2017 Progress Report

Environmental Remediation
of a
Petroleum Release

Site
Perry's Corners
N6097 STH 73
Gilman, WI 54433

Prepared for

Ruth Olson
W5030 Erika's Way
Medford, WI 54451

WDNR BRRTS #03-61-168823
PECFA # 54433-9753-97

Project O4178-005
July 12, 2017
Cedar Corporation
PECFA Participation No. 240179

Cedar corporation

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800-472-7372
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July 12, 2017

Ms. Carrie Stoltz
Department of Natural Resources
107 Sutliff Avenue
Rhinelander, WI 54501

SUBJECT: Perry's Corners, Hannibal – 2013 Progress Monitoring Report
PECFA #54433-9753-97
BRRTS #03-61-168823

Dear Ms. Stoltz:

This report summarizes the recent well improvements for the Webster Tavern well and connection to the former Marlene Witkowski residence. This work occurred over the last several months and required:

1) Approval of the use of the former Hannibal tavern well TA2379 (owned by Glen Webster).
2) Testing and disconnection of well from the former tavern.
3) Repair of the current Glen Webster well (former Olson residence well BQ 514).
4) Repair, deepening, and fracturing of the Webster-tavern well TA2379 prior to connection to Witkowski residence.
5) Connection of TA2379 well to former Witkowski residence and disconnection of well RD 349.
6) Various analytical tests of Tavern well during the process.

During the progress of this project, various PECFA deferments were employed including:

2016-02-26. Approach to utilize off site existing wells in the area (aka well tapping).
No one in area would participate due to low well yields in the region.

2016-04-26. Proposal to obtain access permission and test the former tavern well on the Glen Webster property.
Approval granted.
Well test revealed well connection to water-filled basement. Existing pump connection needed to be disconnected which required removal of a deck and debris, and exposure of wellhead.

2016-06-27. Proposal to expose well.
Cap connection to old well pump in basement.

Cedar Corporation, under the July 12, 2016 approval, obtained access permission and hired Bjork Plumbing, LLC to access and isolate the Webster/Tavern well TA2379 on July 20, 2016 by removing various debris and building additions that were in poor shape. The wellhead was exposed and the old pitless adapter that connected the jet pump in the tavern basement to the well was removed. A new pitless adapter and a temporary submersible pump were installed, thus isolating the well from the water in the basement. The wellhead was extended 30 in. above the surface by welding a piece of 6-inch diameter casing to the existing well casing to bring the well to code. A sampling tap was installed on the wellhead.

Using a portable generator, the water in the well casing was removed to the total depth of the well (84 feet), at which point the pump became fouled and damaged by debris in the well. A second pump was installed to within 5 feet of total depth and the well was pumped without further incident.

Well yield was measured with a stop watch and 6-gallon bucket with 1-gallon markings inscribed on the pail. The well was partially developed (that is the pump was run until the water cleared and was no longer turbid) and then pumped to determine yield. The well appeared to sustain a pump rate of about 2.5 gpm. Increasing the yield resulted in pump cavitation (insufficient water to pump).

Water samples were collected from the sample tap for analysis of VOCs, and metals (lead, iron, and arsenic). A coliform bacteria sample was to be collected, but the well is already considered unsafe from previous tests and will need to be sanitized prior to connection to the Witkowski and Webster properties. Thus, it was not collected.

The analytical results are included in this letter report and the data is summarized in Table 1, below:

Table 1

Analyte	**NR 809 MCL**	**NR 140 ES**	**Webster Well 7-20-2016**
Toluene	1 mg/L	800 µg/L (0.800 mg/L)	0.0018 mg/L
Arsenic	0.010 mg/L	10 µg/L (0.01 mg/L)	0.0013 mg/L
Iron	0.3 mg/L (secondary std)	0.3 mg/L (secondary std)	14.300 mg/L
Lead	0.015 mg/L	15 µg/L (0.015 mg/L)	0.0136 mg/L

Based on these results, iron will need to be removed from the system which can be controlled by readily available treatment units. Toluene, arsenic, and lead are present but below MCLs. Based on the condition of the property and conversation with the property owner, Glen Webster, the well has not been used in several years (possibly 25 or more) and needs to be developed for both quantity and quality. As the current well was constructed in 1949 by cable tool, it penetrates the subcropping decomposed granite at about 14 feet bgs. In cases similar to this, local well drillers hydrofrack the wells to increase well yield. To do so, the well must be deepened to about 80 ft. to properly secure the well packers to solid granite during the hydrofracking process. Water bearing zones in the rock are isolated and pressurized with water fracturing the granite to improve the yield.

2016-08-28. Proposal to deepen & fracture former tavern well

Cedar Corporation, under the 2016-09-13 approval, hired Midwest Well Drilling & Hydrofracturing LLC to deepen and fracture well TA2379. Midwest Hydrofracking LLC used a 5 7/8-inch carbide tri-cone drill bit to ream the upper 14 feet of granite exposed below the casing (set to 70 feet bgs) and extend the drill hole from 84 foot of depth to 164 feet. The well caved after drilling, so it was necessary to cement off the caved portion, allow the cement to set, then drill out the well and fracture the lower portion of the well. Once completed, the well was sampled (2016-10-31) and determined to be free of VOCs with low level detections of lead and arsenic (below MCL). An approval was prepared to connect the well to the Witkowski residence.

2016-11-11. An approval was prepared to connect the well to the Witkowski residence. Approval was not granted until 2016-12-27, as modifications to the work plan required a well access agreement. Details of the well connection estimate were provided to the Department. This approval (granted 2017-01-23) included costs for sampling the Witkowski residence after the well was connected.

Cedar Corporation, under the January 23, 2017 approval, attempted to connect the Webster well to the Witkowski residence. However, prior to this action, certain repairs and improvements were necessary for the water system serving the Glen Webster residence, including a well inspection and pump replacement. Under the agreement with Glen Webster, repair of the Webster well BQ 514 was required to gain approval to connect the upgraded Webster Tavern well to the Witkowski residence.

Also required was repair of the TA2379 well casing which was discovered to be cracked during the attempt to install a pitless adapter for the Witkowski connection. Said repair included excavation to a depth below surface to a point where the well casing is determined to be safe and sanitary and the installation of casing to the surface from that elevation upward.

2017-03-02. An approval is sought for the repair of the Webster well and repair of the tavern well casing.

Cedar Corporation, under the March 8, 2017 approval to complete the well repairs at the Webster residence and the former Tavern well, connected the well at the Witkowski residence. The well connection was completed by directional boring under the frost from the TA 2379 wellhead to the existing well connection at the Witkowski well. The connection to the old Witkowski well RD349 was removed and the rehabilitated TA 2379 well was connected to service the Witkowski residence. Water samples were collected from the Witkowski residence after well connection on March 21 and June 7 2017. The analytical results are included in this letter report and the data summarized in Table 2 below:

Table 2

7-20-2016			
Analyte	**NR 809 MCL**	**NR 140 ES**	**Tavern Well 7-20-2016**
Toluene	1 mg/L	800 µg/L (0.800 mg/L)	0.0018 mg/L
Arsenic	0.010 mg/L	10 µg/L (0.01 mg/L)	0.0013 mg/L
Iron	0.3 mg/L (secondary std)	0.3 mg/L (secondary std)	14.300 mg/L
Lead	0.015 mg/L	15 µg/L (0.015 mg/L)	0.0136 mg/L

10-31-2016			
Analyte	**NR 809 MCL**	**NR 140 ES**	**Tavern Well 10-31-2016**
No VOC detected			
Arsenic	0.010 mg/L	10 µg/L (0.01 mg/L)	0.00083 mg/L
Lead	0.015 mg/L	15 µg/L (0.015 mg/L)	0.00093 mg/L
03-21-2017			
Analyte	**NR 809 MCL**	**NR 140 ES**	**Tavern Well 03-21-2017**
Chloroform	0.080 mg/L		0.0072 mg/l
1,2-Dichloroethane	0.005 mg/L		0.0004 mg/L
Ethylbenzene	0.7 mg/L	0.7 mg/L	0.0016 mg/L
Isopropyl-benzene	No standard established		0.00022 mg/L
p-isopropyl-toluene	No standard established		0.0028 mg/L
Toluene	1 mg/L	800 µg/L (0.800 mg/L)	0.0020 mg/L

06-07-2017

Analyte	**NR 809 MCL**	**NR 140 ES**	**Tavern Well 06-07-2017**
Chloroform	0.080 mg/L		0.0015 mg/l
1,2-Dichloroethane	0.005 mg/L		0.00072 mg/L
Ethylbenzene	0.7 mg/L	0.7 mg/L	0.0016 mg/L

Discussion:

The Webster Tavern well TA 2379 was successfully rehabilitated through deepening, repair, and hydro fracturing. Water flow is limited due to the poor water quantity available but is satisfactory for residential use. Well connection was made utilizing directional boring of the supply line and connection to the existing supply line outside the residence. Sampling of the well water from initial dewatering and development through connection to the former Witkowski residence has shown water quality that meets Federal MCL for VOC and certain tested metals.

No detections of contaminants, except 1,2-dichloroethane, below Enforcement Standard limits are present in the Witkowski water supply based on the June 7, 2017 sampling results.

Recommendations:

1. Abandon the former Witkowski well RD349.

2. Abandon all existing monitoring wells.

3. Collection of a coliform bacteria sample prior to discontinuing bottled water service.

4. Removal of the tank and dispenser system and accessible contaminated soils has been completed. Residual soil (under fiber optic cabling) and groundwater contamination remains on the former Olson (now Webster) property.

5. The bottled water service should be cancelled after a safe drinking water sample for bacteria is collected (currently funded under the Emergency PECFA deferment dated January 14, 2015).

6. Development of cost estimates for well abandonment and case closure should be prepared.

If you have any questions, please feel free to call me at 715-235-9081.

Respectfully submitted,

CEDAR CORPORATION

Mitch Evenson, CHMM
Project Manager

Att.

Cc: Ruth Olson, RP
Suzanne Weibel, Witkowski residence property owner

WISCONSIN UNIQUE WELL NUMBER **BQ514**

Source: GRN - NO DETAIL

State of Wi-Private Water Systems-DG/2
Department Of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-77A
(Rev 02/02)bw

Property Owner: GAS FOR LESS RUTH OLSON | Telephone Number: - -

Mailing Address: UNK

City: GILMAN | State: WI | Zip Code: 54433

County of Well Location: 61 TAYLOR | Co Well Permit No W | Well Completion Date

Well Constructor | License # | Facility ID (Public): 861020270

Address | Public Well Plan Approval#

City | State | Zip Code | Date Of Approval

Hicap Permanent Well # | Common Well # | Specific Capacity: gpm/ft

1. Well Location

T=Town C=City V=Village of | Fire#

Street Address or Road Name and Number

Subdivision Name | Lot# | Block #

Gov't Lot or SE 1/4 of SE 1/4 of Section 18 T 32 N;R 3 W

Latitude Deg. 45 Min. 15 Sec. 12

Longitude Deg 90 Min. 47 Sec. 17

2. Well Type (See item 12 below) | Lat/Long Method: 40

1=New 2=Replacement 3=Reconstruction

of previous unique well # _____ constructed in _____

Reason for replaced or reconstructed Well?

3. Well Serves: PR # of homes and or (eg: barn, restaurant, church, school, industry, etc.)

M=Munic O=OTM N=NonCom P=Private Z=Other X=NonPot A=Anode L=Loop H=Drillhole

High Capacity: Well? Property?

1=Drilled 2=Driven Point 3=Jetted 4=Other

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties?

Well located in floodplain?

Distance in feet from well to nearest: (including proposed)

1. Landfill
2. Building Overhang
3. 1=Septic 2= Holding Tank
4. Sewage Absorption Unit
5. Nonconforming Pit
6. Buried Home Heating Oil Tank
7. Buried Petroleum Tank
8. 1=Shoreline 2= Swimming Pool
9. Downspout/ Yard Hydrant
10. Privy
11. Foundation Drain to Clearwater
12. Foundation Drain to Sewer
13. Building Drain 1=Cast Iron or Plastic 2=Other
14. Building Sewer 1=Gravity 2=Pressure 1=Cast Iron or Plastic 2=Other
15. Collector Sewer: ___ units ___ in . diam.
16. Clearwater Sump
17. Wastewater Sump
18. Paved Animal Barn Pen
19. Animal Yard or Shelter
20. Silo
21. Barn Gutter
22. Manure Pipe 1=Gravity 2=Pressure 1=Cast iron or Plastic2=Other
23. Other manure Storage
24. Ditch
25. Other NR 812 Waste Source

5. Drillhole Dimensions and Construction Method

Dia.(in.)	From (ft)	To (ft)	Upper Enlarged Drillhole / Lower Open Bedrock
	surface		-- 1. Rotary - Mud Circulation
			-- 2. Rotary - Air
			-- 3. Rotary - Air and Foam
			-- 4. Drill-Through Casing Hammer
			-- 5. Reverse Rotary
			-- 6. Cable-tool Bit in. dia
			-- 7. Temp. Outer Casing in. dia. depth ft. Removed ?
			Other

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc	From (ft.)	To (ft.)

6. Casing Liner Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
		surface	

Dia.(in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material

Method / Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
	surface		

9. Static Water Level: feet ground surface A=Above B=Below

10. Pump Test: Pumping level ft. below surface; Pumping at GP Hrs

11. Well Is: in. Grade A=Above B=Below
Developed?
Disinfected?
Capped?

12. Did you notify the owner of the need to permanently abandon and fill all unused wells on this property?
If no, explain

13. Initials of Well Constructor or Supervisory Driller Date Signed

Initials of Drill Rig Operator (Mandatory unless same as above) Date Signed

Additonal Comments? Variance Issued?
Owner Sent Label? More Geology?

WISCONSIN UNIQUE WELL NUMBER **BM503**

Source: GRN - NO DETAIL

State of Wi-Private Water Systems-DG/2
Department Of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-77A
(Rev 02/02)bw

Property Owner: OLSON CORNER JOHN OLSON
Telephone Number: 715-668-5460
Depth 205 FT

Mailing Address: N 6097 STATE HWY 73

City: GILMAN | State: WI | Zip Code: 54433

County of Well Location: 61 TAYLOR
Co Well Permit No: W
Well Completion Date:

1. Well Location
T=Town C=City V=Village of
Fire#
Street Address or Road Name and Number
Subdivision Name | Lot# | Block #

Well Constructor | License #
Facility ID (Public): 61003580
Address
Public Well Plan Approval#
City | State | Zip Code
Date Of Approval

Gov't Lot **or** NE 1/4 of SE 1/4 of Section 18 T 32 N;R 3 W
Latitude Deg. 45 Min. 15 Sec. 16.721
Longitude Deg 90 Min. 47 Sec. 5.6659

2. Well Type (See item I2 below)
1=New 2=Replacement 3=Reconstruction
Lat/Long Method: 40
of previous unique well # _____ constructed in _____
Reason for replaced or reconstructed Well?

Hicap Permanent Well # | Common Well #
Specific Capacity: gpm/ft

3. Well Serves: PR # of homes and or (eg: barn, restaurant, church, school, industry, etc.)
High Capacity: Well? Property?
M=Munic O=OTM N=NonCom P=Private Z=Other X=NonPot A=Anode L=Loop H=Drillhole
1=Drilled 2=Driven Point 3=Jetted 4=Other

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties?
Well located in floodplain?
Distance in feet from well to nearest: (including proposed)

1. Landfill
2. Building Overhang
3. 1=Septic 2= Holding Tank
4. Sewage Absorption Unit
5. Nonconforming Pit
6. Buried Home Heating Oil Tank
7. Buried Petroleum Tank
8. 1=Shoreline 2= Swimming Pool
9. Downspout/ Yard Hydrant
10. Privy
11. Foundation Drain to Clearwater
12. Foundation Drain to Sewer
13. Building Drain 1=Cast Iron or Plastic 2=Other
14. Building Sewer 1=Gravity 2=Pressure 1=Cast Iron or Plastic 2=Other
15. Collector Sewer: ___ units ___ in . diam.
16. Clearwater Sump
17. Wastewater Sump
18. Paved Animal Barn Pen
19. Animal Yard or Shelter
20. Silo
21. Barn Gutter
22. Manure Pipe 1=Gravity 2=Pressure 1=Cast iron or Plastic2=Other
23. Other manure Storage
24. Ditch
25. Other NR 812 Waste Source

5. Drillhole Dimensions and Construction Method Lower Open Bedrock

Dia.(in.)	From (ft)	To (ft)
	surface	

Upper Enlarged Drillhole
-- 1. Rotary - Mud Circulation
-- 2. Rotary - Air
-- 3. Rotary - Air and Foam
-- 4. Drill-Through Casing Hammer
-- 5. Reverse Rotary
-- 6. Cable-tool Bit in. dia
-- 7. Temp. Outer Casing in. dia. depth ft. Removed ?
Other

6. Casing Liner Screen Material, Weight, Specification Manufacturer & Method of Assembly

Dia. (in.)		From (ft.)	To (ft.)
		surface	

Dia.(in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material

Method / Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
	surface		

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc	From (ft.)	To (ft.)

9. Static Water Level
feet ground surface A=Above B=Below

10. Pump Test
Pumping level ft. below surface
Pumping at GP Hrs

11. Well Is: in. Grade A=Above B=Below
Developed?
Disinfected?
Capped?

12. Did you notify the owner of the need to permanently abandon and fill all unused wells on this property?
If no, explain

13. Initials of Well Constructor or Supervisory Driller Date Signed

Initials of Drill Rig Operator (Mandatory unless same as above) Date Signed

Additonal Comments?
Owner Sent Label?
Variance Issued?
More Geology?

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

T32N R3W SE,SE,Sec 18

RECEIVED NOV 8 1949 BUREAU SAN. ENG.

1. County Jayln {Town ☒ Village ☐ City ☐} Cleveland — Check one and give name

2. Location Hannabal S.E. ¼ S.E. ¼ — Name of street and number of premises or Sec. Tn. and R. Numbers

3. Owner ☒ or Agent ☐ N. P. Dildrain — Name of individual, partnership or firm

4. Mail Address Hannabal Wis — Complete address required

5. From well to nearest: Building 7 ft; sewer ____ ft; drain ____ ft; septic tank 50 ft; dry well or filter bed ____ ft; abandoned well 20 ft.

6. Well is intended to supply water for: home and farm

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)
8	0	45

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind	From (ft.)	To (ft.)
6	Standard	0	70

9. GROUT:

Kind	From (ft.)	To (ft.)
drillcuttings	0	45

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Red clay	0	45
gravel	45	49
soapstone	49	70
granite	70	84

11. MISCELLANEOUS DATA:

Yield test: 2 Hrs. at 5 GPM.

Depth from surface to water: 20 ft.

Water-level when pumping: 20 ft.

Water sample sent to laboratory at Madison on Oct 11 19 49

Construction of the well was completed on Oct 1 19 49

The well is terminated 12 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes X No ____

Was the well sealed watertight upon completion? Yes X No ____

Signature Jesse Schrolder
Registered Well Driller

Thorp Wis R 3 Box 269
Complete Mail Address

TA2379

WISCONSIN UNIQUE WELL NUMBER **DU502**

Source: WELL CONSTRUCTION

State of Wi-Private Water Systems-DG/2
Department Of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-77A
(Rev 02/02)bw

Property Owner: R W WITKOMSKI
Telephone Number: 715-668-5247

Depth 83 FT

Mailing Address: W 14416 SCOTT ST

City: HANNIBAL | State: WI | Zip Code: 54439

County of Well Location: 61 TAYLOR
Co Well Permit No: W
Well Completion Date: September 17, 1990

Well Constructor: KOMAREK SR RONALD A
License #: 610

Address: RT 2 BOX 145

City: WESTBORO | State: WI | Zip Code: 54490

Hrcap Permanent Well #
Common Well #

Facility ID (Public)
Public Well Plan Approval#
Date Of Approval
Specific Capacity: gpm/ft

1. Well Location

T=Town C=City V=Village: T of CLEVELAND
Fire#

Street Address or Road Name and Number: HWY 73

Subdivision Name | Lot# | Block #

Gov't Lot or NE 1/4 of SE 1/4 of Section 16 T 32 N;R 3 W

Latitude Deg. Min. Sec.
Longitude Deg Min. Sec.

Lat/Long Method

2. Well Type 2 (See item 12 below)
1=New 2=Replacement 3=Reconstruction

of previous unique well # _____ constructed in 0

Reason for replaced or reconstructed Well?
DUG WILL 10' UNSAFE

1 1=Drilled 2=Driven Point 3=Jetted 4=Other

3. Well Serves P # of homes and or (eg: barn, restaurant, church, school, industry, etc.)

M=Munic O=OTM N=NonCom P=Private Z=Other X=NonPot A=Anode L=Loop H=Drillhole

High Capacity:
Well? N
Property? N

4. Is the well located upslope and not downslope from any contamination sources, including those on neighboring properties? Y
Well located in floodplain? N
Distance in feet from well to nearest: (including proposed)

1. Landfill
60 2. Building Overhang
36 3. 1=Septic 2= Holding Tank
4. Sewage Absorption Unit
5. Nonconforming Pit
6. Buried Home Heating Oil Tank
7. Buried Petroleum Tank
8. 1=Shoreline 2= Swimming Pool
9. Downspout/ Yard Hydrant
10. Privy
11. Foundation Drain to Clearwater
12. Foundation Drain to Sewer
13. Building Drain 1=Cast Iron or Plastic 2=Other
14. Building Sewer 1=Gravity 2=Pressure 1=Cast Iron or Plastic 2=Other
15. Collector Sewer: ___ units ___ in . diam.
16. Clearwater Sump
17. Wastewater Sump
18. Paved Animal Barn Pen
19. Animal Yard or Shelter
20. Silo
21. Barn Gutter
22. Manure Pipe 1=Gravity 2=Pressure 1=Cast iron or Plastic2=Other
23. Other manure Storage
24. Ditch
25. Other NR 812 Waste Source

5. Drillhole Dimensions and Construction Method Lower Open Bedrock

Dia.(in.)	From (ft)	To (ft)
10.	surface	20
6.0	20	83

Upper Enlarged Drillhole
-- 1. Rotary - Mud Circulation
X -- 2. Rotary - Air
-- 3. Rotary - Air and Foam
-- 4. Drill-Through Casing Hammer
-- 5. Reverse Rotary
-- 6. Cable-tool Bit in. dia
-- 7. Temp. Outer Casing Removed ? in. dia. depth ft.
Other

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc	From (ft.)	To (ft.)
CP	CLAY HARDPAN MIX	0	48
Q	GRANITE	48	83

6. Casing Liner Screen

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
6.6	ODX280 ASTMA53B 1780 PSI WELD JT NEWPORT	surface	48

Dia.(in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material

Method BLACKFILL

Kind of Sealing Material	From (ft.)	To (ft.)	# Sacks Cement
CLAY SLURRY	surface	20.0	

9. Static Water Level
5.0 feet B ground surface
A=Above B=Below

10. Pump Test
Pumping level 65.0 ft. below surface
Pumping at 2.0 GP 1.0 Hrs

11. Well Is: 12 in. A Grade
A=Above B=Below
Developed? Y
Disinfected? Y
Capped? Y

12. Did you notify the owner of the need to permanently abandon and fill all unused wells on this property? N
If no, explain IN USE

13. Initials of Well Constructor or Supervisory Driller RK Date Signed 9/17/90

Initials of Drill Rig Operator (Mandatory unless same as above) Date Signed

Additonal Comments?
Owner Sent Label? Y
Variance Issued?
More Geology?

Marlene Witkowski

WISCONSIN UNIQUE WELL NUMBER **RD349**
SOURCE: WELL CONSTRUCTION

State of Wi-Private Water Systems-DG/2
Department Of Natural Resources, Box 7921
Madison, WI 53707

Form 3300-77A (Rev 12/00)

Property Owner: WITKOWSKI, ROBERT
Telephone Number: 715 – 668 – 5247
Depth 365 FT

Mailing Address: W14416 SCOTT ST

City: GILMAN | State: WI | Zip Code: 54433

County of Well Location: 61 TAYLOR | Co Well Permit No: W | Well Completion Date: October 9, 2002

Well Constructor: RONALD A KOMAREK | License #: 610 | Facility ID (Public):

Address: KOMAREK WELL DRILLING | Public Well Plan Approval#:

City: OGEMA | State: WI | Zip Code: 54459 | Date Of Approval:

Hicap Well # | Common Well #: | 0 gpm/ft

1. Well Location
T T=Town C=City V=Village of CLEVELAND | Fire#:
Street Address or Road Name and Number: HWY 73 W14416
Subdivision Name | Lot# | Block #
Gov't Lot or NE 1/4 of SE 1/4 of Section 18 T 32 N R 3 W
Latitude Deg. Min.
Longitude Deg Min.

2. Well Type 1 1=New 2=Replacement 3=Reconstruction (See item 12 below)
of previous unique well # _____ constructed in ____
Reason for replaced or reconstructed Well?
LOCATE # 8224580
Lat/Long Method: 1 1=Drilled 2=Driven Point 3=Jetted 4=Other

3. Well Serves # of homes and or **HOMES** (eg: barn, restaurant, church, school, industry, etc.)
P M=Munic O=OTM N=NonCom P=Private Z=Other X=NonPot A=Anode L=Loop H=Drillhole

High Capacity: Well? N Property? N

4. Is the well located upslope or sideslope and not downslope from any contamination sources, including those on neighboring properties? Y
Well located in floodplain? N
Distance in feet from well to nearest:(including proposed)

	1. Landfill	9. Downspout/ Yard Hydrant	17. Wastewater Sump
>	2 2. Building Overhang	10. Privy	18. Paved Animal Barn Pen
>	25 3. 1=Septic 2= Holding Tank	11. Foundation Drain to Clearwater	19. Animal Yard or Shelter
	4. Sewage Absorption Unit	12. Foundation Drain to Sewer	20. Silo
	5. Nonconforming Pit	13. Building Drain 1=Cast Iron or Plastic 2=Other	21. Barn Gutter
>	10 14. Building Sewer 1 1=Gravity 2=Pressure 1 1=Cast Iron or Plastic 2=Other		22. Manure Pipe 1=Gravity 2=Pressure 1=Cast iron or Plastic 2=Other
	6. Buried Home Heating Oil Tank	15. Collector Sewer: ___ units ___ in . diam.	23. Other manure Storage
	7. Buried Petroleum Tank		24. Ditch
	8. 2 1=Shoreline 2= Swimming Pool	16. Clearwater Sump	25. Other NR 812 Waste Source

5. Drillhole Dimensions and Construction Method

Dia.(in.)	From (ft)	To (ft)
8.0	surface	86
6.0	86	365

Upper Enlarged Drillhole — Lower Open Bedrock
– 1. Rotary - Mud Circulation
X – 2. Rotary - Air
– 3. Rotary - Air and Foam
X – 4. Drill-Through Casing Hammer
– 5. Reverse Rotary
– 6. Cable-tool Bit ____ in. dia
– 7. Temp. Outer Casing ____ in. dia, ____ depth ft. Removed ?
Other

Geology Codes	8. Geology Type, Caving/Noncaving, Color, Hardness, etc	From (ft.)	To (ft.)
ZG	CLAY, GRAVEL, STONES	0	48
BQG	GRAVEL & SOFT BROKEN	48	54
TSQ	SOFT BROWN GRANITE	54	77
THQ	HARD DR BR GRANITE	77	86
Q	BLACK, BROWN, GRAY GRANITE	86	365

6. Casing Liner Screen Material, Weight, Specification Manufacturer & Method of Assembly

Dia. (in.)	Material, Weight, Specification Manufacturer & Method of Assembly	From (ft.)	To (ft.)
8.6	28.58 322 A53B PARAGON ASTMA 6702 USA WELD JT	surface	53
6.6	OD X 280 ASTM A53B 18.99 #TYPE EW TEXAS TUBULAR WELD JT	0	86

Dia.(in.)	Screen type, material & slot size	From	To

7. Grout or Other Sealing Material #

9. Static Water Level 7.0 feet B ground surface A=Above B=Below

10. Pump Test Pumping level 200.0ft. below surface Pumping at 4.0 GPM 3.00Hrs

11. Well Is: A Grade 14 in. A=Above B=Below
Developed? Y
Disinfected? Y
Capped? Y

12. Did you notify the owner of the need to permanently abandon and fill all

APPENDIX B

LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-112508-1
Client Project/Site: Olson's Corner - 4178

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Scott McCurdy

Sandie Fredrick

Authorized for release by:
6/14/2016 2:59:37 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 - 4178

TestAmerica Job ID: 500-112508-1

Job ID: 500-112508-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-112508-1

Comments
No additional comments.

Receipt
The sample was received on 6/3/2016 10:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.6° C.

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

Metals
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 - 4178

TestAmerica Job ID: 500-112508-1

Client Sample ID: Webster Well

Lab Sample ID: 500-112508-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.2		1.0	0.44	ug/L	1		6020	Total Recoverable
Lead	5.1		0.50	0.14	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
6020	Metals (ICP/MS)	SW846	TAL CHI

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-112508-1	Webster Well	Water	06/01/16 12:00	06/03/16 10:30

Client Sample Results

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

Client Sample ID: Webster Well

Date Collected: 06/01/16 12:00
Date Received: 06/03/16 10:30

Lab Sample ID: 500-112508-1

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			06/08/16 16:54	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/08/16 16:54	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/08/16 16:54	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/08/16 16:54	1
Bromoform	<0.48		1.0	0.48	ug/L			06/08/16 16:54	1
Bromomethane	<0.80		2.0	0.80	ug/L			06/08/16 16:54	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/08/16 16:54	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/08/16 16:54	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/08/16 16:54	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/08/16 16:54	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/08/16 16:54	1
Chloroform	<0.37		1.0	0.37	ug/L			06/08/16 16:54	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/08/16 16:54	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/08/16 16:54	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/08/16 16:54	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/08/16 16:54	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/08/16 16:54	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/08/16 16:54	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/08/16 16:54	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/08/16 16:54	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			06/08/16 16:54	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/08/16 16:54	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/08/16 16:54	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/08/16 16:54	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/08/16 16:54	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/08/16 16:54	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/08/16 16:54	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/08/16 16:54	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/08/16 16:54	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/08/16 16:54	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/08/16 16:54	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/08/16 16:54	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/08/16 16:54	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/08/16 16:54	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/08/16 16:54	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/08/16 16:54	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/08/16 16:54	1
Styrene	<0.39		1.0	0.39	ug/L			06/08/16 16:54	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/08/16 16:54	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/08/16 16:54	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/08/16 16:54	1
Toluene	<0.15		0.50	0.15	ug/L			06/08/16 16:54	1

Client Sample ID: Webster Well

Date Collected: 06/01/16 12:00
Date Received: 06/03/16 10:30

Lab Sample ID: 500-112508-1

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/08/16 16:54	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/08/16 16:54	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/08/16 16:54	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/08/16 16:54	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/08/16 16:54	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/08/16 16:54	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			06/08/16 16:54	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/08/16 16:54	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/08/16 16:54	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			06/08/16 16:54	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/08/16 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 127*		*06/08/16 16:54*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*06/08/16 16:54*	*1*
4-Bromofluorobenzene (Surr)	*105*		*71 - 120*		*06/08/16 16:54*	*1*
Dibromofluoromethane	*97*		*70 - 120*		*06/08/16 16:54*	*1*

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.2**		1.0	0.44	ug/L		06/06/16 08:50	06/13/16 18:26	1
Lead	**5.1**		0.50	0.14	ug/L		06/06/16 08:50	06/13/16 18:26	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

GC/MS VOA

Analysis Batch: 338907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-112508-1	Webster Well	Total/NA	Water	8260B	
LCS 500-338907/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-338907/6	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 338543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-112508-1	Webster Well	Total Recoverable	Water	3005A	
LCS 500-338543/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 500-338543/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 339726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-112508-1	Webster Well	Total Recoverable	Water	6020	338543
LCS 500-338543/3-A	Lab Control Sample	Total Recoverable	Water	6020	338543
MB 500-338543/1-A	Method Blank	Total Recoverable	Water	6020	338543

Surrogate Summary

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (71-127)	TOL (75-120)	BFB (71-120)	DBFM (70-120)
500-112508-1	Webster Well	113	99	105	97
LCS 500-338907/4	Lab Control Sample	102	100	95	90
MB 500-338907/6	Method Blank	109	99	104	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane

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

Lab Sample ID: MB 500-338907/6
Matrix: Water
Analysis Batch: 338907

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			06/08/16 10:55	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/08/16 10:55	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/08/16 10:55	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/08/16 10:55	1
Bromoform	<0.48		1.0	0.48	ug/L			06/08/16 10:55	1
Bromomethane	<0.80		2.0	0.80	ug/L			06/08/16 10:55	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/08/16 10:55	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/08/16 10:55	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/08/16 10:55	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/08/16 10:55	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/08/16 10:55	1
Chloroform	<0.37		1.0	0.37	ug/L			06/08/16 10:55	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/08/16 10:55	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/08/16 10:55	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/08/16 10:55	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/08/16 10:55	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/08/16 10:55	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/08/16 10:55	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/08/16 10:55	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/08/16 10:55	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			06/08/16 10:55	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/08/16 10:55	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/08/16 10:55	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/08/16 10:55	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/08/16 10:55	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/08/16 10:55	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/08/16 10:55	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/08/16 10:55	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/08/16 10:55	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/08/16 10:55	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/08/16 10:55	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/08/16 10:55	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/08/16 10:55	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/08/16 10:55	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/08/16 10:55	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/08/16 10:55	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/08/16 10:55	1
Styrene	<0.39		1.0	0.39	ug/L			06/08/16 10:55	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/08/16 10:55	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/08/16 10:55	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/08/16 10:55	1

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

Lab Sample ID: MB 500-338907/6
Matrix: Water
Analysis Batch: 338907

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			06/08/16 10:55	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/08/16 10:55	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/08/16 10:55	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/08/16 10:55	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/08/16 10:55	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/08/16 10:55	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/08/16 10:55	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			06/08/16 10:55	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/08/16 10:55	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/08/16 10:55	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			06/08/16 10:55	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/08/16 10:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 127*		*06/08/16 10:55*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*06/08/16 10:55*	*1*
4-Bromofluorobenzene (Surr)	*104*		*71 - 120*		*06/08/16 10:55*	*1*
Dibromofluoromethane	*95*		*70 - 120*		*06/08/16 10:55*	*1*

Lab Sample ID: LCS 500-338907/4
Matrix: Water
Analysis Batch: 338907

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	49.5		ug/L		99	70 - 125
Bromobenzene	50.0	45.7		ug/L		91	70 - 125
Bromochloromethane	50.0	45.3		ug/L		91	70 - 125
Bromodichloromethane	50.0	48.3		ug/L		97	70 - 125
Bromoform	50.0	45.8		ug/L		92	54 - 128
Bromomethane	50.0	65.6		ug/L		131	40 - 150
n-Butylbenzene	50.0	55.2		ug/L		110	70 - 125
sec-Butylbenzene	50.0	52.4		ug/L		105	70 - 125
tert-Butylbenzene	50.0	51.5		ug/L		103	70 - 125
Carbon tetrachloride	50.0	46.7		ug/L		93	70 - 125
Chlorobenzene	50.0	49.8		ug/L		100	70 - 125
Dibromochloromethane	50.0	47.0		ug/L		94	66 - 125
Chloroethane	50.0	52.0		ug/L		104	60 - 139
Chloroform	50.0	48.6		ug/L		97	70 - 125
Chloromethane	50.0	42.0		ug/L		84	60 - 140
2-Chlorotoluene	50.0	51.2		ug/L		102	69 - 125
4-Chlorotoluene	50.0	53.6		ug/L		107	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	51.1		ug/L		102	51 - 125
1,2-Dibromoethane	50.0	50.1		ug/L		100	70 - 125
Dibromomethane	50.0	47.4		ug/L		95	70 - 125
1,2-Dichlorobenzene	50.0	49.3		ug/L		99	70 - 125
1,3-Dichlorobenzene	50.0	47.9		ug/L		96	70 - 125
1,4-Dichlorobenzene	50.0	49.0		ug/L		98	70 - 125
Dichlorodifluoromethane	50.0	41.0		ug/L		82	51 - 140

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

Lab Sample ID: LCS 500-338907/4
Matrix: Water
Analysis Batch: 338907

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	50.4		ug/L		101	70 - 125
1,2-Dichloroethane	50.0	53.7		ug/L		107	70 - 125
1,1-Dichloroethene	50.0	50.6		ug/L		101	70 - 125
cis-1,2-Dichloroethene	50.0	45.8		ug/L		92	70 - 125
trans-1,2-Dichloroethene	50.0	47.5		ug/L		95	70 - 125
1,2-Dichloropropane	50.0	50.9		ug/L		102	70 - 125
1,3-Dichloropropane	50.0	55.0		ug/L		110	70 - 125
2,2-Dichloropropane	50.0	48.7		ug/L		97	62 - 125
1,1-Dichloropropene	50.0	51.2		ug/L		102	70 - 125
cis-1,3-Dichloropropene	50.0	53.3		ug/L		107	70 - 125
trans-1,3-Dichloropropene	50.0	53.9		ug/L		108	70 - 125
Ethylbenzene	50.0	49.9		ug/L		100	70 - 125
Hexachlorobutadiene	50.0	46.1		ug/L		92	57 - 140
Isopropylbenzene	50.0	49.7		ug/L		99	70 - 125
p-Isopropyltoluene	50.0	49.7		ug/L		99	70 - 125
Methylene Chloride	50.0	48.7		ug/L		97	68 - 125
Methyl tert-butyl ether	50.0	49.8		ug/L		100	67 - 125
Naphthalene	50.0	45.6		ug/L		91	50 - 136
N-Propylbenzene	50.0	52.5		ug/L		105	70 - 125
Styrene	50.0	53.0		ug/L		106	70 - 125
1,1,1,2-Tetrachloroethane	50.0	47.5		ug/L		95	68 - 125
1,1,2,2-Tetrachloroethane	50.0	55.0		ug/L		110	68 - 125
Tetrachloroethene	50.0	47.3		ug/L		95	70 - 125
Toluene	50.0	51.5		ug/L		103	70 - 125
1,2,3-Trichlorobenzene	50.0	44.9		ug/L		90	58 - 135
1,2,4-Trichlorobenzene	50.0	44.7		ug/L		89	64 - 126
1,1,1-Trichloroethane	50.0	46.4		ug/L		93	70 - 125
1,1,2-Trichloroethane	50.0	50.0		ug/L		100	70 - 125
Trichloroethene	50.0	47.0		ug/L		94	70 - 125
Trichlorofluoromethane	50.0	48.7		ug/L		97	60 - 126
1,2,3-Trichloropropane	50.0	50.2		ug/L		100	63 - 125
1,2,4-Trimethylbenzene	50.0	51.2		ug/L		102	70 - 125
1,3,5-Trimethylbenzene	50.0	51.7		ug/L		103	70 - 125
Vinyl chloride	50.0	48.1		ug/L		96	70 - 126
Xylenes, Total	100	104		ug/L		104	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 127*
Toluene-d8 (Surr)	*100*		*75 - 120*
4-Bromofluorobenzene (Surr)	*95*		*71 - 120*
Dibromofluoromethane	*90*		*70 - 120*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 500-338543/1-A
Matrix: Water
Analysis Batch: 339726

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 338543

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.44		1.0	0.44	ug/L		06/06/16 08:50	06/13/16 17:41	1
Lead	<0.14		0.50	0.14	ug/L		06/06/16 08:50	06/13/16 17:41	1

Lab Sample ID: LCS 500-338543/3-A
Matrix: Water
Analysis Batch: 339726

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 338543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	92.79		ug/L		93	80 - 120
Lead	100	97.59		ug/L		98	80 - 120

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

Client Sample ID: Webster Well

Date Collected: 06/01/16 12:00
Date Received: 06/03/16 10:30

Lab Sample ID: 500-112508-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	338907	06/08/16 16:54	EMA	TAL CHI
Total Recoverable	Prep	3005A			338543	06/06/16 08:50	JEF	TAL CHI
Total Recoverable	Analysis	6020		1	339726	06/13/16 18:26	FXG	TAL CHI

Laboratory References:

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

Certification Summary

Client: Cedar Corporation
Project/Site: Olson's Corner - 4178

TestAmerica Job ID: 500-112508-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-16 *

* Certification renewal pending - certification considered valid.

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 #: 500-112508

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler: 4.6

Report To (optional)	Bill To (optional)
Contact: Scott McCurdy	Contact:
Company:	Company:
Address:	Address:
Address:	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail:	PO#/Reference#: 500-112508 COC

Client	Client Project #	Preservative	1	3							
Cedar Corporation	4178										
Project Name		**Parameter**	VOC's	Lead Arsenic							
Olsons Corner											
Project Location/State	**Lab Project #**										
Hannibal, WI											
Sample	**Lab PM**										
RDS	Sadie Fredrick										

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix								
1		Webster well	6/1/16	1200	4	DW	x	x						

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 [x] 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
Ryan Stage	Cedar Corp	6/1/16	1500		TAL	06/03/16	1030
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	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:

Lab Comments:

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-112508-1

Login Number: 112508
List Number: 1
Creator: Kelsey, Shawn M

List Source: 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	4.6c
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

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

TestAmerica Job ID: 500-114831-1
Client Project/Site: Perry's Corners - 4178-005

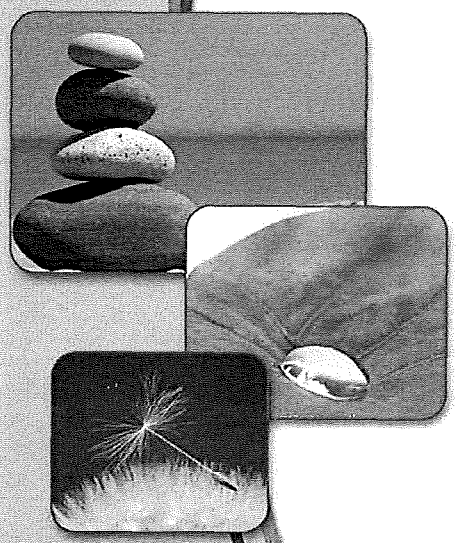
For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Scott McCurdy

Sandie Fredrick

Authorized for release by:
7/29/2016 2:56:36 PM

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



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Case Narrative

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Job ID: 500-114831-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-114831-1

Comments
No additional comments.

Receipt
The samples were received on 7/26/2016 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

GC/MS VOA
Method(s) 8260B: The laboratory control samples (LCS) for 345480 and 345532 recovered outside control limits for the following analytes: Dichlorodifluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Client Sample ID: 072016-1 — Lab Sample ID: 500-114831-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.8		0.50	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: 072016-1 — Lab Sample ID: 500-114831-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.3		1.0	0.44	ug/L	1		6020	Total Recoverable
Iron	14300		100	26.2	ug/L	1		6020	Total Recoverable
Lead	13.6		0.50	0.14	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
6020	Metals (ICP/MS)	SW846	TAL CHI

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-114831-1	072016-1	Ground Water	07/20/16 11:10	07/26/16 10:20
500-114831-2	072016-1	Ground Water	07/20/16 11:00	07/26/16 10:20

Client Sample ID: 072016-1

Date Collected: 07/20/16 11:10
Date Received: 07/26/16 10:20

Lab Sample ID: 500-114831-1

Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/28/16 11:33	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/28/16 11:33	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/28/16 11:33	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/28/16 11:33	1
Bromoform	<0.48		1.0	0.48	ug/L			07/28/16 11:33	1
Bromomethane	<0.80		2.0	0.80	ug/L			07/28/16 11:33	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/16 11:33	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/16 11:33	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/28/16 11:33	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/28/16 11:33	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/28/16 11:33	1
Chloroform	<0.37		1.0	0.37	ug/L			07/28/16 11:33	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/28/16 11:33	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/28/16 11:33	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/28/16 11:33	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/28/16 11:33	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/28/16 11:33	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/28/16 11:33	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/28/16 11:33	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/28/16 11:33	1
Dichlorodifluoromethane	<0.67	*	2.0	0.67	ug/L			07/28/16 11:33	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/28/16 11:33	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/28/16 11:33	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/28/16 11:33	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/28/16 11:33	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/28/16 11:33	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/28/16 11:33	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/28/16 11:33	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/28/16 11:33	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/28/16 11:33	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/28/16 11:33	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/28/16 11:33	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/28/16 11:33	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/28/16 11:33	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/28/16 11:33	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/28/16 11:33	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/28/16 11:33	1
Styrene	<0.39		1.0	0.39	ug/L			07/28/16 11:33	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/28/16 11:33	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/28/16 11:33	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/16 11:33	1
Toluene	**1.8**		0.50	0.15	ug/L			07/28/16 11:33	1

Client Sample ID: 072016-1

Date Collected: 07/20/16 11:10
Date Received: 07/26/16 10:20

Lab Sample ID: 500-114831-1

Matrix: Ground Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/28/16 11:33	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/28/16 11:33	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/16 11:33	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/16 11:33	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/16 11:33	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/28/16 11:33	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			07/28/16 11:33	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/28/16 11:33	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/28/16 11:33	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			07/28/16 11:33	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/28/16 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*71 - 127*		*07/28/16 11:33*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*07/28/16 11:33*	*1*
4-Bromofluorobenzene (Surr)	*98*		*71 - 120*		*07/28/16 11:33*	*1*
Dibromofluoromethane	*89*		*70 - 120*		*07/28/16 11:33*	*1*

Client Sample ID: 072016-1

Date Collected: 07/20/16 11:00
Date Received: 07/26/16 10:20

Lab Sample ID: 500-114831-2

Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**1.3**		1.0	0.44	ug/L		07/27/16 15:09	07/28/16 14:00	1
Iron	**14300**		100	26.2	ug/L		07/27/16 15:09	07/28/16 14:00	1
Lead	**13.6**		0.50	0.14	ug/L		07/27/16 15:09	07/28/16 14:00	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

GC/MS VOA

Analysis Batch: 345532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-114831-1	072016-1	Total/NA	Ground Water	8260B	
MB 500-345532/6	Method Blank	Total/NA	Water	8260B	
LCS 500-345532/4	Lab Control Sample	Total/NA	Water	8260B	

Metals

Prep Batch: 345440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-114831-2	072016-1	Total Recoverable	Ground Water	3005A	
MB 500-345440/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-345440/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
500-114831-2 MS	072016-1	Total Recoverable	Ground Water	3005A	
500-114831-2 MSD	072016-1	Total Recoverable	Ground Water	3005A	
500-114831-2 DU	072016-1	Total Recoverable	Ground Water	3005A	

Analysis Batch: 345783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-114831-2	072016-1	Total Recoverable	Ground Water	6020	345440
MB 500-345440/1-A	Method Blank	Total Recoverable	Water	6020	345440
LCS 500-345440/2-A	Lab Control Sample	Total Recoverable	Water	6020	345440
500-114831-2 MS	072016-1	Total Recoverable	Ground Water	6020	345440
500-114831-2 MSD	072016-1	Total Recoverable	Ground Water	6020	345440
500-114831-2 DU	072016-1	Total Recoverable	Ground Water	6020	345440

Surrogate Summary

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

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

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(71-127)	(75-120)	(71-120)	(70-120)
500-114831-1	072016-1	91	103	98	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(71-127)	(75-120)	(71-120)	(70-120)
LCS 500-345532/4	Lab Control Sample	93	101	96	95
MB 500-345532/6	Method Blank	95	101	99	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane

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

Lab Sample ID: MB 500-345532/6
Matrix: Water
Analysis Batch: 345532

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			07/28/16 10:13	1
Bromobenzene	<0.36		1.0	0.36	ug/L			07/28/16 10:13	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			07/28/16 10:13	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			07/28/16 10:13	1
Bromoform	<0.48		1.0	0.48	ug/L			07/28/16 10:13	1
Bromomethane	<0.80		2.0	0.80	ug/L			07/28/16 10:13	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/16 10:13	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			07/28/16 10:13	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			07/28/16 10:13	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			07/28/16 10:13	1
Chloroethane	<0.51		1.0	0.51	ug/L			07/28/16 10:13	1
Chloroform	<0.37		1.0	0.37	ug/L			07/28/16 10:13	1
Chloromethane	<0.32		1.0	0.32	ug/L			07/28/16 10:13	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			07/28/16 10:13	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			07/28/16 10:13	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			07/28/16 10:13	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
Dibromomethane	<0.27		1.0	0.27	ug/L			07/28/16 10:13	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			07/28/16 10:13	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			07/28/16 10:13	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			07/28/16 10:13	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			07/28/16 10:13	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			07/28/16 10:13	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			07/28/16 10:13	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			07/28/16 10:13	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			07/28/16 10:13	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			07/28/16 10:13	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			07/28/16 10:13	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			07/28/16 10:13	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			07/28/16 10:13	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			07/28/16 10:13	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			07/28/16 10:13	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			07/28/16 10:13	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			07/28/16 10:13	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			07/28/16 10:13	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			07/28/16 10:13	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
Naphthalene	<0.34		1.0	0.34	ug/L			07/28/16 10:13	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			07/28/16 10:13	1
Styrene	<0.39		1.0	0.39	ug/L			07/28/16 10:13	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			07/28/16 10:13	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			07/28/16 10:13	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			07/28/16 10:13	1

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

Lab Sample ID: MB 500-345532/6
Matrix: Water
Analysis Batch: 345532

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			07/28/16 10:13	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			07/28/16 10:13	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			07/28/16 10:13	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			07/28/16 10:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			07/28/16 10:13	1
Trichloroethene	<0.16		0.50	0.16	ug/L			07/28/16 10:13	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			07/28/16 10:13	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			07/28/16 10:13	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			07/28/16 10:13	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			07/28/16 10:13	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			07/28/16 10:13	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			07/28/16 10:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*71 - 127*		*07/28/16 10:13*	*1*
Toluene-d8 (Surr)	*101*		*75 - 120*		*07/28/16 10:13*	*1*
4-Bromofluorobenzene (Surr)	*99*		*71 - 120*		*07/28/16 10:13*	*1*
Dibromofluoromethane	*95*		*70 - 120*		*07/28/16 10:13*	*1*

Lab Sample ID: LCS 500-345532/4
Matrix: Water
Analysis Batch: 345532

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	56.7		ug/L		113	70 - 125
Bromobenzene	50.0	51.4		ug/L		103	70 - 125
Bromochloromethane	50.0	53.6		ug/L		107	70 - 125
Bromodichloromethane	50.0	51.8		ug/L		104	70 - 125
Bromoform	50.0	52.8		ug/L		106	54 - 128
Bromomethane	50.0	47.5		ug/L		95	40 - 150
n-Butylbenzene	50.0	55.1		ug/L		110	70 - 125
sec-Butylbenzene	50.0	53.8		ug/L		108	70 - 125
tert-Butylbenzene	50.0	53.6		ug/L		107	70 - 125
Carbon tetrachloride	50.0	56.9		ug/L		114	70 - 125
Chlorobenzene	50.0	53.6		ug/L		107	70 - 125
Dibromochloromethane	50.0	53.3		ug/L		107	66 - 125
Chloroethane	50.0	51.5		ug/L		103	60 - 139
Chloroform	50.0	53.9		ug/L		108	70 - 125
Chloromethane	50.0	57.3		ug/L		115	60 - 140
2-Chlorotoluene	50.0	51.4		ug/L		103	69 - 125
4-Chlorotoluene	50.0	51.9		ug/L		104	70 - 125
1,2-Dibromo-3-Chloropropane	50.0	49.3		ug/L		99	51 - 125
1,2-Dibromoethane	50.0	51.7		ug/L		103	70 - 125
Dibromomethane	50.0	52.0		ug/L		104	70 - 125
1,2-Dichlorobenzene	50.0	51.5		ug/L		103	70 - 125
1,3-Dichlorobenzene	50.0	52.3		ug/L		105	70 - 125
1,4-Dichlorobenzene	50.0	51.2		ug/L		102	70 - 125
Dichlorodifluoromethane	50.0	71.0	*	ug/L		142	51 - 140

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

Lab Sample ID: LCS 500-345532/4
Matrix: Water
Analysis Batch: 345532

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	56.9		ug/L		114	70 - 125
1,2-Dichloroethane	50.0	51.7		ug/L		103	70 - 125
1,1-Dichloroethene	50.0	60.9		ug/L		122	70 - 125
cis-1,2-Dichloroethene	50.0	57.4		ug/L		115	70 - 125
trans-1,2-Dichloroethene	50.0	59.5		ug/L		119	70 - 125
1,2-Dichloropropane	50.0	55.4		ug/L		111	70 - 125
1,3-Dichloropropane	50.0	51.7		ug/L		103	70 - 125
2,2-Dichloropropane	50.0	55.1		ug/L		110	62 - 125
1,1-Dichloropropene	50.0	58.1		ug/L		116	70 - 125
cis-1,3-Dichloropropene	50.0	55.3		ug/L		111	70 - 125
trans-1,3-Dichloropropene	50.0	55.0		ug/L		110	70 - 125
Ethylbenzene	50.0	55.8		ug/L		112	70 - 125
Hexachlorobutadiene	50.0	54.7		ug/L		109	57 - 140
Isopropylbenzene	50.0	53.7		ug/L		107	70 - 125
p-Isopropyltoluene	50.0	54.6		ug/L		109	70 - 125
Methylene Chloride	50.0	56.6		ug/L		113	68 - 125
Methyl tert-butyl ether	50.0	52.5		ug/L		105	67 - 125
Naphthalene	50.0	56.8		ug/L		114	50 - 136
N-Propylbenzene	50.0	53.9		ug/L		108	70 - 125
Styrene	50.0	53.7		ug/L		107	70 - 125
1,1,1,2-Tetrachloroethane	50.0	54.4		ug/L		109	68 - 125
1,1,2,2-Tetrachloroethane	50.0	49.6		ug/L		99	68 - 125
Tetrachloroethene	50.0	57.2		ug/L		114	70 - 125
Toluene	50.0	57.8		ug/L		116	70 - 125
1,2,3-Trichlorobenzene	50.0	58.6		ug/L		117	58 - 135
1,2,4-Trichlorobenzene	50.0	57.5		ug/L		115	64 - 126
1,1,1-Trichloroethane	50.0	55.8		ug/L		112	70 - 125
1,1,2-Trichloroethane	50.0	52.5		ug/L		105	70 - 125
Trichloroethene	50.0	55.4		ug/L		111	70 - 125
Trichlorofluoromethane	50.0	51.3		ug/L		103	60 - 126
1,2,3-Trichloropropane	50.0	50.4		ug/L		101	63 - 125
1,2,4-Trimethylbenzene	50.0	53.1		ug/L		106	70 - 125
1,3,5-Trimethylbenzene	50.0	52.9		ug/L		106	70 - 125
Vinyl chloride	50.0	56.3		ug/L		113	70 - 126
Xylenes, Total	100	110		ug/L		110	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*71 - 127*
Toluene-d8 (Surr)	*101*		*75 - 120*
4-Bromofluorobenzene (Surr)	*96*		*71 - 120*
Dibromofluoromethane	*95*		*70 - 120*

QC Sample Results

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 500-345440/1-A
Matrix: Water
Analysis Batch: 345783

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 345440

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.44		1.0	0.44	ug/L		07/27/16 15:09	07/28/16 13:52	1
Iron	<26.2		100	26.2	ug/L		07/27/16 15:09	07/28/16 13:52	1
Lead	<0.14		0.50	0.14	ug/L		07/27/16 15:09	07/28/16 13:52	1

Lab Sample ID: LCS 500-345440/2-A
Matrix: Water
Analysis Batch: 345783

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 345440

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	94.33		ug/L		94	80 - 120
Iron	1000	1022		ug/L		102	80 - 120
Lead	100	93.90		ug/L		94	80 - 120

Lab Sample ID: 500-114831-2 MS
Matrix: Ground Water
Analysis Batch: 345783

Client Sample ID: 072016-1
Prep Type: Total Recoverable
Prep Batch: 345440

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.3		100	96.36		ug/L		95	75 - 125
Iron	14300		1000	14970	4	ug/L		67	75 - 125
Lead	13.6		100	107.4		ug/L		94	75 - 125

Lab Sample ID: 500-114831-2 MSD
Matrix: Ground Water
Analysis Batch: 345783

Client Sample ID: 072016-1
Prep Type: Total Recoverable
Prep Batch: 345440

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	1.3		100	90.64		ug/L		89	75 - 125	6	20
Iron	14300		1000	14430	4	ug/L		12	75 - 125	4	20
Lead	13.6		100	101.7		ug/L		88	75 - 125	5	20

Lab Sample ID: 500-114831-2 DU
Matrix: Ground Water
Analysis Batch: 345783

Client Sample ID: 072016-1
Prep Type: Total Recoverable
Prep Batch: 345440

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	1.3		1.23		ug/L		7	20
Iron	14300		14180		ug/L		0.9	20
Lead	13.6		13.72		ug/L		0.7	20

Lab Chronicle

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Client Sample ID: 072016-1 — **Lab Sample ID: 500-114831-1**
Date Collected: 07/20/16 11:10 — **Matrix: Ground Water**
Date Received: 07/26/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	345532	07/28/16 11:33	TCT	TAL CHI

Client Sample ID: 072016-1 — **Lab Sample ID: 500-114831-2**
Date Collected: 07/20/16 11:00 — **Matrix: Ground Water**
Date Received: 07/26/16 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			345440	07/27/16 15:09	JNH	TAL CHI
Total Recoverable	Analysis	6020		1	345783	07/28/16 14:00	FXG	TAL CHI

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

Certification Summary

Client: Cedar Corporation
Project/Site: Perry's Corners - 4178-005

TestAmerica Job ID: 500-114831-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-16 *

* Certification renewal pending - certification considered valid.

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#: 500-114831

Chain of Custody Number:

Page _____ of _____

Temperature °C of Cooler: 1.6

(optional) Report To	(optional) Bill To
Contact: Scott McCurdy	Contact:
Company: Cedar Corporation	Company:
Address: 604 Wilson Ave	Address:
Address: Menomonie, WI	Address:
Phone:	Phone:
Fax:	Fax:
E-Mail:	PO#/Reference#

Client: ~~Ellis~~ Olson

Client Project #: 4178-005

Project Name: Perry's Corners

Project Location/State: WI

Sampler: SMcCurdy

Lab Project #:

Lab PM:

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative: HCl	Preservative: HNO_3	Parameter: VOC	Parameter: Pb, Fe, As	Comments
1		072016-1	7/20/16	11:10	3	GW			✓		
2		~~FB01~~ 072016-1	7/20/16	11:00	1	GW				✓	

Preservative Key
1. HCl- Cool to 4°
2. Cool to 4°
3. Cool to 4°
4. Cool to 4°
5. , Cool to 4°

500-114831 COC

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
SMcCurdy	Cedar	7/21/16	7:30AM	[signature]	TA-WI	07/21/16	10:20
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier:

Shipped: FX STD

Hand elivered:

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:

Lab Comments:

TAL-4124-500 (1209)

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-114831-1

Login Number: 114831
List Number: 1
Creator: Sanchez, Ariel M

List Source: 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	1.6
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	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-119496-1
Client Project/Site: Olson - 4178

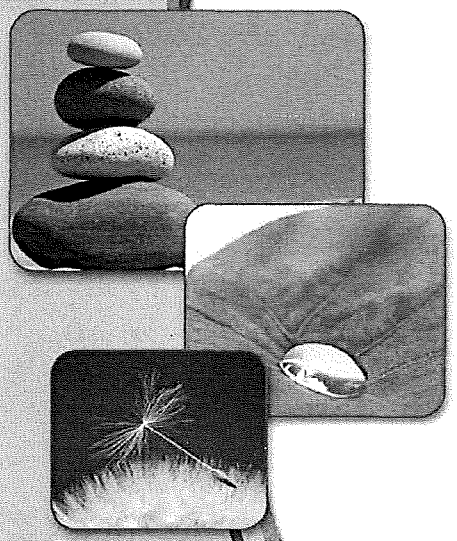
For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Scott McCurdy

Sandie Fredrick

Authorized for release by:
11/7/2016 10:14:25 AM

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



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Case Narrative

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Job ID: 500-119496-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-119496-1

Comments
No additional comments.

Receipt
The sample was received on 11/2/2016 10:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

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

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

Detection Summary

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Client Sample ID: Webster Well

Lab Sample ID: 500-119496-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.83	J	1.0	0.44	ug/L	1		6020A	Total Recoverable
Lead	0.93		0.50	0.14	ug/L	1		6020A	Total Recoverable

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI
6020A	Metals (ICP/MS)	SW846	TAL CHI

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-119496-1	Webster Well	Water	10/31/16 15:15	11/02/16 10:10

Client Sample Results

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Client Sample ID: Webster Well

Lab Sample ID: 500-119496-1

Date Collected: 10/31/16 15:15
Matrix: Water
Date Received: 11/02/16 10:10

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			11/03/16 18:22	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/03/16 18:22	1
Benzene	<0.15		0.50	0.15	ug/L			11/03/16 18:22	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/03/16 18:22	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/03/16 18:22	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/03/16 18:22	1
Toluene	<0.15		0.50	0.15	ug/L			11/03/16 18:22	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/03/16 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*71 - 127*		*11/03/16 18:22*	*1*
4-Bromofluorobenzene (Surr)	*87*		*71 - 120*		*11/03/16 18:22*	*1*
Dibromofluoromethane	*102*		*70 - 120*		*11/03/16 18:22*	*1*
Toluene-d8 (Surr)	*84*		*75 - 120*		*11/03/16 18:22*	*1*

Method: 6020A - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.83**	**J**	1.0	0.44	ug/L		11/03/16 14:45	11/04/16 15:28	1
Lead	**0.93**		0.50	0.14	ug/L		11/03/16 14:45	11/04/16 15:28	1

Definitions/Glossary

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Qualifiers

Metals

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

Glossary

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

QC Association Summary

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

GC/MS VOA

Analysis Batch: 359086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119496-1	Webster Well	Total/NA	Water	8260B	
MB 500-359086/6	Method Blank	Total/NA	Water	8260B	
LCS 500-359086/4	Lab Control Sample	Total/NA	Water	8260B	

Metals

Prep Batch: 359188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119496-1	Webster Well	Total Recoverable	Water	3005A	
MB 500-359188/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 500-359188/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 359556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-119496-1	Webster Well	Total Recoverable	Water	6020A	359188
MB 500-359188/1-A	Method Blank	Total Recoverable	Water	6020A	359188
LCS 500-359188/2-A	Lab Control Sample	Total Recoverable	Water	6020A	359188

Surrogate Summary

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (71-127)	BFB (71-120)	DBFM (70-120)	TOL (75-120)
500-119496-1	Webster Well	110	87	102	84
LCS 500-359086/4	Lab Control Sample	107	92	97	87
MB 500-359086/6	Method Blank	113	91	104	84

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Lab Sample ID: MB 500-359086/6
Matrix: Water
Analysis Batch: 359086

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	<0.36		1.0	0.36	ug/L			11/03/16 12:21	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			11/03/16 12:21	1
Benzene	<0.15		0.50	0.15	ug/L			11/03/16 12:21	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			11/03/16 12:21	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			11/03/16 12:21	1
Naphthalene	<0.34		1.0	0.34	ug/L			11/03/16 12:21	1
Toluene	<0.15		0.50	0.15	ug/L			11/03/16 12:21	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			11/03/16 12:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*71 - 127*		*11/03/16 12:21*	*1*
4-Bromofluorobenzene (Surr)	*91*		*71 - 120*		*11/03/16 12:21*	*1*
Dibromofluoromethane	*104*		*70 - 120*		*11/03/16 12:21*	*1*
Toluene-d8 (Surr)	*84*		*75 - 120*		*11/03/16 12:21*	*1*

Lab Sample ID: LCS 500-359086/4
Matrix: Water
Analysis Batch: 359086

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	50.0	49.0		ug/L		98	70 - 125
1,3,5-Trimethylbenzene	50.0	48.2		ug/L		96	70 - 125
Benzene	50.0	48.0		ug/L		96	70 - 125
Ethylbenzene	50.0	45.8		ug/L		92	70 - 125
Methyl tert-butyl ether	50.0	47.2		ug/L		94	67 - 125
Naphthalene	50.0	46.7		ug/L		93	50 - 136
Toluene	50.0	47.3		ug/L		95	70 - 125
Xylenes, Total	100	94.5		ug/L		94	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*71 - 127*
4-Bromofluorobenzene (Surr)	*92*		*71 - 120*
Dibromofluoromethane	*97*		*70 - 120*
Toluene-d8 (Surr)	*87*		*75 - 120*

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 500-359188/1-A
Matrix: Water
Analysis Batch: 359556

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 359188

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.44		1.0	0.44	ug/L		11/03/16 14:45	11/04/16 11:50	1
Lead	<0.14		0.50	0.14	ug/L		11/03/16 14:45	11/04/16 11:50	1

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 500-359188/2-A
Matrix: Water
Analysis Batch: 359556

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 359188

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	93.54		ug/L		94	80 - 120
Lead	100	97.06		ug/L		97	80 - 120

Lab Chronicle

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Client Sample ID: Webster Well
Date Collected: 10/31/16 15:15
Date Received: 11/02/16 10:10

Lab Sample ID: 500-119496-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	359086	11/03/16 18:22	PJH	TAL CHI
Total Recoverable	Prep	3005A			359188	11/03/16 14:45	JNH	TAL CHI
Total Recoverable	Analysis	6020A		1	359556	11/04/16 15:28	FXG	TAL CHI

Laboratory References:

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

Certification Summary

Client: Cedar Corporation
Project/Site: Olson - 4178

TestAmerica Job ID: 500-119496-1

Laboratory: TestAmerica Chicago

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Wisconsin	State Program	5	999580010	08-31-17

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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

Report To (optional)		Bill To (optional)	
Contact:	Scott McCurdy	Contact:	
Company:		Company:	
Address:		Address:	
Address:		Address:	
Phone:		Phone:	
Fax:		Fax:	
E-Mail:		PO#/Reference#	

500-119496 COC

Chain of Custody Record

Lab Job #: 500-119496

Chain of Custody Number:

Page ____ of ____

Temperature °C of Cooler: 1.5

Client	Cedar Corp.
Client Project #	4178
Project Name	Olson
Project Location/State	Hannibal/WI
Lab Project #	
Sampler	M. Taylor
Lab PM	

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative: 13, 7 / Parameter: PVOC+N, As, Pb										Comments
1		Webster Well	10/31	1515	4	DW	X										

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

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days ___ 15 Days X Other
Requested Due Date 11/7/16

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
M. Taylor	Cedar	11/1/16	900	[signature]	TA	11/02/16	1010

Lab Courier ☐
Shipped ☐
Hand Delivered ☐

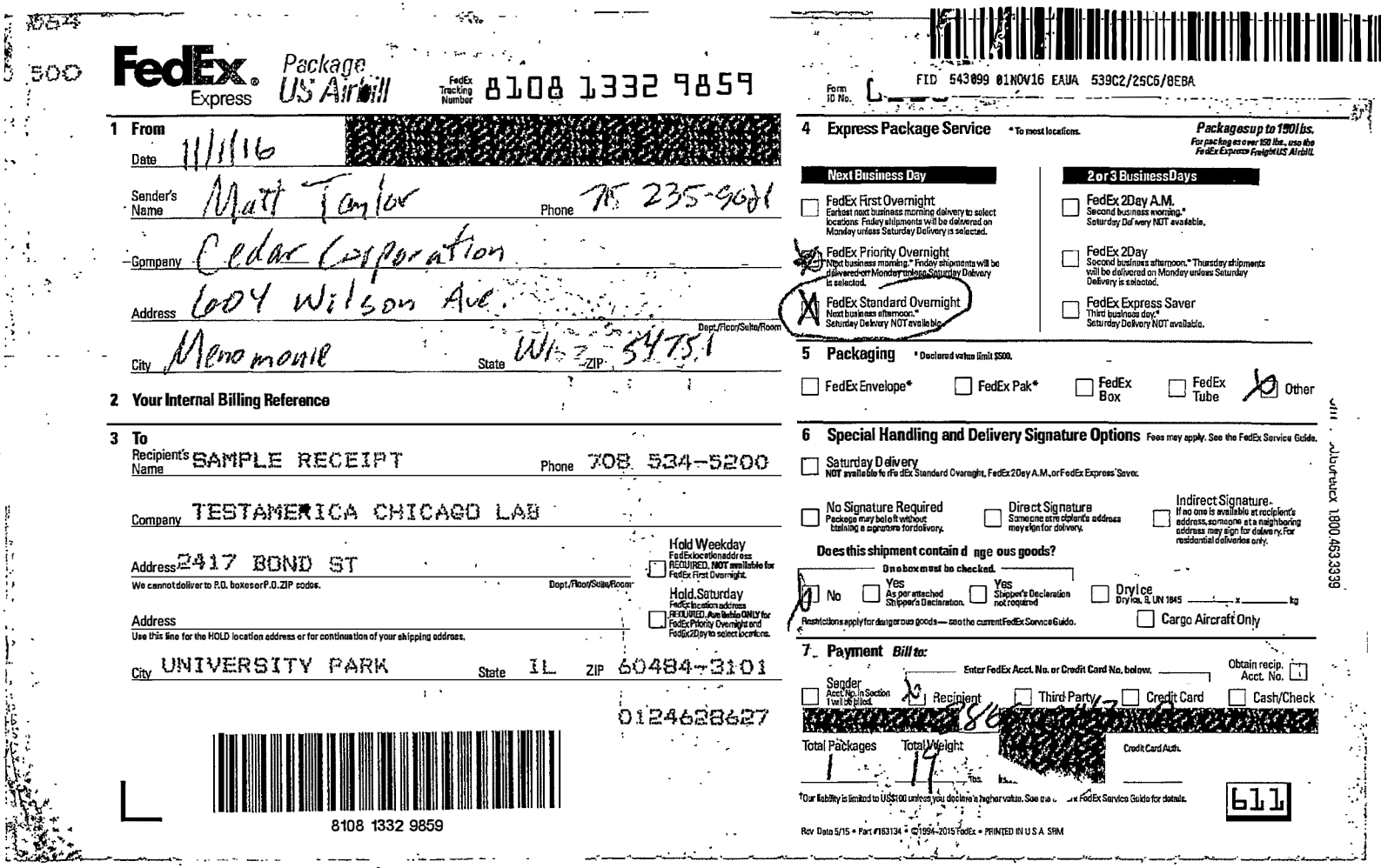
Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

11/7/2016



FedEx Express Package US Airbill

FedEx Tracking Number 8108 1332 9859

Form ID No. L

FID 543099 01NOV16 EAUA 539C2/25C6/8EBA

1 From

Date 11/1/16

Sender's Name Matt Taylor Phone 715 235-9691

Company Cedar Corporation

Address 6004 Wilson Ave.

Dept./Floor/Suite/Room

City Menomonie State WI ZIP 54751

2 Your Internal Billing Reference

3 To

Recipient's Name SAMPLE RECEIPT Phone 708 534-5200

Company TESTAMERICA CHICAGO LAB

Address 2417 BOND ST

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City UNIVERSITY PARK State IL ZIP 60484-3101

Hold Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

Hold Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0124628627

8108 1332 9859

4 Express Package Service * To most locations.

Packages up to 150 lbs. For packages over 150 lbs., use the FedEx Express Freight/US Airbill.

Next Business Day

- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless Saturday Delivery is selected.
- X FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless Saturday Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

FedEx Envelope* | FedEx Pak* | FedEx Box | FedEx Tube | X Other

6 Special Handling and Delivery Signature Options Fees may apply. See the FedEx Service Guide.

Saturday Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required — Package may be left without obtaining a signature for delivery.

Direct Signature — Someone at recipient's address may sign for delivery.

Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only.

Does this shipment contain dangerous goods?

One box must be checked.

X No | Yes As per attached Shipper's Declaration. | Yes Shipper's Declaration not required | Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Restrictions apply for dangerous goods — see the current FedEx Service Guide. Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.

Sender Acct. No. in Section 1 will be billed. | X Recipient | Third Party | Credit Card | Cash/Check

Total Packages 1 Total Weight 17 lbs. kg Credit Card Auth.

†Our liability is limited to US$100 unless you declare a higher value. See the current FedEx Service Guide for details.

611

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Insurance 1-800-463-3339

500-119496 Waybill

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-119496-1

Login Number: 119496
List Number: 1
Creator: Kelsey, Shawn M

List Source: 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	1.5c
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	

ANALYTICAL RESULTS: GCMS 524.2, Rev 4.1 Safe Drinking Water Analysis (Agi5077E)

Customer: Commercial Testing Laboratory Inc **NLS Project:** 275846

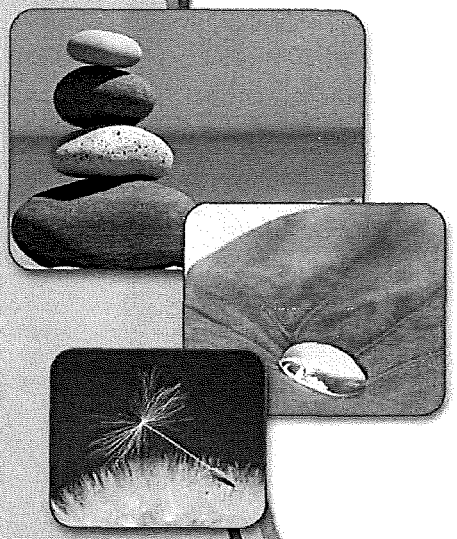
Project Description: Midwest Well Drilling

Project Title:

Template: AGIW **Printed:** 03/14/2017 17:01

Sample: 926003 | Trip Blank | Collected: 03/07/17 | Analyzed: 03/10/17 | Analyst: SD

ANALYTE NAME	RESULT	UNITS	DIL	LOD	LOQ	Note
Benzene	ND	ug/L	1	0.23	0.82	
Bromobenzene	ND	ug/L	1	0.26	0.91	
Bromochloromethane	ND	ug/L	1	0.34	1.2	
Bromodichloromethane	ND	ug/L	1	0.23	0.81	
Bromoform	ND	ug/L	1	0.21	0.74	
Bromomethane	ND	ug/L	1	0.37	1.3	
n-Butylbenzene	ND	ug/L	1	0.22	0.78	
sec-Butylbenzene	ND	ug/L	1	0.23	0.83	
tert-Butylbenzene	ND	ug/L	1	0.23	0.80	
Carbon Tetrachloride	ND	ug/L	1	0.22	0.76	
Chlorobenzene	ND	ug/L	1	0.24	0.86	
Chloroethane	ND	ug/L	1	1.5	5.2	
Chloroform	ND	ug/L	1	0.25	0.90	
Chloromethane	ND	ug/L	1	0.23	0.83	
2-Chlorotoluene	ND	ug/L	1	0.23	0.82	
4-Chlorotoluene	ND	ug/L	1	0.20	0.73	
Dibromochloromethane	ND	ug/L	1	0.17	0.61	
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	0.20	0.71	
1,2-Dibromoethane	ND	ug/L	1	0.22	0.78	
Dibromomethane	ND	ug/L	1	0.26	0.90	
1,2-Dichlorobenzene	ND	ug/L	1	0.25	0.87	
1,3-Dichlorobenzene	ND	ug/L	1	0.25	0.89	
1,4-Dichlorobenzene	ND	ug/L	1	0.28	1.0	
Dichlorodifluoromethane	ND	ug/L	1	0.22	0.77	
1,1-Dichloroethane	ND	ug/L	1	0.31	1.1	
1,2-Dichloroethane	ND	ug/L	1	0.25	0.90	
1,1-Dichloroethene	ND	ug/L	1	0.25	0.87	
cis-1,2-Dichloroethene	ND	ug/L	1	0.30	1.1	
trans-1,2-Dichloroethene	ND	ug/L	1	0.47	1.7	
1,2-Dichloropropane	ND	ug/L	1	0.23	0.81	
1,3-Dichloropropane	ND	ug/L	1	0.25	0.87	
2,2-Dichloropropane	ND	ug/L	1	0.15	0.54	
1,1-Dichloropropene	ND	ug/L	1	0.32	1.1	
cis-1,3-Dichloropropene	ND	ug/L	1	0.18	0.65	
trans-1,3-Dichloropropene	ND	ug/L	1	0.21	0.75	
Ethylbenzene	ND	ug/L	1	0.22	0.79	
Hexachlorobutadiene	ND	ug/L	1	0.24	0.83	
Isopropylbenzene	ND	ug/L	1	0.22	0.77	
p-Isopropyltoluene	ND	ug/L	1	0.22	0.78	
Methylene chloride	ND	ug/L	1	0.22	0.79	
Naphthalene	ND	ug/L	1	0.23	0.83	
n-Propylbenzene	ND	ug/L	1	0.22	0.78	
Styrene	ND	ug/L	1	0.21	0.73	
ortho-Xylene	ND	ug/L	1	0.20	0.70	
1,1,1,2-Tetrachloroethane	ND	ug/L	1	0.21	0.74	
1,1,2,2-Tetrachloroethane	ND	ug/L	1	0.20	0.72	
Tetrachloroethene	ND	ug/L	1	0.28	0.99	
Toluene	ND	ug/L	1	0.22	0.79	
1,2,3-Trichlorobenzene	ND	ug/L	1	0.24	0.85	
1,2,4-Trichlorobenzene	ND	ug/L	1	0.25	0.90	
1,1,1-Trichloroethane	ND	ug/L	1	0.32	1.1	
1,1,2-Trichloroethane	ND	ug/L	1	0.27	0.94	
Trichloroethene	ND	ug/L	1	0.30	1.1	



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-129412-1
Client Project/Site: Perry's Corners

For:
Cedar Corporation
604 Wilson Avenue
Menomonie, Wisconsin 54751

Attn: Mitch Evenson

Sandie Fredrick

Authorized for release by:
6/21/2017 2:38:40 PM

Sandie Fredrick, Project Manager II
(920)261-1660
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Job ID: 500-129412-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-129412-1

Comments
No additional comments.

Receipt
The samples were received on 6/9/2017 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.5° C.

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

Detection Summary

Client: Cedar Corporation
Project/Site: Perry's Corners

TestAmerica Job ID: 500-129412-1

Client Sample ID: Witkowski — Lab Sample ID: 500-129412-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.5	J	2.0	0.37	ug/L	1		8260B	Total/NA
1,2-Dichloroethane	0.72	J	1.0	0.39	ug/L	1		8260B	Total/NA

Client Sample ID: Trip Blank — Lab Sample ID: 500-129412-2

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Cedar Corporation
Project/Site: Perry's Corners

TestAmerica Job ID: 500-129412-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Cedar Corporation
Project/Site: Perry's Corners

TestAmerica Job ID: 500-129412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-129412-1	Witkowski	Water	06/07/17 11:00	06/09/17 10:15
500-129412-2	Trip Blank	Water	06/07/17 00:00	06/09/17 10:15

Client Sample Results

Client: Cedar Corporation
Project/Site: Perry's Corners

TestAmerica Job ID: 500-129412-1

Client Sample ID: Witkowski

Date Collected: 06/07/17 11:00
Date Received: 06/09/17 10:15

Lab Sample ID: 500-129412-1

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			06/20/17 13:10	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/20/17 13:10	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/20/17 13:10	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/20/17 13:10	1
Bromoform	<0.48		1.0	0.48	ug/L			06/20/17 13:10	1
Bromomethane	<0.80		2.0	0.80	ug/L			06/20/17 13:10	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/20/17 13:10	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/20/17 13:10	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/20/17 13:10	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/20/17 13:10	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/20/17 13:10	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/20/17 13:10	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/20/17 13:10	1
Chloroform	**1.5**	**J**	2.0	0.37	ug/L			06/20/17 13:10	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/20/17 13:10	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/20/17 13:10	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/20/17 13:10	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/20/17 13:10	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/20/17 13:10	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/20/17 13:10	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/20/17 13:10	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/20/17 13:10	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/20/17 13:10	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			06/20/17 13:10	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/20/17 13:10	1
1,2-Dichloroethane	**0.72**	**J**	1.0	0.39	ug/L			06/20/17 13:10	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/20/17 13:10	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/20/17 13:10	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/20/17 13:10	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/20/17 13:10	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/20/17 13:10	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/20/17 13:10	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/20/17 13:10	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/20/17 13:10	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/20/17 13:10	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/20/17 13:10	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/20/17 13:10	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/20/17 13:10	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/20/17 13:10	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/20/17 13:10	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/20/17 13:10	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/20/17 13:10	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/20/17 13:10	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/20/17 13:10	1
Styrene	<0.39		1.0	0.39	ug/L			06/20/17 13:10	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/20/17 13:10	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/20/17 13:10	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/20/17 13:10	1
Toluene	<0.15		0.50	0.15	ug/L			06/20/17 13:10	1

Client Sample ID: Witkowski

Lab Sample ID: 500-129412-1

Date Collected: 06/07/17 11:00
Date Received: 06/09/17 10:15

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/20/17 13:10	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/20/17 13:10	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/20/17 13:10	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/20/17 13:10	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/20/17 13:10	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/20/17 13:10	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			06/20/17 13:10	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/20/17 13:10	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/20/17 13:10	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			06/20/17 13:10	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/20/17 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 126*		*06/20/17 13:10*	*1*
Toluene-d8 (Surr)	*102*		*75 - 120*		*06/20/17 13:10*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 124*		*06/20/17 13:10*	*1*
Dibromofluoromethane	*93*		*75 - 120*		*06/20/17 13:10*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 500-129412-2

Date Collected: 06/07/17 00:00
Date Received: 06/09/17 10:15

Matrix: Water

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			06/16/17 14:05	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/16/17 14:05	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/16/17 14:05	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/16/17 14:05	1
Bromoform	<0.48		1.0	0.48	ug/L			06/16/17 14:05	1
Bromomethane	<0.80		2.0	0.80	ug/L			06/16/17 14:05	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/16/17 14:05	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/16/17 14:05	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/16/17 14:05	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/16/17 14:05	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/16/17 14:05	1
Chloroform	<0.37		2.0	0.37	ug/L			06/16/17 14:05	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/16/17 14:05	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/16/17 14:05	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/16/17 14:05	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/16/17 14:05	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/16/17 14:05	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/16/17 14:05	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/16/17 14:05	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/16/17 14:05	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			06/16/17 14:05	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/16/17 14:05	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1

Client Sample ID: Trip Blank

Lab Sample ID: 500-129412-2

Date Collected: 06/07/17 00:00
Matrix: Water
Date Received: 06/09/17 10:15

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/16/17 14:05	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/16/17 14:05	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/16/17 14:05	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/16/17 14:05	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/16/17 14:05	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/16/17 14:05	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/16/17 14:05	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/16/17 14:05	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/16/17 14:05	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/16/17 14:05	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/16/17 14:05	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/16/17 14:05	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/16/17 14:05	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/16/17 14:05	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/16/17 14:05	1
Styrene	<0.39		1.0	0.39	ug/L			06/16/17 14:05	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/16/17 14:05	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/16/17 14:05	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/16/17 14:05	1
Toluene	<0.15		0.50	0.15	ug/L			06/16/17 14:05	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/16/17 14:05	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/16/17 14:05	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/16/17 14:05	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/16/17 14:05	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/16/17 14:05	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/16/17 14:05	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			06/16/17 14:05	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/16/17 14:05	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/16/17 14:05	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			06/16/17 14:05	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/16/17 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 126*		*06/16/17 14:05*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*06/16/17 14:05*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 124*		*06/16/17 14:05*	*1*
Dibromofluoromethane	*94*		*75 - 120*		*06/16/17 14:05*	*1*

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	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: Perry's Corners

TestAmerica Job ID: 500-129412-1

GC/MS VOA

Analysis Batch: 389748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-129412-2	Trip Blank	Total/NA	Water	8260B	
MB 500-389748/6	Method Blank	Total/NA	Water	8260B	
LCS 500-389748/28	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 390086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-129412-1	Witkowski	Total/NA	Water	8260B	
MB 500-390086/7	Method Blank	Total/NA	Water	8260B	
LCS 500-390086/5	Lab Control Sample	Total/NA	Water	8260B	

Surrogate Summary

Client: Cedar Corporation
Project/Site: Perry's Corners

TestAmerica Job ID: 500-129412-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(75-126)	(75-120)	(72-124)	(75-120)
500-129412-1	Witkowski	95	102	102	93
500-129412-2	Trip Blank	115	103	106	94
LCS 500-389748/28	Lab Control Sample	100	106	100	94
LCS 500-390086/5	Lab Control Sample	84	108	98	89
MB 500-389748/6	Method Blank	99	103	103	92
MB 500-390086/7	Method Blank	88	103	98	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane

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

Lab Sample ID: MB 500-389748/6
Matrix: Water
Analysis Batch: 389748

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			06/16/17 13:40	1
Bromobenzene	<0.36		1.0	0.36	ug/L			06/16/17 13:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/16/17 13:40	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/16/17 13:40	1
Bromoform	<0.48		1.0	0.48	ug/L			06/16/17 13:40	1
Bromomethane	<0.80		2.0	0.80	ug/L			06/16/17 13:40	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/16/17 13:40	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/16/17 13:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/16/17 13:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/16/17 13:40	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/16/17 13:40	1
Chloroform	<0.37		2.0	0.37	ug/L			06/16/17 13:40	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/16/17 13:40	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/16/17 13:40	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/16/17 13:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/16/17 13:40	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/16/17 13:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/16/17 13:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/16/17 13:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/16/17 13:40	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			06/16/17 13:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/16/17 13:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/16/17 13:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/16/17 13:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/16/17 13:40	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/16/17 13:40	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/16/17 13:40	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/16/17 13:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/16/17 13:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/16/17 13:40	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/16/17 13:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/16/17 13:40	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/16/17 13:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/16/17 13:40	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/16/17 13:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/16/17 13:40	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/16/17 13:40	1
Styrene	<0.39		1.0	0.39	ug/L			06/16/17 13:40	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/16/17 13:40	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/16/17 13:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/16/17 13:40	1

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

Lab Sample ID: MB 500-389748/6
Matrix: Water
Analysis Batch: 389748

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.15		0.50	0.15	ug/L			06/16/17 13:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/16/17 13:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/16/17 13:40	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/16/17 13:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/16/17 13:40	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/16/17 13:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/16/17 13:40	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			06/16/17 13:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/16/17 13:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/16/17 13:40	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			06/16/17 13:40	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/16/17 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*75 - 126*		*06/16/17 13:40*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*06/16/17 13:40*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 124*		*06/16/17 13:40*	*1*
Dibromofluoromethane	*92*		*75 - 120*		*06/16/17 13:40*	*1*

Lab Sample ID: LCS 500-389748/28
Matrix: Water
Analysis Batch: 389748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	41.6		ug/L		83	70 - 120
Bromobenzene	50.0	38.0		ug/L		76	70 - 122
Bromochloromethane	50.0	39.7		ug/L		79	65 - 122
Bromodichloromethane	50.0	38.7		ug/L		77	69 - 120
Bromoform	50.0	37.3		ug/L		75	56 - 132
Bromomethane	50.0	43.4		ug/L		87	40 - 130
n-Butylbenzene	50.0	43.7		ug/L		87	68 - 125
sec-Butylbenzene	50.0	42.5		ug/L		85	70 - 123
tert-Butylbenzene	50.0	40.6		ug/L		81	70 - 121
Carbon tetrachloride	50.0	35.6		ug/L		71	65 - 122
Chlorobenzene	50.0	41.5		ug/L		83	70 - 120
Dibromochloromethane	50.0	40.0		ug/L		80	68 - 125
Chloroethane	50.0	40.9		ug/L		82	45 - 127
Chloroform	50.0	40.0		ug/L		80	70 - 120
Chloromethane	50.0	41.4		ug/L		83	54 - 147
2-Chlorotoluene	50.0	40.7		ug/L		81	70 - 125
4-Chlorotoluene	50.0	41.0		ug/L		82	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	42.7		ug/L		85	56 - 123
1,2-Dibromoethane	50.0	43.7		ug/L		87	70 - 125
Dibromomethane	50.0	39.6		ug/L		79	70 - 120
1,2-Dichlorobenzene	50.0	40.8		ug/L		82	70 - 125
1,3-Dichlorobenzene	50.0	40.5		ug/L		81	70 - 125
1,4-Dichlorobenzene	50.0	40.0		ug/L		80	70 - 120
Dichlorodifluoromethane	50.0	38.9		ug/L		78	40 - 150

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

Lab Sample ID: LCS 500-389748/28
Matrix: Water
Analysis Batch: 389748

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	50.0	41.9		ug/L		84	70 - 125
1,2-Dichloroethane	50.0	41.5		ug/L		83	68 - 127
1,1-Dichloroethene	50.0	34.8		ug/L		70	67 - 122
cis-1,2-Dichloroethene	50.0	38.4		ug/L		77	70 - 125
trans-1,2-Dichloroethene	50.0	38.0		ug/L		76	70 - 125
1,2-Dichloropropane	50.0	44.1		ug/L		88	67 - 130
1,3-Dichloropropane	50.0	46.0		ug/L		92	62 - 136
2,2-Dichloropropane	50.0	35.4		ug/L		71	58 - 129
1,1-Dichloropropene	50.0	41.7		ug/L		83	70 - 121
cis-1,3-Dichloropropene	50.0	44.2		ug/L		88	64 - 127
trans-1,3-Dichloropropene	50.0	42.6		ug/L		85	62 - 128
Ethylbenzene	50.0	43.6		ug/L		87	70 - 120
Hexachlorobutadiene	50.0	44.3		ug/L		89	51 - 150
Isopropylbenzene	50.0	41.2		ug/L		82	70 - 126
p-Isopropyltoluene	50.0	41.5		ug/L		83	70 - 125
Methylene Chloride	50.0	40.6		ug/L		81	69 - 125
Methyl tert-butyl ether	50.0	39.1		ug/L		78	70 - 120
Naphthalene	50.0	55.9		ug/L		112	59 - 130
N-Propylbenzene	50.0	41.1		ug/L		82	69 - 127
Styrene	50.0	43.4		ug/L		87	70 - 120
1,1,1,2-Tetrachloroethane	50.0	41.7		ug/L		83	70 - 125
1,1,2,2-Tetrachloroethane	50.0	45.3		ug/L		91	67 - 127
Tetrachloroethene	50.0	40.3		ug/L		81	70 - 128
Toluene	50.0	43.3		ug/L		87	70 - 125
1,2,3-Trichlorobenzene	50.0	54.1		ug/L		108	55 - 140
1,2,4-Trichlorobenzene	50.0	49.1		ug/L		98	66 - 127
1,1,1-Trichloroethane	50.0	36.4		ug/L		73	70 - 125
1,1,2-Trichloroethane	50.0	42.8		ug/L		86	70 - 122
Trichloroethene	50.0	40.0		ug/L		80	70 - 125
Trichlorofluoromethane	50.0	37.6		ug/L		75	70 - 126
1,2,3-Trichloropropane	50.0	43.0		ug/L		86	50 - 133
1,2,4-Trimethylbenzene	50.0	42.6		ug/L		85	70 - 123
1,3,5-Trimethylbenzene	50.0	41.9		ug/L		84	70 - 123
Vinyl chloride	50.0	40.5		ug/L		81	64 - 126
Xylenes, Total	100	84.5		ug/L		85	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*
Toluene-d8 (Surr)	*106*		*75 - 120*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane	*94*		*75 - 120*

Lab Sample ID: MB 500-390086/7
Matrix: Water
Analysis Batch: 390086

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.15		0.50	0.15	ug/L			06/20/17 10:06	1

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

Lab Sample ID: MB 500-390086/7
Matrix: Water
Analysis Batch: 390086

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	<0.36		1.0	0.36	ug/L			06/20/17 10:06	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			06/20/17 10:06	1
Bromodichloromethane	<0.37		1.0	0.37	ug/L			06/20/17 10:06	1
Bromoform	<0.48		1.0	0.48	ug/L			06/20/17 10:06	1
Bromomethane	<0.80		2.0	0.80	ug/L			06/20/17 10:06	1
n-Butylbenzene	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
sec-Butylbenzene	<0.40		1.0	0.40	ug/L			06/20/17 10:06	1
tert-Butylbenzene	<0.40		1.0	0.40	ug/L			06/20/17 10:06	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			06/20/17 10:06	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
Dibromochloromethane	<0.49		1.0	0.49	ug/L			06/20/17 10:06	1
Chloroethane	<0.51		1.0	0.51	ug/L			06/20/17 10:06	1
Chloroform	<0.37		2.0	0.37	ug/L			06/20/17 10:06	1
Chloromethane	<0.32		1.0	0.32	ug/L			06/20/17 10:06	1
2-Chlorotoluene	<0.31		1.0	0.31	ug/L			06/20/17 10:06	1
4-Chlorotoluene	<0.35		1.0	0.35	ug/L			06/20/17 10:06	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			06/20/17 10:06	1
1,2-Dibromoethane	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
Dibromomethane	<0.27		1.0	0.27	ug/L			06/20/17 10:06	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			06/20/17 10:06	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			06/20/17 10:06	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			06/20/17 10:06	1
Dichlorodifluoromethane	<0.67		2.0	0.67	ug/L			06/20/17 10:06	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			06/20/17 10:06	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			06/20/17 10:06	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			06/20/17 10:06	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			06/20/17 10:06	1
1,3-Dichloropropane	<0.36		1.0	0.36	ug/L			06/20/17 10:06	1
2,2-Dichloropropane	<0.44		1.0	0.44	ug/L			06/20/17 10:06	1
1,1-Dichloropropene	<0.30		1.0	0.30	ug/L			06/20/17 10:06	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			06/20/17 10:06	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			06/20/17 10:06	1
Isopropyl ether	<0.28		1.0	0.28	ug/L			06/20/17 10:06	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			06/20/17 10:06	1
Hexachlorobutadiene	<0.45		1.0	0.45	ug/L			06/20/17 10:06	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
p-Isopropyltoluene	<0.36		1.0	0.36	ug/L			06/20/17 10:06	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			06/20/17 10:06	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
Naphthalene	<0.34		1.0	0.34	ug/L			06/20/17 10:06	1
N-Propylbenzene	<0.41		1.0	0.41	ug/L			06/20/17 10:06	1
Styrene	<0.39		1.0	0.39	ug/L			06/20/17 10:06	1
1,1,1,2-Tetrachloroethane	<0.46		1.0	0.46	ug/L			06/20/17 10:06	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			06/20/17 10:06	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			06/20/17 10:06	1
Toluene	<0.15		0.50	0.15	ug/L			06/20/17 10:06	1

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

Lab Sample ID: MB 500-390086/7
Matrix: Water
Analysis Batch: 390086

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

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			06/20/17 10:06	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			06/20/17 10:06	1
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			06/20/17 10:06	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			06/20/17 10:06	1
Trichloroethene	<0.16		0.50	0.16	ug/L			06/20/17 10:06	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			06/20/17 10:06	1
1,2,3-Trichloropropane	<0.41		1.0	0.41	ug/L			06/20/17 10:06	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			06/20/17 10:06	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			06/20/17 10:06	1
Vinyl chloride	<0.20		0.50	0.20	ug/L			06/20/17 10:06	1
Xylenes, Total	<0.22		1.0	0.22	ug/L			06/20/17 10:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 126*		*06/20/17 10:06*	*1*
Toluene-d8 (Surr)	*103*		*75 - 120*		*06/20/17 10:06*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*06/20/17 10:06*	*1*
Dibromofluoromethane	*89*		*75 - 120*		*06/20/17 10:06*	*1*

Lab Sample ID: LCS 500-390086/5
Matrix: Water
Analysis Batch: 390086

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	47.9		ug/L		96	70 - 120
Bromobenzene	50.0	50.1		ug/L		100	70 - 122
Bromochloromethane	50.0	43.2		ug/L		86	65 - 122
Bromodichloromethane	50.0	43.7		ug/L		87	69 - 120
Bromoform	50.0	41.7		ug/L		83	56 - 132
Bromomethane	50.0	42.1		ug/L		84	40 - 130
n-Butylbenzene	50.0	54.3		ug/L		109	68 - 125
sec-Butylbenzene	50.0	53.9		ug/L		108	70 - 123
tert-Butylbenzene	50.0	53.1		ug/L		106	70 - 121
Carbon tetrachloride	50.0	46.0		ug/L		92	65 - 122
Chlorobenzene	50.0	49.4		ug/L		99	70 - 120
Dibromochloromethane	50.0	44.9		ug/L		90	68 - 125
Chloroethane	50.0	44.8		ug/L		90	45 - 127
Chloroform	50.0	44.0		ug/L		88	70 - 120
Chloromethane	50.0	46.6		ug/L		93	54 - 147
2-Chlorotoluene	50.0	51.3		ug/L		103	70 - 125
4-Chlorotoluene	50.0	51.1		ug/L		102	68 - 124
1,2-Dibromo-3-Chloropropane	50.0	43.0		ug/L		86	56 - 123
1,2-Dibromoethane	50.0	44.4		ug/L		89	70 - 125
Dibromomethane	50.0	42.2		ug/L		84	70 - 120
1,2-Dichlorobenzene	50.0	48.8		ug/L		98	70 - 125
1,3-Dichlorobenzene	50.0	50.2		ug/L		100	70 - 125
1,4-Dichlorobenzene	50.0	49.2		ug/L		98	70 - 120
Dichlorodifluoromethane	50.0	60.4		ug/L		121	40 - 150
1,1-Dichloroethane	50.0	45.6		ug/L		91	70 - 125

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

Lab Sample ID: LCS 500-390086/5
Matrix: Water
Analysis Batch: 390086

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	42.3		ug/L		85	68 - 127
1,1-Dichloroethene	50.0	47.5		ug/L		95	67 - 122
cis-1,2-Dichloroethene	50.0	45.7		ug/L		91	70 - 125
trans-1,2-Dichloroethene	50.0	46.7		ug/L		93	70 - 125
1,2-Dichloropropane	50.0	46.9		ug/L		94	67 - 130
1,3-Dichloropropane	50.0	45.9		ug/L		92	62 - 136
2,2-Dichloropropane	50.0	45.4		ug/L		91	58 - 129
1,1-Dichloropropene	50.0	49.5		ug/L		99	70 - 121
cis-1,3-Dichloropropene	50.0	49.4		ug/L		99	64 - 127
trans-1,3-Dichloropropene	50.0	45.5		ug/L		91	62 - 128
Ethylbenzene	50.0	50.5		ug/L		101	70 - 120
Hexachlorobutadiene	50.0	50.0		ug/L		100	51 - 150
Isopropylbenzene	50.0	53.5		ug/L		107	70 - 126
p-Isopropyltoluene	50.0	53.9		ug/L		108	70 - 125
Methylene Chloride	50.0	45.3		ug/L		91	69 - 125
Methyl tert-butyl ether	50.0	38.7		ug/L		77	70 - 120
Naphthalene	50.0	37.9		ug/L		76	59 - 130
N-Propylbenzene	50.0	53.5		ug/L		107	69 - 127
Styrene	50.0	46.6		ug/L		93	70 - 120
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	50.0	44.0		ug/L		88	67 - 127
Tetrachloroethene	50.0	54.7		ug/L		109	70 - 128
Toluene	50.0	52.5		ug/L		105	70 - 125
1,2,3-Trichlorobenzene	50.0	36.4		ug/L		73	55 - 140
1,2,4-Trichlorobenzene	50.0	43.2		ug/L		86	66 - 127
1,1,1-Trichloroethane	50.0	46.8		ug/L		94	70 - 125
1,1,2-Trichloroethane	50.0	43.1		ug/L		86	70 - 122
Trichloroethene	50.0	46.6		ug/L		93	70 - 125
Trichlorofluoromethane	50.0	46.1		ug/L		92	70 - 126
1,2,3-Trichloropropane	50.0	42.8		ug/L		86	50 - 133
1,2,4-Trimethylbenzene	50.0	51.7		ug/L		103	70 - 123
1,3,5-Trimethylbenzene	50.0	52.6		ug/L		105	70 - 123
Vinyl chloride	50.0	51.8		ug/L		104	64 - 126
Xylenes, Total	100	95.3		ug/L		95	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*84*		*75 - 126*
Toluene-d8 (Surr)	*108*		*75 - 120*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*
Dibromofluoromethane	*89*		*75 - 120*

Lab Chronicle

Client: Cedar Corporation
Project/Site: Perry's Corners

TestAmerica Job ID: 500-129412-1

Client Sample ID: Witkowski
Date Collected: 06/07/17 11:00
Date Received: 06/09/17 10:15

Lab Sample ID: 500-129412-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	390086	06/20/17 13:10	PMF	TAL CHI

Client Sample ID: Trip Blank
Date Collected: 06/07/17 00:00
Date Received: 06/09/17 10:15

Lab Sample ID: 500-129412-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	389748	06/16/17 14:05	EMA	TAL CHI

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

Accreditation/Certification Summary

Client: Cedar Corporation
Project/Site: Perry's Corners

TestAmerica Job ID: 500-129412-1

Laboratory: 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	08-31-17

TestAmerica

THE LEADER IN ENVIRONMENT

2417 Bond Street, University Park, Il
Phone: 708.534.5200 Fax: 708

500-129412 COC

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

Chain of Custody Record

Lab Job #: 500-129412

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler: 5.5

Client: CedarCorp

Client Project #:

Project Name: Perry's Corners

Project Location/State: Hannibal, WI

Lab Project #:

Sampler: KAL

Lab PM: Sandie F.

Preservative:

Parameter: VOC's

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOC's	Comments
1		Witkowski	6/7/17	1100	3	W	X	
2		Trip Blank			1		↓	

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

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
Kursten Lee [signature]	CedarCorp	6/8/17	1130	[signature]	TA	6-9-17	1015

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:

Lab Comments:

Login Sample Receipt Checklist

Client: Cedar Corporation

Job Number: 500-129412-1

Login Number: 129412
List Number: 1
Creator: James, Jeff A

List Source: 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	5.5
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	