
	11/30/2018	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	4/9/2019	<0.36	<0.37	<0.24	<2.4	<0.33	<0.30	<0.58
	7/3/2019	<0.36	<0.37	0.25 J	<2.4	<0.33	<0.30	<0.58
Witkowski's Well	3/25/2009	**65**	<0.22	1.9	<0.50	<0.25	<0.44	<0.39
	6/1/2009	**69**	<0.50	1.6	<0.25	<0.50	<0.40	<0.50
	4/15/2010	**77**	<0.22	2.2	<0.50	<0.25	<0.44	<0.39
	7/13/2010	**19**	<0.22	2.0	<0.50	<0.25	<0.44	<0.39
	10/6/2010	**60**	<0.22	2.0	<0.50	<0.25	<0.44	<0.39
	10/4/2011	**61**	<0.22	5	<0.50	<0.25	<0.44	<0.39
	4/24/2012	**55.5**	<0.25	2.45	<2.5	<0.25	<0.50	<0.25
	5/16/2013	**72**	<0.37	2.7	<2.4	<0.33	<0.60	<0.58
	6/23/2015	**23**	<0.37	3.4	<2.4	<0.33	<0.60	<0.58
	4/7/2016	**18**	<0.37	2.7	<2.4	<0.33	<0.60	<0.58
	11/30/2018	Not Sampled						
	4/9/2019	<0.36	<0.37	4.9	<2.4	<0.33	<0.30	<0.58

ug/L = micrograms per liter = ppb = parts per billion
J = reported value was between the limit of detection and the limit of quantitation
Italic Numbers indicate a concentration above PAL outlined in NR 140.10
Bold Numbers indicate a concentration above ES outlined in NR 140.10