



February 16, 2021

Greg Moll, Hydrogeologist
Wisconsin Department of Natural Resources
2300 N. Dr. Martin Luther King Jr. Drive
Milwaukee, WI 53212

Re: Remedial Status Update Supplemental to the Semi-Annual Remediation Site Operation, Maintenance, Monitoring and Optimization Report Former One Hour Martinizing 13405 Watertown Plank Road, Elm Grove, Wisconsin BRRTS# 02-68-552102

Dear Mr. Moll:

EnviroForensics, LLC (EnviroForensics) is providing this letter report supplemental to the enclosed Remediation Site Operation, Maintenance, Monitoring and Optimization Report required by WDNR (Form 4400-194 with attachments). The purpose of this report is to present additional data regarding the effect that site remedial actions have had on the extent and magnitude of soil and groundwater impacts due to the release of chlorinated solvents, and to request WDNR approval to discontinue further operation of the existing soil vapor extraction (SVE) system. We are requesting a technical review to facilitate communications regarding future site use, and options for site closure. A separate review fee will be sent via mail to your program assistant. Tables and figures referenced in this document are attached to the Form 4400-194.

Background

The property is located within the downtown area of the Village of Elm Grove. The shallow water table occurs at approximately 15-16 feet below ground surface at the site. The upper 15 feet of soil consists of an interbedded mix of clay, silt, sand, and gravel. Fine to medium grained sand and gravel dominate the remaining unconsolidated soil assemblage below 15 feet to bedrock, which is encountered at approximately 52 feet beneath the site. Commercial and residential properties obtain potable water through private wells terminated in the 50-100 feet of surficial sand and gravel overlying dolomite bedrock or from the dolomite bedrock itself.

The source of release is determined to be leakage from former dry cleaning machines and transport of chlorinated solvent contaminants along and through a leaky sanitary lateral down to the water table. Much of the impacts have occurred to localized groundwater; however, there are unsaturated soil impacts immediately below the building that are causing a vapor intrusion risk and there is a small area of unsaturated soil impacts outside the building near the site potable well that appears to be the result of surface spillage. This outside area encroaches a highly active railroad line that sees heavy freight and passenger railroad traffic throughout the day. As such, mechanical removal of these impacts is impossible due to these traffic hazards. The site private well, which terminates at the surface of the

bedrock and is screened within the surficial sand and gravel, has been sampled numerous times since 2014, and has not suffered impacts.

Effectiveness of Groundwater Remediation Efforts

Groundwater has been monitored quarterly since groundwater remedial injections were performed in June of 2018 to stimulate reductive de-halogenation of the chlorinated solvents. Concentrations of chlorinated volatile organic compounds (CVOCs) in monitoring wells within and close to the source area can be seen in **Table 1**. Iso-concentration lines for the most prevalent compound (cis 1,2-dichloroethene) are shown on **Figures 1** and **2**. Form 4400-194 indicates that the concentration of the contaminant requiring the greatest reduction to reach the preventative action limit be contoured, which would currently be vinyl chloride. However, this would be a single spot at each of three (3) well locations. That is why we chose to contour the most prevalent contaminant. Charts of concentration trends for monitoring wells MW-5, MW-6, and MW-7 have also been included with Form 4400-194.

As can be seen from this data, during the six (6) months following injections, the concentrations of the parent compound tetrachloroethene (PCE) have decreased dramatically, and the concentrations of daughter product cis 1,2-dichloroethene have increased indicating a positive trend towards de-halogenation. The concentrations of PCE and trichloroethene (TCE) in source area well MW-7 have increased slightly since high water table levels occurred in June of 2019 likely due to dissolution of these contaminants existing within the capillary fringe (refer to water table elevation data in **Table 2**). The steady or increasing methane concentrations, negative oxidation/reduction potential values, and low oxygen concentrations seen in **Table 3** indicate that the subsurface continues to maintain reducing conditions suitable for continued de-halogenation. Increases in ethane and ethene concentrations indicate that the processes of complete de-halogenation to these harmless end products is underway.

Effectiveness of Soil Vapor Extraction Efforts

EnviroForensics has operated a soil vapor extraction (SVE) system at the Site since November of 2018 (refer to *Remedial Action Implementation Report*, dated January 8, 2019). The SVE system was put in place primarily in an attempt to remediate the unsaturated soil near the railroad tracks, soil beneath the building to lower the risk of vapor intrusion, and soil near the water table smear zone to prevent re-contamination of the water table following groundwater remedial efforts. Due to low yields and high cost of operation and maintenance, the SVE system was shut down in mid-July of 2020 after one and one-half years of operation. Operational data for the SVE system is provided in **Table 4**.

Soil samples were collected in October of 2020 to determine residual concentrations of chlorinated solvents and have shown mixed results. These confirmation soil borings are identified with an "R" designation. As can be seen in **Table 5** and on **Figure 3** of Form 4400-194, concentrations within shallow unsaturated soil near the railroad right-of-way at B-15/B-15R have not shown a decrease in concentration. In other areas such as at B-16/B-16R and B-24/B-24R, concentrations in soil near the water table have decreased significantly. However, at the location of B-27R, concentrations in soil at a depth of 12 feet were higher than those detected during the site investigation. B-27R was located nearer to the sanitary sewer line than original boring B-27, which may explain the difference in concentrations. It

is known that migration of impacts along the backfill of this line, or a leak in the line itself, is the cause of soil and groundwater impacts in the area of MW-7, B-24/B-24R, and B-27R.

Soil gas and sub-slab vapor samples were also collected as part of this recent assessment at the locations seen on **Figure 3**. As seen in the soil gas results of **Table 6** and the sub-slab vapor results of **Table 7**, concentrations of CVOCs in the vapor phase have decreased in many areas. However, the concentration of PCE in vapor beneath the site building remains above the vapor risk screening level (VRSL) for small commercial structures. The concentrations of PCE have decreased at the location of SS-2, but remain above the VRSL at SS-3. Although concentrations of PCE remain above the VRSL at SS-3, PCE was not detected in indoor air (refer to **Table 8**), indicating that the vapor intrusion pathway is not complete.

Future Site Use and Daylighting of Underwood Creek

The Village of Elm Grove is planning to daylight Underwood Creek which is currently contained in a concrete lined channel adjacent to the west property boundary. Their plans for this renovation include purchase of the site property, demolition of the site building, and relocating the creek to encroach the site along the west property boundary. Information regarding the daylighting of Underwood Creek can be obtained by visiting the Village of Elm Grove website at the following link: [Underwood Creek Downtown Daylighting Project | Elm Grove, WI - Official Website](#). During recent communications with Village representatives, their intent is to begin the daylighting process during the upcoming summer of 2021. When this takes place, a new creek channel will be cut and the excavated soil will need to be tested and possibly managed as special contaminated waste.

During future site development activities, it will be necessary to isolate contaminated soil at the location along the east property boundary near B-15/B-15R to prevent direct contact exposure. This may be accomplished by limited soil removal and replacement with clean soil or by placing fencing to limit access to pedestrians. Protection of groundwater may be accomplished by incorporating a bentonite blanket within the footprint of the demolished building, if required. Future site development engineering plans should include these features, or as otherwise directed by the WDNR. The vapor intrusion risk will be eliminated because the building will be demolished and no new enclosed structures constructed.

Recommendations

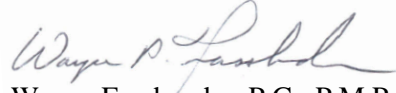
1. The current site building is used as a drop-off location for clothes dry cleaned elsewhere. There are no chlorinated solvent cleaning solutions currently in use and the most recent indoor air results did not detect CVOCs within the building. We recommend sampling indoor air every six months, or until the existing building is unoccupied and demolished, to ensure that the vapor intrusion pathway remains incomplete;
2. The SVE system should be decommissioned due to limited affect in remediating unsaturated soil along and within the railroad corridor and beneath the site building, and the high cost of continued operation;

3. No further active groundwater remedial efforts are recommended due to source area reductions, the stability of the groundwater plume, and data which shows that residual contaminant concentrations in groundwater will naturally attenuate and continue to decrease due to biological activity. The current plans to daylight Underwood Creek involve routing it across the far southwest corner of the property where the groundwater is not currently contaminated. However, changes in the hydraulic gradient are likely to occur which could cause movement of the existing groundwater plume. We recommend holding off on additional and costly groundwater monitoring until future development plans have been reviewed and approved by the WDNR; and
4. The Village of Elm Grove is planning to daylight Underwood Creek beginning in 2021, and their plans include removal of some contaminated soil and demolition of the existing building. With the exception of the isolated, shallow soil impacts at B-15/B-15R, there are no residual CVOC concentrations in soil above direct contact RCLs within 4 feet of the current ground surface. The redevelopment plan should include appropriate management of contaminated soil to ensure the direct-contact risk is minimized.

Please respond regarding our recommendations. If you have questions regarding the content of this report or recommendations, please feel free to contact me at 414-982-3988 or wfassbender@enviroforensics.com.

Sincerely,

EnviroForensics LLC

A handwritten signature in black ink that reads "Wayne P. Fassbender".

Wayne Fassbender, P.G., P.M.P.

Senior Project Manager

Enclosure: Remediation Site Operation, Maintenance, Monitoring and Optimization Report (Form 4400-194 with attachments)

GENERAL INSTRUCTIONS, PURPOSE AND APPLICABILITY OF THIS FORM:

Completion of the applicable portions of this form is required under Wis. Admin. Code § NR 724.13(3). Failure to submit this form as required is a violation of that rule section and is subject to the penalties in Wis. Stats. § 292.99. This form must be submitted every six months for remediation projects that report operation and maintenance progress, in accordance with Wis. Admin. Code §. NR 724.13(3). A narrative report or letter containing the equivalent information required in this form may be submitted in lieu of the actual form. Submittal of this form is not a substitute for reporting required by department programs such as Waste Water or Air Management.

Notes:

1. Long-term monitoring results submitted in accordance with Wis. Admin. Code § NR 724.17(3) 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 that section of code.
2. Responsible parties should check with the department 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 response.
3. Responsible parties should check with the department Project Manager assigned to the site to determine if any of the information required in this form may be omitted or changed and should obtain prior written approval for any omissions or changes.
4. Responsible parties are required to report separately on a semi-annual basis under Wis. Admin. Code § NR 700.11(1). Reporting under that provision is through an internet-based form. More information can be found at: <http://dnr.wi.gov/topic/Brownfields/documents/regs/NR700progreport.pdf>.
5. Personally identifiable information on this form is not intended to be used for any other purpose than tracking progress of the remediation by Remediation and Redevelopment Program. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Public Records Law (Wis. Stats. §§ 19.31–19.39).

Section GI - General Site Information

A. General Information

1. Site name

One Hour Martinizing - Elm Grove

2. Reporting period from: 07/01/2020 To: 12/31/2020 Days in period: 184

3. Regulatory agency (enter DNR, DATCP and/or other)
 DNR

4. BRRTS ID No. (2 digit program-2 digit county-6 digit site specific)
 02-68-552102

5. Site location

Region	County	Address				
Southeast Region	Waukesha	13405 Watertown Plank Road				
Municipality name	<input type="radio"/> City <input type="radio"/> Town <input checked="" type="radio"/> Village		Township	Range	<input type="radio"/> E <input checked="" type="radio"/> W	Section <input type="radio"/> NW <input type="radio"/> NE
Elm Grove			07 N	20	25	

6. Responsible party		7. Consultant	
Name	Brian Cass	<input type="checkbox"/> Select if the following information has changed since the last submittal	
Mailing address	W229 N2494 County Road F, Waukesha, WI 53186	Company name	
Phone number	(262) 521-9710	EnviroForensics, LLC	
		Mailing address	Phone number
		N16W23390 Stoneridge Drive, Suite G	(262) 290-4001

8. Contaminants
 Chlorinated Volatile Organic Compounds (tetrachloroethene, trichloroethene, dichloroethene, and vinyl chloride)

9. Soil types (USCS or USDA)
 Interbedded clay, silt, sand, and gravel in upper 15 feet (unsaturated); medium-grained sand and gravel (saturated)

10. Hydraulic conductivity(cm/sec): 0.002 by slug testing	11. Average linear velocity of groundwater (ft/yr) 1.0
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12. If soil is treated ex situ, is the treatment location off site?

Yes No

If yes, give location: Region

County

Municipality name City Town Village

Township

Range

E

Section

¼

¼ ¼

B. Remediation Method

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

- 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).
- Biopiles (submit a completed Section ES-1).
- Other in situ soil remediation method (submit a completed Section IS-3).
- Soil natural attenuation (submit a completed Section IS-2).
- Soil venting (including soil vapor extraction building venting and bioventing submit a completed Section IS-1).
- Other groundwater remediation method (submit a completed Section GW-4).
- Groundwater natural attenuation (submit a completed Section GW-3).
- In situ air sparging (submit a completed Section GW-2).
- Free product recovery (submit a completed Section GW-1).
- Groundwater extraction (submit a completed Section GW-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. Heavy rain and high soil moisture content occasionally caused overheating of wiring system due to increased stress on blower. We have experienced diminished yields of recovered contaminant mass, even after intermittent system operation. It is not cost effective to continue operating the system and the system was shut down permanently on July 17, 2020.

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:

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D. Economic and Cost Data to Date


- 1. Total investigation cost: \$416,960.00
- 2. Implementation costs (design, capital and installation costs, excluding investigation costs): \$282,900.00
- 3. Total costs during the previous reporting period: \$38,771.00
- 4. Total costs during this reporting period: \$34,653.00
- 5. Total anticipated costs for the next reporting period: \$10,000.00
- 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:
\$9,500 during this period for soil sample and repeat vapor sample collection to determine the concentrations of residual CVOC contaminants.
- 7. If closure is anticipated within 12 months, estimated costs for project closeout: \$41,000.00

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.

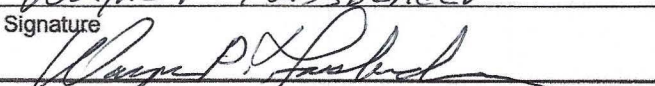
Registered Professional Engineers:

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	<u>Robert S. Fedorick</u>	Title	<u>Senior Engineer</u>
Signature		Date	<u>2/16/2021</u>

Hydrogeologists:

I hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03(1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 2, Wis. Adm. Code, or licensed in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the best of my knowledge, all of the 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	<u>Wayne P. Fassbender</u>	Title	<u>Senior Project Manager</u>
Signature		Date	<u>2/16/2021</u>

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	

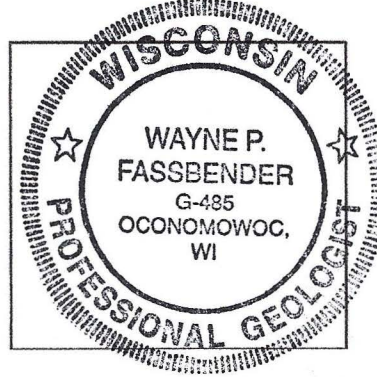
Other Persons:

Print name		Title	
Signature		Date	

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Professional Seal(s), if applicable:



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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: vinyl chloride

b. Percent reduction necessary to reach ch. NR 140 ES and PAL: 99.7 %

c. Maximum contaminant concentration level in any monitoring well of that contaminant: 6.3 µg/L

2. Aquifer parameters:

a. Hydraulic conductivity: 0.002 cm/sec

b. Groundwater average linear velocity: 1 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?
If yes, explain: Yes No

6. Biodegradation parameters:

a. Upgradient (or other site specific background) DO level: 160 µg/L

b. DO levels in the part of the plume that is most heavily contaminated 90 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?
If yes, explain: Yes No

9. Have groundwater table fluctuations changed the contaminant level trends over time?
If yes, explain: Yes No

10. Has the direction of groundwater flow changed during the reporting period?
If yes, approximate change in degrees: Yes No

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.

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Section GW-4, Other Groundwater Remediation Methods

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: Vinyl chloride

b. Percent reduction necessary: 99.7 %

c. Maximum contaminant concentration level in any monitoring well: 6.3 µg/L

2. Is the size of the plume: Increasing Stabalized Decreasing ?

3. Describe the method used to remediate groundwater at the site:

A groundwater reducing agent along with an electron donor and specific microbes capable of degrading chlorinated solvents were injected into the groundwater on a grid system over the area of groundwater impacts in June of 2018.

4. List any additional information required by the DNR for this method for this site:

An injection permit request was submitted to the DNR in April of 2018 and approved on May 24, 2018. In addition, a Remedial Action Implementation Report, dated January 8, 2019 was submitted to the DNR to satisfy reporting requirements in Wisconsin Administrative Code, Chapter NR 724.

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.
- Groundwater contaminant chemistry table.
- Groundwater elevations table.
- Any other attachments required by the DNR for this remediation method.

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Section IS-1, Soil Venting (Including Soil Vapor Extraction, Building Venting and Bioventing)

A. Soil Venting Operation

Note: This form is not required for building vapor mitigation systems that are installed proactively to protect building occupants/users and are not considered part of ongoing active soil remediation.

1. Number of air extraction wells available and number of wells actually in use during the period: _____ 3
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain):
10.7 full days operated intermittently for 32 days.
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain:
5.6%. System operated intermittently for 32 days of the 184-day reporting period. The system was shut down prior to repeat vapor and soil sampling. It was not restarted due to high cost of operating and diminished CVOC yields.
4. Average depth to groundwater: _____ 14 _____ gpm

B. Building Basement/Subslab Venting System Operation

1. Number of venting points available and number of points actually in use during the period: _____
2. Number of days of operation (only list the number of days the system actually operated, if unknown explain): _____
3. System utilization in percent (days of operation divided by reporting time period multiplied by 100). If < 80%, explain: _____

C. Effectiveness Evaluation

1. Average contaminant removal rate for the entire system: _____ 0.028 _____ pounds per day
2. Average contaminant removal rate per well or venting point: _____ 0.009 _____ pounds per day
3. If the average contaminant removal rate is less than one pound per day for the entire system, or if the average contaminant removal rate per well is less than one tenth of a pound per day, evaluate the following:
 - a. If contaminants are aerobically biodegradable and confirmation borings have not been drilled in the past year:
 - i. Oxygen levels in extracted air: _____ percent
 - ii. Methane levels in extracted air (ppmv) If over 10 ppmv, explain: _____
 - iii. If methane is not present above 10 ppmv and if oxygen is greater than 20 percent in extracted air, you should either:
 - o Drill confirmation borings during the next reporting period, if the entire site should be considered for closure.
 - o Or, perform an in situ respirometry test in a zone of high contamination. Do not perform the test in an air extraction well, use a gas probe or water table well. If a zero order rate of decay based on oxygen depletion is less than 2 mg/kg per day, then you should drill confirmation borings, if the entire site should be considered for closure. If the rate of decay is between 2 and 10 mg/kg, operate for one more reporting period before evaluating further. If the zero order rate of decay is greater than 10 mg/kg total hydrocarbons, continue operating the system in a manner than maximizes aerobic biodegradation.
 - b. If contaminants are not aerobically biodegradable and confirmation borings have not been recently drilled during the past year, you should drill confirmation borings during the next reporting period if the entire site should be considered for closure.
 - c. If soil borings were drilled during the past year and soil contamination remains above acceptable levels, explain if the system effectiveness can be increased and/or if other options need to be considered to achieve cleanup criteria.

D. Additional Attachments

Attach the following to this form:

- Well and soil sample location map indicating all air extraction wells. If forced air injection wells are also in use, identify those wells.
- If water table monitoring wells are present at the site, a map of well locations.
- Time versus vapor phase contaminant concentration graph.
- Time versus cumulative contaminant removal graph.
- Groundwater elevations table, if water table wells are present at the site; also list screen lengths and elevations.
- Table of soil contaminant chemistry data.
- Soil gas data, if gas probes are used to monitor subsurface conditions in locations other than where air is extracted.
- System operational data table.

TABLE 1
MONITORING WELL SAMPLE ANALYTICAL RESULTS

One Hour Martinizing
Elm Grove, Wisconsin

Sample Location	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Naphthalene	1,1-Dichloroethene	1,2,4-Trimethylbenzene
Enforcement Standard		5	5	70	100	0.2	5	100	7	480
Preventive Action Limit		0.5	0.5	7	20	0.02	0.5	10	0.7	96
MW-1	11/19/2009	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	9/16/2010	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	4/28/2011	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	9/7/2011	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.41	< 0.89	<0.57	< 0.97
	12/21/2011	< 0.50	< 0.20	1.1	< 0.50	< 0.20	< 0.20	0.45	<0.50	0.48 J
	2/24/2012	< 0.50	< 0.20	0.95 J	< 0.50	< 0.20	< 0.20	<0.25	<0.50	< 0.25
	10/24/2012	1.1	< 0.19	1.4	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	4/24/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	7/2/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	10/16/2013	<0.33	<0.33	1.3	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	12/6/2013	<0.33	<0.33	1.42	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	2/28/2014	<0.33	<0.33	1.08 J	<0.35	0.18	<0.24	<1.7	<0.4	<2.2
	5/8/2014	<0.33	<0.33	0.95 J	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	6/18/2015	<0.74	<0.54	<0.45	<0.54	<0.17	NA	NA	NA	NA
	5/25/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	11/15/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	3/20/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
	8/1/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
4/3/2018	<0.38	<0.3	0.41 J	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8	
6/4/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.22	<2.1	<0.36	<0.8	
8/6/2020	<0.33	<0.47	<0.39	<0.37	<0.2	NA	NA	NA	NA	
MW-2	11/19/2009	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	9/16/2010	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	4/28/2011	1.2	< 0.48	< 0.83	< 0.89	< 0.18	1.2	< 0.25	<0.57	< 0.20
	9/7/2011	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	2.1	< 0.89	<0.57	< 0.97
	12/21/2011	< 0.50	< 0.20	< 0.50	< 0.50	< 0.20	0.58 J	< 0.25	<0.50	0.29 J
	2/24/2012	< 0.50	< 0.20	< 0.50	< 0.50	< 0.20	< 0.20	< 0.25	<0.50	< 0.25
	10/24/2012	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	4/24/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	7/2/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	10/16/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	12/6/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	5/8/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	6/17/2015	<0.74	<0.54	<0.45	<0.54	<0.17	NA	NA	NA	NA
	6/4/2019	0.53 J	<0.3	<0.37	<0.34	<0.2	<0.22	<2.1	<0.36	<0.8
8/6/2020	0.34 J	<0.47	<0.39	<0.37	<0.2	NA	NA	NA	NA	
MW-3	11/19/2009	< 0.45	< 0.48	1.3	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	9/16/2010	< 0.45	< 0.48	2.5	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	4/28/2011	< 0.45	< 0.48	0.96 J	< 0.89	< 0.18	< 0.24	< 0.25	<0.57	< 0.20
	9/7/2011	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.41	< 0.89	<0.57	< 0.97
	12/21/2011	< 0.50	< 0.20	0.73 J	< 0.50	< 0.20	< 0.20	< 0.25	<0.50	0.26 J
	2/24/2012	< 0.50	< 0.20	0.58 J	< 0.50	< 0.20	< 0.20	< 0.25	<0.50	< 0.25
	10/24/2012	0.83	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	4/24/2013	< 0.17	0.31 J	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	7/2/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	<0.31	< 0.14
	10/16/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	12/6/2013	<0.33	<0.33	0.46 J	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	2/28/2014	<0.33	<0.33	0.40 J	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	5/8/2014	<0.33	<0.33	0.40 J	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	6/18/2015	<0.74	<0.54	<0.45	<0.54	<0.17	NA	NA	NA	NA
	5/25/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	11/15/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	3/20/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
	8/1/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
4/3/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8	
6/4/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.22	<2.1	<0.42	<0.8	
8/6/2020	<0.33	<0.47	<0.39	<0.37	<0.2	NA	NA	NA	NA	

TABLE 1
MONITORING WELL SAMPLE ANALYTICAL RESULTS

One Hour Martinizing
Elm Grove, Wisconsin

Sample Location	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Naphthalene	1,1-Dichloroethene	1,2,4-Trimethylbenzene
Enforcement Standard		5	5	70	100	0.2	5	100	7	480
Preventive Action Limit		0.5	0.5	7	20	0.02	0.5	10	0.7	96
MW-4	11/19/2009	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	< 0.57	< 0.20
	9/16/2010	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	< 0.57	< 0.20
	4/28/2011	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.24	< 0.25	< 0.57	< 0.20
	9/7/2011	< 0.45	< 0.48	< 0.83	< 0.89	< 0.18	< 0.41	< 0.89	< 0.57	< 0.97
	12/21/2011	< 0.50	< 0.20	< 0.50	< 0.50	< 0.20	< 0.20	< 0.25	< 0.50	0.37 J
	2/24/2012	< 0.50	< 0.20	< 0.50	< 0.50	< 0.20	< 0.20	< 0.25	< 0.50	0.28 J
	10/24/2012	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	4/24/2013	< 0.17	0.26 J	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	7/3/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	10/16/2013	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	12/6/2013	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	5/9/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	6/17/2015	< 0.74	< 0.54	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	3/18/2020	< 0.74	< 0.54	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
8/6/2020	< 0.33	< 0.47	< 0.39	< 0.37	< 0.2	NA	NA	NA	NA	
MW-5	10/24/2012	0.95 J	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	4/24/2013	31	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	7/2/2013	53	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	10/16/2013	3.6	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	12/6/2013	4.1	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	5/9/2014	12.6	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	8/5/2014	3.03	< 0.33	0.48 J	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	10/30/2014	1.3	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	3/31/2015	6.6	< 0.47	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	6/17/2015	6.3	< 0.54	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	9/4/2015	3.7	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 136	< 0.65	< 1.6
	12/3/2015	37	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	8/30/2018	108	1.68	1.08 J	< 0.34	< 0.2	< 0.22	< 2.1	< 0.42	< 0.8
	11/19/2018	0.49 J	< 0.3	205	1.23	1.77	0.48 J	< 2.1	< 0.42	< 0.8
	3/29/2019	4.7	0.38 J	147	4.2	1.06	< 0.22	< 2.1	< 0.42	< 0.8
	6/5/2019	2.58	0.80 J	193	6.1	1.03	< 0.22	< 2.1	0.54 J	< 0.8
	10/14/2019	3.1	0.59 J	168	4.3	1.02	< 0.22	< 2.1	< 0.42	< 0.8
	12/27/2019	0.94 J	< 0.3	90	2.94	< 0.2	< 0.22	< 2.1	< 0.42	< 0.8
	3/18/2020	2.1	0.63 J	131	3.6	1.43	NA	NA	NA	NA
8/5/2020	3.3	1.48 J	106	4.5	3.2	NA	NA	NA	NA	
DUP-1	3.6	1.46 J	101	3.5	2.89	NA	NA	NA	NA	
12/10/2020	5.5	1.87	142	5.1	6.3	< 0.33	< 1.1	< 0.5	< 0.3	
MW-6	10/24/2012	540	11	5.1	0.73 J	0.8	< 0.074	< 0.16	< 0.31	< 0.14
	4/25/2013	510	9.0	3.6	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	7/2/2013	510	6.8	2.3	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	10/16/2013	360	9.6 J	22.9	< 3.5	< 1.8	< 2.4	< 17	< 4	< 22
	12/6/2013	480	8.1 J	7.8 J	< 3.5	< 1.8	< 2.4	< 17	< 4	< 22
	5/8/2014	196	51	51	< 3.5	< 1.8	< 2.4	< 17	< 4	< 22
	8/5/2014	276	25.2	10.8	< 1.75	< 0.9	< 1.2	< 8.5	< 2	< 11
	10/30/2014	340	24.4	4.8 J	< 1.75	< 0.9	< 1.2	< 8.5	< 2	< 11
	3/31/2015	206	94	54	< 5.4	< 1.7	NA	NA	NA	NA
	6/17/2015	218	41	34	< 2.7	< 0.85	NA	NA	NA	NA
	9/4/2015	229	67	55	1.15 J	0.54	< 0.44	< 1.6	< 0.65	< 1.6
	12/4/2015	195	40	18.8	< 2.7	< 0.85	< 2.2	< 8	< 3.25	< 8
	8/30/2018	150	17.2	61	0.50 J	< 0.2	< 0.22	< 2.1	< 0.42	< 0.8
	11/19/2018	89	31.5	88	0.57 J	< 0.2	< 0.22	< 2.1	< 0.42	< 0.8
	3/29/2019	40	10.7	285	1.73	1.04	< 0.22	< 2.1	< 0.42	< 0.8
	6/5/2019	1.7 J	0.96 J	370	2.78	0.76 J	< 0.44	< 4.2	1.48 J	< 1.6
	10/14/2019	3.8 J	2.2 J	380	3.4 J	6.1	< 1.1	< 10.5	< 2.1	< 4
	12/27/2019	< 3.8	< 3	330	< 3.4	< 2	< 2.2	< 21	< 4.2	< 8
	3/18/2020	8.9	4.6 J	350	2.85 J	< 1	NA	NA	NA	NA
8/5/2020	< 0.33	< 0.47	860	3.2	10.2	< 0.33	< 1.1	1.37 J	< 0.3	
12/10/2020	< 3.3	< 4.7	410	4.2 J	5.2 J	< 3.3	< 11	< 5	< 3	

TABLE 1
MONITORING WELL SAMPLE ANALYTICAL RESULTS

One Hour Martinizing
Elm Grove, Wisconsin

Sample Location	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Naphthalene	1,1-Dichloroethene	1,2,4-Trimethylbenzene
Enforcement Standard		5	5	70	100	0.2	5	100	7	480
Preventive Action Limit		0.5	0.5	7	20	0.02	0.5	10	0.7	96
MW-7	4/25/2013	110	16	50	2.9	4.1	< 0.074	< 0.16	< 0.31	< 0.14
	7/2/2013	160	31	72	3.5	2.1	< 0.074	< 0.16	< 0.31	< 0.14
	10/16/2013	520	98	176	9.8 J	< 1.8	< 2.4	< 17	< 4	< 22
	12/6/2013	420	118	211	12.6	< 1.8	< 2.4	< 17	< 4	< 22
	5/8/2014	370	96	170	11.3	< 1.8	< 2.4	< 17	< 4	< 22
	8/5/2014	272	78	144	5.5 J	2.6	< 2.4	< 17	< 4	< 22
	10/30/2014	110	31.5	70	3.9 J	1.25 J	< 1.2	< 8.5	< 2	< 11
	3/31/2015	530	117	177	11.8 J	< 1.7	NA	NA	NA	NA
	6/17/2015	257	91	166	9.3	0.9	NA	NA	NA	NA
	9/4/2015	400	125	178	11 J	< 1.7	< 4.4	< 16	< 6.5	< 16
	12/4/2015	214	68	77	< 5.4	< 1.7	< 4.4	< 16	< 6.5	< 16
	5/24/2016	620	106	166	11 J	< 1.7	< 4.4	< 16	< 6.5	< 16
	11/15/2016	850	122	125	8.2 J	< 1.7	< 4.4	< 16	< 6.5	< 16
	3/20/2017	810	105	126	8.1 J	< 1.9	< 1.7	< 21.7	< 4.6	< 11.4
	8/1/2017	930	118	130	7.8 J	< 1.9	< 1.7	< 21.7	< 4.6	< 11.4
	4/3/2018	670	94	100	5.8 J	< 2	< 2.2	< 21	< 4.2	< 8
	8/30/2018	203	590	350	6.9 J	3.5 J	< 2.2	< 21	< 4.2	< 8
	11/19/2018	< 3.8	< 3	1,300	9.7 J	10	< 2.2	< 21	< 4.2	< 8
	3/29/2019	4.4 J	< 3	1,390	15.6	7.6	< 0.22	< 2.1	< 0.42	< 0.8
	6/5/2019	< 3.8	< 3	1,470	22.9	6.9	< 2.2	< 21	< 4.2	< 8
10/14/2019	27.2	5.8 J	1,110	16.6	2.6 J	< 2.2	< 21	< 4.2	< 8	
12/27/2019	12.3	6.1 J	530	10.7	< 2	< 2.2	< 21	< 4.2	< 8	
3/18/2020	102	22	790	11	< 1	NA	NA	NA	NA	
DUP-1	70	18.3	630	9.2 J	< 2	NA	NA	NA	NA	
8/5/2020	35	6.8	1,040	9.6	0.65	< 0.3	< 1.1	1.72	< 0.3	
12/10/2020	54	18.9	970	12.2	3.7	< 1.65	< 5.5	2.6 J	< 1.5	
MW-8	12/6/2013	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	2/28/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	5/8/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	8/5/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	10/31/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	3/31/2015	< 0.74	< 0.47	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	6/18/2015	< 0.74	< 0.54	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	9/4/2015	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	12/3/2015	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	5/24/2016	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	11/15/2016	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	3/20/2017	< 0.48	< 0.45	< 0.41	< 0.35	< 0.19	< 0.17	< 2.17	< 0.46	< 1.14
	8/1/2017	< 0.48	< 0.45	< 0.41	< 0.35	< 0.19	< 0.17	< 2.17	< 0.46	< 1.14
	4/3/2018	< 0.38	< 0.3	< 0.37	< 0.34	< 0.2	< 0.22	< 0.21	< 0.42	< 0.8
6/4/2019	< 0.38	< 0.3	< 0.37	< 0.34	< 0.2	< 0.22	< 2.1	< 0.42	< 0.8	
8/6/2020	< 0.33	< 0.47	< 0.39	< 0.37	< 0.2	NA	NA	NA	NA	
MW-9	12/6/2013	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	2/28/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	5/8/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	6/18/2015	< 0.74	< 0.54	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	6/4/2019	< 0.38	< 0.3	< 0.37	< 0.34	< 0.2	< 0.22	< 2.1	< 0.42	< 0.8
	8/6/2020	< 0.33	< 0.47	< 0.39	< 0.37	< 0.2	NA	NA	NA	NA
PZ-1	4/24/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	7/3/2013	< 0.17	< 0.19	< 0.12	< 0.25	< 0.10	< 0.074	< 0.16	< 0.31	< 0.14
	10/16/2013	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	12/6/2013	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	2/28/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	5/9/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	8/5/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	10/30/2014	< 0.33	< 0.33	< 0.38	< 0.35	< 0.18	< 0.24	< 1.7	< 0.4	< 2.2
	3/31/2015	< 0.74	< 0.47	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	6/17/2015	< 0.74	< 0.54	< 0.45	< 0.54	< 0.17	NA	NA	NA	NA
	9/4/2015	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	12/3/2015	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	5/24/2016	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	11/15/2016	< 0.49	< 0.47	< 0.45	< 0.54	< 0.17	< 0.44	< 1.6	< 0.65	< 1.6
	3/20/2017	< 0.48	< 0.45	< 0.41	< 0.35	< 0.19	< 0.17	< 2.17	< 0.46	< 1.14
	8/1/2017	< 0.48	< 0.45	< 0.41	< 0.35	< 0.19	< 0.17	< 2.17	< 0.46	< 1.14
	4/3/2018	< 0.38	< 0.3	< 0.37	< 0.34	< 0.2	< 0.22	< 0.21	< 0.42	< 0.8
	6/4/2019	< 0.38	< 0.3	< 0.37	< 0.34	< 0.2	< 0.22	< 2.1	< 0.42	< 0.8
8/6/2020	< 0.33	< 0.47	< 0.39	< 0.37	< 0.2	NA	NA	NA	NA	

TABLE 1
MONITORING WELL SAMPLE ANALYTICAL RESULTS

One Hour Martinizing
Elm Grove, Wisconsin

Sample Location	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Benzene	Naphthalene	1,1-Dichloroethene	1,2,4-Trimethylbenzene
Enforcement Standard		5	5	70	100	0.2	5	100	7	480
Preventive Action Limit		0.5	0.5	7	20	0.02	0.5	10	0.7	96
PZ-2	7/1/2014	0.99 J	<0.33	0.63 J	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	8/5/2014	0.91 J	<0.33	0.88 J	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	10/30/2014	<0.33	<0.33	0.85 J	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	3/31/2015	<0.74	0.63 J	1.18 J	<0.54	<0.17	NA	NA	NA	NA
	6/17/2015	<0.74	<0.54	0.78 J	<0.54	<0.17	NA	NA	NA	NA
	9/4/2015	<0.49	0.67 J	5.3	<0.54	<0.17	<0.44	<1.6	<0.65	<1.7
	12/3/2015	<0.49	0.58 J	4.7	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	5/24/2016	<0.49	<0.47	5.3	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	11/15/2016	<0.49	<0.47	7.1	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	3/20/2017	<0.48	<0.45	7.7	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
	8/1/2017	<0.48	<0.45	1.29	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
	4/3/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8
	8/30/2018	<0.38	<0.3	<0.37	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8
	11/19/2018	<0.38	<0.3	5.0	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8
	3/29/2019	<0.38	<0.3	5.5	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8
	6/4/2019	<0.38	<0.3	1.6	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8
	10/14/2019	<0.38	<0.3	3.6	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8
	12/27/2019	<0.38	<0.3	2.92	<0.34	<0.2	<0.22	<0.21	<0.42	<0.8
	3/18/2020	<0.33	<0.47	1.5	<0.37	<0.2	NA	NA	NA	NA
	8/5/2020	0.72 J	<0.47	0.44 J	<0.37	<0.2	NA	NA	NA	NA
DUP-2	0.75 J	<0.47	<0.39	<0.37	<0.2	NA	NA	NA	NA	
12/10/2020	0.64 J	<0.47	0.42 J	<0.37	<0.2	<0.33	<1.1	<0.5	<0.3	
DUP-1	0.66 J	<0.47	<0.39	<0.37	<0.2	<0.33	<1.1	<0.5	<0.3	
Potable Well (Bailer)	4/24/2013	0.59 J	0.88	<0.12	<0.25	<0.10	<0.074	<0.16	<0.31	<0.14
Potable Well (Spigot)	4/24/2013	0.81 J	1.8	<0.12	<0.25	<0.10	<0.074	<0.16	<0.31	<0.14
	7/3/2013	<0.17	<0.19	<0.12	<0.25	<0.10	<0.074	<0.16	<0.31	<0.14
	10/16/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	12/6/2013	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	2/28/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	5/9/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	8/5/2014	<0.33	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	10/31/2014	0.81 J	<0.33	<0.38	<0.35	<0.18	<0.24	<1.7	<0.4	<2.2
	6/17/2015	<0.74	<0.54	<0.45	<0.54	<0.17	NA	NA	NA	NA
	9/4/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	12/4/2015	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.7
	5/24/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	11/15/2016	<0.49	<0.47	<0.45	<0.54	<0.17	<0.44	<1.6	<0.65	<1.6
	3/20/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
	8/1/2017	<0.48	<0.45	<0.41	<0.35	<0.19	<0.17	<2.17	<0.46	<1.14
	6/4/2019	<0.38	<0.3	<0.37	<0.34	<0.2	<0.22	<2.1	<0.42	<0.8
	8/5/2020	<0.33	<0.47	<0.39	<0.37	<0.2	NA	NA	NA	NA

Notes:

All concentrations reported in units of micrograms per liter (µg/l)

Samples analyzed using EPA SW-846 Method 8260

Only detected compounds are listed

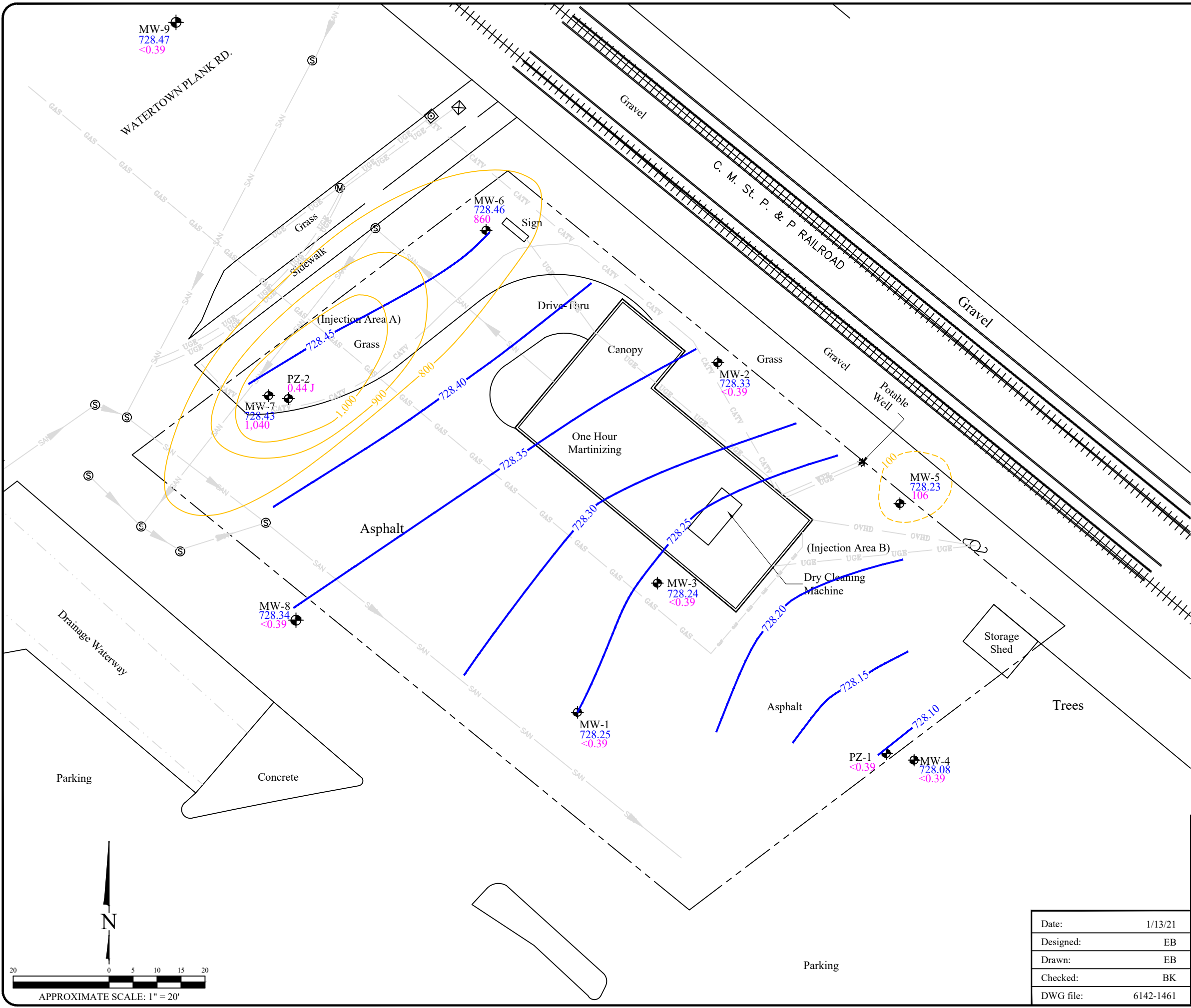
Bolded values indicate a laboratory detection

Bolded and Orange Shaded values exceed the Public Health Enforcement Standard

Bolded and Blue Shaded values exceed the Public Health Preventive Action Limit

J = Analyte concentration detected between the laboratory Reporting Limit and the laboratory Method Detection Limit

NA = Not Analyzed



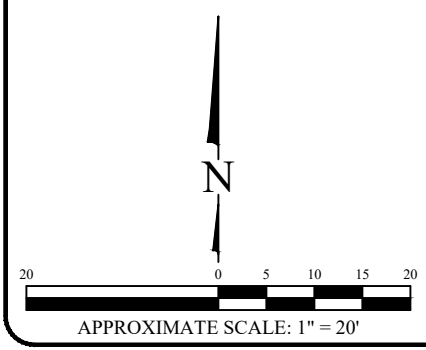
- Legend**
- Property boundary
 - Underground gas utility line
 - Underground water utility line
 - Underground sanitary utility line (Arrow shows direction of flow)
 - Underground cable television utility line
 - Over head electrical utility line
 - Underground electrical utility line
 - MW-1 Monitoring well location
 - Sanitary Sewer Manhole
 - Manhole
 - 728.30 Groundwater elevation contour
 - 728.25 Groundwater elevation (feet above mean sea level)
 - 0.53 J cis-1,2-DCE concentration in ug/L
ug/L = Micrograms per Liter
 - 500 cis-1,2-DCE contour interval in ug/L
 - Dashed boundaries are inferred

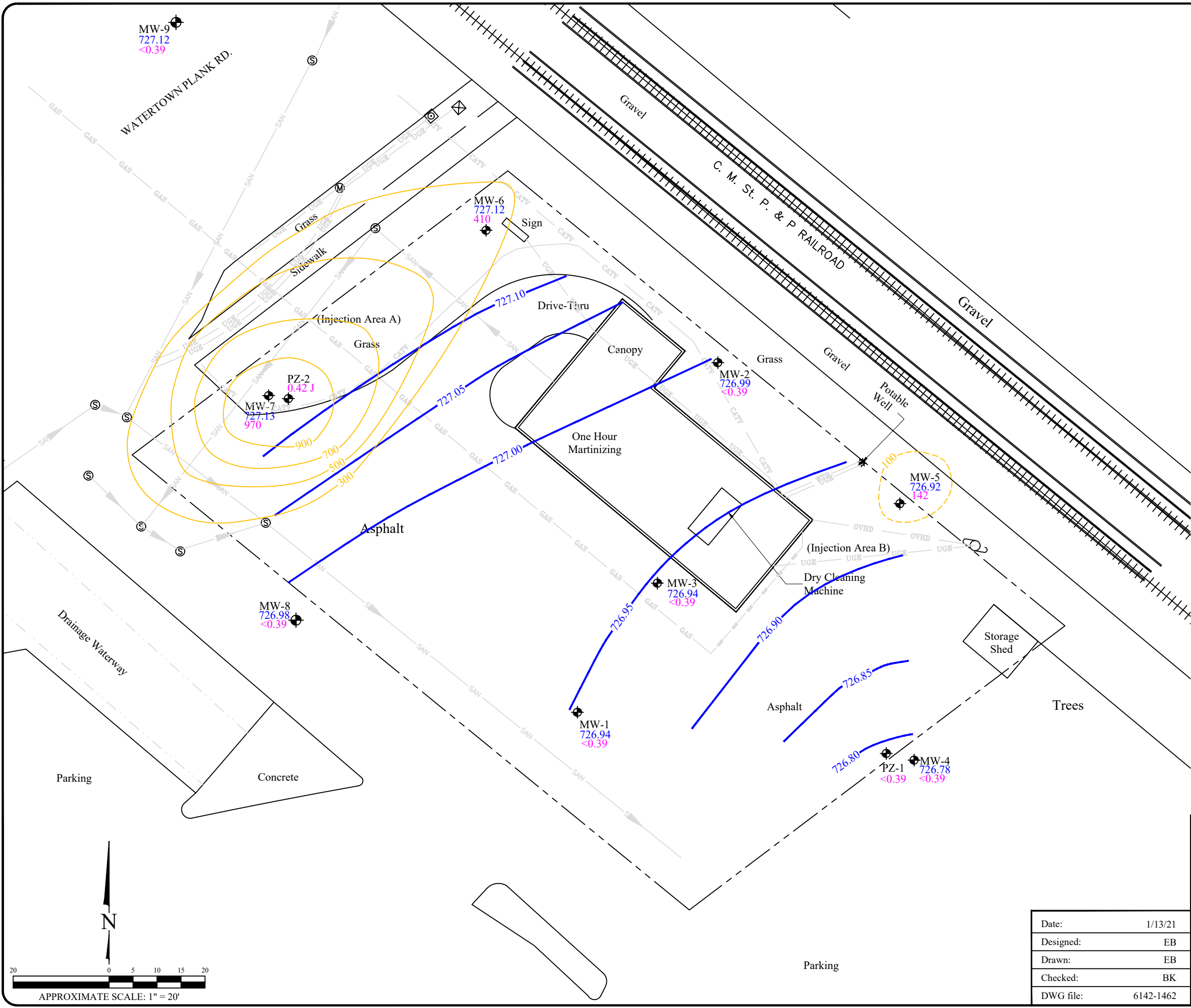
**cis-1,2-DCE GROUNDWATER RESULTS AND
 POTENTIOMETRIC SURFACE CONTOUR MAP**
 AUGUST 5, 2020
 One Hour Martinizing
 13405 Watertown Plank Road
 Elm Grove, WI

Date:	1/13/21
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6142-1461

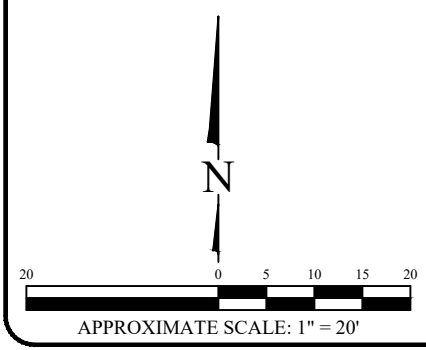
Figure	1
Project	6142

825 North Capitol Avenue • Indianapolis, IN 46204
 EnviroForensics.com





- Legend**
- Property boundary
 - Underground gas utility line
 - Underground water utility line
 - Underground sanitary utility line (Arrow shows direction of flow)
 - Underground cable television utility line
 - Over head electrical utility line
 - Underground electrical utility line
 - MW-1 Monitoring well location
 - Sanitary Sewer Manhole
 - Manhole
 - 726.95 Groundwater elevation contour
 - 726.94 Groundwater elevation (feet above mean sea level)
 - 0.53 J cis-1,2-DCE concentration in ug/L
ug/L = Micrograms per Liter
 - 500 cis-1,2-DCE contour interval in ug/L
 - Dashed boundaries are inferred



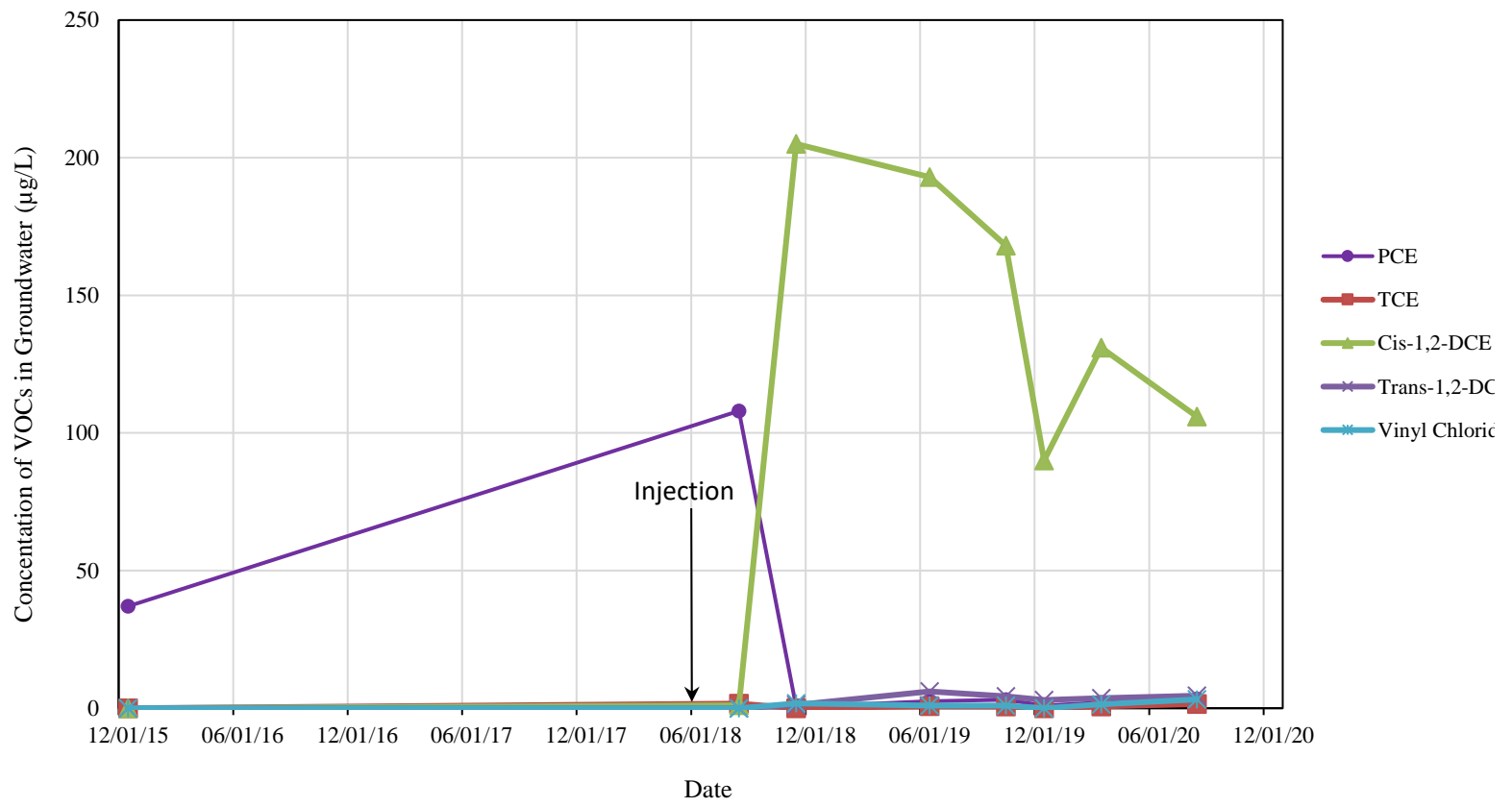
**cis-1,2-DCE GROUNDWATER RESULTS AND
 POTENTIOMETRIC SURFACE CONTOUR MAP**
 DECEMBER 10, 2020
 One Hour Martinizing
 13405 Watertown Plank Road
 Elm Grove, WI

Date:	1/13/21
Designed:	EB
Drawn:	EB
Checked:	BK
DWG file:	6142-1462

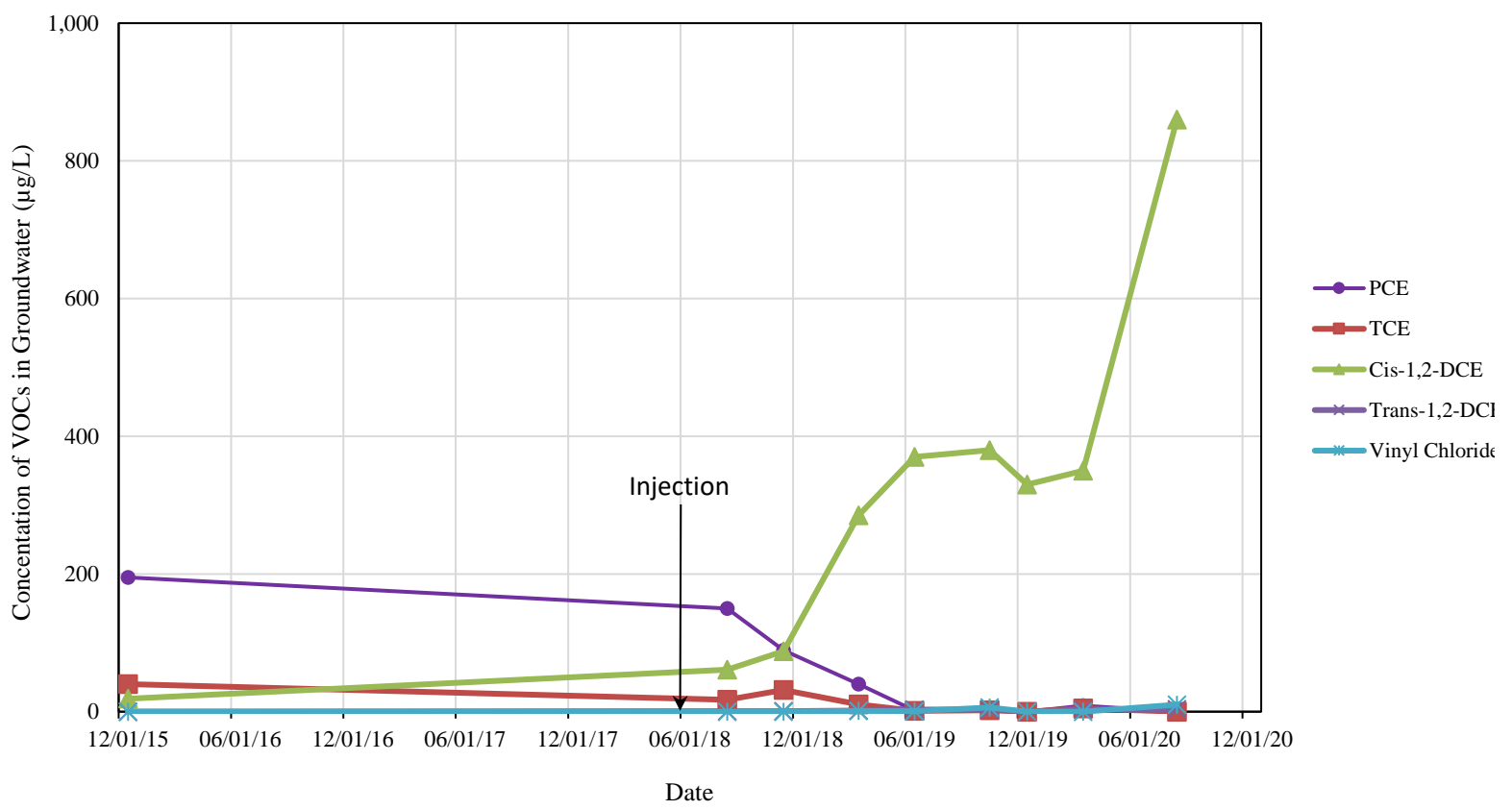
825 North Capitol Avenue • Indianapolis, IN 46204
 EnviroForensics.com

Figure	2
Project	6142

Groundwater VOC Concentration Trend in MW-5



Groundwater VOC Concentration Trend in MW-6



Groundwater VOC Concentration Trend in MW-7

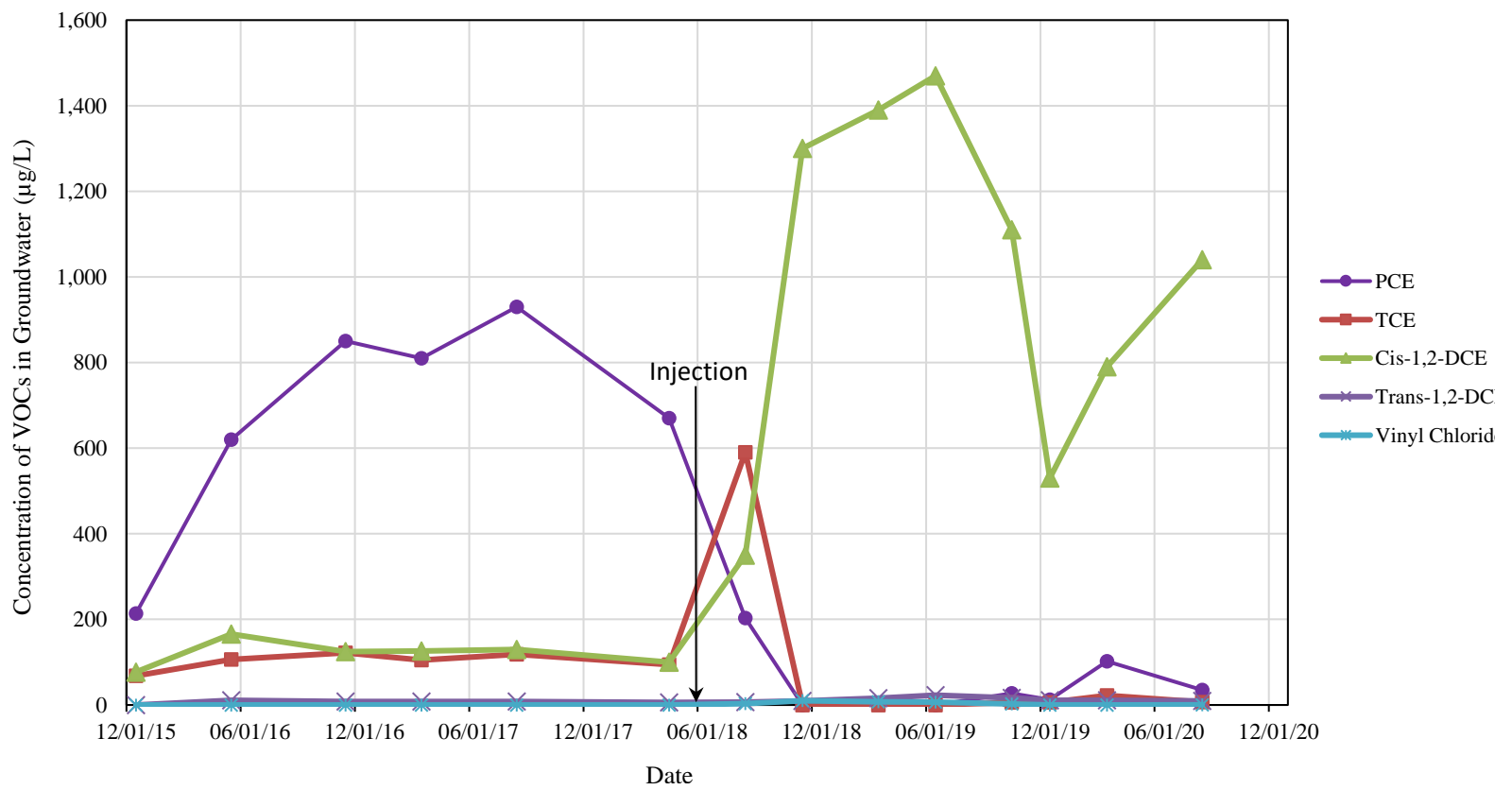


TABLE 2
GROUNDWATER ELEVATION DATA

One Hour Martinizing
Elm Grove, Wisconsin

Well ID	Screen Length (feet)	Screened Interval (feet AMSL)	TOC Elevation (feet AMSL)	Date	DTW (feet)	Groundwater Elevation (feet amsl)
MW-1	10.0	722.7 - 732.7	741.88	11/19/2009	15.50	726.38
				9/16/2010	14.24	727.64
				4/25/2011	14.40	727.48
				9/7/2011	15.38	726.50
				12/21/2011	15.79	726.09
				2/12/2012	16.26	725.62
				10/24/2012	17.04	724.84
				4/24/2013	13.24	728.64
				7/2/2013	13.19	728.69
				10/16/2013	15.48	726.40
				12/6/2013	16.05	725.83
				2/27/2014	16.55	725.33
				5/8/2014	15.36	726.52
				8/5/2014	NM	NM
				10/30/2014	15.42	726.46
				6/17/2015	15.49	726.39
				9/4/2015	16.23	725.65
				5/23/2016	14.22	727.66
				11/16/2016	13.61	728.27
				7/31/2017	14.64	727.24
				4/3/2018	15.53	726.35
				8/30/2018	15.53	726.35
				11/19/2018	14.27	727.61
				6/4/2019	13.20	728.68
				10/14/2019	13.36	728.52
				12/26/2019	13.73	728.15
3/18/2020	13.53	728.35				
8/5/2020	13.63	728.25				
12/10/2020	14.94	726.94				
	Max	17.04	728.69			
	Min	13.19	724.84			
	Avg	14.85	727.03			
MW-2	10.0	724.4 - 734.4	743.40	11/19/2009	16.94	726.46
				9/16/2010	15.60	727.80
				4/25/2011	16.03	727.37
				9/7/2011	16.82	726.58
				12/21/2011	17.27	726.13
				2/12/2012	17.74	725.66
				10/24/2012	18.52	724.88
				4/24/2013	14.68	728.72
				7/2/2013	14.60	728.80
				10/16/2013	16.96	726.44
				12/6/2013	17.55	725.85
				2/27/2014	NM	NM
				5/8/2014	16.84	NM
				8/5/2014	NM	NM
				10/30/2014	16.89	726.51
				6/17/2015	17.00	726.40
				9/4/2015	17.72	725.68
				5/23/2016	15.63	727.77
				4/3/2018	17.09	726.31
				8/30/2018	16.29	727.11
				11/19/2018	15.76	727.64
				6/4/2019	14.65	728.75
				10/14/2019	14.80	728.60
				12/26/2019	15.58	727.82
				3/18/2020	14.96	728.44
				8/5/2020	15.07	728.33
12/10/2020	16.41	726.99				
	Max	18.52	728.80			
	Min	14.60	724.88			
	Avg	16.29	727.13			

TABLE 2
GROUNDWATER ELEVATION DATA

One Hour Martinizing
Elm Grove, Wisconsin

Well ID	Screen Length (feet)	Screened Interval (feet AMSL)	TOC Elevation (feet AMSL)	Date	DTW (feet)	Groundwater Elevation (feet amsl)
MW-3	10.0	723.8 - 733.8	742.94	11/19/2009	16.53	726.41
				9/16/2010	15.25	727.69
				4/25/2011	15.66	727.28
				9/7/2011	16.44	726.50
				12/21/2011	16.50	726.44
				2/12/2012	17.32	725.62
				10/24/2012	18.10	724.84
				4/24/2013	14.28	728.66
				7/2/2013	14.21	728.73
				10/16/2013	16.55	726.39
				12/6/2013	17.12	725.82
				2/27/2014	17.61	725.33
				5/8/2014	15.42	727.52
				8/5/2014	NM	NM
				10/30/2014	16.46	726.48
				6/17/2015	15.58	727.36
				9/4/2015	17.30	725.64
				5/23/2016	15.25	727.69
				11/16/2016	14.67	728.27
				7/31/2017	13.58	729.36
				4/3/2018	16.64	726.30
				8/30/2018	15.88	727.06
				11/19/2018	15.23	727.71
				6/4/2019	14.22	728.72
10/14/2019	14.41	728.53				
12/26/2019	14.77	728.17				
3/18/2020	14.58	728.36				
8/5/2020	14.70	728.24				
12/10/2020	16.00	726.94				
	Max	18.10	729.36			
	Min	13.58	724.84			
	Avg	15.72	727.23			
MW-4	10.0	722.5 - 732.5	741.88	11/19/2009	15.51	726.37
				9/16/2010	14.28	727.60
				4/25/2011	14.63	727.25
				9/7/2011	15.46	726.42
				12/21/2011	15.89	725.99
				2/12/2012	16.36	725.52
				10/24/2012	17.11	724.77
				4/24/2013	13.31	728.57
				7/2/2013	13.23	728.65
				10/16/2013	15.56	726.32
				12/6/2013	16.14	725.74
				2/27/2014	NM	NM
				5/8/2014	15.47	726.41
				8/5/2014	NM	NM
				10/30/2014	15.51	726.37
				6/17/2015	16.62	725.26
				9/4/2015	16.34	725.54
				5/23/2016	14.36	727.52
				4/3/2018	15.66	726.22
				8/30/2018	14.95	726.93
				11/19/2018	14.46	727.42
				4/22/2019	13.31	728.57
				10/14/2019	13.52	728.36
				12/26/2019	13.85	728.03
3/18/2020	13.72	728.16				
8/5/2020	13.80	728.08				
12/10/2020	15.10	726.78				
	Max	17.11	728.65			
	Min	13.23	724.77			
	Avg	14.97	726.92			

TABLE 2
GROUNDWATER ELEVATION DATA

One Hour Martinizing
Elm Grove, Wisconsin

Well ID	Screen Length (feet)	Screened Interval (feet AMSL)	TOC Elevation (feet AMSL)	Date	DTW (feet)	Groundwater Elevation (feet amsl)
MW-5	10.0	719.0 - 729.0	742.96	10/24/2012	18.12	724.84
				4/24/2013	14.31	728.65
				7/2/2013	14.23	728.73
				10/16/2013	16.59	726.37
				12/6/2013	17.16	725.80
				2/27/2014	NM	NM
				5/8/2014	16.46	726.50
				8/5/2014	15.68	727.28
				10/30/2014	16.51	726.45
				3/31/2015	16.92	726.04
				6/17/2015	NM	NM
			9/4/2015	17.32	725.64	
			5/23/2016	15.29	727.67	
			4/3/2018	16.65	726.31	
			8/30/2018	15.68	727.07	
			11/19/2018	15.15	727.60	
			3/29/2019	14.70	728.05	
			6/4/2019	14.00	728.75	
			10/14/2019	14.24	728.51	
			12/26/2019	14.55	728.20	
			3/18/2020	14.43	728.32	
			8/5/2020	14.52	728.23	
12/10/2020	15.83	726.92				
	Max	18.12	728.75			
	Min	14.00	724.84			
	Avg	15.64	727.25			
MW-6	10.0	720.1 - 730.1	744.05	10/24/2012	19.14	724.91
				4/24/2013	15.27	728.78
				7/2/2013	15.20	728.85
				10/16/2013	17.52	726.53
				12/6/2013	18.11	725.94
				2/27/2014	NM	NM
				5/8/2014	17.42	726.63
				8/5/2014	16.60	727.45
				10/30/2014	17.49	726.56
				10/31/2014	17.89	726.16
				6/17/2015	17.59	726.46
				9/4/2015	18.32	725.73
				5/23/2016	16.19	727.86
				4/3/2018	17.62	726.43
				8/30/2018	16.84	727.21
				11/19/2018	16.29	727.76
				3/29/2019	15.83	728.22
				6/4/2019	15.19	728.86
				10/14/2019	15.33	728.72
				12/26/2019	15.70	728.35
				3/18/2020	15.49	728.56
				8/5/2020	15.59	728.46
12/10/2020	16.93	727.12				
	Max	19.14	728.86			
	Min	15.19	724.91			
	Avg	16.71	727.35			

TABLE 2
GROUNDWATER ELEVATION DATA

One Hour Martinizing
Elm Grove, Wisconsin

Well ID	Screen Length (feet)	Screened Interval (feet AMSL)	TOC Elevation (feet AMSL)	Date	DTW (feet)	Groundwater Elevation (feet amsl)	
MW-7	10.0	719.0 - 729.0	742.95	4/24/2013	14.21	728.74	
				7/2/2013	14.11	728.84	
				10/16/2013	16.44	726.51	
				12/6/2013	17.02	725.93	
				2/27/2014	NM	NM	
				5/8/2014	16.34	726.61	
				8/5/2014	15.56	727.39	
				10/30/2014	16.36	726.59	
				3/31/2015	16.81	726.14	
				6/17/2015	16.49	726.46	
				9/4/2015	17.24	725.71	
				5/23/2016	15.12	727.83	
				11/14/2016	14.53	728.42	
				7/31/2017	14.49	728.46	
				4/3/2018	16.55	726.40	
				8/30/2018	15.73	727.22	
				11/19/2018	15.18	727.77	
				3/29/2019	14.74	728.21	
				6/4/2019	14.08	728.87	
				10/14/2019	14.26	728.69	
				12/26/2019	14.58	728.37	
3/18/2020	14.41	728.54					
8/5/2020	14.52	728.43					
12/10/2020	15.82	727.13					
	Max	17.24	728.87				
	Min	14.08	725.71				
	Avg	15.42	727.55				
MW-8	10.0	718.5 - 728.5	741.81	12/6/2013	15.94	725.87	
				2/27/2014	16.42	725.39	
				5/8/2014	15.23	726.58	
				8/5/2014	14.46	727.35	
				10/30/2014	15.29	726.52	
				3/31/2015	15.70	726.11	
				6/17/2015	15.39	726.42	
				9/4/2015	16.11	725.70	
				5/23/2016	14.05	727.76	
				11/14/2016	13.47	728.34	
				7/31/2017	13.43	728.38	
				4/3/2018	15.48	726.33	
				8/30/2018	14.65	727.16	
				11/19/2018	14.15	727.66	
				6/4/2019	13.01	728.80	
				10/14/2019	13.21	728.60	
				12/26/2019	13.57	728.24	
				3/18/2020	13.38	728.43	
				8/5/2020	13.47	728.34	
				12/10/2020	14.83	726.98	
					Max	16.42	728.80
	Min	13.01	725.39				
	Avg	14.56	727.26				
MW-9	10.0	720.9 - 730.9	744.62	12/6/2013	18.70	725.92	
				2/27/2014	19.19	725.43	
				5/8/2014	18.02	726.60	
				8/5/2014	NM	NM	
				10/30/2014	18.04	726.58	
				6/17/2015	18.16	726.46	
				9/4/2015	19.90	724.72	
				5/21/2016	16.78	727.84	
				4/3/2018	NM	NM	
				8/30/2018	17.37	727.25	
				11/19/2018	16.81	727.81	
				6/4/2019	15.36	729.26	
				10/14/2019	15.87	728.75	
				12/26/2019	16.20	728.42	
				3/18/2020	16.04	728.58	
				8/5/2020	16.15	728.47	
				12/10/2020	17.50	727.12	
					Max	19.90	729.26
					Min	15.36	724.72
					Avg	17.34	727.29

TABLE 2
GROUNDWATER ELEVATION DATA

One Hour Martinizing
Elm Grove, Wisconsin

Well ID	Screen Length (feet)	Screened Interval (feet AMSL)	TOC Elevation (feet AMSL)	Date	DTW (feet)	Groundwater Elevation (feet amsl)
PZ-1	5.0	694.9 - 699.9	741.81	4/24/2013	13.11	728.70
				7/2/2013	13.00	728.81
				10/16/2013	15.33	726.48
				12/6/2013	15.95	725.86
				2/27/2014	16.41	725.40
				5/8/2014	15.26	726.55
				8/5/2014	14.47	727.34
				10/30/2014	15.28	726.53
				3/31/2015	15.74	726.07
				6/17/2015	15.42	726.39
				9/4/2015	16.16	725.65
				5/23/2016	14.00	727.81
				11/15/2016	13.47	728.34
				7/31/2017	13.42	728.39
				4/3/2018	15.45	726.36
				8/30/2018	14.72	727.09
				11/19/2018	14.16	727.65
				6/4/2019	13.06	728.75
				10/14/2019	13.20	728.61
				12/26/2019	13.42	728.39
3/18/2020	13.34	728.47				
8/5/2020	13.47	728.34				
12/10/2020	14.83	726.98				
	Max	16.41	728.81			
	Min	13.00	725.40			
	Avg	14.46	727.36			
PZ-2	5.0	697.3 - 702.3	742.83	7/1/2014	14.70	728.13
				8/5/2014	15.39	727.44
				10/30/2014	16.24	726.59
				3/31/2015	16.66	726.17
				6/17/2015	16.49	726.34
				9/4/2015	17.08	725.75
				5/23/2016	14.96	727.87
				11/15/2016	14.33	728.50
				7/31/2017	14.33	728.5
				4/3/2018	16.34	726.49
				8/30/2018	15.62	727.21
				11/19/2018	15.04	727.79
				3/29/2019	14.57	728.26
				6/4/2019	13.92	728.91
				10/14/2019	14.08	728.75
				12/26/2019	14.48	728.35
				3/18/2020	14.25	728.58
				8/5/2020	14.35	728.48
				12/10/2020	15.70	727.13
					Max	17.08
	Min	13.92	725.75			
	Avg	15.19	727.67			

Notes:

- AMSL = above mean sea level
- DTW = depth to water, below top of casing (TOC)
- TOC = Top of Casing in feet above mean sea level
- NM = Not Measured

TABLE 3
GROUNDWATER GEOCHEMICAL DATA SUMMARY

Former One Hour Martinizing Cleaners
Elm Grove, Wisconsin

Monitoring Well Identification	Sample Date	Injection Pre/Post	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl chloride	1,1-Dichloroethene	Dissolved Gases			Inorganic/ Physical Parameters					Dehalococoides (DHC)				Field Parameters						
									Ethane	Ethene	Methane	Dissolved Iron	Total Iron	Nitrite plus Nitrate	Nitrate	Nitrite	Sulfate	DHC	teeA Reductase	BAV1 Vinyl Chloride Reductase	Vinyl Chloride Reductase	Temperature	pH	Specific Conductance	Oxidation Reduction Potential	Turbidity	Dissolved Oxygen
Units			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	cells/mL	cells/mL	cells/mL	cells/mL	°C	S.U.	mS/cm	mV	NTU	mg/L
Enforcement Standard			5	5	70	100	0.2	7																			
Preventive Action Limit			0.5	0.5	7	20	0.02	0.7																			
MW-4	3/18/2020	Post	<0.74	<0.54	<0.45	<0.54	<0.17	NA	<0.5	<0.5	4.45	--	--	--	--	--	--	--	--	--	11.1	6.64	11.41	77.2	0.04	0.22	
MW-5	12/3/2015	Pre	37	<0.47	<0.45	<0.54	<0.17	<0.65	--	--	--	--	--	--	--	--	--	--	--	--	12.56	7.02	2.35	126	17.6	0.00	
	8/30/2018	Post	108	1.68	1.08	<0.34	<0.2	<0.42	<0.5	<0.5	1.94	22.7	25.6	<0.36	--	--	123 J	--	--	--	17.30	6.90	1.71	-163	0.1	1.56	
	11/19/2018		0.49	<0.3	205	1.23	1.77	<0.42	0.57 J	<0.5	295	22	22.8	--	<0.15	0.003 J	2.97 J	5.00 E-01 J	<5.00 E-01	<5.00 E-01	<5.00 E-01	12.7	7.00	1.58	-122	2.6	0.29
	6/5/2019		2.58	0.8	193	6.1	1.03	<0.42	<0.5	<0.5	11,500	3.85	30.6	--	<0.47	0.016 J	560				17.30	6.79	2.02	-356	14.4	5.16	
	10/14/2019		3.1	0.59	168	4.3	1.02	0.54 J	<0.5	<0.5	10,200	4.44	5.22	--	<0.47	0.074	308				14.35	6.55	2.22	-339	31	0.07	
	12/26/2019		0.94	<0.3	90	2.94	<0.2	<0.42	--	--	--	--	--	--	--	--	--				12.22	6.32	1.43	-238	29	0.18	
	3/18/2020		2.1	0.63	131	3.6	1.43	<0.42	<10	<10	16,900	--	--	--	--	--	--				10.52	6.60	1.53	-210	14	0.05	
	8/5/2020		3.3	1.48	106	4.5	3.2	NA	<0.5	<0.5	15,500	1.38	1.53	--	<0.47	<0.11	69.9				13.71	6.62	1.28	-123	17.4	0.08	
12/10/2020	5.5		1.87	142	5.1	6.3	<0.5	3.49	<0.5	17,600	--	--	--	--	--	--				13.37	6.66	1.23	-68.3	1.68	0.43		
MW-6	12/4/2015	Pre	195	40	18.8	<2.7	<0.85	<3.25	--	--	--	--	--	--	--	--	--	--	--	--	13.85	6.99	5.18	-15	22.4	0.00	
	8/30/2018	Post	150	17.2	61	0.5	<0.2	<0.42	<0.5	<0.5	50.4	3.67	3.79	<0.36	--	--	169 J	--	--	--	13.34	7.15	4.12	-87	6.4	0.00	
	11/19/2018		89	31.5	88	0.57	<0.2	<0.42	<0.5	<0.5	11.9	4.23	2.92	--	<0.15	<0.0023	307	5.00 E-00 J	<5.00 E-01	<5.00 E-01	1.00 E-01 J	11.55	7.53	4.31	-69	0.6	0.00
	3/29/2019		40	10.7	285	1.73	1.04	<0.42	--	--	--	--	--	--	--	--	--				12.25	7.13	4.61	-338	11.4	0.21	
	6/5/2019		1.7	0.96	370	2.78	0.76	1.48 J	10.5	<0.5	4,760	2.57	4.06	--	<0.47	<0.014	264				15.51	7.19	4.22	-230	2.2	8.53	
	10/14/2019		3.8	2.2	380	3.4	6.1	<2.1	3.33	<0.5	2,540	3.51	4.45	--	<0.47	<0.014	469				13.28	7.12	4.37	-186	2.3	0.09	
	12/26/2019		<3.8	<3	330	<3.4	<2	<4.2	--	--	--	--	--	--	--	--	--				12.62	6.77	4.41	-125	18	0.54	
	3/18/2020		8.9	4.6	350	2.85	<1	NA	<5	<5	4,230	--	--	--	--	--	--				11.19	7.01	3.93	-167	5.5	0.04	
	8/5/2020		<0.33	<0.47	860	3.2	10.2	1.37 J	17.6	<0.5	5,490	4.56	5.26	--	<0.47	<0.11	502				12.61	6.79	5.09	-160	14.8	0.01	
12/10/2020	<0.33		<0.47	410	4.2 J	5.2 J	<5	<0.5	4.98	10,800	--	--	--	--	--	--				13.08	7.07	3.29	-77.1	1.17	0.18		
MW-7	12/4/2015	Pre	214	68	77	<5.4	<1.7	<6.5	--	--	--	--	--	--	--	--	--	--	--	--	14.93	6.88	8.92	-37	24.6	0.00	
	5/24/2016		620	106	166	11	<1.7	<6.5	--	--	--	--	--	--	--	--	--	--	--	--	20.98	6.64	5.75	182	105	0.00	
	11/15/2016		850	122	125	8.2	<1.7	<6.5	--	--	--	--	--	--	--	--	--	--	--	--	16.78	6.9	--	54	52.5	0.47	
	3/20/2017		810	105	126	8.1	<1.9	<4.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	8/1/2017		930	118	130	7.8	<1.9	<4.6	--	--	--	--	--	--	--	--	--	--	--	--	--	24.87	6.83	5.38	63	2.5	0.00
	4/3/2018		670	94	100	5.8	<2	<4.2	--	--	--	--	--	--	--	--	--	--	--	--	--	9.11	6.87	2.72	7	7.9	0.00
	8/30/2018	203	590	350	6.9	3.5	<4.2	1.25 J	<0.5	257	47.2	47.6	<0.36	--	--	46.1	--	--	--	14.55	6.76	4.08	-142	30	0.00		
	11/19/2018	Post	<3.8	<3	1,300	9.7	10	<4.2	<2.5	4,480	4.96	6.83	--	<0.15	0.005 J	38.2	4.00 E-01 J	<5.00 E-01	<5.00 E-01	<5.00 E-01	11.62	7.42	3.60	-281	0.5	25.86*	
	3/29/2019		4.4	<3	1,390	15.6	7.6	<0.42	--	--	--	--	--	--	--	--	--				11.74	7.03	4.75	-357	19.2	1.81	
	6/5/2019		<3.8	<3	1,470	22.9	6.9	<4.2	0.737 J	<0.5	8,690	0.04	2.91	--	<0.47	<0.014	405				16.18	7.00	3.93	-356	8.1	5.44	
	10/14/2019		27.2	5.8	1,110	16.6	2.6	<4.2	<0.5	<0.5	8,750	1.28	3.39	--	0.026 J	<0.47	521				15.64	6.82	5.16	-319	21	0.07	
	12/26/2019		12.3	6.1	530	10.7	<2	<4.2	--	--	--	--	--	--	--	--	--				13.37	6.75	5.77	-265	16	0.54	
	3/18/2020		102	22	790	11	<1	NA	<5	<5	9,290	--	--	--	--	--	--				10.77	6.99	4.67	-315	18	0.07	
8/5/2020	35		6.8	1,040	9.6	0.65	1.72	<0.5	<0.5	7,080	0.46	1.76	--	0.71 J	<0.47	1560				14.08	6.91	4.84	-306	11.6	0.03		
12/10/2020	54	18.9	970	12.2	3.7	2.6 J	<0.5	0.84 J	9,814	--	--	--	--	--	--				14.25	6.92	5.60	-260.3	8.81	0.09			
MW-9	8/6/2020	Background	<0.33	<0.47	<0.39	<0.37	<0.2	NA	<0.5	<0.5	<1	<0.03	0.04 J	--	<0.47	<0.11	434			15.42	6.92	3.81	104	8.0	0.16		
PZ-2	3/18/2020	Post	<0.33	<0.47	1.5	<0.37	<0.2	NA	<0.5	<0.5	4.45	--	--	--	--	--				10.88	7.37	1.79	-124	3.9	5.82		
	12/10/2020		0.66 J	<0.47	0.42 J	<0.37	<0.2	<0.3	<0.5	<0.5	<1	--	--	--	--	--	--				13.40	7.45	1.39	5.1	57.12	4.56	

Notes:
 * = Malfunction of probe/sensor suspected.
 -- = Not Analyzed
 NA = Not Analyzed
 J = Analyte concentration detected between the laboratory Reporting Limit and the laboratory Method Detection Limit
 µg/L = micrograms per liter
 mg/L = milligrams per liter
 mV = millivolts
 µS/cm = microSiemens per centimeter
 NTU = nephelometric turbidity unit
 S.U. = standard unit

TABLE 4
SOIL VAPOR EXTRACTION SYSTEM MASS REMOVAL DATA
 OHM-Elm Grove
 Elm Grove, Wisconsin

Sample Date	Pitot Tube Calculation		VOC Concentration ug/m ³	VOC Concentration lbs/m ³	Runtime hrs	Sample	Sample	Mass Removed lbs	Cumulative Mass lbs
	Flow Rate SCFM	Flow Rate SCFM (m ³ /min)				Duration hrs	Duration mins		
12/12/2017	170	4.81	3,815	0.000008	7.1	2.3	138	0.01	0.01
12/13/2017	250	7.08	10,120	0.000022	11.6	3.5	210	0.03	0.04
11/7/2018	310	8.78	11,071	0.000024	3.7	3.2	192	0.04	0.08
11/8/2018	383	10.85	9,772	0.000022	23.8	23.3	1,398	0.33	0.41
12/5/2018	360	10.20	512	0.000001	52.9	29.1	1,746	0.02	0.43
12/12/2018	337	9.54	4,233	0.000009	152.6	99.7	5,982	0.53	0.96
12/19/2018	382	10.82	14,581	0.000032	289.5	136.9	8,214	2.86	3.82
12/26/2018	382	10.82	3,643	0.000008	461.6	172.1	10,326	0.90	4.71
1/2/2019	382	10.82	3,229	0.000007	628.6	167.0	10,020	0.77	5.49
2/13/2019	348	9.86	1,243	0.000003	1,238.5	609.9	36,594	0.99	6.47
3/6/2019	340	9.63	1,936	0.000004	1,499.0	260.5	15,630	0.64	7.12
4/15/2019	336	9.52	1,207	0.000003	1,938.8	439.8	26,388	0.67	7.78
5/14/2019	360	10.20	824	0.000002	2,626.3	687.5	41,250	0.76	8.55
6/13/2019	360	10.20	665	0.000001	3,144.0	517.7	31,062	0.46	9.01
7/8/2019	334	9.46	1,355	0.000003	3,639.7	495.7	29,742	0.84	9.85
8/15/2019	330	9.35	2,012	0.000004	4,376.5	736.8	44,208	1.83	11.69
8/23/2019	330	9.35	2,550	0.000006	4,377.0	0.5	30	0.00	11.69
9/6/2019	336	9.52	1,310	0.000003	4,709.0	332.0	19,920	0.55	12.24
9/16/2019	336	9.52	690	0.000002	4,709.3	0.3	18	0.00	12.24
10/3/2019	315	8.92	1,288	0.000003	5,106.7	397.4	23,844	0.60	12.84
10/14/2019	325	9.20	3,350	0.000007	5,107.0	0.3	18	0.00	12.84
10/21/2019	325	9.20	1,300	0.000003	5,292.5	185.5	11,130	0.29	13.14
12/26/2019	336	9.52	384	0.000001	5,673.9	381.4	22,884	0.18	13.32
1/22/2020	320	9.06	858	0.000002	5,773.8	99.9	5,994	0.10	13.42
2/27/2020	315	8.92	516	0.000001	6,085.8	312.0	18,720	0.19	13.61
4/13/2020	315	8.92	562	0.000001	6,452.2	366.4	21,984	0.24	13.86
6/15/2020	325	9.20	868	0.000002	6770.0	317.8	19,068	0.34	14.19
7/17/2020	315	8.92	990	0.000002	7027.8	257.8	15468	0.30	14.49

TABLE 5
SOIL SAMPLE ANALYTICAL RESULTS SUMMARY
 One Hour Martinizing
 Elm Grove, Wisconsin

Location	Sample Name	Sample Date	Sample Depth	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Ethylbenzene	Hexachloro-1,3-butadiene	Methylene Chloride	Naphthalene	1,1,1,2-Tetrachloroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Toluene	Isopropylbenzene (Cumene)	n-Propylbenzene	Xylenes, Total
<i>Soil to Groundwater Residual Contaminant Level</i>				4.5	3.6	41.2	62.6	0.1	1,570	NE	2.6	658	53.4	1,390	1,380	1,107	NE	NE	3,960
Non-Industrial Residual Contaminant Level				33,000	133	156,000	211,000	67	8,020	1,630	61,800	5,520	2,780	219,000	182,000	818,000	268,000	264,000	260,000
Industrial Residual Contaminant Level				145,000	8,410	2,340,000	1,850,000	2,080	35,400	7,190	1,150,000	24,100	12,300	219,000	182,000	818,000	268,000	264,000	260,000
GP-1	GP-1	2/20/2006	2-4	25,000	280	370	<28	<39	<28	<39	<55	79	<28	<28	<28	<28	<28	<28	<94
GP-1R	6142-GP-1R	10/6/2020	2-4	17,000	630	118	<38	<66	<19	<100	<150	<120	<83	<54	<17	<32	<25	<19	<28
GP-2	GP-2	2/20/2006	8-10	13,000	<27	<27	<27	<38	30	<38	<54	120	<27	92	40	83	<27	<27	120
GP-2R	6142-GP-2R	10/6/2020	8-10	141	<48	<21	<38	<66	<19	<100	<150	<120	<83	<54	<17	<32	<25	<19	<28
B-11	6142-B-11	6/17/2011	4-6	21,900	<100	<100	<100	<100	<100	<106	<100	<100	<100	<100	<100	<100	<25.0	<25.0	<200
			10-12	1,200	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<26.4	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
B-11R	6142-B-11R	10/6/2020	4-6	7,500	<48	<21	<38	<66	<19	<100	<150	<120	<83	<54	<17	36 J	<25	<19	<28
B-15	6142-B-15	10/22/2012	2.5-5	360,000	400	<32	<66	<27	<13	<91	<180	<130	110	<55	<54	<30	<66	<46	<18
			10-12.5	6,000	<17	<11	<23	<9.6	<12	<32	<63	<46	<32	<20	<19	<11	<23	<16	<6.3
B-15R	6142-B-15R	10/6/2020	3-5	420,000	<2,400	<1,050	<1,900	<3,300	<950	<5,000	<7,500	<6,000	<4,150	<4,350	<850	<1,600	<1,250	<950	<1,400
			12-14	2,840	<48	<21	<38	<66	<19	<100	<150	<120	<83	<54	<17	<32	<25	<19	<28
B-16	6142-B-16	10/22/2012	2.5-5	79	<20	<37	<27	<11	<14	<37	<73	<53	<37	<23	<22	<12	<27	<19	<7.3
			10-12.5	180	<9.8	<6.5	<13	<5.5	<6.6	<18	<36	<26	<18	<11	<11	<6.1	<13	<9.2	<3.6
			15-17.5	17,000	39.0 J	<11	<23	<9.4	<11	<31	<62	<45	<31	<19	<19	<10	<23	<16	<6.2
B-16R	6142-B-16R	10/6/2020	15-17	330	<48	<21	<38	<66	<19	<100	<150	<120	<83	<54	<17	<32	<25	<19	<28
B-24	6142-B-24	4/9/2013	4-6	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	66.1 J	<26.0	<26.0	<26.0	<26.0	<26.0	<26.0	<52.1
			14-15	60,000	1,160	435 J	<312	<312	<312	<312	<312	<312	<312	<312	<312	<312	<312	<312	<312
B-24R	6142-B-24R	10/6/2020	14-15	12,900	288	275	<38	<66	<19	<100	<150	<120	<83	<54	<17	<32	<25	<19	<28
B-27	6142-B-27	11/14/2013	12	8,300	138	<24	<29	<21	<10	<95	<57	<114	<23	<26	<26	<20	<25	<24	<99
B-27R	6142-B-27R	10/6/2020	12	92,000	179	<21	<38	<66	<19	<100	<150	<120	<83	<54	<17	45 J	<25	<19	<28

Notes:

Residual contaminant level calculated according to the procedures described in WDNR Publication RR-890 using the EPA Calculator

Samples analyzed using EPA SW-846 Method 8260 with Prep Method 5030B

All concentrations reported in units of micrograms per kilogram (µg/kg)

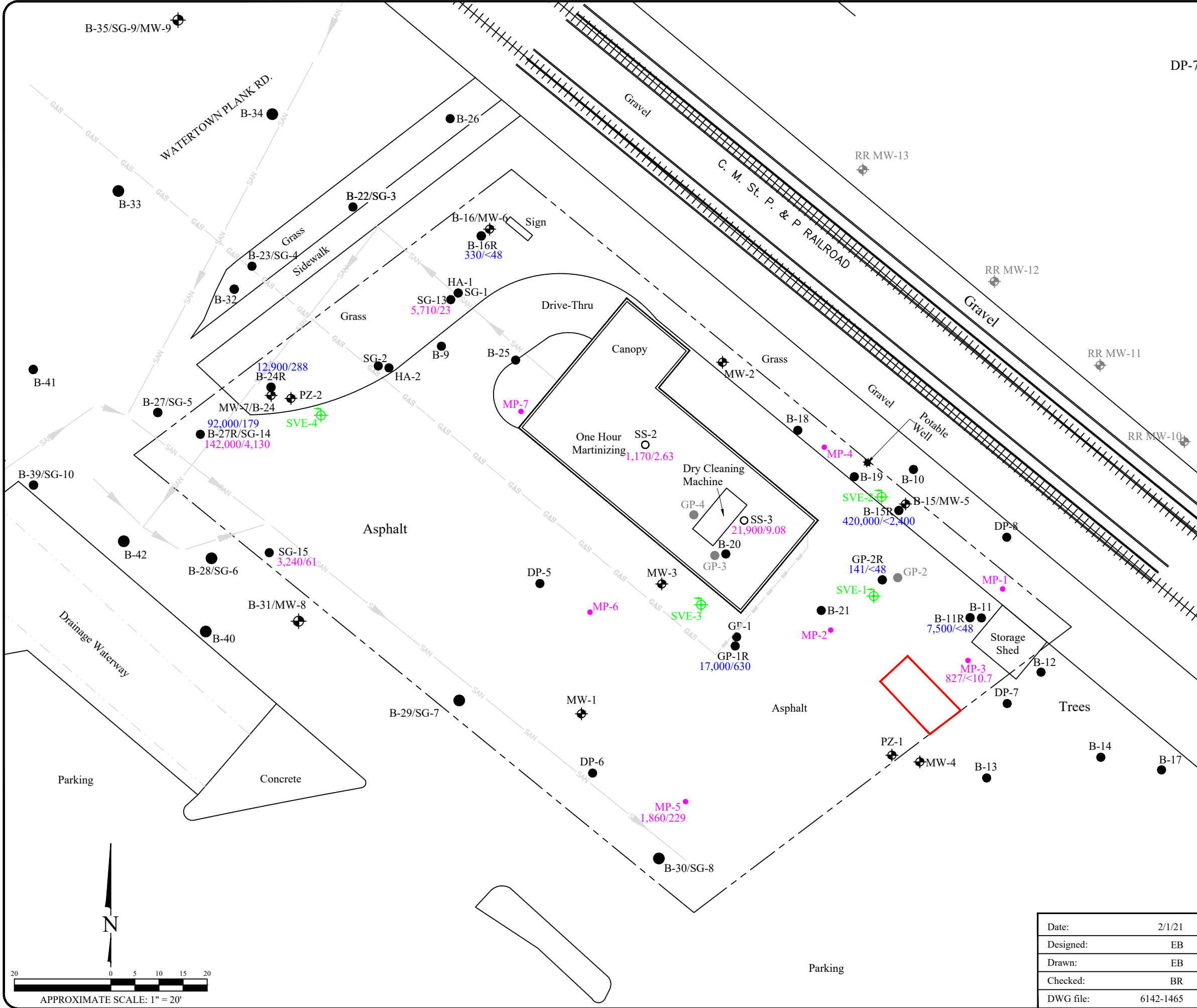
Bolded and Shaded values exceed the WDNR generic Industrial Residual Contaminant Levels

Bolded values exceed the WDNR generic Non-Industrial Residual Contaminant Levels

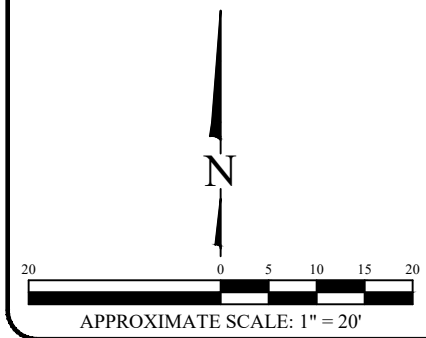
Italicized values exceed the WDNR generic Soil to Groundwater Residual Contaminant Levels

NE - Not Established

J = Concentration is less than the reporting limit but greater than the method detection limit.



- Legend**
- GP-1 ● Direct-push boring sample location (by others)
 - DP-7,HA-1,B-9 ● Direct-push boring sample location
 - MW-2 ⊕ Monitoring well location
 - SG-1 ● Soil gas boring location
 - SS-1 ○ Sub-slab vapor sample location
 - RR MW-10 ⊕ Railroad Right-of-Way monitoring wells (Installed by Sigma Group for BP Amoco site)
 - - - Property boundary
 - SAN → Underground sanitary utility line (Arrow shows direction of flow)
 - GAS → Underground gas utility line
 - SVE-1 ⊕ SVE well
 - MP-1 ● Monitoring point
 - SVE system equipment enclosure
 - 180/20 Soil sample concentrations PCE/TCE μg/kg
 - 180/20 Soil gas sample concentrations PCE/TCE μg/m³
- Note:**
1. Units for soil are in micrograms per kilogram (μg/kg)
 2. Units for soil gas are in micrograms per cubic meter (μg/m³)
 3. PCE = Tetrachloroethene
 4. TCE = Trichloroethene



POST-REMEDIATION SOIL AND SOIL GAS SAMPLE RESULTS

One Hour Martinizing
13405 Watertown Plank Road
Elm Grove, WI

Date:	2/1/21
Designed:	EB
Drawn:	EB
Checked:	BR
DWG file:	6142-1465

Figure	3
Project	6142

825 North Capitol Avenue • Indianapolis, IN 46204
EnviroForensics.com

TABLE 6
SOIL GAS SAMPLE ANALYTICAL RESULTS

One Hour Martinizing
Elm Grove, Wisconsin

Sample Identification	Sample Date	Sample Depth (feet BGS)	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene
6142-SG-1	10/23/2012	14	29,000	270	<160	NA
6142-SG-2	10/23/2012	4	1,600	<21	<16	NA
6142-SG-3	4/12/2013	14	8,130	82.6	<35.5	<35.5
6142-SG-4	4/12/2013	4	4.7	<2.0	<3.0	<3.0
6142-PRT-SG-5	11/14/2013	14	761,000	23,700	13,500	1,430
6142-PRT-SG-6	11/14/2013	14	69,800	2,110	586	<396
6142-PRT-SG-7	11/15/2013	14	13,300	187	<198	<396
6142-PRT-SG-8	11/15/2013	14	11,400	186	<198	<396
6142-PRT-SG-9	11/14/2013	16	<31.9	<10.7	<198	<396
6142-SG-10	3/7/2014	20	389	<10.7	<198	<396
6142-SG-11	3/7/2014	12	<31.9	<10.7	<198	<396
6142-SG-12	3/7/2014	10	54.9	<10.7	<198	<396
6142-PRT-SG-13	10/6/2020	14	5,710	23	<198	<396
6142-PRT-SG-14	10/6/2020	15	142,000	4,130	764	<396
6142-PRT-SG-15	10/6/2020	14	3,240	61	<198	<396
6142-MP-3i	10/6/2020	6	827	<10.7	<198	<396
6142-MP-5i	10/6/2020	5.5	1,860	229	<198	<396
Vapor Risk Screening Level (Small Commercial)			6,000	290	NE	NE

Notes:

Vapor Risk Screening Levels calculated according to WDNR guidance

All concentrations reported in units of micrograms per cubic meter (µg/m³)

Bolded values are above detection limits

Bolded and Orange Shaded values exceed the small commercial soil gas Vapor Risk Screening Level

BGS = Below ground surface

NE = Not Established

TABLE 7
SUB-SLAB VAPOR SAMPLE ANALYTICAL RESULTS

One Hour Martinizing
 Elm Grove, Wisconsin

Sample Identification	Sample Date	Tetrachloroethene	Trichloroethene	Methylene Chloride
6142-SSV-1	10/23/2012	970	<36	150
6142-SS-2	5/19/2015	42,200	30.6	NA
	11/18/2019	16,500	7.74	NA
	10/6/2020	1,170	2.63	NA
6142-SSV-2	10/23/2012	3,900	<130	<210
6142-SS-3	5/19/2015	105,000	142	NA
	11/18/2019	5,180	<1.07	NA
	10/6/2020	21,900	9.08	NA
Vapor Risk Screening Level (Small Commercial)		6,000	290	87,000

Notes:

¹ Vapor Risk Screening Levels calculated according to WDNR guidance

All concentrations reported in units of micrograms per cubic meter

Bolded values are above detection limits

Bolded and Shaded values exceed the applicable Screening Level

NA = Not Analyzed

TABLE 8
INDOOR/OUTDOOR AIR ANALYTICAL RESULTS
 One Hour Martinizing
 Elm Grove, Wisconsin

Sampling Identification	Date Sampled	Tetrachloroethene	Trichloroethene
6142-OHM-OA-1	5/18/2015	<3.19	<1.07
	10/6/2020	<3.19	<1.07
6142-OHM-IA-1	5/18/2015	1,090	<1.07
	10/6/2020	<3.19	<1.07
Indoor Air Vapor Action Levels (Commercial)		180	8.8

Notes:

The Vapor Action Levels are based on U.S. E.P.A.'s Regional Screening Levels (RSL's)

All concentrations reported in units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)

Bolded values are above detection limits

Bolded and Orange Shaded values exceed the commercial VAL

N.E. = Not Established

ND = Compound not detected