

February 25, 2020
File No. 25211343.92

Mr. Jeff Ackerman
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

Subject: Groundwater Monitoring Report and Request to Submit for Closure
Reporting Period December 2018 – January 2020
Platteville Cleaners, 250 W. Main Street, Platteville, WI
BRRTS No. 02-22-550753

Dear Mr. Ackerman:

Please find enclosed a Remediation Site Operation, Maintenance, Monitoring & Optimization Form for the Platteville Cleaners project. This update covers the reporting period December 12, 2018, through January 20, 2020. During this reporting period SCS Engineers (SCS) continued post-remediation groundwater monitoring for natural attenuation. Based on the post-remediation groundwater monitoring results, we are requesting permission to submit for case closure.

Remediation work was performed in late 2017 and included in-situ chemical oxidation (ISCO) of chlorinated volatile organic compounds (CVOCs) in the soil underlying the dry cleaner building. Detailed information regarding the ISCO treatment and initial post-remediation groundwater monitoring results are included in our July 10, 2018 Summary of Soil Remediation and Quarterly Groundwater Monitoring letter.

To date, one round of pre-injection and seven rounds of quarterly post-remediation groundwater monitoring have been performed. The sample results indicate that CVOC concentrations initially increased following the soil treatment, with the most significant increases observed in wells nearest the treatment area.

The increasing groundwater concentrations likely resulted from flushing of CVOCs from the source area soil during the ISCO treatment. The most recent groundwater monitoring performed in October 2019 and January 2020 indicates that the CVOC concentrations for wells nearest the treatment area are decreasing. The groundwater laboratory analytical reports and tabulated analytical results for the sampling were previously submitted to the Wisconsin Department of Natural Resources (WDNR) and affected property owners.

It is anticipated that the groundwater CVOC concentrations will continue to decrease over time as observed prior to the soil treatment. Based on these findings, we request permission to submit NR 726 case closure documentation for closure of the Platteville Cleaners case.



Mr. Jeff Ackerman
February 25, 2020
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Please contact Robert Langdon at (608) 216-7329 if you have any questions concerning this letter.

Sincerely,



Meghan Blodgett, PG
Hydrogeologist
SCS Engineers



Robert Langdon
Senior Project Manager
SCS Engineers

REL/AJR/MDB

cc: Tim Koeller, Platteville Cleaners

Encl. Remediation Site Operation, Maintenance, Monitoring & Optimization Form and Attachments

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GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM: Completion of this form is required under s. NR 724.13(3), Wis. Adm. Code. A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Failure to submit this form as required is a violation of s. NR 724.13(3), Wis. Adm. Code, and is subject to the penalties in s. 292.99, Wis. Stats. This form must be submitted every six months for soil or groundwater remediation projects that report operation and maintenance progress in accordance with s. NR 724.13(3), Wis. Adm. Code.

Note: Long-term monitoring results submitted in accordance with s. NR 724.17(3), Wis. Adm. Code are required to be submitted within 10 business days of receiving sampling results and are not required to be submitted using this form. However, portions of this form require monitoring data summary information that may be based on information previously submitted in accordance with s. NR 724.17(3), Wis. Adm. Code.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if this form is required to be submitted at sites responded to under the Federal Comprehensive Environmental Response and Compensation Act (commonly known as Superfund) or an equivalent State lead Superfund response.

Note: Responsible parties should check with the State Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and obtain prior written approval for any omissions or changes.

Submittal of this form is not a substitute for reporting required by Department programs such as Waste Water or Air Management. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by the Bureau for Remediation and Redevelopment.

Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.). Unless otherwise noted, all citations refer to Wisconsin Administrative Code.

Note: There is a separate semi-annual report required under s. NR 700.11(1), Wis. Adm. Code. Reporting under that provision is through an internet-based form:

<http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf>

Section GI - General Site Information

A. General Information

1. Site name

Platteville Cleaners

2. Reporting period from:	12/12/2018	To:	01/20/2020	Days in period:	404
3. Regulatory agency (enter DNR, DATCP and/or other)		4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific) DNR 02-22-550753			

5. Site location

Region	County	Address					
South Central Region	Grant	250 West Main Street					
Municipality name	<input checked="" type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village	Township	Range	<input type="radio"/> E	Section	<input type="radio"/> NW	<input type="radio"/> SW
Platteville		03 N	1	<input checked="" type="radio"/> W	15		

6. Responsible party

Name	7. Consultant
Tim Koeller	<input type="checkbox"/> Select if the following information has changed since the last submittal
Mailing address	Company name
250 West Main Street, Platteville, WI 53818	SCS Engineers
Phone number	Mailing address
(608) 348-2222	2830 Dairy Drive, Madison, WI 53718
	Phone number
	(608) 224-2830

8. Contaminants

Chlorinated volatile organic compounds

9. Soil types (USCS or USDA)

Predominantly CL, CH, and ML.

10. Hydraulic conductivity(cm/sec):	11. Average linear velocity of groundwater (ft/yr)
1.3x10-3 (sandstone bedrock)	91

12. If soil is treated ex situ, is the treatment location off site? Yes No

If yes, give location: Region	County						
Municipality name	<input type="radio"/> City <input type="radio"/> Town <input type="radio"/> Village	Township	Range	<input type="radio"/> E	Section	<input type="radio"/> NW	<input type="radio"/> SW
		N		<input type="radio"/> W			

B. Remediation Method

Only submit sections that apply to an individual site. Check all that apply:

- Groundwater extraction (submit a completed Section GW-1).
- Free product recovery (submit a completed Section GW-1).
- In situ air sparging (submit a completed Section GW-2).
- Groundwater natural attenuation (submit a completed Section GW-3).
- Other groundwater remediation method (submit a completed Section GW-4).
- Soil venting (including soil vapor extraction building venting and bioventing submit a completed Section IS-1).
- Soil natural attenuation (submit a completed Section IS-2).
- Other in situ soil remediation method (submit a completed Section IS-3).
- Biopiles (submit a completed Section ES-1).
- Landspreading/thinspreading of petroleum contaminated soil (submit a completed Section ES-2).
- Other ex situ remediation method (submit a completed Section ES-3).
- Site is a landfill (submit a completed Section LF-1).

C. General Effectiveness Evaluation for All Active Systems

If the remediation is active (not natural attenuation), complete this subsection.

1. Is the system operating at design rates and specifications? Yes No

If the answer is no, explain whether or not modifications are necessary to achieve the goal that was previously established in design.

2. Are modifications to the system warranted to improve effectiveness Yes No

If yes, explain:

3. Is natural attenuation an effective low cost option at this time? Yes No

4. Is closure sampling warranted at this time? Yes No

5. Are there any modifications that can be made to the remediation to improve cost effectiveness? Yes No

If yes, explain:

D. Economic and Cost Data to Date

1. Total investigation cost: \$130,506.53

2. Implementation costs (design, capital and installation costs, excluding investigation costs): \$60,008.49

3. Total costs during the previous reporting period: \$19,931.49

4. Total costs during this reporting period: \$23,866.00

5. Total anticipated costs for the next reporting period: \$11,000.00

6. Are any unusual or one-time costs listed in the reporting periods covered by D.3., D.4. or D.5. above? Yes No

If yes, explain:

7. If closure is anticipated within 12 months, estimated costs for project closeout: \$30,000.00

Site name: Platteville Cleaners
Reporting period from: 12/12/2018 To: 01/20/2020
Days in period: 404

Remediation Site Operation, Maintenance, Monitoring & Optimization Report

Form 4400-194 (R 11/14)

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E. Name(s), Signature(s) and Date of Person(s) Submitting Form

Legibly print name, date and sign. Only persons qualified to submit reports under ch. NR 712 Wis. Adm. Code are to sign this form for sites with any ongoing active remediation, monitoring or an investigation. Other persons may sign this form for sites with no response activities during the six month reporting period.

Registered Professional Engineers:

I hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the rules of Professional Conduct in ch. A-E 8, Wis. Adm. Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Signature	Date

Hydrogeologists:

I hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Meghan Blodgett 	Hydrogeologist Date 2/25/2020

Scientists:

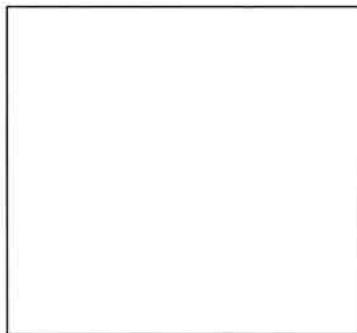
I hereby certify that I am a scientist as that term is defined in s. NR 712.03(3), Wis. Adm. Code, and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

Print name	Title
Signature	Date

Other Persons:

Print name	Title
Signature	Date

Professional Seal(s), if applicable:



Site name: Platteville Cleaners
Reporting period from: 12/12/2018 To: 01/20/2020
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Remediation Site Operation, Maintenance, Monitoring & Optimization Report

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Section GW-3, Natural Attenuation (Passive Bioremediation) In Groundwater

A. Effectiveness Evaluation

1. If free product is not present, determine the single contaminant that requires the greatest percent reduction to achieve ch. NR 140 ES and PAL. Perform this calculation for all contaminants that were present at the site that have ch. NR 140 standards. Use the highest contaminant concentration measured in any sampling points during reporting period. If free product is present, write "FREE PRODUCT" in A.1.a

a. Contaminant: Tetrachloroethylene (PCE)

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: 99.99375 %

c. Maximum contaminant concentration level in any monitoring well of that contaminant: 8,000 µg/L

2. Aquifer parameters:

a. Hydraulic conductivity: 1X10-3 cm/sec
b. Groundwater average linear velocity: 91 ft/yr

3. Is there a downgradient monitoring well that meets ch. NR 140 standards? Yes No

4. Based on water chemistry results, is the plume: Expanding Stabalized Contracting ?

5. If the answer in 4. (above) is "expanding," is natural attenuation still the best option? Yes No

If yes, explain:

6. Biodegradation parameters:

a. Upgradient (or other site specific background) DO level: 7,770 µg/L
b. DO levels in the part of the plume that is most heavily contaminated 4,390 µg/L

7. Is site closure a viable option within 12 months from the date of this form? Yes No

8. Are there any modifications that can improve cost effectiveness? Yes No

If yes, explain:

9. Have groundwater table fluctuations changed the contaminant level trends over time? Yes No

If yes, explain:

10. Has the direction of groundwater flow changed during the reporting period? Yes No

If yes, approximate change in degrees:

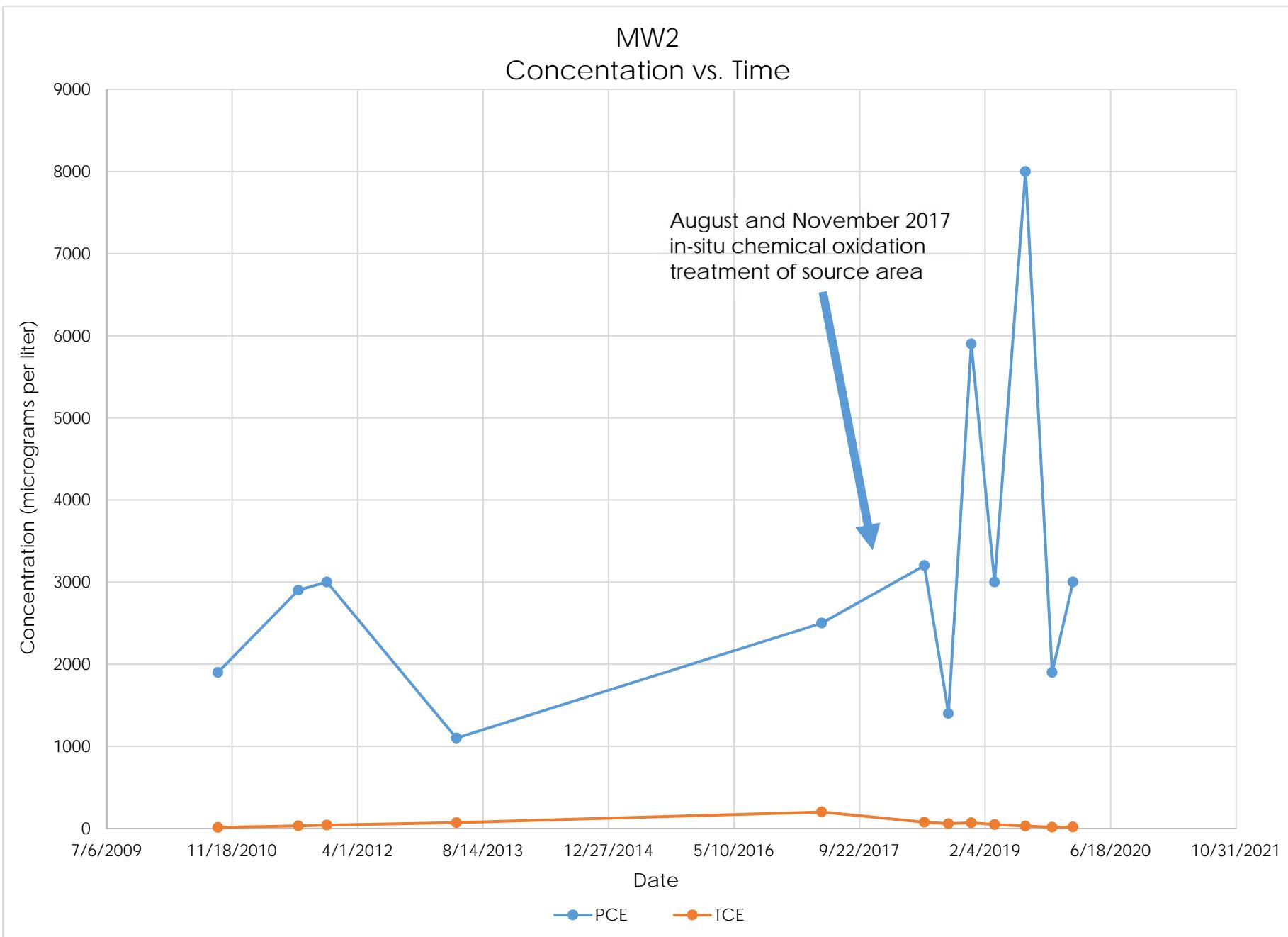
B. Additional Attachments

Attach the following:

- Groundwater contour map.
- Groundwater contaminant distribution map (may be combined with contour map).
- When contaminants are aerobically biodegradable, attach a dissolved oxygen in groundwater map (dissolved oxygen may be combined with the contaminant data on a single map).
- Graph of contaminant concentrations versus time for the contaminant listed in A.1.a. (above) for the monitoring point with the greatest level of contamination.

Note: This is the minimum required graph; however, it is recommended that multiple time versus contamination concentration graphs as described in the instructions on page 24 for Natural Attenuation of Groundwater be submitted.

- Graph of contaminant concentrations versus distance.
- Groundwater contaminant chemistry table.
- Groundwater biological parameters.
- Groundwater elevations table.



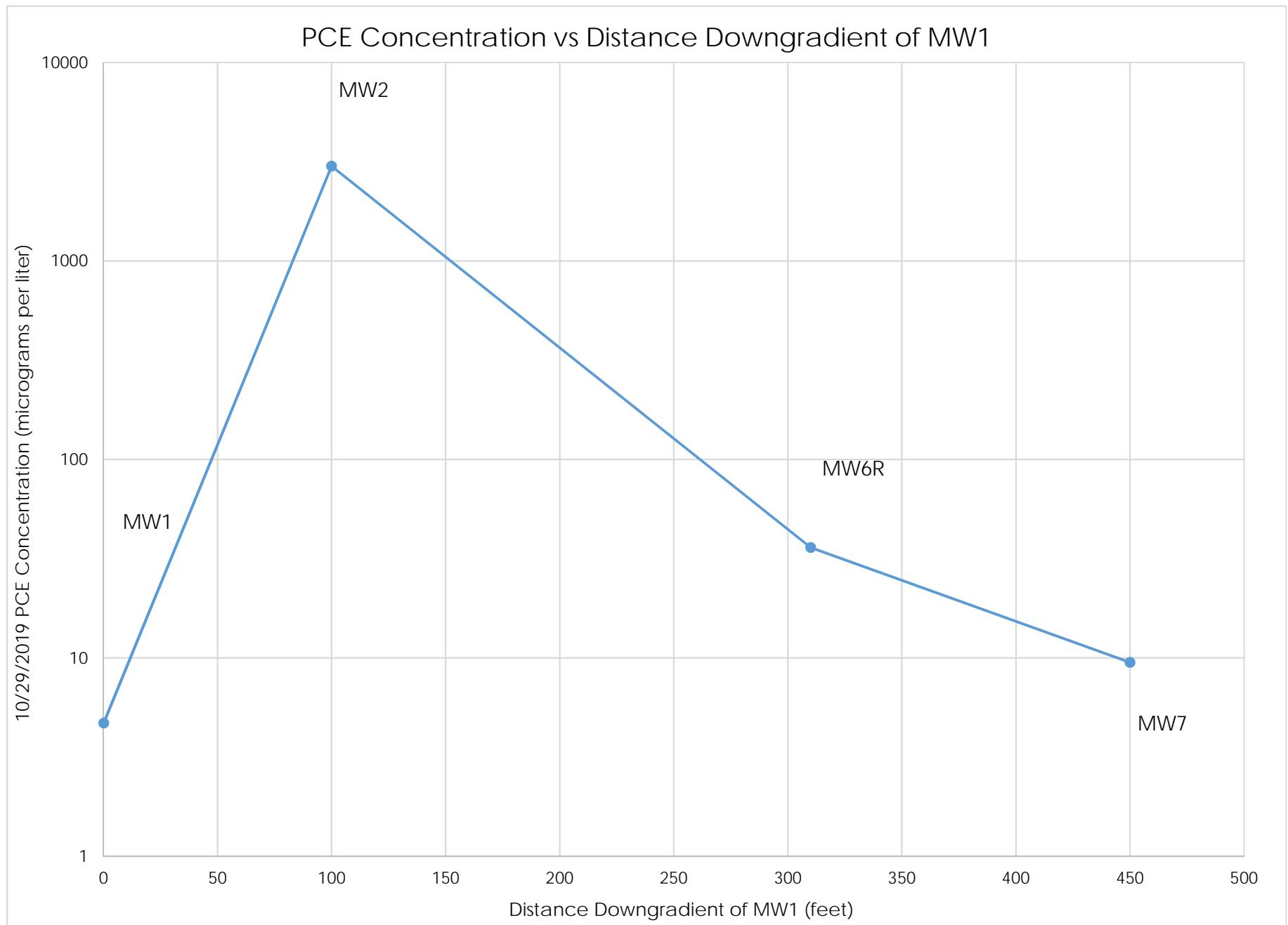


Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92
 (Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Toluene	Xylenes	MTBE	PCE	TCE	VC	cis-1,2-DCE	trans-1,2-DCE	Other VOCs
MW1	3/31/2009	--	<0.20	<0.50	<0.50	0.84 J	<u>49</u>	<0.20	<0.20	<0.50	<0.50	ND
	6/30/2009	(1)	<0.20	<0.50	<0.50	<0.50	<u>64</u>	<0.20	<0.20	<0.50	<0.50	ND
	5/17/2010	--	<2.00	<4.00	<6.00	<5.00	<u>42.5</u>	<3.00	<2.00	<4.00	<5.00	ND
	9/23/2010	--	<0.20	<0.50	<0.50	<0.50	<u>15</u>	<0.20	<0.20	<0.50	<0.50	ND
	8/9/2011	--	<0.20	<0.50	<0.50	0.53 J3	<u>26</u>	<0.20	<0.20	<0.50	<0.50	Chloromethane 0.45 J3
	12/1/2011	--	<0.20	<0.50	<0.50	0.51 J3	<u>13</u>	<0.20	<0.20	<0.50	<0.50	ND
	4/30/2013	--	<10	<10	<30	<10	<u>410</u> D	<10	<10	<10	<10	ND
	4/24/2017	(3)	<0.15	<0.15	<0.22	<0.39	<u>35</u>	<0.16	<0.20	<0.41	<0.35	ND
	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	<u>58</u>	<0.16	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	<u>510</u>	0.22 J3	<0.20	<0.41	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	<u>16</u>	<0.20	<0.18	<0.21	<0.23	ND
	7/15/2019	(9)	<0.15	<0.15	<0.22	<0.39	<u>12</u>	<0.16	<0.20	<0.41	<0.35	ND
	10/29/2019	--	<0.15	<0.15	<0.22	<0.39	<u>4.7</u>	<0.16	<0.20	<0.41	<0.35	ND
	1/20/2020	--	<0.15	<0.15	<0.22	<0.39	<u>4.3</u>	<0.16	<0.20	<0.41	<0.35	Naphthalene 0.74 J3, B n-Butylbenzene 0.54 J3, B
MW2	3/31/2009	--	<0.20	<0.50	<0.50	<0.50	<u>1,700</u>	<u>170</u>	<0.20	<u>6.4</u>	<0.50	ND
	6/30/2009	(1)	<6.4	<16	<16	<16	<u>3,200</u>	<u>73</u>	<6.4	<16	<16	ND
	5/17/2010	--	<20.0	<40.0	<60.0	<50.0	<u>2,360</u>	<40.0	<20.0	<40.0	<50.0	ND
	9/23/2010	--	<5.0	<13	<13	<13	<u>1,900</u>	<u>12</u> J	<5.0	<13	<13	Naphthalene 8.8 J
	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	<u>2,900</u>	<u>30</u>	<0.20	<u>6.0</u>	<0.50	ND
	12/1/2011	--	<8.0	<20	<20	<20	<u>3,000</u>	<u>40</u> J3	<8.0	<20	<20	ND
	4/30/2013	--	<25	<25	<75	<25	<u>1,100</u> D	<u>70</u> D	<25	<25	<25	ND
	4/24/2017	(2)(3)	<1.5	<1.5	<2.2	<3.9	<u>2,500</u>	<u>200</u>	<2.0	<u>18</u>	<3.5	ND
	6/7/2018	(4)	<1.5	<1.5	<2.2	<3.9	<u>3,200</u>	<u>75</u>	<2.0	<u>15</u>	<3.5	ND
	9/11/2018	(6)	<0.73	<0.76	<1.1	<2.0	<u>1,400</u>	<u>57</u>	<1.0	<u>5.6</u>	<1.7	ND
	12/11/2018	(8)	<2.0	<1.7	<5.8	<1.7	<u>5,900</u>	<u>68</u>	<1.8	<u>11</u>	<2.3	ND

Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92
(Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Toluene	Xylenes	MTBE	PCE	TCE	VC	cis-1,2-DCE	trans-1,2-DCE	Other VOCs
MW2 (cont.)	3/14/2019	--	<0.73	1.0 ^{J3, B}	<1.1	<2.0	<u>3,000</u>	<u>46</u>	<1.0	5.4	<1.7	ND
	3/14/2019 (DUP)	--	<0.73	1.2 ^{J3, B}	<1.1	<2.0	<u>3,300</u>	<u>49</u>	<1.0	5.6	<1.7	ND
	7/15/2019	--	<1.5	<1.5	<2.2	<3.9	<u>8,000</u>	<u>28</u>	<2.0	<u>10</u>	<3.5	Chloroform 4.1 J3
	7/15/2019 (DUP)	(13)	<1.5	<1.5	<2.2	<3.9	<u>7,600</u>	<u>24</u>	<2.0	<4.1	<3.5	ND
	10/29/2019	--	<0.73	<0.76	<1.1	<2.0	<u>1,900</u>	<u>14</u>	<1.0	4.6 J3	<1.7	ND
	10/29/2019 (DUP)	--	<0.73	<0.76	<1.1	<2.0	<u>1,900</u>	<u>13</u>	<1.0	5.1	<1.7	ND
	1/20/2020	--	<0.73	<0.76	<1.1	<2.0	<u>3,000</u>	<u>17</u>	<1.0	6.9	<1.7	ND
	1/20/2020 (DUP)	--	<0.73	<0.76	<1.1	<2.0	<u>2,900</u>	<u>18</u>	<1.0	6.8	<1.7	ND
MW3	3/31/2009	--	<0.20	<0.50	<0.50	0.50 J	<u>2,700</u>	<u>11</u> J	<0.20	2.9	<0.50	ND
	6/30/2009	--	<10	<25	<25	<25	<u>2,700</u>	<u>10</u> J	<10	<25	<25	ND
	5/17/2010	--	<20.0	<40.0	<60.0	<50.0	<u>2,700</u>	<40.0	<20.0	<40.0	<50.0	ND
	9/23/2010	--	<5.0	<13	<13	<13	<u>1,800</u>	<u>5.3</u> J	<5.0	<13	<13	ND
	8/9/2011	--	<3.2	<8.0	<8.0	<8.0	<u>1,600</u>	<u>4.6</u> J3	<3.2	<8.0	<8.0	ND
	12/1/2011	--	<4.0	<10	<10	<10	<u>1,300</u>	<4.0	<4.0	<10	<10	ND
	4/30/2013	--	<10	<10	<30	<10	<u>660</u> D	<10	<10	<10	<10	ND
	4/24/2017 (2)(3)	<2.9	<3.0	<4.4	<7.9		<u>4,700</u>	<u>14</u>	<4.1	<u>13</u> J	<7.0	ND
	6/7/2018 (4)	<0.73	<0.76	<1.1	<2.0		<u>2,700</u>	<u>7.8</u>	<1.0	5.6	<1.7	ND
	9/11/2018 (6)	<1.5	<1.5	<2.2	<3.9		<u>2,700</u>	<1.6	<2.0	5.8 J3	<3.5	ND
	12/11/2018 (8)	<5.0	<4.3	<15	<4.3		<u>5,000</u>	<u>9.4</u> J3	<4.5	<5.3	<5.8	ND
	3/14/2019	--	<0.73	1.1 ^{J3, B}	<1.1	<2.0	<u>4,500</u>	<u>8.7</u>	<1.0	5.9	<1.7	ND
	7/15/2019	--	<1.5	<1.5	<2.2	<3.9	<u>5,800</u>	<u>10</u>	<2.0	5.4 J	<3.5	ND
	10/29/2019	--	<0.73	<0.76	<1.1	<2.0	<u>2,200</u>	<u>3.8</u>	<1.0	3.0 J3	<1.7	ND
	1/20/2020	--	<0.73	<0.76	<1.1	<2.0	<u>2,300</u>	<u>2.9</u>	<1.0	<2.0	<1.7	ND

Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92
(Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Toluene	Xylenes	MTBE	PCE	TCE	VC	cis-1,2-DCE	trans-1,2-DCE	Other VOCs
MW4	5/17/2010	--	<0.20	0.47 J2	<0.60	<0.50	<u>0.74</u> J2	<0.40	<0.20	<0.40	<0.50	Ethylbenzene 0.28 J2
	9/23/2010	--	<0.20	<0.50	<0.50	<0.50	48	0.31 J	<0.20	<0.50	<0.50	ND
	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	<u>2.3</u>	<0.20	<0.20	<0.50	<0.50	ND
	12/1/2011	--	<0.20	<0.50	<0.50	<0.50	14	<0.20	<0.20	<0.50	<0.50	ND
	4/30/2013	--	<0.50	<0.50	<1.50	<0.50	11	<0.50	<0.50	<0.50	<0.50	n-Hexane 0.65
	4/24/2017	(3)	<0.15	<0.15	<0.22	<0.39	<u>1.2</u>	<0.16	<0.20	<0.41	<0.35	ND
	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	<u>3.7</u>	<0.16	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	<u>2.5</u>	<0.16	<0.20	<0.41	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	19	0.38 J3	<0.18	<0.21	<0.23	ND
	7/15/2019	(12)	7.8	1.8	0.34 J3	<0.39	7.6	<0.16	<0.20	<0.41	<0.35	ND
	10/30/2019	--	<0.15	<0.15	<0.22	<0.39	7.0	<0.16	<0.20	<0.41	<0.35	1,2,4-TMB 0.66 J3,B 1,3,5-TMB 0.59 J3,B
	1/20/2020	--	<0.15	<0.15	<0.22	<0.39	9.2	<0.16	<0.20	<0.41	<0.35	ND
MW4P	5/17/2010	--	<0.20	<0.40	<0.60	0.61 J2	<0.30	<0.40	<0.20	<0.40	<0.50	ND
	9/23/2010	--	<0.20	<0.50	<0.50	0.57 J	<0.50	<0.20	<0.20	<0.50	<0.50	Chloroform 0.29 J
	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	Chloromethane 0.46 J3
	12/1/2011	--	<0.20	<0.50	<0.50	<0.50	<u>1.2</u> J3	<0.20	<0.20	<0.50	<0.50	ND
	4/30/2013	--	<0.50	<0.50	<1.50	<0.50	<u>0.57</u>	<0.50	<0.50	<0.50	<0.50	ND
	4/24/2017	--	<0.15	<0.15	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	ND
	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	<u>4.4</u>	<0.16	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	<u>0.59</u> J3	<0.16	<0.20	<0.41	<0.35	Chloroform 1.2 J3
	12/11/2018	(8)	0.30 J3	<0.17	<0.58	<0.17	<0.14	<0.20	<0.18	<0.21	<0.23	ND
	7/15/2019	(13)	<0.15	<0.15	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	ND
	10/30/2019	--	<0.15	<0.15	<0.22	<0.39	0.48	<0.16	<0.20	<0.41	<0.35	1,2,4-TMB 0.64 J3,B 1,3,5-TMB 0.58 J3,B
	1/21/2020	--	<0.15	<0.15	<0.22	<0.39	1.8	<0.16	<0.20	<0.41	<0.35	ND
MW5	5/17/2010	--	<0.20	<0.40	<0.60	<0.50	<0.30	<0.40	<0.20	<0.40	<0.50	ND
	9/23/2010	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	12/1/2011	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	4/30/2013	--	<0.50	<0.50	<1.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	ND

Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92
(Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Toluene	Xylenes	MTBE	PCE	TCE	VC	cis-1,2-DCE	trans-1,2-DCE	Other VOCs
MW5R	4/24/2017	(3)	<0.15	<0.15	<0.22	<0.39	7.9	1.6	<0.20	1.2	<0.35	ND
	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	28	5.8	<0.20	2.0	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	27	11	<0.20	4.6	<0.35	ND
	9/11/2018 (Dup)	(6)	<0.15	<0.15	<0.22	<0.39	30	12	<0.20	5.4	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	3.9	<0.20	<0.18	<0.21	<0.23	ND
	3/14/2019	--	<0.15	0.23 J3, B	<0.22	<0.39	0.87 J3	<0.16	<0.20	<0.41	<0.35	Methylene Chloride 2.3 J3
	7/15/2019	--	<0.15	<0.15	<0.22	<0.39	3.8	0.48 J3	<0.20	<0.41	<0.35	ND
	10/30/2019	--	<0.15	<0.15	<0.22	<0.39	1.3	<0.16	<0.20	<0.41	<0.35	1,2,4-TMB 0.66 J3,B 1,3,5-TMB 0.59 J3,B
	1/20/2020	--	<0.15	<0.15	<0.22	<0.39	7.1	<0.16	<0.20	<0.41	<0.35	ND
MW6	5/17/2010	--	<2.00	<4.00	<6.00	<5.00	55	<4.00	<2.00	<4.00	<5.00	ND
	9/23/2010	--	<0.20	<0.50	<0.50	<0.50	59	0.41 J	<0.20	<0.50	<0.50	ND
	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	110	0.81 J3	<0.20	<0.50	<0.50	ND
	12/1/2011	--	<0.20	<0.50	<0.50	<0.50	93	0.80 J3	<0.20	<0.50	<0.50	ND
	4/30/2013	--	<2.5	<2.5	<7.5	<2.5	92 D	<2.5	<2.5	<2.5	<2.5	ND
MW6R	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	33	0.36 J3	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	28	0.30 J3	<0.20	<0.41	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	25	<0.20	<0.18	<0.21	<0.23	ND
	3/14/2019	--	<0.15	0.2 J3, B	<0.22	<0.39	6.6	<0.16	<0.20	<0.41	<0.35	Methylene Chloride 2.4 J3
	7/15/2019	(13)	<0.15	<0.15	<0.22	<0.39	17	<0.16	<0.20	<0.41	<0.35	ND
	10/30/2019	--	<0.15	<0.15	<0.22	<0.39	16	<0.16	<0.20	<0.41	<0.35	1,2,4-TMB 0.64 J3,B 1,3,5-TMB 0.58 J3,B
	1/21/2020	--	<0.15	<0.15	<0.22	<0.39	36	0.27 J3	<0.20	<0.41	<0.35	ND
MW6P	5/17/2010	--	<2.00	<4.00	<6.00	<5.00	74.3	5.26 J2	<2.00	<4.00	<5.00	ND
	9/23/2010	--	<0.40	<1.0	<1.0	<1.0	110	6.1	<0.40	<1.0	<1.0	ND
	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	18	0.92 J3	<0.20	<0.50	<0.50	Chloromethane 0.33 J3
	12/1/2011	--	0.71 J3	<0.50	<0.50	<0.50	9.5	0.47 J3	<0.20	<0.50	<0.50	Bromoform 1.2 J3
	4/30/2013	--	<2.5	<2.5	<7.5	<2.5	200 D	12 D	<2.5	<2.5	<2.5	ND

Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92
(Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Toluene	Xylenes	MTBE	PCE	TCE	VC	cis-1,2-DCE	trans-1,2-DCE	Other VOCs
MW6PR	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	<u>40</u>	<u>1.1</u>	<0.20	<0.41	<0.35	ND
	6/7/2018 (Dup)	(4)	<0.15	0.25 J3	<0.22	<0.39	<u>41</u>	<u>1.1</u>	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	<u>17</u>	0.47 J3	<0.20	<0.41	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	<u>28</u>	<u>0.68</u> J3	<0.18	<0.21	<0.23	Bromomethane 0.41 J3
	12/11/2018 (Dup)	(8)	<0.20	<0.17	<0.58	<0.17	<u>22</u>	<0.20	<0.18	<0.21	<0.23	ND
	3/14/2019	--	<0.15	0.19 J3, B	<0.22	<0.39	<u>22</u>	<u>0.54</u>	<0.20	<0.41	<0.35	Chloroethane 0.58 J3 Methylene Chloride 2.1 J3
	7/15/2019	--	<0.15	<0.15	<0.22	<0.39	<u>33</u>	<u>0.57</u>	<0.20	<0.41	<0.35	ND
	10/30/2019	--	<0.15	<0.15	<0.22	<0.39	<u>44</u>	<u>0.55</u>	<0.20	<0.41	<0.35	1,2,4-TMB 0.64 J3,B 1,3,5-TMB 0.58 J3,B
	1/21/2020	--	<0.15	<0.15	<0.22	<0.39	<u>36</u>	0.47 J3	<0.20	<0.41	<0.35	ND
MW7	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	<u>20</u>	<0.20	<0.20	<0.50	<0.50	Chloromethane 0.37 J3
	12/1/2011	--	<0.20	<0.50	<0.50	<0.50	<u>9.1</u>	<0.20	<0.20	<0.50	<0.50	ND
	4/30/2013	--	<0.50	<0.50	<1.50	<0.50	<u>7.6</u>	<0.50	<0.50	<0.50	<0.50	ND
	4/24/2017	--	<0.15	<0.15	<0.22	<0.39	<u>12</u>	<0.16	<0.20	<0.41	<0.35	ND
	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	<u>2.6</u>	<0.16	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	0.47 J3	<0.16	<0.20	<0.41	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	<u>0.54</u> J3	<0.20	<0.18	<0.21	<0.23	ND
	3/14/2019	--	<0.15	0.23 J3, B	<0.22	<0.39	<u>1.2</u>	<0.16	<0.20	<0.41	<0.35	Methylene Chloride 2.3 J3
	7/15/2019	--	<0.15	<0.15	<0.22	<0.39	<u>1.1</u>	<0.16	<0.20	<0.41	<0.35	Naphthalene 0.35 J3, B
	10/29/2019	--	<0.15	<0.15	<0.22	<0.39	<u>9.5</u>	<0.16	<0.20	<0.41	<0.35	ND

Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92
(Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Toluene	Xylenes	MTBE	PCE	TCE	VC	cis-1,2-DCE	trans-1,2-DCE	Other VOCs
MW7P	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	<u>12</u>	0.22 J3	<0.20	<0.50	<0.50	ND
	12/1/2011	--	<u>37</u>	7.3	2.0 J3	<0.50	<u>8.2</u>	<0.20	<u>0.48</u> J3	<0.50	<0.50	Bromomethane 0.70 J3 Chloroform 0.39 J3 Ethylbenzene 1.1 J3 Isopropylbenzene 0.47 J3 p-Isopropyltoluene 0.77 J3 Naphthalene 0.95 J3 Styrene 1.2 J3 1,3,5 TMB 0.33 J3
	4/30/2013	--	<0.50	<0.50	<1.50	<0.50	<u>20</u>	<u>0.54</u>	<0.50	<0.50	<0.50	ND
	4/24/2017	(3)	<0.15	<0.15	<0.22	<0.39	<u>0.5</u> J	<0.16	<0.20	<0.41	<0.35	ND
	6/7/2018	(4)(5)	<0.15	<0.15	<0.22	<0.39	<u>11</u>	<0.16	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)(7)	<0.15	<0.15	<0.22	<0.39	<u>6.3</u>	<0.16	<0.20	<0.41	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	<u>14</u>	<0.20	<0.18	<0.21	<0.23	ND
	3/14/2019	--	<0.15	<u>0.19</u> J3, B	<0.22	<0.39	<u>5.5</u>	<0.16	<0.20	<0.41	<0.35	Methylene Chloride <u>2.3</u> J3
	7/15/2019	(10) (11)	<0.15	<0.15	<0.22	<0.39	<u>12</u>	<0.16	<0.20	<0.41	<0.35	ND
	10/29/2019	--	<0.15	<0.15	<0.22	<0.39	<u>8.0</u>	<0.16	<0.20	<0.41	<0.35	ND
Trip Blank	3/31/2009	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	6/30/2009	(1)	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	5/17/2010	--	<0.20	<0.40	<0.60	<0.50	<0.30	<0.40	<0.20	<0.40	<0.50	ND
	9/23/2010	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	8/9/2011	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	12/1/2011	--	<0.20	<0.50	<0.50	<0.50	<0.50	<0.20	<0.20	<0.50	<0.50	ND
	4/24/2017	--	<0.15	<0.15	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	Methylene Chloride <u>5.2</u> cn
	6/7/2018	(4)	<0.15	<0.15	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	ND
	9/11/2018	(6)	<0.15	<0.15	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	ND
	12/11/2018	(8)	<0.20	<0.17	<0.58	<0.17	<0.14	<0.20	<0.18	<0.21	<0.23	ND

Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92
 (Results are in µg/L)

Sample	Date	Lab Notes	Benzene	Toluene	Xylenes	MTBE	PCE	TCE	VC	cis-1,2-DCE	trans-1,2-DCE	Other VOCs
Trip Blank (cont.)	3/14/2019	--	<0.15	0.20 ^{J3, B}	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	Methylene Chloride 2.6 J3
	7/15/2019	(9)	<0.15	<0.15	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	ND
	10/29/2019	--	<0.15	<0.15	<0.22	<0.39	<0.37	<0.16	<0.20	<0.41	<0.35	ND
	1/20/2020	--	<0.15	<0.15	<0.22	<0.39	0.94 J3	<0.16	<0.20	<0.41	<0.35	ND
NR 140 Enforcement Standards (ES)		5	800	2,000	60	5	5	0.2	70	100		Bromomethane 10 Bromoform 4.4 Chloroethane 400 Chloroform 6 Chloromethane 30 Ethylbenzene 700 n-Hexane 600 Methylene Chloride 5 Naphthalene 100 Styrene 100 TMBs 480
NR 140 Preventive Action Limits (PAL)		0.5	160	400	12	0.5	0.5	0.02	7	20		Bromomethane 1 Bromoform 0.44 Chloroethane 80 Chloroform 0.6 Chloromethane 3 Ethylbenzene 140 n-Hexane 120 Methylene Chloride 0.5 Naphthalene 10 Styrene 10 TMBs 96

Table 1. Groundwater Analytical Results Summary
Platteville Cleaners / SCS Engineers Project #25211343.92

Abbreviations:

µg/L = micrograms per liter or parts per billion (ppb)
 VC = Vinyl Chloride
 -- = Not Applicable

MTBE = Methyl-tert-butyl ether
 DCE = Dichloroethene
 ND = Not Detected

PCE = Tetrachloroethene
 TMB = Trimethylbenzene
 TCE = Trichloroethene
 VOCs = Volatile Organic Compounds

Notes:

NR 140 ES - Wisconsin Administrative Code (WAC), Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standard:
 NR 140 PAL - WAC, Chapter NR 140.10 Table 1 - Public Health Groundwater Quality Standards

As of the December 2010 ch. NR 140 Wisconsin Administrative Code, eff. 1-1-11, the ESs and PALs have changed for Toluene and Xylenes. The previous standards were:

Toluene 1,000 ES/200 PAL; Xylenes 10,000 ES/1,000 PAL.

Bold values meet or exceed NR 140 enforcement standards.
Italic values meet or exceed NR 140 preventive action limits.

Laboratory Notes/Qualifiers:

B = Compound was found in the blank and the sample.

cn = Method(s) 8260B: The following sample detected Methylene Chloride above the reporting limit: Trip Blank (500-127088-9). The method blank 383264 associated with this sample did not detect Methylene Chloride. Since Methylene Chloride is a known lab contaminant and the results are just above the reporting limit; the results have been flagged with a "cn" flag to denote the probable lab contamination.

D = Data reported from a dilution.

J = Results reported between the Method Detection Limit (MDL) and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.

J2 = Estimated concentration below laboratory quantitation level.

J3 = Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit and the concentration is an approximate value

- (1) Naphthalene analysis - Analyte was detected in the associated Method Blank.
- (2) Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-3 (500-127088-6) and MW-2 (500-127088-7). Elevated reporting limits (RLs) are provided.
- (3) Method(s) 8260B: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). The pH, however, was outside the required criteria when verified by the laboratory: MW4 (500-127088-1), MW-7P (500-127088-3), MW-5R (500-127088-5), MW-3 (500-127088-6), MW-2 (500-127088-7), and MW-1 (500-127088-8). The sample was analyzed within 7 days per EPA recommendation, therefore no further corrective action was needed.
- (4) 1,2,4-Trichlorobenzene: * = LCS or LCSD is outside acceptance limits.
- (5) Naphthalene: F1 = MS and/or MSD Recovery is outside acceptance limits.
- (6) Bromomethane = LCS or LCSD is outside acceptance limits.
- (7) Bromomethane = MS and/or MSD Recovery is outside acceptance limits.
- (8) Dichlorodifluoromethane = LCS or LCSD is outside acceptance limits.
- (9) 1,2,3-Trichlorobenzene: * = LCS or LCSD is outside acceptance limits.
- (10) Naphthalene: F2 = MS/MSD RPD exceeds control limits.
- (11) 1,2,3-Trichlorobenzene: F1 = MS and/or MSD Recovery is outside acceptance limits & F2 = MS/MSD RPD exceeds control limits.
- (12) Chloroethane: * = LCS or LCSD is outside acceptance limits.
- (13) Bromoform and 1,2-Dibromo-3-Chloropropane: * = LCS or LCSD is outside acceptance limits.

Created by:	TLR	Date:	4/9/2009
Updated by:	JSN	Date:	1/29/2020
Checked by:	LMH	Date:	1/29/2020
Proj Mgr QA/QC:	REL	Date:	1/30/2020

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Table 2. Groundwater Natural Attenuation Analytical Results Summary
Platteville Cleaners / SCS Project #25211343.91

Sample	Date	Chloride (mg/l)	Nitrate+Nitrite Nitrogen (mg/l as N)	Sulfate (mg/l)	Sulfide (mg/l)	Arsenic (mg/l)	Iron (mg/l)	Manganese (mg/l)	TIC (mg/l)	TOC (mg/l)	Ethane (µg/l)	Ethene (µg/l)	Methane (µg/l)	Sodium (µg/l)
MW1	9/23/2010	250	4.8 B	170	<0.20	0.0013 J,B	0.75	0.0051	88.9	1.01	<26.0	<26.0	<26.0	NA
	6/7/2018	NA	NA	150	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	42,000
	7/15/2019	NA	NA	120	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	53,000
MW2	9/23/2010	120	2.7 B	120	<0.20	0.0013 J,B	0.64	0.18	89.5	1.79	<26.0	<26.0	<26.0	NA
	6/7/2018	NA	NA	140	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	55,000
	7/15/2019	NA	NA	330	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	88,000
	7/15/2019 (DUP)	NA	NA	300	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	88,000
MW3	9/23/2010	310	4.7 B	150	<0.20	0.0012 J,B	1.0	0.048	93.1	1.07	<26.0	<26.0	<26.0	NA
	6/7/2018	NA	NA	150	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	240,000
	7/15/2019	NA	NA	180	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	96,000
MW4	9/23/2010	640	2.6 B	180	<0.20	0.0015 J,B	1.1	0.019	119	1.55	<26.0	<26.0	<26.0	NA
	6/7/2018	NA	NA	230	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	150,000
	7/15/2019	NA	NA	190	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	130,000
MW4P	9/23/2010	270	1.0 B	190	<0.20	0.0012 J,B	0.77	0.11	102	1.04	<26.0	<26.0	<26.0	NA
	6/7/2018	NA	NA	180	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	110,000
	7/15/2019	NA	NA	7.1	NA	NA	0.12	NA	NA	NA	<1.5	<1.5	<1.0	68,000
MW5	9/23/2010	170	1.5 B	150	<0.20	0.0013 J,B	0.44 J	0.0039	86.8	<1.00	<26.0	<26.0	<26.0	NA
MW-5R	6/7/2018	NA	NA	330	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	74,000
	7/15/2019	NA	NA	110	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	75,000
MW6	9/23/2010	470	3.8 B	230	2.0	0.0014 J,B	1.0	0.014	101	1.22	<26.0	<26.0	<26.0	NA
MW6R	6/7/2018	NA	NA	280	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	200,000
	7/15/2019	NA	NA	180	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	150,000
MW6P	9/23/2010	380	1.8 B	240	1.6	0.0014 J,B	0.94	0.014	103	<1.00	<26.0	<26.0	<26.0	NA
MW6PR	6/7/2018	NA	NA	230	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	140,000
	6/7/2018 (Dup)	NA	NA	250	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	140,000
	7/15/2019	NA	NA	210	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	160,000
MW7	6/7/2018	NA	NA	120	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	110,000
	7/15/2019	NA	NA	140	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	280,000 V
MW7P	6/7/2018	NA	NA	220	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	130,000
	7/15/2019	NA	NA	370	NA	NA	<0.047	NA	NA	NA	<1.5	<1.5	<1.0	220,000

Table 2. Groundwater Natural Attenuation Analytical Results Summary
Platteville Cleaners / SCS Project #25211343.91

Abbreviations:

µg/l = micrograms per liter
mg/l = milligrams per liter

TIC = Total Inorganic Compound
TOC = Total Organic Compound

Laboratory Notes/Qualifiers

B = Analyte was detected in the associated Method Blank.

J = Results reported between the Method Detection Limit (MDL) and Limit of Quantitation (LOQ) are less certain than results at or above the LOQ.

J1 = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

V = Serial Dilution exceeds the control limits.

Created by: TLR Date: 10/20/2010
Last revision by: AJR Date: 2/20/2020
Checked by: JSN Date: 8/1/2019
Proj Mgr QA/QC: REL Date: 2/20/2020

I:\3439A\Tables-General\[Table 2_Groundwater Natural Attenuation Analytical Results Summary.xls]GW Natural Attenuation

Table 3. Groundwater Natural Attenuation Field Parameter Measurements Summary
Platteville Cleaners / SCS Project #25211343.91

Sample	Date	Dissolved Oxygen (mg/L)	Conductivity ($\mu\text{mhos}/\text{cm}$)	Temp °C	ORP (milivolts)	pH (Std. Units)
MW1	9/23/2010	10.2	1,088	14.9	-78	7.13
	6/7/2018	6.62	922	NM	147.0	6.53
	7/15/2019	7.77	NM	NM	123.2	5.79
MW2	9/23/2010	3.0	954	15.4	-66	6.89
	6/7/2018	1.71	1,141	NM	65.0	7.12
	7/15/2019	4.39	NM	NM	293.3	5.90
MW3	9/23/2010	4.2	1,409	15	-60	6.99
	6/7/2018	3.94	1,958	NM	64.7	7.38
	7/15/2019	3.89	NM	NM	199	5.88
MW4	9/23/2010	2.5	1,314	14.5	-61	7.08
	6/7/2018	5.05	2,714	NM	67.0	7.35
	7/15/2019	7.26	NM	NM	288.5	5.78
MW4P	9/23/2010	<2.0	1,075	14.1	-22	7.21
	6/7/2018	3.35	1,575	NM	59.4	7.54
	7/15/2019	3.98	NM	NM	284.4	5.60
MW5	9/23/2010	7.0	756	16.5	-11	7.09
MW5R	6/7/2018	2.80	1,706	NM	55.5	7.34
	7/15/2019	4.92	NM	NM	274.7	6.03
MW6	9/23/2010	3.0	1,482	15.4	-10	7.02
MW6R	6/7/2018	4.34	2,248	NM	48.0	7.34
	7/15/2019	7.27	NM	NM	227.4	5.84
MW6P	9/23/2010	11.5	1,158	14.7	-50	6.92
MW6PR	6/7/2018	2.76	2,170	NM	40.9	7.35
	7/15/2019	6.47	NM	NM	233	6.01
MW7	6/7/2018	4.80	1,539	NM	49.1	7.57
	7/15/2019	6.29	NM	NM	202.4	6.06
MW7P	6/7/2018	3.75	1,735	NM	48.9	7.63
	7/15/2019	4.82	NM	NM	236	5.93

Table 3. Groundwater Natural Attenuation Field Parameter Measurements Summary
Platteville Cleaners / SCS Project #25211343.91

Abbreviations:

mg/L = milligrams per liter

µmhos/cm = micromhos per centimeter

NM = Not Measured

Note:

All results from field measurements.

Created by: TJK

Date: 9/24/2010

Last revision by: AJR

Date: 7/30/2019

Checked by: JSN

Date: 8/1/2019

Proj Mgr QA/QC: REL

Date: 2/20/2020

I:\3439A\Tables-General\[Table 3_Groundwater Natural Attenuation Field Parameter Measurements Summary.xls]GW Natural Attenuation

Table 4. Water Level Summary
Platteville Cleaners / SCS Project #25211343.91

Depth to Water in feet below top of well casing																	
Raw Data	MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW4P	MW6P	MW7P	Heer MW5	Heer MW6	Heer PZ2	MW5R	MW6R	MW6PR	
Measurement Date																	
3/31/2009 *	39.49	35.58	37.95	NM	NM	NM	--	--	--								
June 30, 2009	38.94	35.27	37.61	NM	35.47	35.37	NM	--	--	--							
February 4, 2010	38.50	34.58	36.99	NM	34.86	NM	--	--	--	--							
April 20, 2010 *	NM	NM	NM	38.25	39.51	37.06	NM	39.62	37.45	NM	NM	NM	--	--	--	--	
May 17, 2010	36.90	33.05	35.71	37.66	36.94	36.17	NM	38.8	36.74	NM	33.2	36.11	33.31	--	--	--	
September 23, 2010	34.12	29.64	32.12	33.18	32.43	31.59	NM	34.7	32.55	NM	30.47	30.09	32.61	--	--	--	
July 10, 2011	NM	NM	NM	38.26	37.64	37.15	NM	NM	NM	NM	NM	NM	--	--	--	--	
July 13, 2011	NM	NM	NM	NM	NM	NM	33.69	NM	NM	34.16	NM	NM	--	--	--	--	
August 9, 2011	38.32	34.37	36.43	38.40	37.63	37.25	33.56	39.80	37.71	34.01	34.88	34.42	37.18	--	--	--	
December 1, 2011	40.61	36.63	38.58	40.35	39.91	39.48	35.73	41.95	39.87	36.15	37.26	36.75	39.34	--	--	--	
April 30, 2013	43.81	40.04	42.74	44.70	42.50	42.68	38.81	45.07	42.90	39.10	NM	NM	NM	--	--	--	
April 24, 2017	40.38	36.86	38.87	40.39	DS	DS	35.79	42.87	DS	36.09	AB	AB	39.85	--	--	--	
June 7, 2018	44.00	40.75	42.75	43.89	DS	DS	38.70	44.95	DS	39.00	AB	AB	42.80	42.50	42.95		
September 11, 2018	41.16	37.45	40.31	41.76	DS	DS	36.62	42.95	DS	37.03	AB	AB	40.79	40.50	40.95		
December 11, 2018	36.10	32.00	34.37	35.63	DS	DS	30.96	37.21	DS	31.42	AB	AB	35.10	34.30	35.22		
March 14, 2019	NM	33.00	35.40	NM	DS	DS	32.20	NM	DS	29.85	AB	AB	36.10	30.29	36.00		
July 15, 2019	33.45	29.41	31.57	32.90	DS	DS	28.35	34.57	DS	28.54	AB	AB	32.45	31.30	32.65		
October 29 - 30, 2019	29.97	25.29	27.80	28.91	DS	DS	24.54	30.92	DS	25.26	AB	AB	28.58	27.39	28.96		
January 20, 2020	34.64	29.77	32.20	33.37	DS	DS	(1)	34.76	DS	(1)	AB	AB	32.44	31.44	32.69		
Ground Water Elevation in feet above mean sea level (amsl)																	
Well Number	MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW4P	MW6P	MW7P	Heer MW5	Heer MW6	Heer PZ2	MW5R	MW6R	MW6PR	
Top of Casing Elevation (feet amsl)	998.20	991.55	993.01	992.58	990.40	989.73	985.63	992.61	989.65	985.76	1,002.51	1,000.83	1,000.81	989.95	989.63	989.75	
Screen Length (ft)	15.00	15.00	15.00	15.00	15.00	15.00	15.00	5.00	5.00	5.00	--	--	--	15.00	15.00	5.00	
Total Depth (ft from top of casing)	49.50	49.40	49.40	51.50	50.25	55.50	47.00	82.00	85.70	80.00	--	47.91	--	50.80	56.15	86.40	
Top of Well Screen Elevation (ft)	963.70	957.15	958.61	956.08	955.15	949.23	953.63	915.61	908.95	910.76	--	--	--	954.15	948.48	908.35	
Measurement Date																	
3/31/2009 *	958.71	955.97	955.06	NM	NM	NM	--	--	--								
June 30, 2009	959.26	956.28	955.40	NM	967.04	965.46	NM	--	--	--							
February 4, 2010	959.70	956.97	956.02	NM	965.97	NM	--	--	--	--							
April 20, 2010 *	NM	NM	NM	954.33	950.89	952.67	NM	952.99	952.20	NM	NM	NM	--	--	--	--	
May 17, 2010	961.30	958.50	957.30	954.92	953.46	953.56	NM	953.81	952.91	NM	969.31	964.72	967.50	--	--	--	
September 23, 2010	964.08	961.91	960.89	959.40	957.97	958.14	NM	957.91	957.10	NM	972.04	970.74	968.20	--	--	--	
July 10, 2011	NM	NM	NM	954.32	952.76	952.58	NM	NM	NM	NM	NM	NM	NM	--	--	--	
July 13, 2011	NM	NM	NM	NM	NM	NM	951.94	NM	NM	951.60	NM	NM	--	--	--	--	
August 9, 2011	959.88	957.18	956.58	954.18	952.77	952.48	952.07	952.81	951.94	951.75	967.63	966.41	963.63	--	--	--	
December 1, 2011	957.59	954.92	954.43	952.23	950.49	950.25	949.90	950.66	949.78	949.61	965.25	964.08	961.47	--	--	--	
April 30, 2013	954.39	951.51	950.27	947.88	947.90	947.05	946.82	947.54	946.75	946.66	NM	NM	NM	--	--	--	
April 24, 2017	957.82	954.69	954.14	952.19	DS	DS	949.84	949.74	DS	949.67	AB	AB	AB	950.10	--	--	
June 7, 2018	954.20	950.80	950.26	948.69	DS	DS	946.93	947.66	DS	946.76	AB	AB	AB	947.15	947.13	946.80	
September 11, 2018	957.04	954.10	952.70	950.82	DS	DS	949.01	949.66	DS	948.73	AB	AB	AB	949.16	949.13	948.80	
December 11, 2018	962.10	959.55	958.64	956.95	DS	DS	954.67	955.40	DS	954.34	AB	AB	AB	954.85	955.33	954.53	
March 14, 2019	NM	958.55	957.61	NM	DS	DS	953.43	NM	DS	955.91	AB	AB	AB	953.85	959.34	953.75	
July 15, 2019	964.75	962.14	961.44	959.68	DS	DS	957.28	958.04	DS	957.22	AB	AB	AB	957.50	958.33	957.10	
October 29 - 30, 2019	968.23	966.26	965.21	963.67	DS	DS	961.09	961.69	DS	960.50	AB	AB	AB	961.37	962.24	960.79	
January 20, 2020	963.56	961.78	960.81	959.21	DS	DS	(1)	957.85	DS	(1)	AB	AB	AB	957.51	958.19	957.06	
Bottom of Well Elevation (ft)	948.70	942.15	943.61	941.08	940.15	934.23	938.63	910.61	903.95	905.76	--	--	--	939.15	933.48	903.35	

