April 12, 2021

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

RE: Results of Additional Environmental Services for the DB Oak Property (former Thomas Industries) Located at 700-710 Oak Street in Fort Atkinson, Wisconsin — FEC Project No. 170503: DNR BRRTS # 02-28-176509

Friess Environmental Consulting, Inc. (FEC) submits this letter to provide the results of the additional site investigation (SI) activities conducted at the above-referenced site (the "Site"). In addition, this letter documents additional rounds of groundwater sampling, additional monitoring well installation and installation of Phase I of the on-site vapor mitigation system (VMS) and associated additional sub-slab and indoor air vapor testing. The Site is located at 700-710 Oak Street in Fort Atkinson, Wisconsin, and is shown on Figure 1. The project background and results of the SI are described below.

Project Background

The DB Oak property is located at 700-710 Oak Street in Fort Atkinson, Wisconsin. The property is relatively flat at an approximate elevation of 790 feet above mean sea level (MSL). Regional topography near the site slopes to the east and south towards the Rock River. The DB Oak property is bounded by East Cramer Street to the north, Oak Street to the west-southwest, and the Union Pacific (formerly Chicago and Northwest) rail line to the east-southeast. The property consists of an 180,000-square foot building with surrounding driveways and parking lots. A large parking lot and driveway near the northwest corner of the building are accessible from North Main Street to the west and Oak Street to the south. A gravel driveway and loading dock area is at the east side of the facility building. The loading dock is accessible from an asphalt driveway and small parking lot at the south side of the property, and from a gravel driveway at the north side of the building. An undeveloped wooded parcel is between the driveway at the north side of the building and East Cramer Street. Lawn areas are south and west of the building. The site location and property features are shown on Figures 1 and 2.

Extensive site investigation and groundwater monitoring activities have been conducted for a release of chlorinated volatile organic compounds (CVOCs) from the above referenced site. Twelve groundwater monitoring wells, fourteen piezometers, and four temporary wells have been installed during the SI. Groundwater samples have also been collected and/or evaluated from fourteen soil probes and twelve monitoring wells installed on neighboring properties.

VOCs were detected above DNR groundwater quality standards in the groundwater samples collected from MW-9 and piezometer MW-9A in 2016. A

well and an “A” horizon piezometer (MW-15 and MW 15A) were installed farther to the southeast of the MW-9 nest to define the groundwater plume extent to the south of the MW-9 nest.

VOCs were detected in MW-12 in March 2016 and a concentration of cis-1,2-dichloroethene (c-DCE) was detected in the groundwater samples collected from piezometer MW-12A during the August 2018 and April 2019 sampling events. Based on the groundwater sampling results, additional monitoring wells (MW-14 and MW-13) were installed further downgradient (south and east, respectively) of the MW-12 nest to confirm the absence of groundwater impacts in the shallow groundwater. Additional “A” horizon piezometers (MW-14A and MW-13A) were installed further downgradient (south and east, respectively) of the MW-12A nest to define the extent of the groundwater plume.

Installation of additional monitoring wells to further define the downgradient edge of the plume was proposed in our approved work plan. In September 2020, three monitoring wells and four piezometers were installed as part of the approved scope of work submitted in our work plan dated April 10, 2020. The results are discussed below. The new well/piezometer locations are shown on Figure 3.

Additional Site Investigation

In September 2020, FEC documented the procedures utilized by Giles Engineering Associates, Inc. (Giles) to install six groundwater monitoring wells/piezometers to further define the degree and extent of the groundwater impacts and determine the appropriate course of action for the remaining impacts. MW-13 and MW-13A were installed further downgradient east of the MW-12 nest. MW-14 and MW-14A were installed further downgradient south of the MW-12 nest. MW-15 and MW 15A were installed farther to the southeast of the MW-9 nest.

Soil Evaluation

Grass and topsoil are present in the surficial soils. The native soils consist of a brown to gray silty fine sand to a maximum depth of 45 feet bgs, the maximum depth explored. Field indications of impacted soils (staining, odors and PID readings) were not apparent in any of the soil samples collected during the field sampling and screening. Groundwater was encountered at a depth of 15-17 feet during drilling. Soil boring logs are included in Appendix D. General descriptions of the soil and groundwater sampling methods and procedures are included in Appendix E. The locations of the borings/wells are shown on Figure 3. The well construction and sampling procedures are also included in Appendix E.

Groundwater Evaluation

Rounds of groundwater sampling were conducted in October 2020 and January 2021. FEC measured the depth to groundwater at each of the monitoring well locations. The depths to groundwater ranged from 3.52 to 18.16 feet bgs. In general, the results of the groundwater elevation survey indicate groundwater flows in a southeasterly direction, which is consistent with

the previous rounds of groundwater sampling. The depth to groundwater and groundwater elevations are presented on Table 2 and illustrated on Figure 3 (October 2020). The groundwater well construction and development forms are included in Appendix D.

The groundwater samples collected from the monitoring wells were analyzed by the laboratory for VOCs. Groundwater monitoring wells and piezometers were sampled on October 8, 2020 and January 21, 2021. No VOCs were detected at MW-13, MW-14 and MW-14A, MW-15 or MW-15A in either groundwater sampling round. Concentrations of c-DCE (660 and 300 ppb) were detected at MW-13A in the October 2020 and January 2021 sampling round, respectively. The results of the groundwater analytical testing from each round of groundwater sampling are included in Appendix F.

The results of the groundwater sampling continue to demonstrate a reduction in contaminant concentrations from across the site. However, the downgradient edge of the plume appears to require further definition. The results of the groundwater analytical testing are shown on the attached Table 2. Additional groundwater monitoring well installation, groundwater monitoring and analytical testing and hydraulic conductivity testing are proposed in 2021. This includes sampling of the temporary monitoring wells (if accessible), installation of monitoring wells inside the building, downgradient of MW-13A, and deeper wells downgradient to further evaluate the "B" horizon.

Vapor Mitigation System

The first phase of the vapor mitigation system (VMS) was installed on the subject property by Lifetime Radon Solutions (LRS) and became operational in March 2020. The building foundation and sub-slab depressurization system (SSDS) together make up the VMS that exists on the above-described property. Phase I of the SSDS, consisted of construction of two subsurface trenches connected to two (2) interior drop points drilled through the foundation with 4-inch solid stainless steel risers extending upwards and extending at least 10-inches above the roof line to exhaust points. Ventilation fans are located inline with the vertical risers. An electrical on/off switch is present at each fan location. Manometer pressure gauges are also located inline with the vertical exhaust pipes to indicate fan operation and vacuum pressure within the SSDS (readings should indicate pressure readings on the manometer when operating). The manometer gauges are present at the location of each vent stack. A copy of the LRS report for the installation of the system is included in Appendix D.

Post installation PFE testing showed excellent coverage from the north and south trenches of the VMS installed in the central portion of the building. Three additional rounds of PFE testing were conducted to confirm the VMS is operating efficiently. Three additional sub-slab vapor points were installed and subsequent sub-slab vapor sampling was conducted to further define the sub-slab vapor impacts. In addition, a second round of vapor sampling was conducted at selected areas from the existing vapor points (VP-1 to VP-19)

to evaluate the effectiveness of the installed VMS. Follow-up indoor air sampling was also conducted within the central portion of the building to further assess the vapor intrusion risks. The vapor sampling locations and VMS system locations are shown on Figure 2. Vapor sampling procedures are attached as Exhibit 4. FEC has prepared a VMS maintenance plan, which is included in Appendix D.

Pilot testing for Phase II of the VMS was conducted during the week of February 14, 2021. Attached is a summary of the results. The Pressure Field Extension Testing (PFET) indicated a regular Pressure Extension in the north and south portions of the building as compared to the center building where Phase I of the VMS was installed in 2020. As such, the VMS for the north and south portions of the building will not require a high-capacity blower. A description of Phase II of the VMS is included in Appendix D.

Vapor Evaluation

Three new sub-slab vapor points (VP-20 to VP-22) were installed on January 21, 2021. VP-20 was installed within the northern portion of the building, VP-21 and VP-22 were installed within the southern portion of the building. To Install the sub-slab vapor sampling points, a small diameter hole was drilled through the concrete slab into the sub-slab aggregate. The top of the hole was reamed with a larger drill bit to allow for the sampling point to be finished just below floor grade. A 2-inch long stainless-steel sleeve was inserted into the drill hole and the space between the top of the sleeve and the concrete floor was sealed with hydraulic cement and allowed to set.

After allowing for the cement to set, FEC collected the sub-slab samples from the new vapor sampling points. To collect the sample, the probe cap was replaced with a brass ball valve and attached dedicated HDPE sample tubing that was run through a “T” to a vacuum pump and to a 1-liter summa canister equipped with a laboratory calibrated regulator or the air sampling pump. Shut-in testing and leak detection through the water dam method were then conducted to ensure the system was considered leak tight. The sampling apparatus was then arranged to isolate the line from the sampling point to the regulator on the summa canister and the air sampling pump.

VP-20 to VP-22 and select vapor points (VP-8, VP-11, and VP-15) were sampled on January 21, 2021. In addition, two indoor air samples (IA-3 and IA-4) were collected. To collect the samples for select VOCs, the summa canister valve was opened, and the sample was collected over approximately 15 minutes to allow for the recommended flow rates. FEC subsequently submitted the canisters to a Wisconsin-certified laboratory for analyses of select VOCs, via the TO-15 analytical method.

The results of the sub-slab vapor sampling show a continued decrease in contaminant concentrations within the central portion of the building as a result of the operations of the vapor mitigation system (VMS). The analysis did not detect indoor air at concentrations above their DNR commercial or

industrial vapor action levels ("VALs"). The results of the vapor sampling analytical testing are included in Appendix F.

Conclusions and Recommendations

The results of the groundwater sampling continue to demonstrate a reduction in contaminant concentrations from across the site. However, the downgradient edge of the plume appears to require further definition. Additional groundwater monitoring well installation, groundwater monitoring and analytical testing and hydraulic conductivity testing are proposed in 2021.

Post installation PFE testing showed excellent coverage from the north and south trenches of the VMS installed in the central portion of the building. Pilot testing for Phase II of the VMS was conducted and the results of the PFET indicate a regular pressure extension in the north and south portions of the building. Phase II of the VMS for the north and south portions of the building will not require a high-capacity blower. It is anticipated that Phase II of the VMS will be installed on the subject property and become operational in April/May 2021.

The results of the sub-slab vapor sampling show a continued decrease in contaminant concentrations as a result of the operations of the VMS. The analysis did not detect indoor air at concentrations above their DNR commercial or industrial VALs. Additional sub-slab vapor and indoor air sampling and PFET will be conducted following installation of Phase II of the VMS.

We hope that this letter has provided sufficient documentation of the SI activities conducted to date. If you have any questions or comments regarding this letter, please call us at (414) 228-9815.

Respectfully,

FRIESS ENVIRONMENTAL CONSULTING, INC.

Bryan Frieseke
Project Assistant

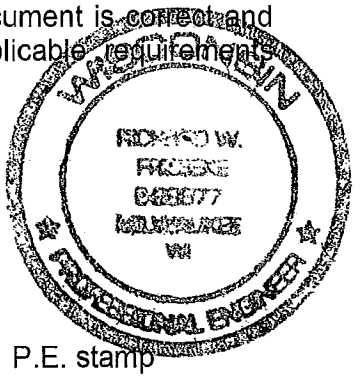
Trenton J. Ott
Project Manager

Attachments

170503SI

Certifications

"I, Richard Frieseke, hereby certify that I am a registered professional engineer in the State of Wisconsin, registered in accordance with the requirements of ch., 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."



Richard W Frieseke 4/1/21

Signature, title and P.E. number P.E. stamp

29877-006 Date

"I, Greg Konicek, 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."

4/1/21

Hydrogeologist

Signature and title Date

"I, Trenton Ott, 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 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."

Trenton J. Ott 4/1/21

Project Manager

Signature and title Date

APPENDIX A

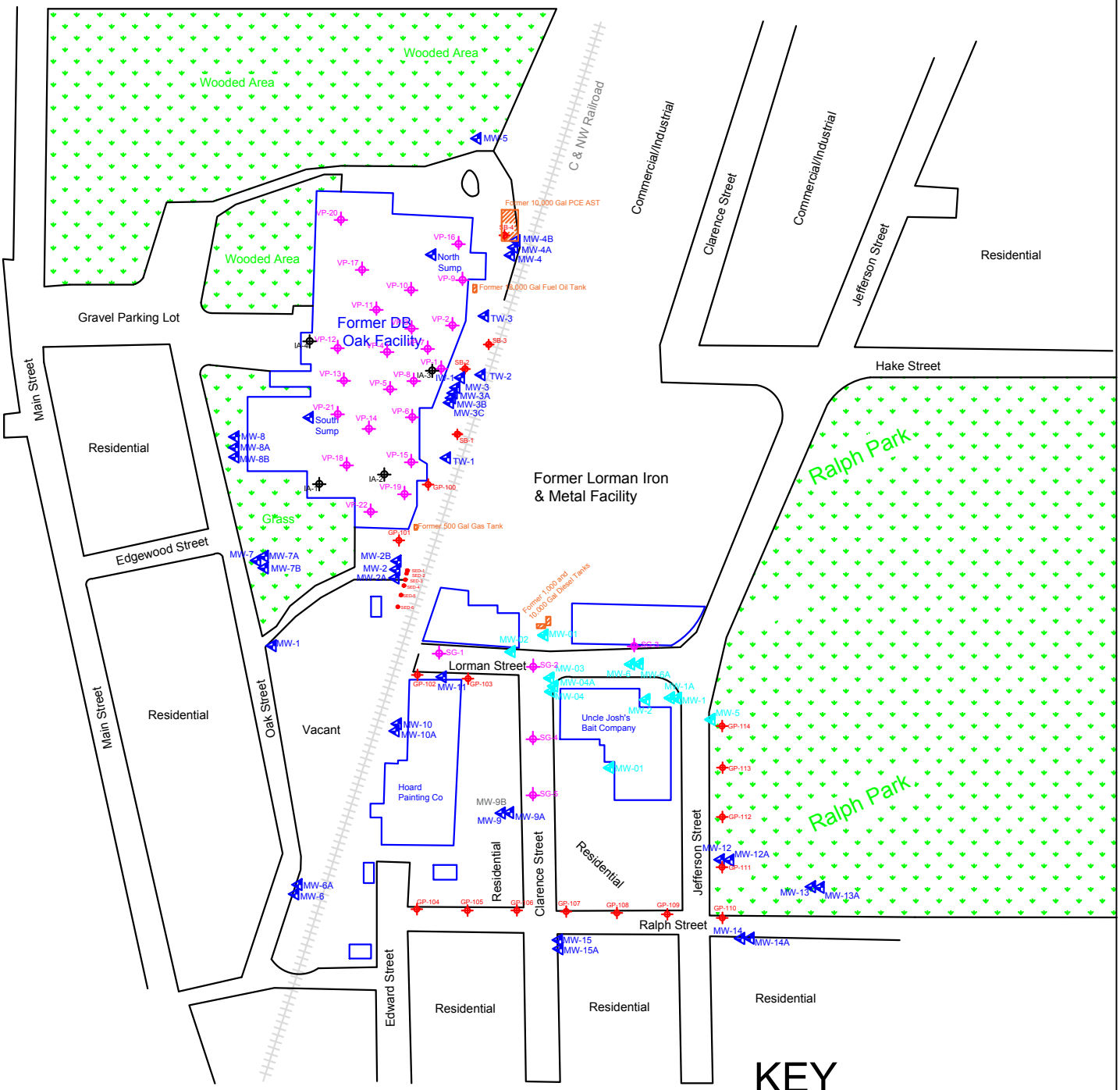
GENERAL INFORMATION

Contact Information (as of April 2021):

Site Owner/Operator:	Mary Betsch Gardner Denver Inc. 222 East Erie Street Milwaukee, WI 53202 (414) 212-4700
Consultant:	Friess Environmental Consulting, Inc. Attn: Richard W. Frieseke, P.E. 6635 North Sidney Place Milwaukee, WI 53209 (414) 228-9815
Drilling Contractors:	Giles Engineering Associates, Inc. Mr. Dave Cornale N8 W22350 Johnson Drive Waukesha, WI 53186 (262) 544-0118
Laboratory Contractor:	Synergy Environmental Lab, Inc. Mr. Michael Ricker 1990 Prospect Court Appleton, WI 54914 (920) 830-2455
DNR:	Mr. Jeff Ackerman Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711 (608) 275-3323 Jeffrey.Ackerman@Wisconsin.gov

APPENDIX B

MAPS & FIGURES



KEY

- = SI monitoring well
- = SI boring location
- = Sediment sample
- = Former SI monitoring well
- =Vapor Intrusion Point
- =Proposed Vapor Intrusion Point
- =Proposed SI Monitoring Well

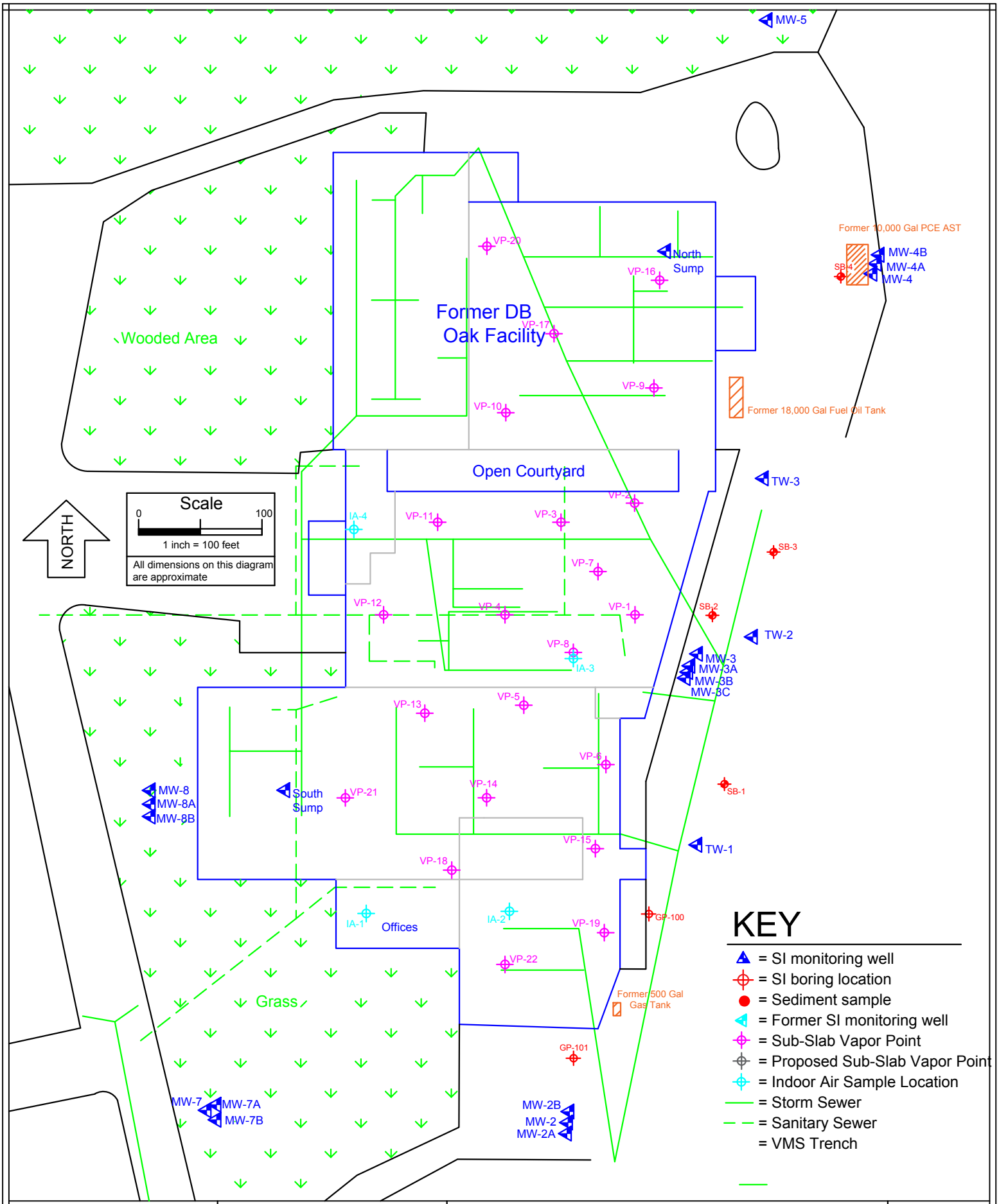
NORTH

Scale
0 200
1 inch = 200 feet
All dimensions on this diagram are approximate

File No.:	170503
DWG Date:	2-20-18
Rev Date:	8-26-19
Drawn By:	BRF
Checked By (PM):	TJO

WP Site Diagram
Former DB Oak Property
704 Oak Street
Fort Atkinson, Wisconsin

Figure
2



File No.:	170503
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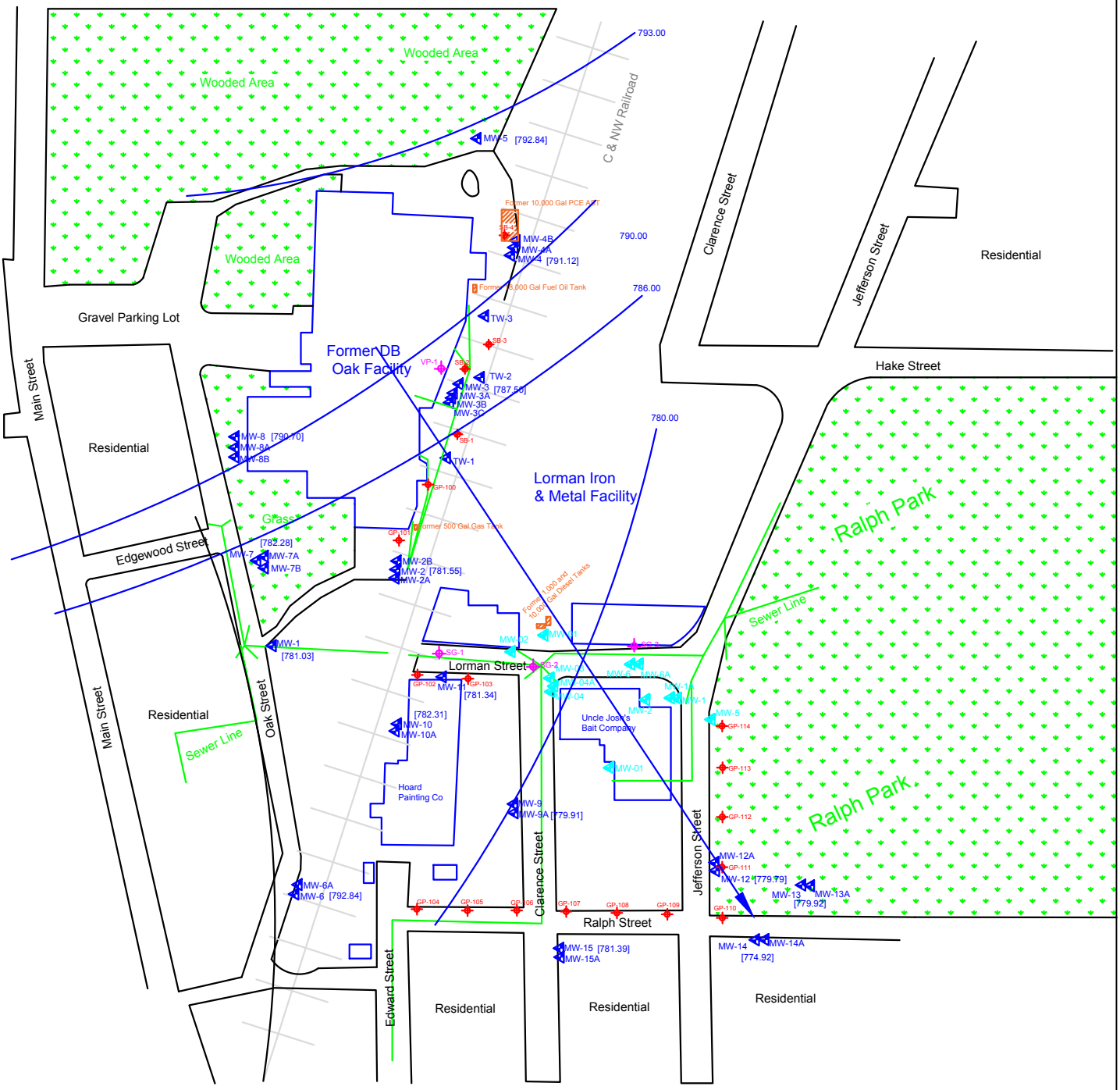
WP Site Diagram
Former DB Oak Property
704 Oak Street
Fort Atkinson, Wisconsin

Figure
1



NORTH

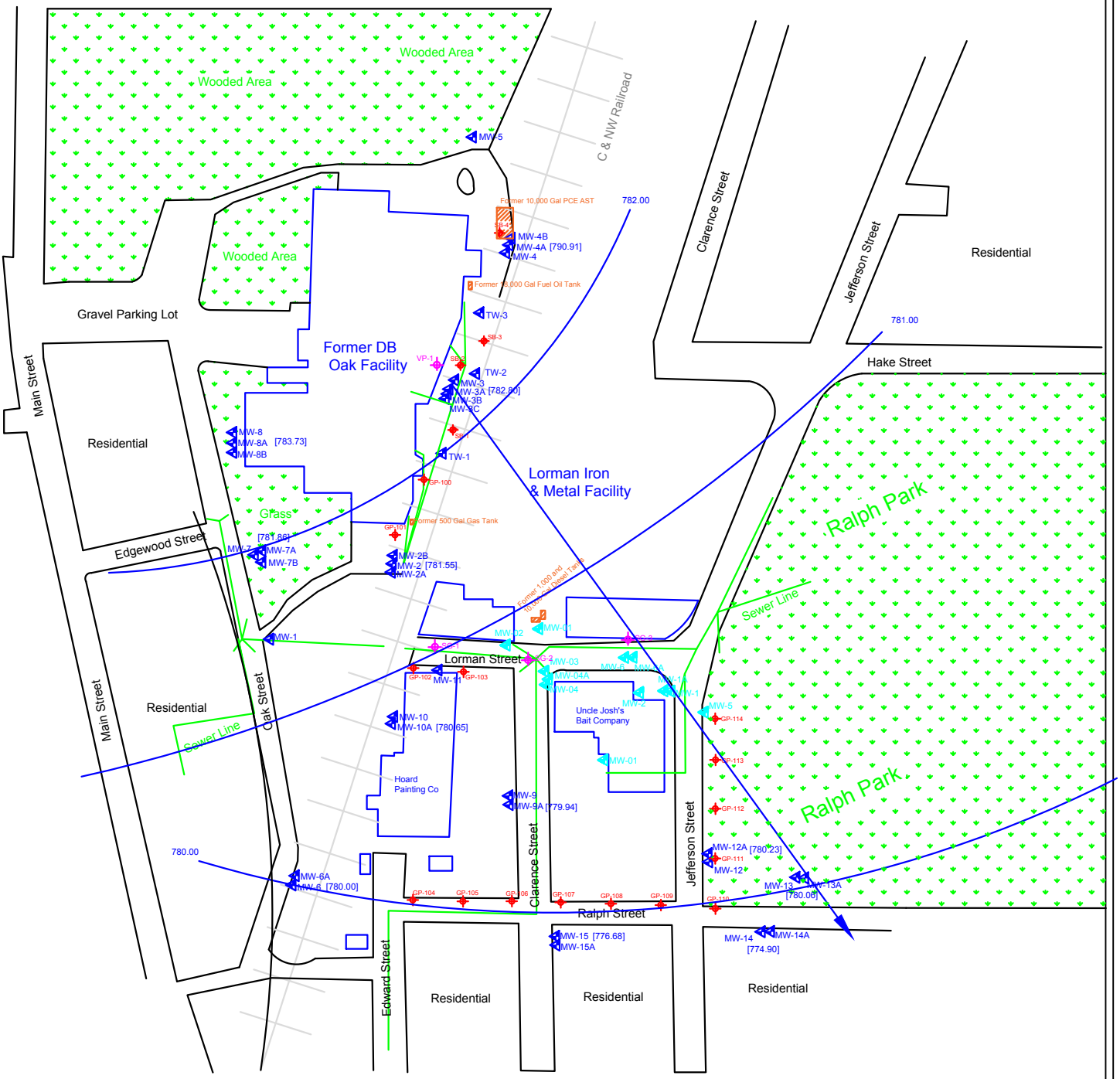
Scale
0 200
1 inch = 200 feet
All dimensions on this diagram are approximate

KEY

= SI monitoring well
= SI boring location
= Former SI monitoring well

File No.: 170503	Groundwater Contour MW-1 Jan '21 Former DB Oak Property 704 Oak Street Fort Atkinson, Wisconsin
DWG Date: 2-20-19	
Rev Date:	
Drawn By: BRF	
Checked By (PM): TJO	

Figure
2



NORTH

Scale
0 200
1 inch = 200 feet
All dimensions on this diagram are approximate

KEY

- = SI monitoring well
- = SI boring location
- = Former SI monitoring well

File No.: 170503	Groundwater Contour MW-A'S Jan '21 Former DB Oak Property 704 Oak Street Fort Atkinson, Wisconsin
DWG Date: 2-20-19	
Rev Date:	
Drawn By: BRF	
Checked By (PM): TJO	

Figure
2

APPENDIX C

DATA TABLES

TABLE A.1. (Page 1 of 10)
Groundwater Analytical Tables - VOCs
Former DB Oak Property
Fort Atkinson, Wisconsin

Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
TW-01	5/26/2009	5,900	52	3,000	350	2,700
	9/22/2009	5,000	140	120	<74.0	1,300
	12/2/2009	1,900	89	<15.0	<46.0	560
	3/23/2010	3.00	0.93	1.30	0.91	1.10
	6/22/2010	10	1.20	0.41	0.18	1.60
	9/15/2010	7.80	13.0	0.16	<0.16	56.0
	12/14/2010	11	0.33	0.54	0.61	0.66
	3/9/2011	6.70	0.31	3.00	5.60	1.60
	6/28/2011	1.10	<0.19	<0.15	<0.25	<0.15
	9/20/2011	0.44	<0.26	0.29	0.20	<0.18
	12/5/2011	0.53	<0.26	<.21	0.64	<0.18
	3/6/2012	1.90	<0.19	0.18	0.30	0.84
	9/24/2012	1.10	<0.26	0.27	0.34	0.44
	3/20/2013	0.31	<0.32	<0.22	0.27	<0.17
	9/16/2013	1.40	<0.18	0.19	0.14	0.24
	3/24/2014	0.54	<0.32	<0.16	0.74	<0.17
	9/24/2014	0.36	<0.32	<0.22	<0.27	<0.17
	3/10/2015	<0.30	<0.25	<0.21	<0.31	<0.16
	9/25/2015	0.35	<0.18	<0.22	<0.17	0.86
	3/21/2016	1.40	0.19	0.88	2.00	0.69
	9/14/2016	1.70	0.29	0.61	1.20	0.94
	3/8/2017	4.80	0.36	0.64	1.90	1.20
TW-02	5/26/2009	6,000	64	320	440	240
	9/22/2009	3,300	63	640	750	410
	12/2/2009	4,100	62	460	710	520
	3/23/2010	3,700	<100	530	640	680
	6/22/2010	4,000	<65.0	370	440	1,100
	9/15/2010	<250	3,600	500	560	1,000
	12/14/2010	2,400	<65.0	840	790	470
	3/9/2011	1,500	<33.0	730	450	830
	6/28/2011	2,100	37	360	410	590
	9/20/2011	1,900	<65.0	510	530	500
	12/5/2011	1,900	<52.0	550	470	550
	3/6/2012	1,300	31	810	490	260
	6/6/2012	1,400	120	1,400	1,200	1,800
	9/24/2012	1,200	29	420	400	290
	12/5/2012	1,200	32	350	360	280
	3/20/2013	680	<32.0	480	250	150
	6/11/2013	1,000	39	330	270	260
	9/16/2013	1,100	35	300	220	280
	12/4/2013	700	32	410	290	110
	3/24/2014	770	<32.0	360	200	200
	6/23/2014	620	<32.0	230	180	210
	9/24/2014	660	<2.00	220	180	230
	12/22/2014	550	23	270	200	120
	3/10/2015	440	17	260	160	99
	6/18/2015	160	<3.50	12	19	30
	9/25/2015	470	15	60.0	39	130
	12/21/2015	550	<10.0	230	150	160
	3/21/2016	540	26	220	170	190
	6/14/2016	560	21	130	100	200
	9/14/2016	340	13	24	19	130
	12/20/2016	450	19	180	120	130
	3/8/2017	290	17	160	97	120
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

TABLE A.1. (Page 2 of 10)
Groundwater Analytical Tables - VOCs
Former DB Oak Property
Fort Atkinson, Wisconsin

Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
TW-03	5/26/2009	*14*	<5.20	**210**	**200**	<3.7
	9/22/2009	5.50	<4.10	**1,100**	**130**	<3.4
	12/2/2009	**220**	<4.10	**590**	**130**	<3.4
	3/23/2010	**450**	<13.0	**92**	**77**	<9.2
	6/22/2010	**340**	<6.50	**10**	**7.20**	**58**
	9/15/2010	<3.10	**290**	<4.5	**7.70**	**130**
	3/9/2011	*62*	<6.50	**7.80**	**13**	**290**
	6/28/2011	**580**	5.50	**51**	**79**	**460**
	9/20/2011	**110**	<6.50	<5.20	<4.20	**650**
	12/5/2011	**480**	<21.0	<16.0	<13.0	**560**
	3/6/2012	6.70	<0.19	<0.15	<0.25	**13**
	6/6/2012	**770**	5.60	**10**	**15**	**1,100**
	9/24/2012	**180**	<4.80	<3.70	<6.20	**290**
	12/5/2012	**530**	<24.0	<18.0	<3.00	**1,100**
	3/20/2013	**400**	<25	**38**	**31**	**750**
	6/11/2013	**90**	<0.18	<13.0	**20**	**1,000**
	9/16/2013	**390**	<15.0	**24**	**20**	**970**
	12/4/2013	**330**	<32.0	**28**	<27	**720**
	3/24/2014	**390**	<32.0	**26**	**51**	**760**
	6/23/2014	**290**	<32.0	**52**	**40**	**680**
	9/24/2014	**320**	<32.0	<22.0	<27.0	**780**
	12/22/2014	**350**	<16.0	**16**	<14.0	**700**
	3/10/2015	**370**	<20.0	**130**	**80**	**750**
	6/18/2015	**428**	<22.0	**36.8**	**20.6**	**488**
	9/25/2015	**1,300**	<14.0	<17.0	<13.0	**1,000**
	12/21/2015	**600**	<25.0	**41.0**	<31.0	**950**
	3/21/2016	**1,100**	8.70	**37**	**26**	**1,200**
	6/14/2016	**1,300**	<15.0	<17.0	<24.0	**1,100**
	9/14/2016	**2,100**	19.0	<21.0	<30.0	**1,100**
	12/20/2016	**430**	15.0	**62**	**38**	**1,200**
	3/8/2017	**1,500**	<34.0	**74**	<65.0	**1,100**
IW-1	5/26/2009	*8.80*	<0.26	*0.76*	*0.68*	**5.50**
	9/22/2009	2.70	<0.26	<0.21	<0.17	**7.20**
	12/2/2009	2.00	<0.21	0.12	0.43	**7.80**
	3/23/2010	1.70	<0.26	<0.21	<0.17	**9.30**
	6/22/2010	1.80	<0.26	*0.54*	0.23	**7.60**
	9/15/2010	<.13	0.99	<0.16	<0.16	**6.90**
	12/14/2010	1.20	<0.26	0.44	0.44	**7.80**
	3/9/2011	1.00	NR	0.43	<0.17	**6.70**
	6/28/2011	0.82	<0.26	<0.21	<0.17	**4.80**
	9/20/2011	0.49	<0.19	<0.15	<0.25	**2.60**
	12/5/2011	0.43	<0.26	<0.15	<0.17	**2.10**
	3/6/2012	0.29	<0.26	<0.21	<0.17	*1.80*
	9/24/2012	0.54	<0.26	<0.21	<0.17	*1.80*
	3/20/2013	0.27	<0.32	0.31	0.34	*1.80*
	9/16/2013	0.31	<0.18	0.19	<0.14	*1.50*
	3/24/2014	0.26	<0.32	<0.16	<0.27	*1.80*
	9/24/2014	0.22	<0.32	<0.22	<0.27	*1.50*
	3/10/2015	<.30	<0.25	<0.21	<0.31	*1.70*
	9/25/2015	<.30	<0.25	<0.21	<0.31	*1.40*
	3/21/2016	<.18	<0.15	<0.17	<0.24	*1.60*
	9/14/2016	<.24	<0.17	<0.22	<0.32	*1.20*
	3/8/2017	2.30	<0.17	*1.60*	*0.66*	*1.30*
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

TABLE A.1. (Page 3 of 10)
Groundwater Analytical Tables - VOCs
Former DB Oak Property
Fort Atkinson, Wisconsin

Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-1	12/16/2004	0.14	<0.11	<0.13	<0.12	<0.16
	6/1/2005	<0.40	<0.35	<0.31	<0.25	<0.11
	3/28/2006	<0.19	<0.17	<0.16	0.40	<0.20
	10/25/2007	<0.50	<0.50	<0.50	<0.50	<0.50
	4/21/2008	<0.50	<0.50	<0.50	<0.50	<0.50
	5/26/2009	<0.20	<0.26	<0.21	<0.17	<0.18
	3/23/2010	<0.12	<0.13	<0.18	<0.16	<0.17
	3/20/2013	<0.10	<0.32	<0.22	<0.27	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-2	12/16/2004	**5,900**	*32.0*	**120**	**140**	**33**
	6/1/2005	**3,800**	**160**	<150	**160**	<53.0
	3/28/2006	**6,400**	<85.0	**190**	**450**	<98.0
	10/25/2007	**1,800**	<25.0	<25.0	**520**	**27**
	4/21/2008	**560**	<25.0	**120**	**85.0**	<25.0
	5/26/2009	**260**	<6.50	**110**	**69**	**6.90**
	9/22/2009	**630**	<6.50	**270**	**170**	**25**
	12/2/2009	**510**	<5.20	**320**	**230**	**6.50**
	3/23/2010	**1,000**	7.60	**470**	**360**	**17**
	6/22/2010	**950**	<10.0	**400**	**290**	**16**
	9/15/2010	<5.00	**360**	**180**	**150**	<6.90
	12/14/2010	**390**	<10.0	**270**	**200**	**13**
	3/9/2011	**530**	<10.0	**220**	**180**	<7.40
	6/28/2011	**570**	<10.0	**210**	**200**	**10**
	9/20/2011	**710**	<7.70	**250**	**290**	**6.60**
	12/5/2011	**2,200**	*27*	**15**	**500**	**65**
	3/6/2012	**3,200**	<52.0	**450**	**340**	**55**
	6/6/2012	**3,200**	<65.0	**350**	**300**	<46.0
	9/24/2012	**3,900**	<48.0	**530**	**490**	<37.0
	12/5/2012	**4,800**	<77.0	**200**	**510**	<60.0
	3/20/2013	**3,200**	<130	**270**	**500**	<66.0
	6/11/2013	**870**	<32.0	**140**	**160**	<17.0
	9/16/2013	**2,300**	<74.0	**74**	**200**	<44.0
	12/4/2013	**1,900**	<40.0	**330**	**400**	<44.0
	3/24/2014	**1,800**	<40.0	**140**	**190**	<21.0
	6/23/2014	**840**	<16.0	**96**	**67**	**16**
	9/24/2014	**1,300**	<16.0	**230**	**360**	**14**
	12/22/2014	**2,000**	<32.0	**230**	**270**	**24**
	3/10/2015	**3,800**	*25*	**200**	**200**	**28**
	6/18/2015	**1,800**	<35.0	**72**	**120**	**39**
	9/25/2015	**2,400**	<35.0	**170**	**370**	**39**
	12/21/2015	**1,600**	<50.0	**150**	**280**	**31**
	3/21/2016	**1,700**	<29.0	**120**	**170**	**32**
	6/14/2016	**1,400**	<34.0	**85**	**92**	**34**
	9/14/2016	**2,500**	*21*	**180**	**270**	**20**
	12/20/2016	**1,100**	<42.0	**160**	**220**	**43**
	3/8/2017	**1,800**	<42.0	**150**	**220**	**43**
	10/8/2020	5.70	<0.37	*4.20*	*1.75*	*0.78*
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

TABLE A.1. (Page 4 of 10)
Groundwater Analytical Tables - VOCs
Former DB Oak Property
Fort Atkinson, Wisconsin

Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-2A	12/16/2004	**380**	<5.40	**44**	**69**	**29**
	6/1/2005	**350**	<8.70	**110**	**83.0**	**36**
	3/28/2006	**3,800**	*20*	**320**	**700**	**91**
	10/25/2007	**1,800**	<25.0	**360**	**530**	<25.0
	4/21/2008	**2,100**	<25.0	**610**	**620**	<25.0
	5/26/2009	**660**	<13.0	**590**	**380**	<9.20
	9/22/2009	**920**	<13.0	**530**	**280**	**75**
	12/2/2009	**1,700**	11.0	**390**	**280**	**56**
	3/23/2010	**1,900**	16.0	**250**	**180**	**76**
	6/22/2010	**1,600**	<26.0	**290**	**200**	<18.0
	9/15/2010	<13.0	**730**	**340**	**200**	<17.0
	12/14/2010	**2,100**	<26.0	**370**	**190**	**25**
	3/9/2011	**1,700**	<26.0	**220**	**140**	**48**
	6/28/2011	**1,600**	<26.0	**240**	**160**	<18.0
	9/20/2011	**1,200**	<19.0	**210**	**150**	<15.0
	12/5/2011	**1,700**	<26.0	**170**	**110**	**33**
	3/6/2012	**2,200**	<52.0	**140**	**100**	**69**
	6/6/2012	**2,200**	<52.0	**88**	**79**	**73**
	9/24/2012	**1,800**	<39.0	**110**	**85**	**66**
	12/5/2012	**2,300**	<39.0	**74**	**87**	**67**
	3/20/2013	**2,400**	<63.0	**66**	**61**	<33.0
	6/11/2013	**1,500**	<63.0	**94**	**130**	<33.0
	9/16/2013	**1,600**	<37.0	**62**	**91**	**32**
	12/4/2013	**2,400**	<63.0	**65**	**65**	**54**
	3/24/2014	**630**	<16.0	**33**	**39**	**36**
	6/23/2014	**2,300**	<63.0	<200	<200	**59**
	9/24/2014	**1,500**	<63.0	<43.0	<55.0	<33.0
	12/22/2014	**1,900**	<32.0	**42**	**36**	**62**
	3/10/2015	**2,000**	<31.0	**44**	**49**	**47**
	6/18/2015	**3,630**	<34.0	**135**	**71**	**53.9**
	9/25/2015	**2,000**	<35.0	<44.0	<33.0	**47**
	12/21/2015	**2,200**	<50.0	<43.0	<61.0	**100**
	3/21/2016	**2,500**	<29.0	<33.0	<47.0	**98**
	6/14/2016	**1,900**	<34.0	<44.0	<65.0	**100**
	9/14/2016	**1,400**	<29.0	<33.0	<47.0	<32.0
	12/20/2016	**1,600**	<21.0	<28.0	<40.0	**75.0**
	3/8/2017	**2,000**	<21.0	<28.0	<40.0	**290**
	10/8/2020	**121**	<3.70	<3.30	<4.70	**29.3**
MW-2B	10/25/2007	*19*	<0.50	**15**	**6.20**	<0.50
	4/21/2008	*19*	<0.50	**15**	**6.20**	<0.50
	5/26/2009	1.40	<0.26	**11**	**6.60**	<0.18
	9/22/2009	1.80	<0.26	**9.20**	**6.40**	<0.18
	12/2/2009	2.20	<0.21	**9.80**	**5.90**	<0.17
	3/23/2010	4.60	<0.13	**13**	**6.70**	<0.17
	6/22/2010	1.60	<0.26	**11**	**6.70**	<0.18
	9/15/2010	<0.13	0.63	**7.10**	**6.50**	<0.17
	12/14/2010	*15*	<0.26	**19**	**6.30**	<0.18
	3/9/2011	*14*	<0.26	**8.20**	*4.90*	<0.18
	6/28/2011	*16*	<0.26	**8.20**	*4.50*	<0.18
	9/20/2011	*15*	<0.19	*5.00*	*3.90*	<0.15
	12/5/2011	*13*	<0.26	**6.90**	*4.80*	<0.18
	3/6/2012	*12*	<0.26	**6.80**	**5.50**	<0.18
	9/24/2012	*16*	0.21	**6.70**	**7.30**	<0.15
	3/20/2013	*35*	0.37	**10**	**11**	<0.17
	9/16/2013	*23*	<0.74	**5.90**	**5.1**	<0.44
	3/24/2014	*39*	<0.79	**7.70**	**11**	<0.42
	9/24/2014	*7.30*	<0.32	**9.60**	**6.60**	<0.17
	3/10/2015	*11*	<0.25	**13**	**8.50**	*0.19*
	9/25/2015	5.60	<0.18	**23**	**7.80**	<0.20
	3/21/2016	*13*	0.22	**16**	**8.10**	<0.16
	9/14/2016	*18*	0.25	**16**	*4.80*	<0.16
	3/8/2017	*25*	0.38	**20**	**5.60**	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

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Groundwater Analytical Tables - VOCs
Former DB Oak Property
Fort Atkinson, Wisconsin

Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-3	12/16/2004	**6,800**	<540	**34,000**	**17,000**	<820
	6/1/2005	**2,600**	<870	**27,000**	**5,500**	<270
	3/28/2006	**3,500**	<420	**28,000**	**7,200**	<490
	11/2/2006	**3,000**	<220	**22,000**	**5,100**	**79**
	10/25/2007	**5,800**	<200	**10,000**	**3,300**	**710**
	4/21/2008	**2,100**	<130	**24,000**	**3,100**	<130
	5/26/2009	**2,800**	<51.0	**5,700**	**4,000**	**270**
	9/22/2009	**27,000**	**840**	<100	<84	**12,000**
	12/2/2009	**68,000**	**2,000**	<59.0	<190	**27,000**
	3/23/2010	**80,000**	**1,800**	<900	<820	**31,000**
	6/22/2010	**2,500**	<1300	<1000	<840	**52,000**
	9/15/2010	<630	<600	<900	<820	**27,000**
	12/14/2010	<510	<650	<520	<420	**26,000**
	3/9/2011	**970**	<650	<520	<420	**28,000**
	6/28/2011	<200	<260	<210	<170	**13,000**
	9/20/2011	<100	<97.0	<73.0	<120	**4,400**
	12/5/2011	**100**	<130	<100	<84.0	**15,000**
	3/6/2012	**470**	<520	<410	<330	**20,000**
	6/6/2012	<200	<260	<210	<170	**12,000**
	9/24/2012	0.28	<0.19	<0.15	<0.25	**2.10**
	12/5/2012	2.00	<0.19	<0.15	<0.25	**83**
	3/20/2013	*13.0*	*62.0*	<1.7	<2.20	**5,200**
	6/11/2013	<4.00	<13.0	<8.6	<11.0	**380**
	9/16/2013	1.30	<0.74	<0.65	<0.57	<0.44
	12/4/2013	1.60	<0.32	<0.22	<0.27	*0.57*
	3/24/2014	1.90	<0.32	<0.22	*0.68*	**6.60**
	6/23/2014	3.00	<0.17	<0.21	<0.15	**8.90**
	9/24/2014	1.10	<0.32	<0.22	*0.56*	*0.77*
	12/22/2014	0.85	<0.32	<0.22	<0.27	*0.54*
	3/10/2015	0.81	<0.25	<0.21	<0.31	*0.31*
	6/18/2015	1.63	<0.27	0.41	0.36	*0.48*
	9/25/2015	1.10	0.34	<0.22	<0.17	*1.70*
	12/21/2015	3.30	0.38	<0.21	*1.30*	**4.80**
	3/21/2016	3.00	0.30	<0.17	<0.24	**12**
	9/14/2016	1.10	0.61	<0.17	<0.24	**2.10**
	3/8/2017	3.00	0.24	<0.22	<0.32	**39**
	10/8/2020	4.90 J	<0.37	<0.33	<0.47	**690**
	1/21/2021	**330**	4.6 J	<3.30	<4.70	**1220**
MW-3A	6/1/2005	**13,000**	**250**	**3,000**	**2,300**	**910**
	3/28/2006	**12,000**	**190**	**4,200**	**2,900**	**740**
	11/2/2006	**14,000**	<220	**1,700**	**1,900**	**580**
	10/25/2007	**11,000**	**190**	**2,100**	**1,500**	**520**
	4/21/2008	**16,000**	<250	**4,400**	**2,700**	**990**
	5/26/2009	**18,000**	**250**	**3,100**	**2,100**	**1,700**
	9/22/2009	**20,000**	**300**	**1,200**	**1,100**	**2,300**
	12/2/2009	**18,000**	<260	**1,500**	**1,200**	**2,200**
	3/23/2010	**15,000**	**180**	**1,400**	**1,300**	**1,600**
	6/22/2010	**16,000**	<330	**2,400**	**1,400**	**1,700**
	9/15/2010	<160	**15,000**	**1,300**	**1,500**	**1,900**
	12/14/2010	**17,000**	<330	**1,500**	**1,500**	**1,700**
	3/9/2011	**14,000**	<330	**1,500**	**310**	**1,200**
	6/28/2011	**8,500**	<330	<260	<210	**1,200**
	9/20/2011	**14,000**	<330	<260	<210	**4,000**
	12/5/2011	**8,500**	<330	<260	<200	**9,400**
	3/6/2012	**4,500**	<150	<120	<130	**6,700**
	6/6/2012	**7,900**	<210	<160	<62	**4,700**
	9/24/2012	**3,200**	*50.0*	<37.0	<250	**2,800**
	12/5/2012	**15,000**	<190	<150	<340	**2,800**
	3/20/2013	**11,000**	<400	<270	**390**	**2,400**
	6/11/2013	**13,000**	<400	<270	<180	**2,600**
	9/16/2013	**13,000**	<230	<200	<340	**2,400**
	12/4/2013	**13,000**	<400	<270	<340	**2,200**
	3/24/2014	**14,000**	<400	<400	<190	**2,200**
	6/23/2014	**14,000**	<180	<170	<340	**2,600**
	9/24/2014	**12,000**	<400	<270	<270	**2,500**
	12/22/2014	**15,000**	<320	<220	<380	**2,500**
	3/10/2015	**13,000**	<310	<270	<230	**2,360**
	6/18/2015	**14,700**	<340	<330	<380	**2,500**
	9/25/2015	**13,000**	<310	<270	<380	**2,300**
	12/21/2015	**12,000**	<310	<270	<300	**2,800**
	3/21/2016	**16,000**	<180	<210	<400	**2,800**
	6/14/2016	**13,000**	<210	<280	<400	**2,500**
	9/14/2016	**18,000**	<180	<210	<300	**2,900**
	12/20/2016	**16,000**	<210	<280	<400	**2,800**
	3/8/2017	**17,000**	<210	<280	<400	**3,100**
	10/8/2020	**8,900**	**400**	<3.30	<4.70	**1,980**
	1/21/2021	**12,000**	*93*	<23.50	<16.50	**2,850**
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

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Groundwater Analytical Tables - VOCs
Former DB Oak Property
Fort Atkinson, Wisconsin

Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-3B	3/28/2006	600	<85.0	17,000	2,800	<98.0
	11/2/2006	400	<110	9,700	1,800	<22.0
	10/25/2007	330	<100	5,300	1,200	<100
	4/21/2008	530	<100	12,000	2,400	<100
	5/26/2009	480	<51.0	9,700	2,300	<42.0
	9/22/2009	1,000	<210	9,800	1,900	210
	12/2/2009	1,000	<160	9,700	2,200	<140
	3/23/2010	920	<100	10,000	2,200	<140
	6/22/2010	860	<210	1,600	1,900	<150
	9/15/2010	<170	1,000	10,000	2,400	<140
	12/14/2010	740	<260	11,000	2,100	<180
	3/9/2011	670	<260	9,600	1,900	<180
	6/28/2011	1,800	<52.0	830	820	130
	9/20/2011	4,900	<130	320	1,500	160
	12/5/2011	4,800	<130	210	710	190
	3/6/2012	6,500	<77.0	<58	<99	400
	6/6/2012	3,400	<130	110	550	710
	9/24/2012	2,200	<39.0	840	870	690
	12/5/2012	1,500	<39.0	1,800	1,100	450
	3/20/2013	1,100	<40.0	2,500	1,100	250
	6/11/2013	1,400	<37.0	2,700	1,200	270
	9/16/2013	1,100	<63.0	2,400	1,200	250
	12/4/2013	960	<63.0	1,900	1,000	190
	3/24/2014	900	<63.0	2,200	1,200	170
	6/23/2014	950	<63.0	1,900	1,100	220
	9/24/2014	1,100	<63.0	2,100	1,100	250
	12/22/2014	1,300	<63.0	2,400	1,500	230
	3/10/2015	990	<50.0	2,800	1,400	210
	6/18/2015	1,160	<54.0	3,380	1,440	218
	9/25/2015	980	<50.0	2,600	1,300	230
	12/21/2015	900	<50.0	3,000	1,400	220
	3/21/2016	1,100	<36.0	3,400	1,300	<300
	6/14/2016	940	<42.0	2,900	1,200	310
	9/14/2016	1,200	<36.0	3,600	1,300	370
	12/20/2016	1,300	<68.0	2,800	1,200	400
	3/8/2017	1,200	<68.0	4,100	1,400	360
	10/8/2020	330	13.1	<3.30	<4.70	460
	1/21/2021	309	11.30 J	<3.30	<4.70	610
MW-3C	10/25/2007	110	1.00	*3.20*	*1.40*	2.80
	4/21/2008	*49.0*	<5.00	<5.00	<5.00	<5.00
	5/26/2009	*37.0*	0.38	*1.90*	*2.50*	*0.57*
	9/22/2009	0.35	<0.26	*0.68*	0.22	<0.18
	12/2/2009	<0.41	<0.51	<0.30	*1.10*	<0.42
	3/23/2010	5.00	<0.50	<0.72	<0.65	*1.80*
	6/22/2010	*11.0*	<1.00	<0.82	<0.67	*1.70*
	9/15/2010	<0.13	6.10	<0.18	0.31	*0.85*
	12/14/2010	6.10	<0.26	34	5.40	*1.20*
	3/9/2011	6.40	NR	<0.21	0.34	*0.71*
	6/28/2011	5.30	<0.26	<0.21	0.34	*0.95*
	9/20/2011	6.90	<0.26	0.44	*0.94*	*0.79*
	12/5/2011	4.80	<0.26	<0.21	*0.53*	*0.73*
	3/6/2012	4.30	<0.19	<0.15	<0.25	*0.61*
	9/24/2012	4.10	<0.19	<0.15	<0.25	*0.66*
	3/20/2013	4.30	<0.32	0.35	0.42	*1.10*
	9/16/2013	1.90	<0.32	<0.22	<0.17	<0.17
	3/24/2014	5.50	<0.32	*4.10*	*1.90*	*0.66*
	9/24/2014	1.50	<0.32	<0.22	<0.27	0.19
	3/10/2015	1.80	<0.25	<0.21	<0.31	*0.26*
	9/25/2015	1.40	<0.25	<0.21	<0.31	0.18
	3/21/2016	1.40	<0.17	<0.22	<0.32	*0.20*
	9/14/2016	1.20	<0.15	<0.17	<0.24	0.17
	3/8/2017	1.30	<0.17	<0.22	<0.32	*0.37*
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	*1.29*	<0.47	<0.20
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

TABLE A.1. (Page 7 of 10)
Groundwater Analytical Tables - VOCs
Former DB Oak Property
Fort Atkinson, Wisconsin

Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-4	12/16/2004	<66.0	<54.0	2,500	10,000	<82.0
	6/1/2005	<200	<170	2,500	4,700	<53.0
	3/28/2006	<190	<170	5,400	38,000	<200
	10/25/2007	*42*	<25.0	2,000	1,500	<25.0
	4/21/2008	600	<500	14,000	43,000	<500
	5/26/2009	<40.0	<52.0	2,400	1,100	<37.0
	9/22/2009	5,200	<52.0	<41.0	44	1,300
	12/2/2009	1,600	<21.0	110	71	800
	3/23/2010	4,300	*47.0*	5,000	17,000	1,600
	6/22/2010	3,600	<33.0	<26.0	<21.0	1,600
	9/15/2010	<15.0	660	<23.0	<20.0	970
	12/14/2010	990	<33.0	<26.0	<21.0	2,100
	3/9/2011	3,100	<26	5,500	6,300	1,400
	6/28/2011	7,200	*69*	70	1,000	7,200
	9/20/2011	9,200	*57*	<18.0	730	3,200
	12/5/2011	21,000	140	<100	2,000	4,400
	3/6/2012	69,000	650	<180	1,900	14,000
	6/6/2012	8,300	<210	<160	<130	7,000
	9/24/2012	5,800	<210	<160	<130	6,800
	12/5/2012	9,700	<150	<120	<200	9,100
	3/20/2013	30,000	270	150	5,900	13,000
	6/11/2013	5,000	<250	<170	<220	6,700
	9/16/2013	1,300	<74.0	87	<57.0	5,200
	12/4/2013	*7.80*	<1.30	<2.70	<3.40	160
	3/24/2014	6,500	<500	<110	3,900	3,000
	6/23/2014	14,000	<160	<110	<140	12,000
	9/24/2014	7,400	<400	<270	<340	8,400
	12/22/2014	740	<22.0	<17.0	<19.0	1,200
	3/10/2015	2,600	<63.0	<53.0	<76.0	1,700
	6/18/2015	6,010	<67.0	<66.0	<46.0	4,560
	9/25/2015	9,700	<130	<110	510	8,000
	12/21/2015	3,600	<130	<110	<150	5,100
	3/21/2016	3,700	<85	<110	<160	5,600
	6/14/2016	3,900	<85	<110	<160	3,000
	9/14/2016	620	<21.0	<28.0	<40.0	1,800
	12/20/2016	3.70	0.62	<0.44	<68.0	18.0
	3/8/2017	800	<17.0	<22.0	<32.0	1,100
	10/8/2020	*50*	4.30 J	<3.30	<4.70	102
	1/21/2021	180	2.71	<0.33	*2*	340
MW-4A	12/16/2004	0.89	<0.11	7.10	23	<0.16
	6/1/2005	<0.40	<0.35	*1.20*	*0.59*	<0.11
	3/28/2006	0.29	<0.17	6.90	*0.97*	<0.20
	10/25/2007	<0.50	<0.50	*1.20*	8.50	<0.50
	4/21/2008	<0.50	<0.50	*1.50*	*1.10*	<0.50
	5/26/2009	<0.20	<0.26	*3.80*	*1.60*	<0.18
	9/22/2009	0.36	<0.21	<0.12	<0.37	<0.17
	12/2/2009	0.20	<0.21	*0.95*	<0.37	<0.57
	3/23/2010	2.60	<0.26	*3.30*	*2.20*	<0.18
	6/22/2010	0.79	<0.26	*1.20*	*0.52*	<0.18
	9/15/2010	<0.13	0.53	*1.10*	*0.56*	<0.17
	12/14/2010	<0.2	<0.26	0.38	0.33	<0.18
	3/9/2011	2.60	<0.26	6.20	*1.40*	<0.18
	6/28/2011	0.70	<0.26	*0.67*	*0.65*	<0.18
	9/20/2011	1.90	<0.19	*0.82*	*1.70*	<0.15
	12/5/2011	1.60	<0.26	*0.82*	*0.59*	<0.18
	3/6/2012	1.40	<0.19	*0.66*	0.41	<0.15
	6/6/2012	1.80	<0.19	*0.85*	*0.51*	<0.15
	9/24/2012	1.50	<0.26	*0.74*	*0.61*	<0.18
	3/20/2013	0.44	<0.32	*0.68*	*0.55*	<0.17
	9/16/2013	0.30	<0.32	0.29	0.32	<0.17
	3/24/2014	0.11	0.32	<0.16	0.46	<0.17
	9/24/2014	<0.10	<0.32	<0.22	0.29	<0.17
	3/10/2015	<0.30	<0.25	<43	<0.31	<0.16
	9/25/2015	0.64	<0.25	0.34	0.40	<0.16
	3/21/2016	2.10	<0.17	0.33	<0.32	<0.17
	9/14/2016	<0.24	<0.17	<0.22	<0.32	<0.17
	3/8/2017	<0.24	<0.17	<0.22	<0.32	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

TABLE A.1. (Page 8 of 10)
Groundwater Analytical Tables - VOCs
Former DB Oak Property
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Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-4B	5/26/2009	<0.20	<0.26	*1.10*	0.42	<0.18
	9/22/2009	1.10	<0.21	*3.60*	*1.20*	<0.17
	12/2/2009	2.50	<0.21	*2.80*	*1.10*	<0.57
	3/23/2010	0.29	<0.26	*2.20*	0.25	<0.18
	6/22/2010	0.39	<0.26	*0.81*	<0.17	<0.18
	9/15/2010	<0.13	0.24	<0.18	<0.16	<0.17
	12/14/2010	2.40	<0.26	*2.50*	0.46	*0.22*
	3/9/2011	*7.30*	<0.26	*1.50*	0.44	<0.18
	6/28/2011	1.90	<0.26	0.40	0.23	*0.29*
	9/20/2011	0.92	<0.19	<0.15	<0.25	<0.15
	12/5/2011	1.30	<0.26	0.37	0.39	<0.18
	3/6/2012	3.10	<0.19	*1.40*	0.49	<0.15
	9/24/2012	0.69	<0.26	<0.21	<0.17	<0.18
	3/20/2013	0.33	<0.32	<0.22	<0.27	<0.17
	9/16/2013	<0.10	<0.32	<0.22	<0.17	<0.17
	3/24/2014	<0.10	0.32	<0.16	<0.27	<0.17
	9/24/2014	0.40	<0.32	0.31	<0.27	<0.17
	3/10/2015	<0.30	<0.25	*0.78*	<0.31	<0.16
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-5	12/16/2004	0.21	<0.11	*2.30*	*1.20*	<0.16
	6/1/2005	<0.40	<0.35	<0.31	<0.25	<0.11
	3/28/2006	<0.19	<0.17	0.17	*0.77*	<0.2
	10/25/2007	<0.50	<0.50	<0.50	<0.50	<0.50
	4/21/2008	<0.50	<0.50	*0.78*	*0.81*	<0.50
	5/26/2009	<0.20	<0.26	<0.21	<0.17	<0.18
	3/23/2010	<0.12	<0.13	<0.18	<0.16	<0.17
	9/15/2010	<0.13	<0.12	<0.18	0.47	<0.17
	3/9/2011	<0.20	NR	<0.21	<0.17	<0.18
	9/20/2011	<0.21	<0.19	<0.15	<0.25	<0.15
	3/6/2012	<0.20	<0.26	<0.21	<0.17	<0.18
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-6	6/1/2005	<0.40	<0.35	<0.31	<0.25	<0.11
	3/28/2006	<0.19	<0.17	<0.16	0.35	<0.2
	10/25/2007	<0.50	<0.50	<0.50	<0.50	<0.50
	4/21/2008	<0.50	<0.50	<0.50	<0.50	<0.50
	5/26/2009	<0.20	<0.26	<0.21	<0.17	<0.18
	3/23/2010	<0.12	<0.13	<0.18	<0.16	<0.17
	3/20/2013	<0.10	<0.32	<0.22	<0.27	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-6A	6/1/2005	<0.40	<0.35	<0.31	<0.25	<0.11
	3/28/2006	<0.34	<0.17	<0.16	<0.19	<0.2
	10/25/2007	<0.50	<0.50	<0.50	<0.50	<0.50
	4/21/2008	<0.50	<0.50	<0.50	<0.50	<0.50
	5/26/2009	<0.20	<0.26	<0.21	<0.17	<0.18
	3/23/2010	<0.12	<0.13	<0.18	<0.16	<0.17
	3/20/2013	<0.10	<0.32	0.30	<0.27	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-7	3/28/2006	0.89	<0.17	**5.40**	*2.90*	<0.2
	11/2/2006	<.83	<0.89	*4.90*	*1.40*	<0.18
	10/25/2007	<0.50	<0.50	*3.50*	*0.63*	<0.50
	4/21/2008	<0.50	<0.50	<0.50	<0.50	<0.50
	5/26/2009	<0.20	<0.26	0.34	<0.17	<0.18
	9/22/2009	<0.16	<0.21	*0.85*	<0.37	<0.17
	12/2/2009	<0.16	<0.21	*0.98*	<0.37	<0.17
	3/23/2010	<0.12	<0.13	0.32	<0.16	<0.17
	9/15/2010	<0.13	<0.12	0.48	<0.16	<0.17
	3/9/2011	<0.20	NR	0.34	<0.17	<0.18
	9/20/2011	NR	<0.48	0.47	<0.25	<0.15
	3/6/2012	<0.21	<0.19	0.29	<0.25	<0.15
	9/24/2012	*22*	0.28	*0.80*	*1.40*	<0.18
	3/20/2013	0.99	<0.32	0.42	0.34	<0.17
	9/16/2013	<0.10	<0.32	0.27	<0.17	<0.17
	3/24/2014	<0.10	0.32	<0.16	<0.27	<0.17
	9/24/2014	1.20	<0.32	*2.30*	*0.64*	<0.17
	3/10/2015	<0.30	<0.25	0.29	<0.31	<0.16
	9/25/2015	<0.30	<0.25	0.30	<0.31	<0.16
	3/21/2016	<0.24	<0.17	< 0.22	<0.32	<0.17
	9/14/2016	NR	<0.17	<0.22	<0.32	<0.17
	3/8/2017	<0.24	<0.17	<0.22	<0.32	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
ES (ug/L)	*-*	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	*-*	*7*	*20*	*0.5*	*0.5*	*0.02*

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Groundwater Analytical Tables - VOCs
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Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-7A	3/28/2006	270	<10.0	850	200	<8.30
	11/2/2006	290	<8.90	560	180	<1.80
	10/25/2007	<5.00	<5.00	310	110	<5.00
	4/21/2008	<0.50	<0.50	0.67	<0.50	<0.50
	5/26/2009	<1.60	<2.10	94	3.90	<1.50
	9/22/2009	<1.30	<1.60	68	5.90	<1.40
	12/2/2009	0.50	<0.21	83	3.60	<0.57
	3/23/2010	5.00	<0.63	92	6.40	<0.87
	6/22/2010	<1.60	<2.10	82	2.10	<1.50
	9/15/2010	<0.50	<0.48	44	2.10	<0.69
	12/14/2010	<1.00	<1.30	55	1.30	<0.92
	3/9/2011	1.10	NR	60	1.20	<0.92
	6/28/2011	1.30	<1.30	45	2.00	1.10
	9/20/2011	1.10	<0.48	43	1.90	<0.37
	12/5/2011	3.50	<1.00	50	1.70	<0.74
	3/6/2012	4.20	<0.77	59	2.90	<0.60
	6/6/2012	67	<0.97	54	3.50	<0.75
	9/24/2012	74	<1.30	67	6.40	<0.92
	12/5/2012	74	<0.97	55	6.90	<0.75
	3/20/2013	140	<1.60	69	25	<0.83
	6/11/2013	96	<2.30	44	11	1.90
	9/16/2013	45	<3.20	25	4.90	<1.70
	12/4/2013	86	<3.20	47	9.70	<1.70
	3/24/2014	160	<32.0	60	24	<1.70
	6/23/2014	120	<3.20	49	20	<1.70
	9/24/2014	77	<3.20	31	11	<1.70
	12/22/2014	97	<0.87	49	17	<0.84
	3/10/2015	92	<2.00	44	19	<1.20
	6/18/2015	187	<2.70	70.8	32	<2.00
	9/25/2015	160	<2.50	71	45	<1.60
	12/21/2015	180	<3.10	120	65	<2.00
	3/21/2016	180	<12.5	100	55	<2.10
	6/14/2016	170	<2.10	88	55	<2.10
	9/14/2016	190	<2.10	130	60	<2.10
	12/20/2016	200	<2.10	120	54	<2.10
	3/8/2017	230	<3.40	140	61	<2.10
	10/8/2020	3.00	<0.37	33	9.40	<0.20
	1/21/2021	1.50	<0.37	22.6	3.50	<0.20
MW-7B	10/25/2007	<0.50	<0.50	6.90	0.87	<0.50
	4/21/2008	<0.50	<0.50	6.40	0.73	<0.50
	5/26/2009	<0.16	<0.21	8.60	<0.37	<0.18
	9/22/2009	<0.16	<0.21	10	0.39	<0.17
	12/2/2009	0.49	<0.21	11	0.62	<0.17
	3/23/2010	0.20	<0.13	8.60	0.62	<0.17
	6/22/2010	<0.20	<0.26	8.10	0.35	<0.18
	9/15/2010	<0.13	<0.12	8.00	0.78	<0.17
	12/14/2010	<0.20	<0.26	11	0.51	<0.15
	3/9/2011	<0.20	NR	8.40	0.42	<0.18
	6/28/2011	<0.21	<0.19	7.10	0.45	<0.15
	9/20/2011	<0.21	<0.19	6.60	0.49	<0.15
	12/5/2011	<0.20	<0.26	5.50	0.48	<0.18
	3/6/2012	0.66	<0.19	3.50	0.48	<0.15
	9/24/2012	0.61	<0.26	3.10	0.58	<0.18
	3/20/2013	4.90	<0.32	3.10	1.30	0.79
	9/16/2013	<0.10	<0.32	0.56	3.50	<0.17
	3/24/2014	0.33	<0.32	4.90	1.60	<0.17
	9/24/2014	<0.10	<0.32	3.80	0.40	<0.17
	3/10/2015	0.50	<0.25	5.50	0.79	<0.16
	9/25/2015	0.77	<0.18	6.40	1.50	0.23
	3/21/2016	8.40	0.25	8.50	5.10	0.52
	9/14/2016	7.10	<0.17	15	7.70	0.35
	3/8/2017	2.30	<0.17	20	7.40	0.39
	10/8/2020	<0.39	<0.37	6.80	1.26	<0.20
	1/21/2021	<0.39	<0.37	4.90	1.06 J	<0.20
MW-8	10/25/2007	<0.50	<0.50	<0.50	<0.50	<0.50
	4/21/2008	<0.50	<0.50	<0.50	<0.50	<0.50
	5/26/2009	<0.16	<0.21	<0.12	<0.37	<0.17
	3/23/2010	<0.12	<0.13	0.22	<0.16	<0.17
	9/15/2010	<0.13	<0.12	<0.16	<0.16	<0.18
	3/9/2011	<0.20	NR	<0.21	<0.17	<0.18
	9/20/2011	<0.21	<0.19	<0.15	<0.25	<0.15
	3/6/2012	<0.21	<0.19	<0.15	<0.25	<0.15
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
ES (ug/L)	-	70	100	5	5	0.2
PAL (ug/L)	-	7	20	0.5	0.5	0.02

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Well ID	Sampling Date	cis-1,2-DCE (ppb)	trans-1,2-DCE (ppb)	PCE (ppb)	TCE (ppb)	Vinyl chloride (ppb)
MW-8A	10/25/2007	<0.50	<0.50	<0.50	<0.50	<0.50
	4/21/2008	<0.50	<0.50	*1.90*	<0.50	<0.50
	5/26/2009	<0.16	<0.21	<0.12	<0.37	<0.17
	3/23/2010	<0.12	<0.13	*1.10*	<0.16	<0.17
	9/15/2010	<0.13	0.68	<0.16	<0.16	<0.18
	3/9/2011	<0.20	NR	<0.21	<0.17	<0.18
	9/20/2011	0.33	<0.19	<0.15	*0.60*	<0.15
	3/6/2012	<0.21	<0.19	<0.15	<0.25	<0.15
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-8B	10/25/2007	<0.50	<0.50	<0.50	<0.50	<0.50
	4/21/2008	1.30	<0.50	*4.00*	*1.40*	<0.50
	5/26/2009	<0.16	<0.21	<0.12	<0.37	<0.17
	3/23/2010	0.24	<0.13	*2*	<0.16	<0.17
	9/15/2010	<0.13	<0.12	<0.16	<0.16	<0.18
	3/9/2011	0.37	NR	*3.20*	0.33	<0.18
	9/20/2011	<0.20	<0.19	<0.15	<0.25	<0.15
	3/6/2012	0.23	<0.19	<0.15	0.31	<0.15
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	*0.96 J*	<0.47	<0.20
MW-9	12/22/2014	**780**	<17.0	<14.0	<15.0	**20**
	3/10/2015	**980**	<20.0	<17.0	<24.0	**52**
	6/18/2015	**2,300**	*25.4*	**37.7**	<15.0	**85.6**
	9/25/2015	**3,400**	<35.0	<55.0	<42.0	**230**
	12/21/2015	**2,100**	<63.0	<53.0	<76.0	**75**
	3/21/2016	**1,700**	<34.0	<44.0	<65.0	**73**
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	*7.20*	<0.37	<0.33	<0.47	<0.20
MW-9A	12/22/2014	**340**	<7.90	<5.40	<6.80	<4.20
	3/10/2015	**300**	<6.30	<5.30	<7.60	<3.90
	6/18/2015	**358**	<6.70	<6.60	<4.60	**16.8**
	9/25/2015	**290**	<4.40	<5.50	<4.20	<4.90
	12/21/2015	**480**	<6.30	<5.30	<7.60	**7.70**
	3/21/2016	**320**	<6.80	<8.80	<13.0	<6.80
	10/8/2020	**100**	1.91	<0.33	<0.47	<0.20
	1/21/2021	**161**	1.51	<0.33	<0.47	**0.35 J**
MW-10	6/14/2016	<0.18	<0.15	<0.17	<0.24	<0.16
	9/14/2016	<0.24	<0.17	<0.22	<0.32	<0.17
	12/20/2016	<0.17	<0.24	<0.17	<0.32	<0.17
	3/8/2017	<0.17	<0.24	<0.17	<0.32	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-10A	6/14/2016	<0.18	<0.15	<0.17	<0.24	<0.16
	9/14/2016	<0.24	<0.17	<0.22	<0.32	<0.17
	12/20/2016	<0.17	<0.24	<0.17	<0.32	<0.17
	3/8/2017	<0.17	<0.24	<0.17	<0.32	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-11	6/14/2016	<0.18	<0.15	<0.17	<0.24	<0.16
	9/14/2016	<0.24	<0.17	0.47	<0.32	<0.17
	12/20/2016	<0.17	<0.24	0.37	<0.32	<0.17
	3/8/2017	<0.17	<0.24	0.23	<0.32	<0.17
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-12	3/21/2016	*20*	0.47 J	<0.22	<0.32	**0.35 J**
	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-12A	3/21/2016	**2,400**	<29.0	<33.0	<47.0	**290**
	8/7/2018	**360**	4.90	<0.38	<0.30	<0.20
	4/26/2019	**137**	<3.40	<3.80	<3.00	<2.00
	10/8/2020	*42*	1.41	<0.33	<0.47	<0.20
	1/21/2021	*37*	0.98 J	<0.33	<0.47	<0.20
MW-13	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-13A	10/8/2020	**830**	11.90	<0.33	<0.47	**75**
	1/21/2021	**590**	5.2 J	<0.33	<0.47	**35**
MW-14	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-14A	10/8/2020	1.76	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-15	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
MW-15A	10/8/2020	<0.39	<0.37	<0.33	<0.47	<0.20
	1/21/2021	<0.39	<0.37	<0.33	<0.47	<0.20
ES (ug/L)	-	*70*	*100*	*5*	*5*	*0.2*
PAL (ug/L)	-	*7*	*20*	*0.5*	*0.5*	*0.02*

Notes:
1.) Concentrations in red bold exceed their respective enforcement standard (ES)
2.) Concentrations in blue italics exceed their respective preventive action limit (PAL).
3.) NR = Samples were not taken during this round of sampling or well was not constructed yet.

A.4. Vapor Analytical Table
VOC Analytical Results - Indoor Air Samples
Former DB Oak Property
Fort Atkinson, Wisconsin

Sample Location	Location	Sampling Date	cis-1,2-DCE (ug/m^3)	trans-1,2-DCE (ug/m^3)	PCE (ug/m^3)	TCE (ug/m^3)	Vinyl Chloride (ug/m^3)
IA-1	SW Office	9/27/19	<0.197	<0.231	25.9	1.66	<0.148
IA-2	SE Garage	9/27/19	<0.197	<0.231	3.40	<0.237	<0.148
IA-3	Mid Bay	9/27/19	1.27	<0.231	20.0	3.60	<0.148
		1/20/21	6.30	<0.231	21.3	4.30	0.74
IA-4	Kennel Club	9/27/19	19.5	<0.231	18.8	3.70	<0.148
		1/20/21	3.20	<0.231	13.2	2.95	0.33 J
Residential VALs			*NS*	*NS*	*42*	*2.1*	*1.7*
Commercial VALs			*NS*	*NS*	*180*	*8.8*	*28*
Industrial VALs			*NS*	*NS*	*180*	*8.8*	*28*

Notes:
1. DNR Vapor Action Levels (VALs) are from U.S. EPA tables (updated November 2017)
2. Concentrations that exceed their respective residential DNR VALs are underlined.
3. Concentrations that exceed their respective small commercial DNR VALs are in red.
4. Concentrations that exceed their respective large commercial DNR VALs are in **red bold**.

A.4. Vapor Analytical Table
VOC Analytical Results - Sub-Slab Vapor Samples
Former DB Oak Property
Fort Atkinson, Wisconsin

Sample Location	Sampling Date	cis-1,2-DCE (ug/m^3)	trans-1,2-DCE (ug/m^3)	PCE (ug/m^3)	TCE (ug/m^3)	Vinyl Chloride (ug/m^3)
VP-1	8/7/18	820,000	19,300	**5,000,000**	**2,920,000**	<828.8
	7/21/20	400	9.2	13,100	311	1.12
VP-2	4/26/19	<551.6	2,330	**212,000**	**34,000**	<414.4
	7/21/20	69	10.4	5,100	500	<0.148
VP-3	4/26/19	NS	NS	NS	NS	NS
	10/25/19	14.9 J	<5.775	**27,100**	**1,810**	<3.70
	7/21/20	1.11	<0.231	280	4.90	<0.148
VP-4	4/26/19	<551.6	<646.8	**64,000**	**9,700**	<414.4
	7/21/20	1.74	<0.231	1,210	26.10	<0.148
VP-5	4/26/19	NS	NS	*NS*	NS	NS
	10/25/19	640	630	**86,000**	**10,900**	<3.70
VP-6	4/26/19	<9.85	<11.55	**20,100**	204	<7.40
VP-7	4/26/19	<551.6	<646.8	**153,000**	**23,700**	<414.4
	7/21/20	3,700	69.0	**29,800**	**12,000**	73.00
VP-8	4/26/19	910,000	9,700	**47,000,000**	**580,000**	**12,200**
	1/21/21	9.20	2.77	124	33.0	10.3
VP-9	10/3/19	23,300	<6,468	**2,200,000**	**196,000**	<4,144
VP-10	10/3/19	<4.925	<5.775	3,500	193	<3.7
VP-11	10/3/19	2,260,000	218,000	**176,000**	**31,300,000**	**9,400**
	7/21/20	490	21.8	37.0	**13,400**	<1.48
	1/21/21	550	48.0	17.8	**4,900**	2.25
VP-12	10/3/19	236	5.90 J	830	670	<3.70
	7/21/20	259	2.77 J	590	118	<1.48
VP-13	10/3/19	10.3 J	<4.62	5,200	243	<2.96
VP-14	10/3/19	2,930	1,700	**29,200**	**50,000**	<74.0
VP-15	10/3/19	<5,516	<6,468	**2,860,000**	**178,000**	<4,144
	1/21/21	520	56.0	**204,000**	**13,100**	<0.148
VP-16	10/25/19	<4.925	<5.775	1,620	**3,800**	<3.70
VP-17	10/25/19	137	6.90 J	2,470	**1,760**	<3.70
VP-18	10/25/19	80.0	134	**39,000**	**5,000**	<3.70
VP-19	10/25/19	51.0	9.90 J	**71,000**	**1,650**	<3.70
VP-20	1/21/21	241	258	16,400	153	16.3
VP-21	1/21/21	127	44.0	4,700	500	<0.148
VP-22	1/21/21	86.0	21.0	13,700	340	<0.148
Residential VRSLs		*NS*	*NS*	*1,400*	*70*	*57*
Commercial VRSLs		*NS*	*NS*	*6,000*	*293*	*933*
Industrial VRSLs		*NS*	*NS*	*18,000*	*880*	*2,800*

Notes:
1. DNR Vapor Risk Screening Levels (VRSLs) are from U.S. EPA tables (updated November 2017)
2. Concentrations that exceed their respective residential DNR VRSLs are underlined.
3. Concentrations that exceed their respective small commercial DNR VRSLs are in red.
4. Concentrations that exceed their respective large commercial DNR VRSLs are in **red bold**.
5. Sub-slab depressurization system (SSDS) start up on March 24, 2020.

APPENDIX D

DOCUMENTATION

State of Wisconsin
Department of Natural Resources
PO Box 7921, Madison WI 53707-7921
dnr.wi.gov

GROUNDWATER MONITORING WELL AND POINT INFORMATION

Form 4400-089 (R 04/19)

Use the Groundwater Monitoring Well and Point Information Form to record identification, location and construction information for groundwater monitoring wells and any other sample "points," (e.g., gas probes, lysimeters, leachate collection systems, etc.), that are part of the environmental monitoring program. **NOTE:** Not all fields will be applicable to all point types. Only **one** coordinate reference system may be used per site. Allowable coordinate systems are listed below. (Coordinates for each system require a minimum number of digits as described below.) Local grid coordinates cannot be accepted. Identify the Coordinate Reference System, Datum and Method used.

Facility Name	County	Facility ID No. (FID)	License, Permit or Monitoring No.	Date	Completed By (Name and Firm)
DB Oak	Jefferson	128003260	N?A	04/05/2021	Bryan Frieseke FEC, Inc

DNR Point ID No.	Point Name[1]	WUWN[2] (if app.)	Type	Status	Gradient	*Enf. Stds. Y/N.*	Construction Date	Elevations msl (ft)		Well Casing			Well Screen Length (ft)	Well (Pt) Total Length[5] (ft)	Coordinates[6,7,8,9]	
								Ground Surface	Well Top (of casing)	Type	Diam[3] (in)	Length[4] (ft)			Y / Lat / Northing	X / Long / Easting
	MW-13		11	A	D	Yes	09/29/2020	792.08	791.88	P	2	10	10	20	42.934423	-88.832940
	MW-13A		12	A	D	Yes	09/29/2020	792.21	791.66	P	2	40	5	45	42.934423	-88.832927
	MW-14		11	A	Y	Yes	09/30/2020	791.08	791.88	P	2	10	10	20	42.934246	-88.833313
	MW-14A		12	A	Y	Yes	09/29/2020	791.08	791.80	P	2	40	5	45	42.934206	-88.833320
	MW-15		11	A	Y	Yes	09/30/2020	792.80	792.08	P	2	10	10	20	42.934224	-88.834667
	MW-15A		12	A	Y	Yes	09/30/2020	792.80	791.99	P	2	40	5	45	42.934234	-88.834667

[1]Include previous name as well if one exists.

[2]Wisconsin Unique Well Number.

[3]Well Casing Diameter measures inside diameter.

[4]Length of well casing from top of casing to top of screen.

[5]Total length of well from top of casing to bottom of well. *Should equal sum of well casing length and screen length.*

[6]Identify Coordinate Reference System (only one system may be used per site):

- (X) Lat/Long (Decimal Degrees) WGS84 (min. 8 digits total w/ 6 right of decimal, e.g., -89.123456)

State Plane (min. 2 digits right of decimal)

- ( ) North
- ( ) Central
- ( ) South
- ( ) Wisc. Transverse Mercator WTM91 (min. 2 digits right of decimal)
- ( ) Local County Coord. Sys. (WISCRS) (min. digits vary by county)

[7]Identify Projection Datum and units*

- ( ) NAD83
- ( ) NAD27
- ( ) NAD83(91)
- ( ) NAD83(11)
- ( ) Other Describe: _____

Units used for State Plane, WTM or County Coord. Sys:

- ( ) meters
- ( ) feet

*NOTE: A datum and units are not required for Lat/Long

[8]Identify the Method Used to Determine the Coordinates:

- ( ) GPS001-Survey grade
- ( ) GPS003-Mapping grade/real-time differential correction
- (X) GPS004-Mapping grade/post processing
- ( ) SRV001-Classical terrestrial surveying techniques
- ( ) OTH001 (Other), Describe:

[9]Y / Lat / Northing describe the vertical axis.

X / Long / Easting describe the horizontal axis.

(include "-" where needed, e.g., -89.123456)

Remarks:

Completion of this form is mandatory under chs. 281, 289 and 292, Wis. Stats., and ss. NR 110.25, NR 507.14 and NR 716.15, Wis. Admin. Code

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: DB Oak Facility	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: MW-13
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 42° 934' 423 " Long. -88° 832'940 " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID: 128003260	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 09 / 29 / 2020 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 34 , T. 6 N, R. 14 ☒ E ☐ W	Well Installed By: Name (first, last) and Firm: Trenton Ott / FEC Inc
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known / Gov. Lot Number	

A. Protective pipe, top elevation 791.88 ft. MSL

B. Well casing, top elevation 792.08 ft. MSL

C. Land surface elevation 792.08 ft. MSL

D. Surface seal, bottom _____ ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐ ___

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
_____

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 8.0 ft.

G. Filter pack, top _____ ft. MSL or 9.0 ft.

H. Screen joint, top _____ ft. MSL or 10.0 ft.

I. Well bottom _____ ft. MSL or 20.0 ft.

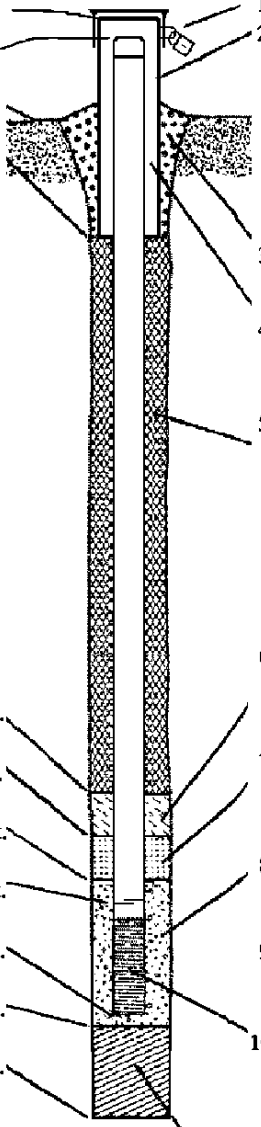
J. Filter pack, bottom _____ ft. MSL or 20.0 ft.

K. Borehole, bottom _____ ft. MSL or 20.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.0 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 Other ☐ ___
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 Other ☐ ___

4. Material between well casing and protective pipe: Bentonite ☐ 30 Other ☐ ___

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☐3/8 in. ☐1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ ___

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint Fine Sand ___
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint Coarse Sand ___
b. Volume added _____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐ ___

10. Screen material: _____ ___
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ___
b. Manufacturer _____
c. Slot size: 0.10 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☒ 14
_____ Other ☐ ___

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesike | Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
DB Oak Facility	Jefferson	MW-13

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	28	_____	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 200.0 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 4.2 gal.

7. Volume of water removed from well 4.2 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? ☐ Yes ☐ No
(If yes, attach results)

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 15.25 ft.	11.96 ft.
Date	b. 09/30/2020	01/21/2021
Time	c. 8:00 ☒ a.m. ☐ p.m.	8:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Trenton Last Name: Ott
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

17. Additional comments on development:

Bailed dried and recharged with sediment free water.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mary Last Name: Betsch
Facility/Firm: Gardner Denver Inc
Street: 222 East Erie Street
City/State/Zip: Milwaukee, Wisconsin 53202

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Bryan Frieseke
Print Name: Bryan Frieseke
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: DB Oak Facility	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: MW-13A
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 42° 934' 423 " Long. -88° 832'927 " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID: 128003260	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 09 / 29 / 2020 (m m d d y y y y)
Type of Well: Well Code 12 / MW	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 34, T. 6 N, R. 14 ☒ E ☐ W	Well Installed By: Name (first, last) and Firm: Trenton Ott, FEC Inc
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 791.96 ft. MSL

B. Well casing, top elevation 792.21 ft. MSL

C. Land surface elevation 792.21 ft. MSL

D. Surface seal, bottom _____ ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / Other ☐ _____

15. Drilling fluid used: Water ☐ 02 / Air ☐ 01 / Drilling Mud ☐ 03 / None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 38.0 ft.

G. Filter pack, top _____ ft. MSL or 39.0 ft.

H. Screen joint, top _____ ft. MSL or 40.0 ft.

I. Well bottom _____ ft. MSL or 45.0 ft.

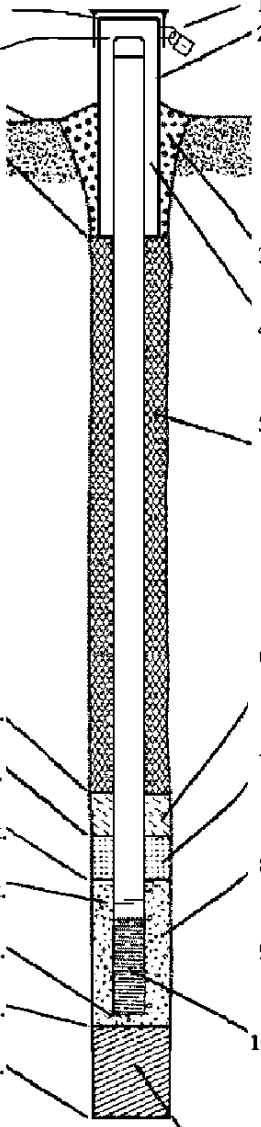
J. Filter pack, bottom _____ ft. MSL or 45.0 ft.

K. Borehole, bottom _____ ft. MSL or 45.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.0 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 / Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Other ☐ _____

4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☐ _____

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ _____

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint Fine Sand
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint Coarse Sand
b. Volume added _____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ _____

10. Screen material: _____
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer _____
c. Slot size: 0.10 in.
d. Slotted length: 5 ft.

11. Backfill material (below filter pack): None ☒ 14 / Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesike | Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
DB Oak Facility	Jefferson	MW-13A

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	28	_____	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well ___60 min.

4. Depth of well (from top of well casisng) __45.0 ft.

5. Inside diameter of well __2.0__ in.

6. Volume of water in filter pack and well casing __26.6 gal.

7. Volume of water removed from well ___5.0 gal.

8. Volume of water added (if any) ___0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. __15.12 ft.	__11.90 ft.
Date	b. 09/30/2020 (m m d d y y y y)	01/21/2021 (m m d d y y y y)
Time	c. 8:00 ☒ a.m. ☐ p.m.	8:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	__0.0 inches	__0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Trenton Last Name: Ott
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

17. Additional comments on development:

Bailed until sediment free water was obtained

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mary Last Name: Betsch
Facility/Firm: Gardner Denver Inc
Street: 222 East Erie Street
City/State/Zip: Milwaukee, Wisconsin 53202

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Bryan Frieseke
Print Name: Bryan Frieseke
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: DB Oak Facility	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: MW-14
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 42° 934' 426 " Long. -88° 833'313 " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID: 128003260	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 09 / 30 / 2020 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 34 , T. 6 N, R. 14 ☒ E ☐ W	Well Installed By: Name (first, last) and Firm: Trenton Ott / FEC Inc
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 791.88 ft. MSL

B. Well casing, top elevation 792.08 ft. MSL

C. Land surface elevation 792.08 ft. MSL

D. Surface seal, bottom _____ ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐ ___

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
_____

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 8.0 ft.

G. Filter pack, top _____ ft. MSL or 9.0 ft.

H. Screen joint, top _____ ft. MSL or 10.0 ft.

I. Well bottom _____ ft. MSL or 20.0 ft.

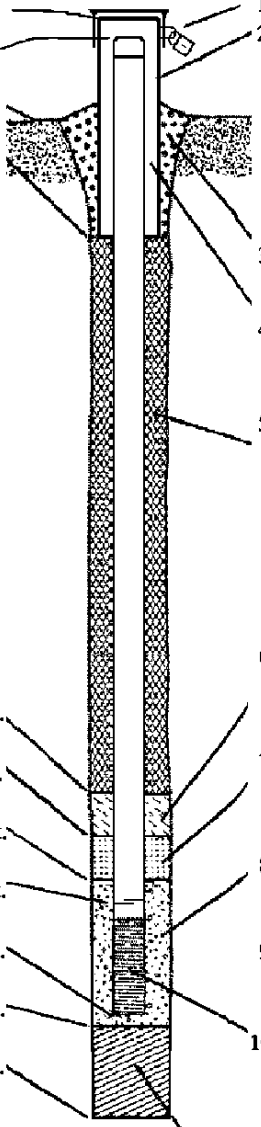
J. Filter pack, bottom _____ ft. MSL or 20.0 ft.

K. Borehole, bottom _____ ft. MSL or 20.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.0 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 Other ☐ ___
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 Other ☐ ___

4. Material between well casing and protective pipe: Bentonite ☐ 30 Other ☐ ___

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☐3/8 in. ☐1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ ___

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint Fine Sand ___
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint Coarse Sand ___
b. Volume added _____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐ ___

10. Screen material: _____ ___
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ___
b. Manufacturer _____
c. Slot size: 0.10 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☒ 14
_____ Other ☐ ___

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesike | Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
DB Oak Facility	Jefferson	MW-14

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	28	_____	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well 30 min.

4. Depth of well (from top of well casisng) 20.0 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 3.4 gal.

7. Volume of water removed from well 34. gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 16.20 ft.	16.96 ft.
Date	b. 09/30/2020 (m m d d y y y y)	01/21/2021 (m m d d y y y y)
Time	c. 8:00 ☒ a.m. ☐ p.m.	8:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Trenton Last Name: Ott
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

17. Additional comments on development:

Bailed dried and recharged with sediment free water.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mary Last Name: Betsch
Facility/Firm: Gardner Denver Inc
Street: 222 East Erie Street
City/State/Zip: Milwaukee, Wisconsin 53202

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Bryan Frieseke
Print Name: Bryan Frieseke
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: DB Oak Facility	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: MW-14A
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 42° 934' 206 " Long. -88° 833'320 " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID: 128003260	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 09 / 29 / 2020 (m m d d y y y y)
Type of Well: Well Code 12 / MW	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 34 , T. 6 N, R. 14 ☒ E ☐ W	Well Installed By: Name (first, last) and Firm: Trenton Ott / FEC Inc
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 791.80 ft. MSL

B. Well casing, top elevation 792.08 ft. MSL

C. Land surface elevation 792.08 ft. MSL

D. Surface seal, bottom _____ ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / Other ☐ _____

15. Drilling fluid used: Water ☐ 02 / Air ☐ 01 / Drilling Mud ☐ 03 / None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 38.0 ft.

G. Filter pack, top _____ ft. MSL or 39.0 ft.

H. Screen joint, top _____ ft. MSL or 40.0 ft.

I. Well bottom _____ ft. MSL or 45.0 ft.

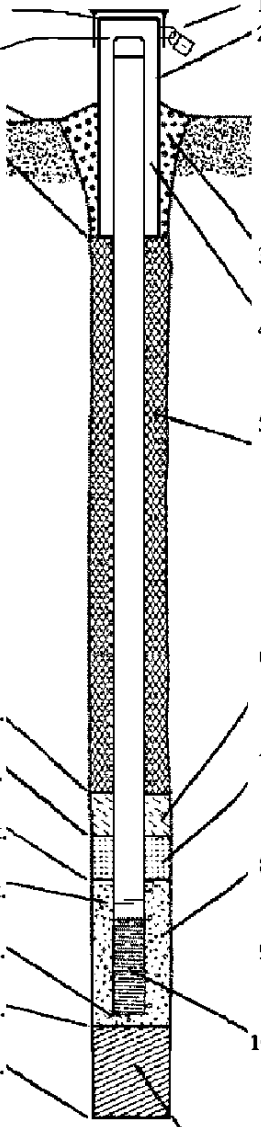
J. Filter pack, bottom _____ ft. MSL or 45.0 ft.

K. Borehole, bottom _____ ft. MSL or 45.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.0 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 / Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Other ☐ _____

4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☐ _____

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☐3/8 in. ☐1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ _____

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint Fine Sand
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint Coarse Sand
b. Volume added _____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ _____

10. Screen material: _____
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer _____
c. Slot size: 0.10 in.
d. Slotted length: 5 ft.

11. Backfill material (below filter pack): None ☒ 14 / Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesike | Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
DB Oak Facility	Jefferson	MW-14A

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	28	_____	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well 60 min.

4. Depth of well (from top of well casisng) 450 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 256 gal.

7. Volume of water removed from well 5.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 16.27 ft.	16.90 ft.
Date	b. 09/30/2020 (m m d d y y y y)	01/21/2021 (m m d d y y y y)
Time	c. 8:00 ☒ a.m. ☐ p.m.	8:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Trenton Last Name: Ott
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

17. Additional comments on development:

Bailed until sediment free water was obtained

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mary Last Name: Betsch
Facility/Firm: Gardner Denver Inc
Street: 222 East Erie Street
City/State/Zip: Milwaukee, Wisconsin 53202

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Bryan Frieseke
Print Name: Bryan Frieseke
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: DB Oak Facility	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: MW-15
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 42° 934' 426 " Long. -88° 833'313 " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID: 128003260	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 09 / 30 / 2020 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 34 , T. 6 N, R. 14 ☒ E ☐ W	Well Installed By: Name (first, last) and Firm: Trenton Ott / FEC Inc
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number: _____

A. Protective pipe, top elevation 791.99 ft. MSL

B. Well casing, top elevation 792.15 ft. MSL

C. Land surface elevation 792.15 ft. MSL

D. Surface seal, bottom _____ ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / Other ☐ _____

15. Drilling fluid used: Water ☐ 02 / Air ☐ 01 / Drilling Mud ☐ 03 / None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 8.0 ft.

G. Filter pack, top _____ ft. MSL or 9.0 ft.

H. Screen joint, top _____ ft. MSL or 10.0 ft.

I. Well bottom _____ ft. MSL or 20.0 ft.

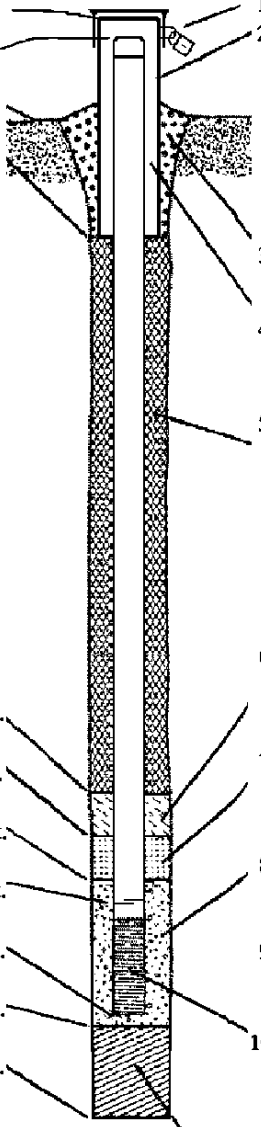
J. Filter pack, bottom _____ ft. MSL or 20.0 ft.

K. Borehole, bottom _____ ft. MSL or 20.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.0 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 / Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Other ☐ _____

4. Material between well casing and protective pipe: Bentonite ☐ 30 / Other ☐ _____

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ _____

7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint Fine Sand
b. Volume added _____ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint Coarse Sand
b. Volume added _____ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ _____

10. Screen material: _____
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer _____
c. Slot size: 0.10 in.
d. Slotted length: 10 ft.

11. Backfill material (below filter pack): None ☒ 14 / Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesike | Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
DB Oak Facility	Jefferson	MW-15

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	28	_____	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well ___30 min.

4. Depth of well (from top of well casisng) __20.0 ft.

5. Inside diameter of well __2.0__ in.

6. Volume of water in filter pack and well casing ___8.9 gal.

7. Volume of water removed from well ___8.9 gal.

8. Volume of water added (if any) ___0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. __15.17 ft.	__15.91 ft.
Date	b. 09/30/2020 (m m d d y y y y)	01/21/2021 (m m d d y y y y)
Time	c. 8:00 ☒ a.m. ☐ p.m.	8:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	__0.0 inches	__0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	_____.__ mg/l	_____.__ mg/l
15. COD	_____.__ mg/l	_____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Trenton Last Name: Ott
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

17. Additional comments on development:

Bailed dried and recharged with sediment free water.

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mary Last Name: Betsch
Facility/Firm: Gardner Denver Inc
Street: 222 East Erie Street
City/State/Zip: Milwaukee, Wisconsin 53202

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Bryan Frieseke
Print Name: Bryan Frieseke
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: DB Oak Facility	Local Grid Location of Well: _____ ft. ☐ N. ☐ S. _____ ft. ☐ E. ☐ W.	Well Name: MW-15A
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☒ Lat. 42° 934' 234" Long. -88° 834'3667" or	Wis. Unique Well No. / DNR Well ID No.
Facility ID: 128003260	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 09 / 30 / 2020 (m m d d y y y y)
Type of Well: Well Code 12 / MW	Section Location of Waste/Source: NW 1/4 of SW 1/4 of Sec. 34, T. 6 N, R. 14 ☒ E ☐ W	Well Installed By: Name (first, last) and Firm: Trenton Ott, FEC Inc
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☒	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☒ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 791.99 ft. MSL

B. Well casing, top elevation 792.15 ft. MSL

C. Land surface elevation 792.15 ft. MSL

D. Surface seal, bottom _____ ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 38.0 ft.

G. Filter pack, top _____ ft. MSL or 39.0 ft.

H. Screen joint, top _____ ft. MSL or 40.0 ft.

I. Well bottom _____ ft. MSL or 45.0 ft.

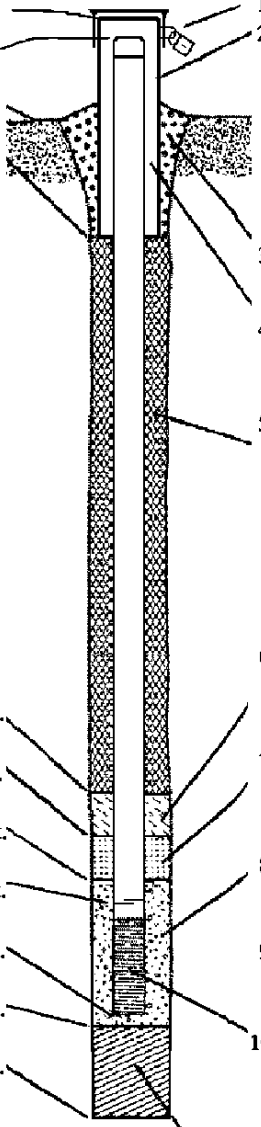
J. Filter pack, bottom _____ ft. MSL or 45.0 ft.

K. Borehole, bottom _____ ft. MSL or 45.0 ft.

L. Borehole, diameter 8.3 in.

M. O.D. well casing 2.0 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 Other ☐ __
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 Other ☐ __
4. Material between well casing and protective pipe: Bentonite ☐ 30 Other ☐ __
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☐3/8 in. ☐1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ __
7. Fine sand material: Manufacturer, product name & mesh size
a. Red Flint Fine Sand __
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint Coarse Sand __
b. Volume added _____ ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ __
10. Screen material: _____ __
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ __
b. Manufacturer _____
c. Slot size: 0.10 in.
d. Slotted length: 5 ft.
11. Backfill material (below filter pack): None ☒ 14 Other ☐ __

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesike | Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

MONITORING WELL DEVELOPMENT

Form 4400-113B Rev. 7-98

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

Facility/Project Name	County Name	Well Name
DB Oak Facility	Jefferson	MW-15A

Facility License, Permit or Monitoring Number	County Code	Wis. Unique Well Number	DNR Well ID Number
	28	_____	___

1. Can this well be purged dry? ☒ Yes ☐ No

2. Well development method

surged with bailer and bailed	☒ 41
surged with bailer and pumped	☐ 61
surged with block and bailed	☐ 42
surged with block and pumped	☐ 62
surged with block, bailed and pumped	☐ 70
compressed air	☐ 20
bailed only	☐ 10
pumped only	☐ 51
pumped slowly	☐ 50
Other _____	☐ __

3. Time spent developing well 60 min.

4. Depth of well (from top of well casisng) 450 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 266 gal.

7. Volume of water removed from well 5.0 gal.

8. Volume of water added (if any) 0.0 gal.

9. Source of water added _____

10. Analysis performed on water added? (If yes, attach results) ☐ Yes ☐ No

	Before Development	After Development
11. Depth to Water (from top of well casing)	a. 15.25 ft.	15.47 ft.
Date	b. 09/30/2020 (m m d d y y y y)	01/21/2021 (m m d d y y y y)
Time	c. 8:00 ☒ a.m. ☐ p.m.	8:00 ☒ a.m. ☐ p.m.
12. Sediment in well bottom	0.0 inches	0.0 inches
13. Water clarity	Clear ☒ 10 Turbid ☐ 15 (Describe)	Clear ☒ 20 Turbid ☐ 25 (Describe)
14. Total suspended solids	____.__ mg/l	____.__ mg/l
15. COD	____.__ mg/l	____.__ mg/l

Fill in if drilling fluids were used and well is at solid waste facility:

16. Well developed by: Name (first, last) and Firm
First Name: Trenton Last Name: Ott
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

17. Additional comments on development:

Bailed until sediment free water was obtained

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mary Last Name: Betsch
Facility/Firm: Gardner Denver Inc
Street: 222 East Erie Street
City/State/Zip: Milwaukee, Wisconsin 53202

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: Bryan Frieseke
Print Name: Bryan Frieseke
Firm: FRIESS ENVIRONMENTAL CONSULTING INC.

NOTE: See instructions for more information including a list of county codes and well type codes.

Boring Number: MW-13

Facility/Project Name: DB Oak

FEC Project Number: 201105

Boring Drilled By:	Date Drilling Started:	Date Drilling Completed:	Drilling Method:
Giles Engineering Associates Inc.	9-29-2020	9-29-2020	Hollow-stem

WI Unique Well No.: ___ ___ ___ ___ ___

NW 1/4 of SW 1/4 of Section 34 T 6 N. R 14 E

Location Description: Down Gradient

Facility ID:	County:	County Code:	Town/City/or Village:
128003260	Jefferson	28	Fort Atkinson

Sample No.	Length Recovered	Blow Counts (N)	Compressive Strength (QP)	Depth in ft bgs	Soil/rock description	USCS Class.	Graphic log	PID Reading
1		NM	NM		Topsoil			
					BrownClay	CL		<1
2		NM	NM	5				<1
				10	Brown Silty Sands			
3		NM	NM		▼			<1
				15		SP		
4		NM	NM		Gray Silty Sands			<1
				20				
				25	End of probehole at 20 feet below ground surface.			
					▼ - depth to groundwater			

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesske

Firm: Friess Environmental Consulting Inc.

Boring Number: MW-13A

Facility/Project Name: DB Oak

FEC Project Number: 201105

Boring Drilled By:	Date Drilling Started:	Date Drilling Completed:	Drilling Method:
Giles Engineering Associates Inc.	9-29-2020	9-29-2020	Hollow-stem

WI Unique Well No.: ___ ___ ___ ___ ___

NW 1/4 of SW 1/4 of Section 34 T 6 N. R 14 E

Location Description: Down Gradient

Facility ID:	County:	County Code:	Town/City/or Village:
128003260	Jefferson	28	Fort Atkinson

Sample No.	Length Recovered	Blow Counts (N)	Compressive Strength (QP)	Depth in ft bgs	Soil/rock description	USCS Class.	Graphic log	PID Reading
1		NM	NM		Topsoil			
					BrownClay	CL		<1
2		NM	NM	5				<1
3		NM	NM	10	Brown Silty Sands			<1
4		NM	NM	15		SP		<1
5		NM	NM		Gray Silty Sands			<1
6		NM	NM	20				<1
7		NM	NM	25				<1
8		NM	NM	30				<1
9		NM	NM	35				<1
				40				
				45	End of probehole at 45 feet below ground surface.			

▼- depth to groundwater

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesske

Firm: Friess Environmental Consulting Inc.

Boring Number: MW-14

Facility/Project Name: DB Oak

FEC Project Number: 201105

Boring Drilled By: Giles Engineering Associates Inc.

Date Drilling Started: 9-30-2020

Date Drilling Completed: 9-30-2020

Drilling Method: Hollow-stem

WI Unique Well No.: ___ ___ ___ ___ ___

NW 1/4 of SW 1/4 of Section 34 T 6 N. R 14 E

Location Description: Down Gradient

Facility ID: 128003260

County: Jefferson

County Code: 28

Town/City/or Village: Fort Atkinson

Sample No.	Length Recovered	Blow Counts (N)	Compressive Strength (QP)	Depth in ft bgs	Soil/rock description	USCS Class.	Graphic log	PID Reading
1		NM	NM		Topsoil			
					BrownClay	CL		<1
2		NM	NM	5				<1
					Brown Silty Sands			
3		NM	NM	10 ▽				<1
						SP		
4		NM	NM	15				<1
					Gray Silty Sands			
				20				
				25	End of probehole at 20 feet below ground surface.			
					▽ - depth to groundwater			

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesske

Firm: Friess Environmental Consulting Inc.

Boring Number: MW-14A

Facility/Project Name: DB Oak

FEC Project Number: 201105

Boring Drilled By:	Date Drilling Started:	Date Drilling Completed:	Drilling Method:
Giles Engineering Associates Inc.	9-29-2020	9-29-2020	Hollow-stem

WI Unique Well No.: ___ ___ ___ ___ ___

NW 1/4 of SW 1/4 of Section 34 T 6 N. R 14 E

Location Description: Down Gradient

Facility ID:	County:	County Code:	Town/City/or Village:
128003260	Jefferson	28	Fort Atkinson

Sample No.	Length Recovered	Blow Counts (N)	Compressive Strength (QP)	Depth in ft bgs	Soil/rock description	USCS Class.	Graphic log	PID Reading
1		NM	NM		Topsoil			
					BrownClay	CL		<1
2		NM	NM	5				<1
3		NM	NM	10	Brown Silty Sands			<1
4		NM	NM	15 ▽		SP		<1
5		NM	NM		Gray Silty Sands			<1
6		NM	NM	20				<1
7		NM	NM	25				<1
8		NM	NM	30				<1
9		NM	NM	35				<1
				40				
				45	End of probehole at 45 feet below ground surface.			
					▽ - depth to groundwater			

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesske

Firm: Friess Environmental Consulting Inc.

Boring Number: MW-15

Facility/Project Name: DB Oak

FEC Project Number: 201105

Boring Drilled By:	Date Drilling Started:	Date Drilling Completed:	Drilling Method:
Giles Engineering Associates Inc.	9-30-2020	9-30-2020	Hollow-stem

WI Unique Well No.: ___ ___ ___ ___ ___

NW 1/4 of SW 1/4 of Section 34 T 6 N. R 14 E

Location Description: Down Gradient

Facility ID:	County:	County Code:	Town/City/or Village:
128003260	Jefferson	28	Fort Atkinson

Sample No.	Length Recovered	Blow Counts (N)	Compressive Strength (QP)	Depth in ft bgs	Soil/rock description	USCS Class.	Graphic log	PID Reading
1		NM	NM		Topsoil			
					BrownClay	CL		<1
2		NM	NM	5				<1
					Brown Silty Sands			
3		NM	NM	10 ▽				<1
						SP		
4		NM	NM	15				<1
					Gray Silty Sands			
				20				
				25	End of probehole at 20 feet below ground surface.			
					▽ - depth to groundwater			

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesske

Firm: Friess Environmental Consulting Inc.

Boring Number: MW-15A

Facility/Project Name: DB Oak

FEC Project Number: 201105

Boring Drilled By:	Date Drilling Started:	Date Drilling Completed:	Drilling Method:
Giles Engineering Associates Inc.	9-30-2020	9-30-2020	Hollow-stem

WI Unique Well No.: ___ ___ ___ ___ ___

NW 1/4 of SW 1/4 of Section 34 T 6 N. R 14 E

Location Description: Down Gradient

Facility ID:	County:	County Code:	Town/City/or Village:
128003260	Jefferson	28	Fort Atkinson

Sample No.	Length Recovered	Blow Counts (N)	Compressive Strength (QP)	Depth in ft bgs	Soil/rock description	USCS Class.	Graphic log	PID Reading
1		NM	NM		Topsoil			
					BrownClay	CL		<1
2		NM	NM	5				<1
3		NM	NM	10	Brown Silty Sands			<1
4		NM	NM	15 ▽		SP		<1
5		NM	NM	20	Gray Silty Sands			<1
6		NM	NM	25				<1
7		NM	NM	30				<1
8		NM	NM	35				<1
9		NM	NM	40				<1
				45	End of probehole at 45 feet below ground surface.			

▽- depth to groundwater

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: Bryan Friesske

Firm: Friess Environmental Consulting Inc.

Vapor Mitigation Install Report: 700 Oak Street, Fort Atkinson, WI 53538
Phase 1: Central Building

Presented By: Lifetime Radon Solutions, Inc.
Scott Campbell, President
Chad Rogness, President of Commercial Projects
Brian Thompson, Executive Vice President

Presented To: Friess Environmental Consulting, Inc.
Trent Ott, Project Manager

INTRO

The commercial vapor mitigation system installation at the 700 Oak Street Building in Fort Atkinson, Wisconsin took place between September 30th, 2019 and March 27th, 2020. The vapor mitigation work was completed in four separate phases:

1.) Pre-mitigation Diagnostics and Exploration—Pressure Field Extension Testing (PFET)
2.) Vapor Mitigation System Design and Planning
3.) Sub-slab Depressurization System Installation
4.) Post Mitigation System Diagnostics (Post Mitigation PFET).

SUMMARY

The initial diagnostics are important for a multitude of reasons but mainly because they help the on-site technicians understand the sub-slab conditions and the negative pressure communication needed to design an effective vapor mitigation system. Once the sub-slab conditions are understood, the technicians are able to choose the appropriate mitigation fans needed, the proper pipe size/diameter, and many other system design factors that address the communication present. Moreover, visual and physical exploration help to identify potential sources, or areas of interest/concern, and also assist in the planning of the construction, or build phase, of the project. After the pre-mitigation diagnostics and system design take place, the build, or installation of the vapor mitigation system begins. In the case of the 700 Oak Street Building in Fort Atkinson, sub-slab depressurization (also known as active soil depressurization) is the form of mitigation that took place. Lastly, after the system(s) are installed, it is important to perform post mitigation diagnostics to ensure system effectiveness prior to initiating vapor retesting.

PRE-MITIGATION DIAGNOSTICS AND EXPLORATION—PRESSURE FIELD EXTENSION TESTING (PFET)

In order to determine the mitigation approach and the mitigation fan most likely to create optimal field extension and ultimately reduce the vapor levels effectively, a pressure field extension test (PFE test) was completed prior to system installation. The PFE test is a key component of the mitigation process for a multitude of reasons but mainly because it allows the technician to observe and test the sub-slab conditions.

During the initial PFE test, at the 700 Oak Street Building in Fort Atkinson, WI, the technician cored 3-inch holes into the slab to gain access to the sub-slab material. It was observed that the poured concrete slab was between 8-12” (inches) in depth (throughout each of the areas of concern). Further, the sub-slab material was a conglomerate of sands and clay like sediment and appeared to be native soil to the region rather than any particular “brought-in, building fill.” Approximately 10-20 gallons of soil was removed from each collection point for both system and PFE test effectiveness and also to observe the consistency of the soil throughout multiple areas/layers of removal. Due to this natural soil condition, PFET results are tough to predict because the consistency of the soil has a high variance. That is, some sub-slab areas may be more of a claylike sand where others may be a more porous, sandy mixture. Moreover, porous mixtures are easier to pull air through (and ultimately provide better sub-slab communication) whereas claylike conditions are much tougher to depressurize. Furthermore, removing a

minimum of 10-gallons of soil, and creating a “collection pit,” allows the fan to remove the air from the void(s) beneath the slab. Once all of the air is removed from this main collection pit, the vacuum draws air from surrounding sub-slab pockets and brings them to collection. When potentially effective negative pressures are read (using a micro-manometer), in test points drilled strategically throughout the footprint of the structure, quality communication is established. This type of depressurization is the communication needed for a successful install. If communication cannot be established, a larger depressurization is applied to the collection pit and further tested. If the higher suction is successful, it is noted that a fan with greater suction will be needed (fans are chosen/designed based on calculated flow metrics during the design phase of the project). If no communication is present, then extra collection points may need to be drilled/added in order to provide depressurization in areas the sub-soil conditions have previously prohibited. Moreover, in some cases, trenching may be required to ensure long stretches of uninterrupted communication are present. The determination to add extra collection points or create sub-slab trenches is also dependent on the percentage of the area providing good communication verses the percentage of the area where a lack of communication is present. Additionally, the initial vapor readings and the size of the mitigation space (as well as other diagnostic factors) are also considered when determining if extra collection points or trenching are necessary.

After the main test hole is cored (the 3-inch core described above), small 1/4-inch holes are cored in strategic areas throughout the area of interest. The first hole cored is generally chosen to test the initial vacuum of the presumed fan—***it is important to note that the fan used and the test hole drilled cannot be too strong or too close to the initial collection because too strong of a pressure can damage the micro-manometer testing the sub-slab vacuum pressure*.** The subsequent test holes are strategically placed throughout the room to test the strength and coverage area of the vacuum. The test fan is chosen based on the square footage of the area of concern and also the visual and physical appearance of the soil. Based on the soil conditions felt and observed (throughout the 700 Oak Street Building) as well as the square footage of the areas of concern, it was determined that a vacuum capable of both a higher negative pressure and moderate to high air-volume would be advantageous and the best choice for PFE testing. That is, a vacuum capable of moving enough air-volume to mitigate a large area but also pulling a negative pressure great enough to pull through potentially less porous soil consistencies. If this initial test vacuum is not successful in creating the appropriate negative pressure necessary to mitigate the area of concern, a 6.5-HP shop vacuum is applied and a calculation is preformed, during the design phase of the system, to determine the pressure (measured in inches of water column {in.w.g}) and the airflow (measured in cubic feet per minute {CFM}) necessary to create optimal sub-slab communication. This data represents the information necessary to help build and design an effective vapor mitigation system.

In short, the PFET is essentially an attempt to see how far a pressure field extends in the soil beneath the slab. This process is completed by coring a hole into the slab using either a diamond wet core machine or a carbide tipped rotary hammer. After the hole in the slab has been created, a collection chamber is dug to a certain size (dependent on soil type) and a vacuum is applied to the collection chamber. The device used for creating the vacuum is also dependent on the soil type as some require a high volume and others require a high pressure. Once this vacuum is applied, small 1/4 inch holes are drilled to see what the vacuum is at certain distances from the collection point. This entire process provides the information needed to properly design and build the mitigation system. This information includes the fan type and size, the number of collection points and sometimes even the need to install sub-slab, perforated pipe to create long stretches of uninterrupted communication.

VAPOR MITIGATION SYSTEM DESIGN AND PLANNING

(Please see the attached PFET Report below from October 7, 2019)

FIGURE 1

LIFETIME RADON SOLUTIONS

262.955.5701
RADON TESTING AND MITIGATION

PFET Results and Report for 700 Oak Street in Fort Atkinson, WI

Proposal To: Trenton J. Ott
Project Manager
Friess Environmental Consulting, Inc.
office (414) 228-9815
mobile (414) 688-6683

Proposal From: Chad Rogness, Director of Commercial Projects
Lifetime Radon Solutions Inc.
825 Wells St. Delafield Wi, 53018
262-955-5701
Oct. / 7 / 2019

Results: The PFET results show there are multiple areas with communication blockage throughout the slab area of concern. There were three different large pressure points created and tested, all with different communication abilities. The first sub-slab depressurization (SSD) test point was created near VP1, this pressure point had little to no communication through the slab in any direction. There were 2-5hp shop vacs connected creating near absolute vacuum (about 120" negative pressure) and just three feet away at VP1 there was less than 2.5" of negative pressure left. A pressure test point was created about 20 feet away to the west and there was no measurable negative pressure left. SSD test point 2 was created about 70 feet to the west of SSD test point 1 were communication was found to be considerably better than test point 1 but still would not reach most of the area needed to be mitigated. SSD test point three was created about 70 feet to the North East of SSD 2. Here it was found to have decent communication to the south and west but could not communicate well to north or east.
Due to time constraint and costs, it was determined that it would be best to stop and analyzed the data that was collected to best decide what type of mitigation systems would be able to handle the large footprint with such extremely variable sub-slab soils and conditions. Based on the information gathered it was determined the best way to mitigate would be to burry large perforated vent pipe in long horizontal trenches with large custom built blowers that could handle the possibility of extremely high volumes and/ or create the extremely high negative pressures that are required for the tighter sub slab soil areas.
The first diagram located on the next page is for the South Bay Area and the second on the following page is for the rest of the building area of concern located to the north of the south bay.

FIGURE 2

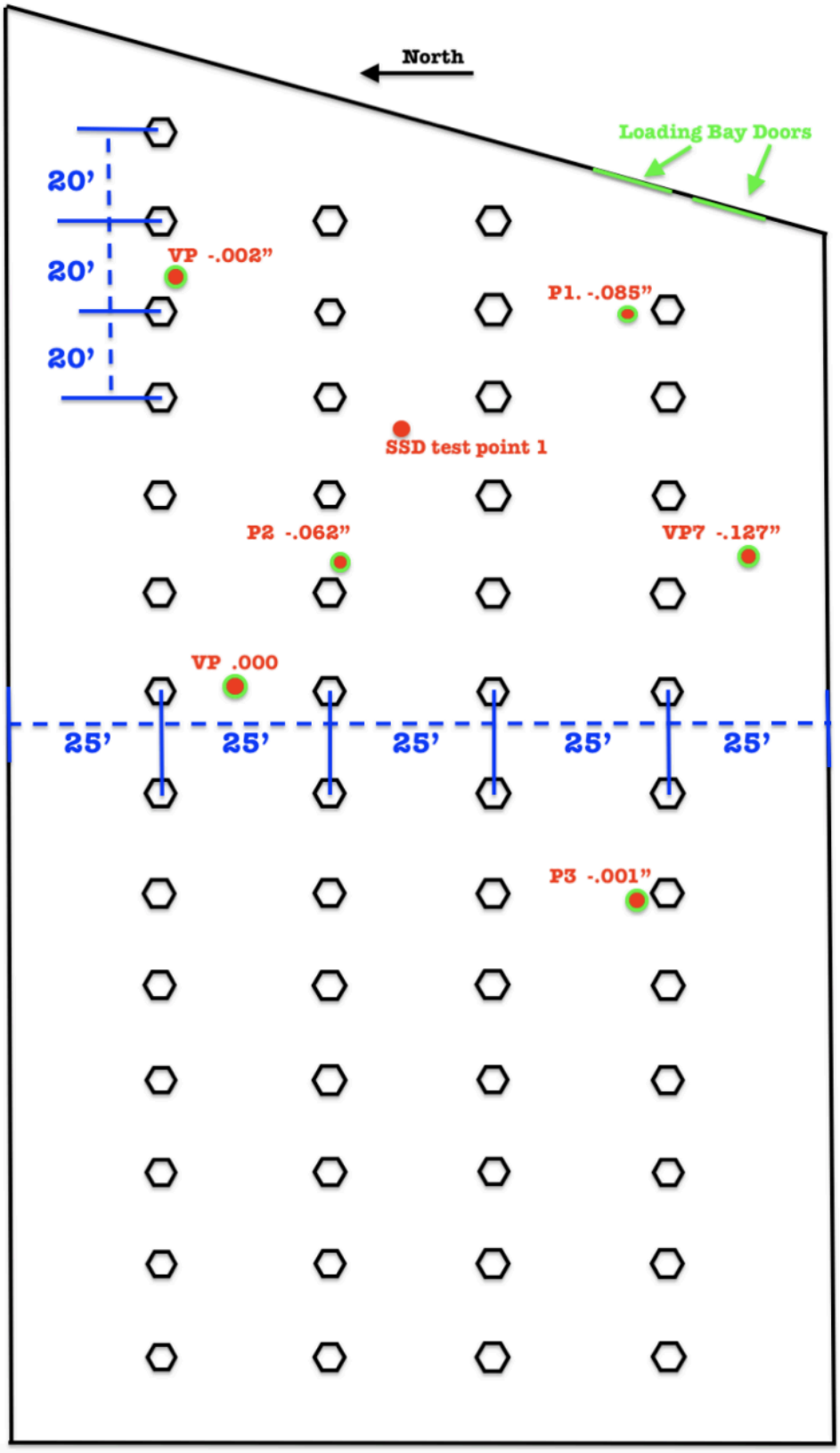
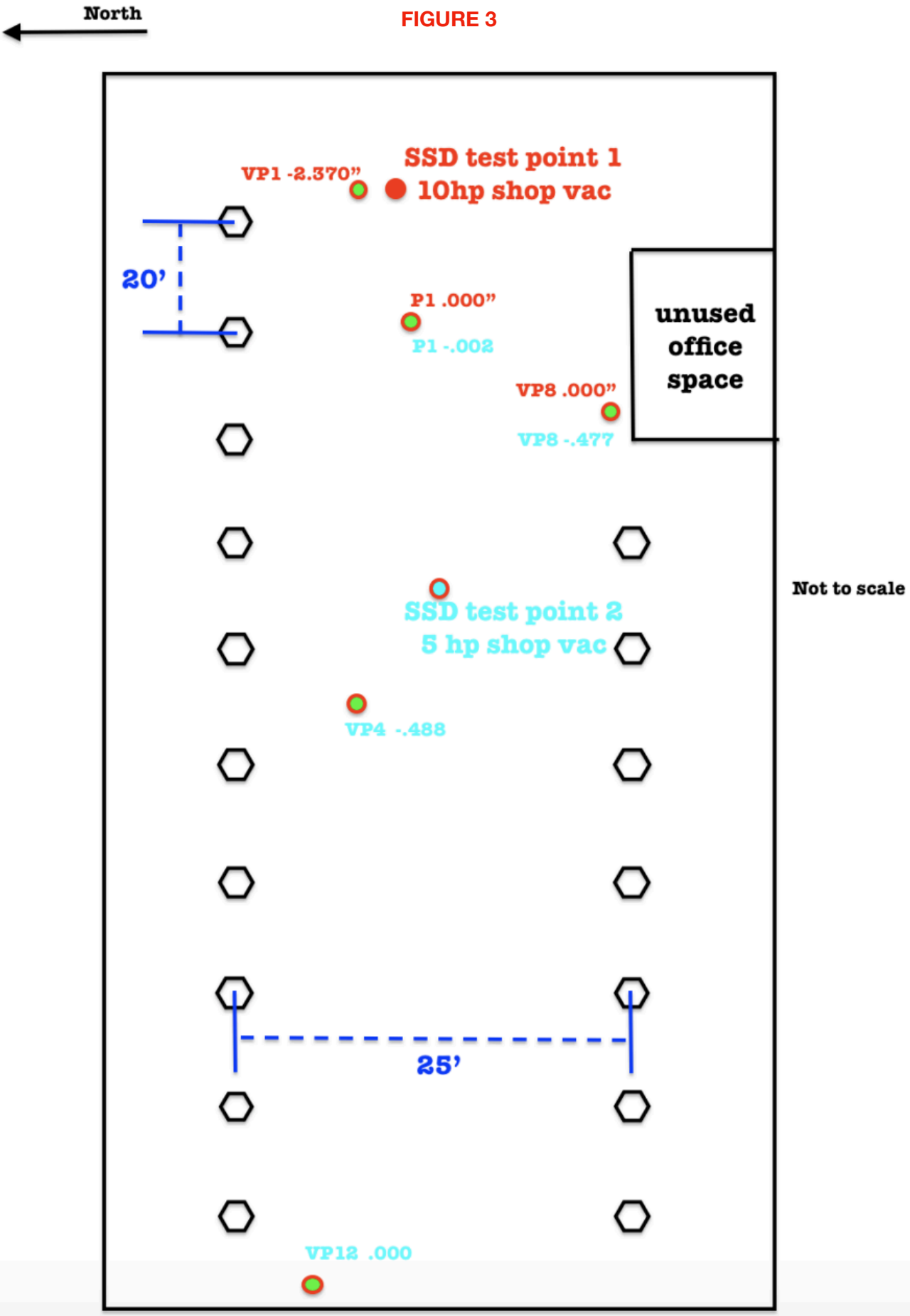

North
Loading Bay Doors
20'
20'
20'
VP -.002"
P1. -.085"
SSD test point 1
P2 -.062"
VP7 -.127"
VP .000
25'
25'
25'
25'
25'
P3 -.001"

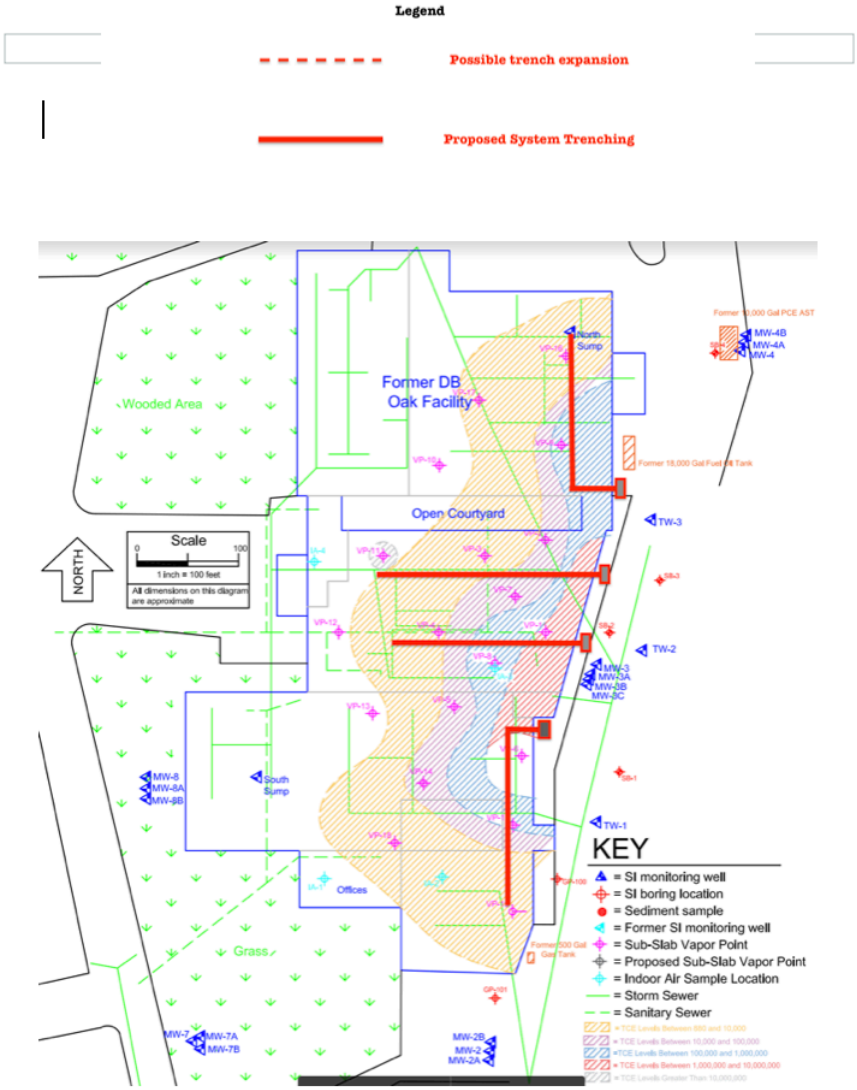
FIGURE 3


North
SSD test point 1
10hp shop vac
VP1 -2.370"
20'
P1 .000"
P1 -.002
unused
office
space
VP8 .000"
VP8 -.477
Not to scale
SSD test point 2
5 hp shop vac
VP4 -.488
25'
VP12 .000

As one can see, based upon the initial PFET and the high variance in sub-slab material, a more robust active soil depressurization system is needed to create proper communication throughout the areas of concern. Further, it is also noted that trenching (or laying large sections of piping under the sub-slab to create lengthy stretches of uninterrupted depressurization) would be the most effective means of mitigation. That is, since the sub-slab soil conditions range from relatively porous to virtually no porosity at all, creating long stretches of uninterrupted communication increases the likelihood of establishing negative pressure in areas potentially unreached by other means of mitigation.

(Please see the accepted vapor mitigation system design below)

FIGURE 4



The system design illustration above shows the three main areas of concern for the building located at 700 Oak Street: The North Building, The south Building, and the Central Building in between. Furthermore, the proposed project design above is expected to be addressed in phases. As one can see by the legend of the accepted vapor mitigation design above, the Central Building is the initial area of concern due to its exceptionally high vapor readings.

VAPOR MITIGATION SYSTEM DESIGN AND INSTALLATION (CENTRAL BUILDING)

The approved system design for the Central Building includes two long trenches spanning the majority of the foundation slab in this central portion of the structure. The North Trench is 248-feet in length and the South Trench is measured at approximately 171-feet in length. The trenches require a long slender saw cut (about 14" wide) in addition to demolition and removal of the existing concrete floor. Within that "demo'ed" area, trenching and removing of the existing soil beneath the slab (to a depth of at least 14") is also required. The disposal of that soil is to be handled by Friess Environmental Consulting, Inc. (the primary contractor on site) as it is considered contaminated. Once the soil is removed, a bedding approximately 4" deep of 1" washed stone is laid. After the stone bed is finished, 6" perforated, stainless steel piping is installed in the trench and then further backfilled with more 1" washed stone. The stone will completely fill the trench to the bottom of the original existing concrete (at least 8" from the finished floor). On top of the stone, a 6-mil vapor barrier will be laid. Moreover, new concrete will be poured to a depth of about 8" and it will be reinforced by 1/2" steal rebar. The rebar will be drilled into the existing slab every 3' at alternating points on both sides of the saw cut. Therefore, there is a steel reinforcement approximately every 18". At the far east side of the building, the end of the trench, a 6" stainless steel riser will be installed. This will be the case for both the North Trench and the South Trench (for each system). Further, the stainless steel risers then exit the building and continue to the location of the blower motor. The vent piping has a final exhaust point 12" above the roof/gutter line.

FIGURE 5

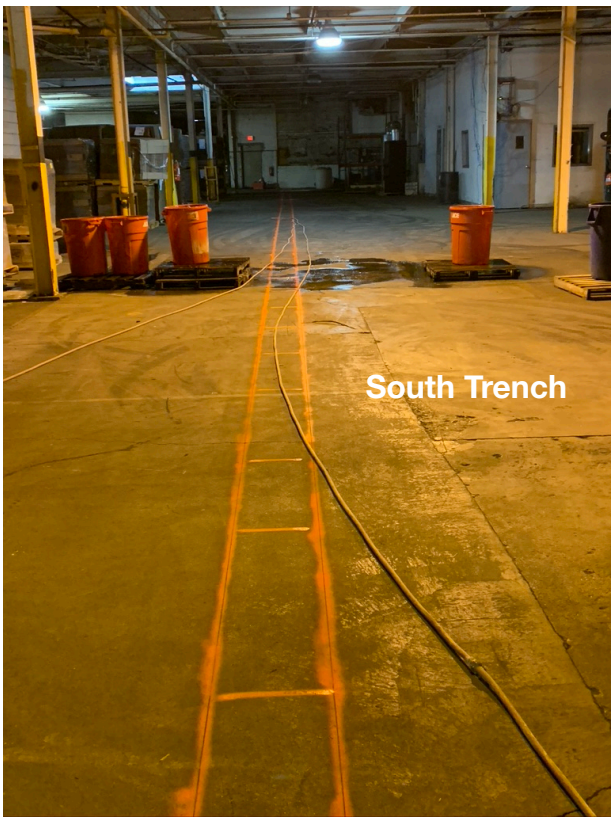
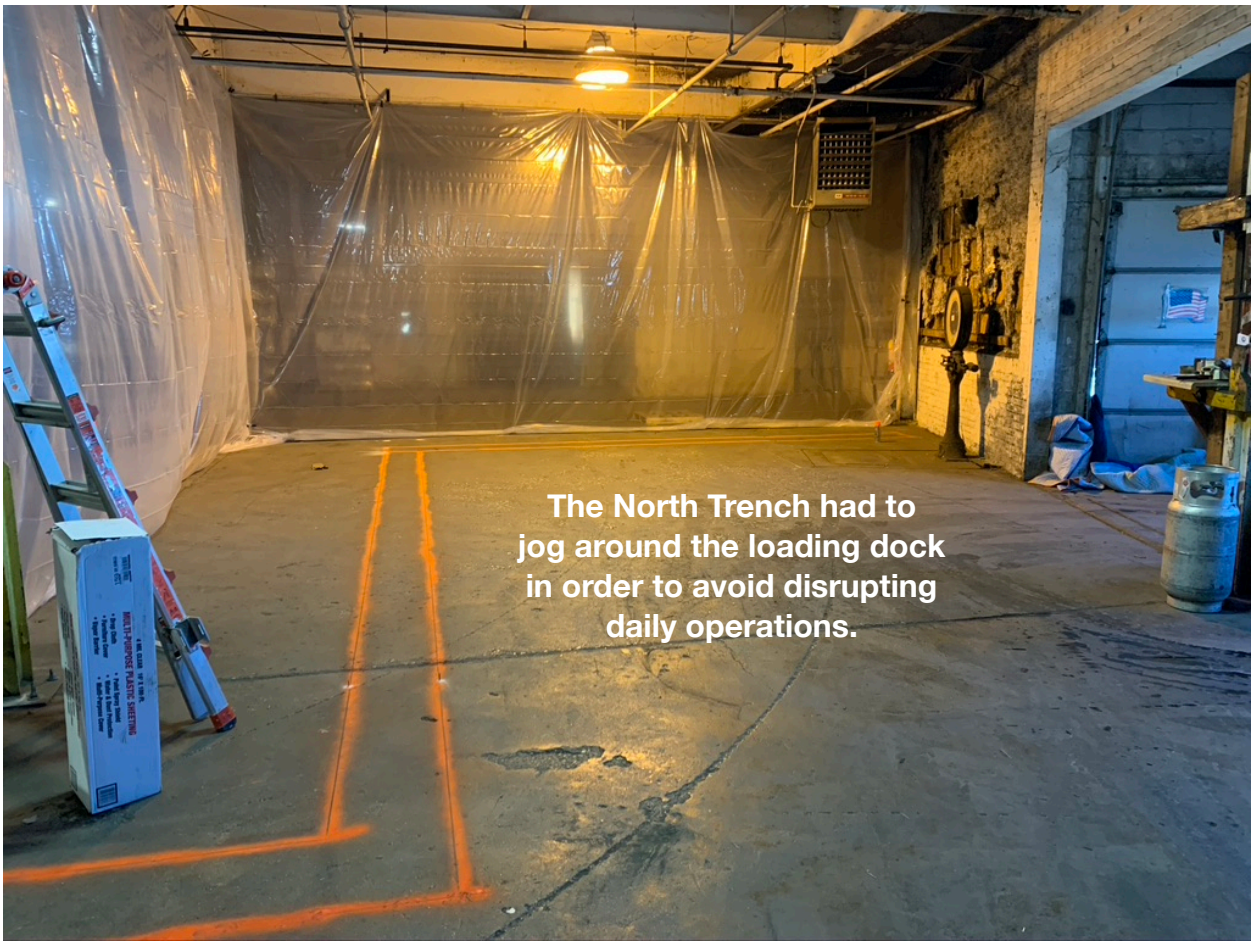


FIGURE 6

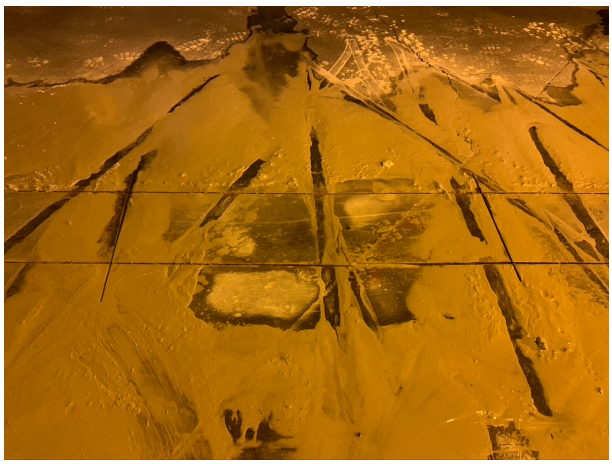
FIGURE 9



As one can see by the figures above, marking paint was used to identify where the trenching should take place, at what width the trenches should be cut, and where the sections should be cut horizontally to ultimately remove the concrete blocks. Ground penetrating radar was used prior to marking to ensure the trenching pathway was clear of plumbing lines, other sub-slab utilities or any obstructions. Further, a temporary tunnel around the trench pathway was constructed with plastic sheeting, and held down tightly with furring strips, in order to control concrete dust and soil vapors as cutting and removal took place. Large portable air handlers were placed on the far west end of the tunnel directing the air through the tunnel and ultimately outside of the loading dock doors on the far east side of the building.

FIGURE 7

FIGURE 8



Once the trenches are cut, the concrete is removed, and the slurry is cleaned and properly disposed of, the soil is finally ready for removal. One technician used a mini excavator to dig and trench the soil while the other technician used a Bobcat, skid-steer loader to remove the soil for proper disposal in the plastic lined disposal bins.

FIGURE 10

The trench was dug approximately 14” deep to leave enough room for a proper aggregate bed, the 6-inch stainless steel piping, and final backfill. Moreover, midway through the south trench it was discovered that almost exactly 14” beneath the current slab was a second, older slab. The second slab was only present for a smaller, approximate 20-foot section of the trench.

(Please see Figure 11 below—Second Slab)

FIGURE 11

Once all of the soil is fully removed from the trench, the technicians corrugate the stainless steel piping. While corrugating, it is important to cut the piping at a 45 degree angle to keep the integrity and strength of the rolled steel. Further, using stainless steel piping is extremely important because the high concentrations of TCE will deteriorate traditional schedule 40 PVC or other plastic piping over time. For the underground portion of the project, spiral stainless steel piping was used and carefully corrugated. For the above ground portion of the project, quick connect, high pressure stainless steel tubing was used for aesthetics, strength, and durability in the industrial setting. Pictured above in Figure 11 is the corrugated stainless steel spiral used during the underground portion of the project.

After all of the piping is laid in the trench, the technicians continue to backfill around, and slightly above, the underground piping with the 1” washed stone previously mentioned. The

technicians were extremely diligent in ensuring that any portion of the existing slab that was slightly undermined during the excavation process was properly backfilled and compressed with the aforementioned aggregate. After the stone fill was added and properly compressed, the onsite project manager checked the depth between the existing slab and the backfill to ensure at least 8-inches of space was left for an even, sturdy 8" concrete pour. If the depths of any areas were greater or less than 8-inches, the proper adjustments were made and regraded. Additionally, after the stone was properly graded, the 6-mil vapor barrier was added to the trench to prep for the final concrete pour.

FIGURE 12

Backfilling Underground Pipe

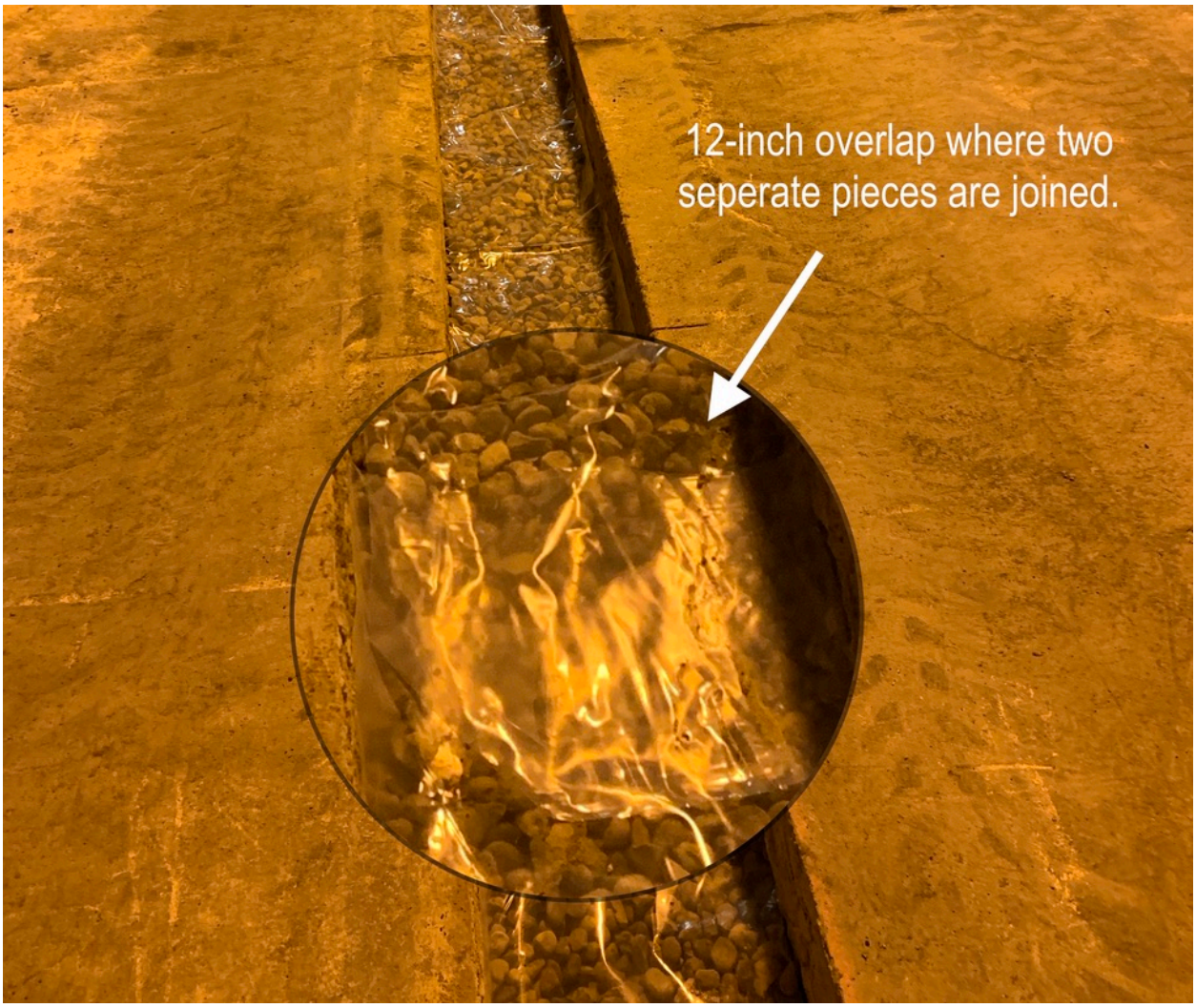
FIGURE 13

Final Grade of Underground Pipe w/ Vapor Barrier

The 6-mil vapor barrier was placed over the 1" washed stone backfill and overlapped by at least 12-inches where two separate pieces are joined. This is important to ensure the vapor barrier helps create a better vacuum under the slab while the soil is being depressurized. To be absolutely clear, the vapor barrier does not fully ensure that a perfect vacuum is achieved but rather it helps to create a better vacuum than if it were not present and/or not overlapped where two separate sections are joined.

(See Figure 14 below illustrating the vapor barrier and the overlap present)

FIGURE 14



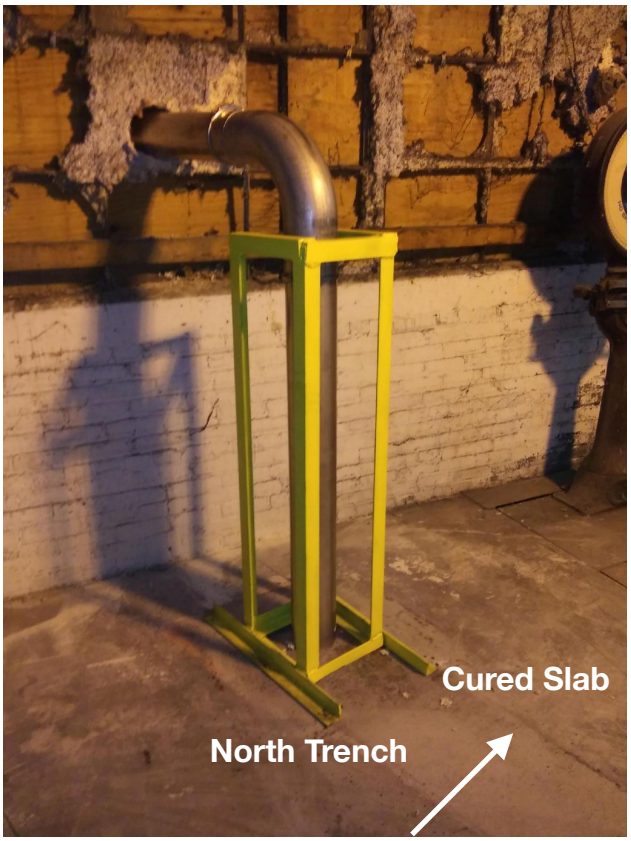
After the vapor barrier was properly installed across the entire length and width of both trenches, it is time to pour new cement. As previously mentioned, to strengthen the concrete, metal rebar was installed prior to pouring the new cement. The new cement was poured to a depth of about 8". The 1/2-inch steel rebar was drilled into the existing slab every 3' at alternating points on both sides of the saw cut. Therefore, there is a steel reinforcement approximately every 18". Further, once all of the new cement is poured and finished, it is time to let it set and dry into concrete. As the cement dried, the technicians began work on the above ground piping, and mounting of the external blower units.

One important consideration for the above ground piping on this particular project was protecting the vertical piping in the industrial setting. That is, ensuring that fork lifts and other industrial equipment do not damage the piping during the course of normal operations or in the event of an accidental collision. With that being said, the technicians designed and welded a protective barrier to enclose the vertical piping and ultimately protect the vapor piping from the aforementioned concerns. Further, to improve visibility of the vertical piping and barrier, the technicians painted the protective barrier yellow.

(Please see Figures 15 & 16 below illustrating the cured concrete and welded barrier)

FIGURE 15

FIGURE 16



As one can see in the figures above, the above grade piping comes out at about 4-feet above the slab and has a 90-degree, long radius elbow exiting to the exterior of the building. Utilizing a long radius elbow is important to help maximize both pressure and airflow of the system. That is, long radius elbows provide less friction and resistance than short radius fittings.

Once the pipe exits the structure, the custom blowers are connected and mounted to the vapor mitigation system. The blowers used for both the North Trench and South Trench of the Central Building are custom blowers manufactured by New York Blower Company. The design specifications of the fans can be found in figure 17, 18, and 19 below.

FIGURE 17

1 Pressure Blower Size 1606S05 STL Arr-4 Flanged Inlet 08

Capacities
Standard 500 cfm, 20 in wg, 3500 rpm, 2.76 bhp, 0.0712 lb/ft3, 0 ft 70 °F

Motor (Supplied by NYB and mounted by NYB)
Integral TE 5 HP 3600 rpm 3-60-230/460 Premium Efficiency 184T

Included Accessories/Modifications

- Drain Plug: SST 316
- Drain: SST 316
- Airstream Parts: SST 304
- Certified Documents: To-scale Composite Drawings, DWG format, with STP File

FIGURE 18

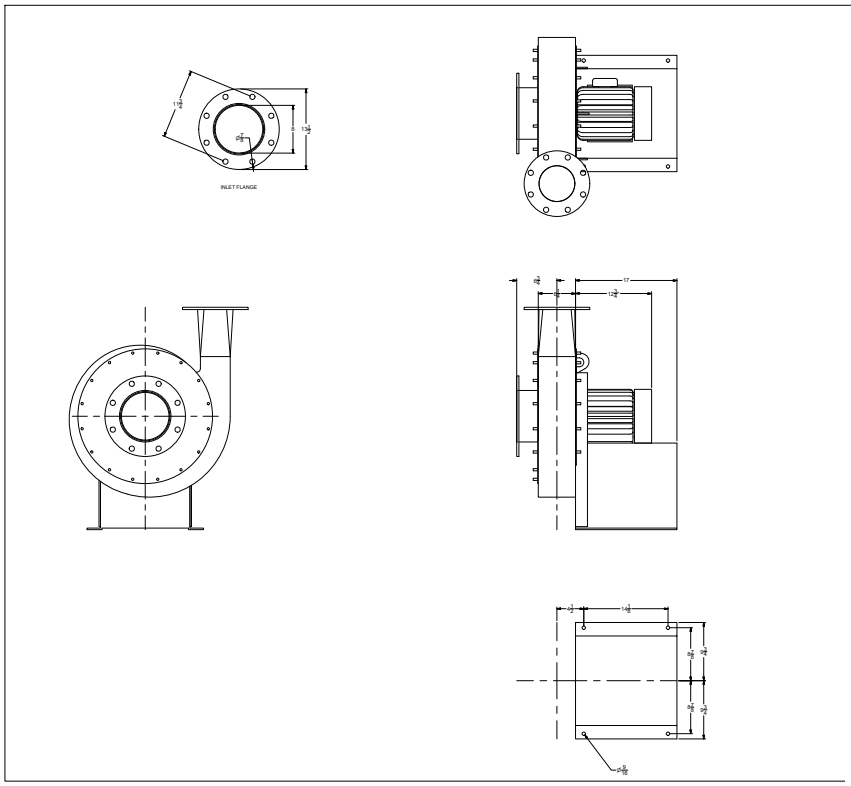
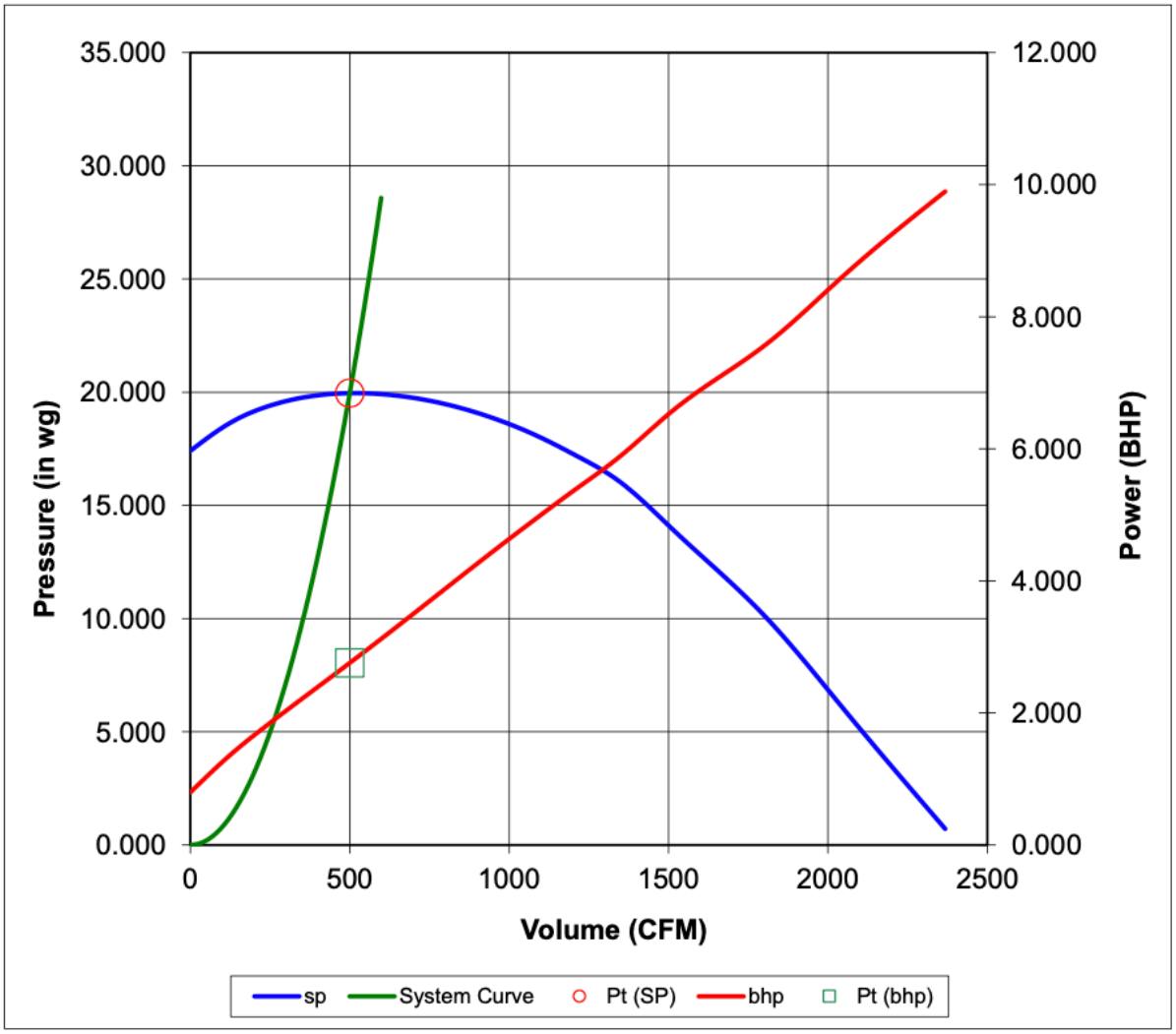


FIGURE 19

Performance Curve

Date:	04-Feb-20	File:	2020-06025-002	**CBU**
Performance		Cust. No.:	2320	
Options:		Customer:	LIFETIME RADON SOLUTIONS	
			824 Wells Street	
		Product Line:	Pressure Blower	
		Size:	1606S	
		Wheel Type:	STL	
		Capacity:	Standard	
		Volume (CFM):	500	
		Press. (in wg):	20 (FSP)	
Temperature:	70° F	Speed (RPM):	3500	
Altitude:	N/A	Power (BHP):	2.76	
		Density (lb/ft3):	0.0712	
		Max Safe Speed:	4000	



Because of the height at which the above ground piping is exiting the structure and due to the condition of the exterior slab, a platform to hold, stabilize and ultimately mount the fan was built. Figure 20 below briefly illustrates the platform built for the fan.

FIGURE 20

The blower was of course bolted to the wooden platform shown above. Further, the platform was then also bolted to the exterior slab beneath the fan for extra support and stability. Once the blower was fully mounted and secured, the technicians began building the exterior, exhaust portion of the system. Similar to the importance of the long radius, 90-degree elbows previously mentioned (on the intake portion of the system), it is equally important to reduce friction and resistance on the output side of the blower as well. Therefore, when building out

the output portion of the system, the technicians used two, long radius 45-degree elbows rather than two, 90-degree elbows—thus reducing friction loss and resistance substantially. This offset is important to properly mount the system to the building and the fittings chosen are equally as important for maximum system effectiveness. Once the system was properly offset back to the structure, metal brackets further secured the vapor piping to the structure.

(Please see Figure 21 for a visual representation of the fittings and brackets used)

FIGURE 21

In order to protect the blower motor and vapor mitigation system from tampering, vandals and weathering, a protective “shed-like” housing was also built around the blower. This housing is illustrated in figure 22.

FIGURE 22

The protective housing is of course complete and properly enclosed. The above illustration shows the housing while technicians were still making blower adjustments. The design was built so the front of the enclosure can bolt apart and technicians can access for any potential maintenance or service down the road.

After the system was fully assembled and the technicians completed the blower enclosure, their next task is the post diagnostic testing. That is, just as PFE Testing was done prior to installation (for system design and ultimately understanding of the sub-slab communication) the system now needs to be retested for verification of system design and ultimately system effectiveness.

POST MITIGATION DIAGNOSTICS AND EXPLORATION—PRESSURE FIELD EXTENSION TESTING (PFET)

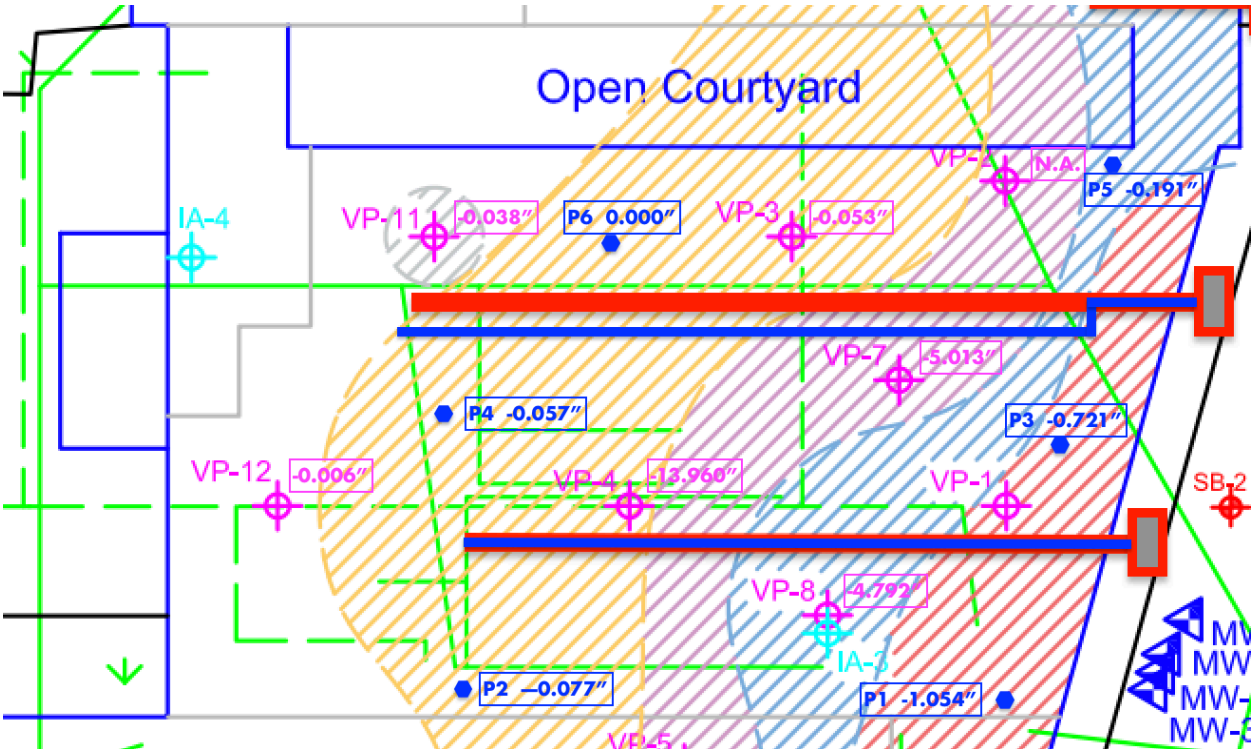
After system installation, the electrical sub-contractor activated both systems. It is important to note that the electrical activation was done by a licensed, master electrician and his tradesman and that the mitigation technicians or project managers on staff from Lifetime Radon Solutions, Inc. did not install the electrical components necessary to power the mitigation blower. Further, it is also worth noting that the electrical sub-contractor is responsible for all necessary permits associated with the activation of the vapor mitigation system.

Once the systems were fully activated, the mitigation technicians begin post mitigation diagnostics and exploration. That is, in addition to the PFE testing, it is important to check any cracks or penetrations made throughout the vapor mitigation installation process to ensure a quality negative pressure/vacuum is achieved under the slab. Any cracks present between the newly poured slab and the existing slab (along the trench) were caulked with a polyurethane and sealed with a “painted on” rubberized coating. These are of course important areas to check and ultimately mend if air-loss was present during the post mitigation exploration.

After the exploration phase of the post mitigation diagnostic process, the lead technician measured the negative pressure of the mitigation system (in w.c.) as well as the airflow at the discharge (in CFM). The negative pressure of the system is measured with the Magnehelic Differential Pressure Gauge mounted on the system. This pressure gauge shows the pressure underneath the slab and is mounted on the interior vertical piping for maximum visibility and functionality. The North Trench (North System) was pulling a negative pressure of 19” w.c. and the South Trench (South System) was also pulling a negative pressure of 19” w.c. Moreover, the North System was moving 834 CFM and the South System was moving 767 CFM. After the pressure and airflow readings were taken, the lead technician began doing his post mitigation PFE testing. The results of the post mitigation PFET can be found below in Figure 23.

The post mitigation PFE Test results below show the sub-slab pressure readings after the vapor mitigation system installation. As one can see, nearly all of the sub-slab pressure readings indicate that a negative pressure is taking place. This means the system is working and extending through the soil as it should. The only point that did not show a negative pressure reading was P6. With that being said, vapor mitigation system PFET readings tend to change over time—that change is of course dependent on many factors, including but not limited to moisture content in the soil, wind, HVAC usage or barometric pressure changes, etc. Further, it is not unusual for negative pressure readings to improve (over time) as the vapor mitigation system extracts water vapor from the soil, ultimately drying out the sub-slab material. Drying out the sub-slab can create cracks, crevasses, and separation below grade that improves porosity and ultimately negative pressure field extension.

FIGURE 23



(Please Read Further For OM&M Information)

FAN / NEW YORK BLOWER OPERATIONS, MAINTENANCE AND MONITORING PROGRAM

THE NEW YORK BLOWER COMPANY
7660 Quincy Street
Willowbrook, IL 60527-5530
Visit us on the Web: http://www.nyb.com
Phone: (800) 208-7918 Email: nyb@nyb.com

Installation, Maintenance, and Operation Manual			
Product:	Pressure Blower, Arrangement 4 Size 1606, STL, UB, CW		
File No.	2020-06025-02	**Customer PO:**	2320
Customer:	LIFETIME RADON SOLUTIONS		

WORD ABOUT SAFETY

Beginning in June 2012, the **WARNING** signage to the right has been placed on all **nyb** fans, as specified by ISO and recommended by the European Union. Air moving equipment involves electrical wiring, moving parts, sound, and air velocity or pressure which can create safety hazards if the equipment is not properly installed, operated and maintained. To minimize this danger, follow these instructions as well as the additional instructions and warnings on the equipment itself.
All installers, operators and maintenance personnel should study AMCA Publication 410, "Recommended Safety Practices for Air Moving Devices", which is included as part of every shipment. Additional copies can be obtained by writing to New York Blower Company, 7660 Quincy St., Willowbrook, IL 60527.

ELECTRICAL DISCONNECTS

Every motor driven fan should have an independent disconnect switch to isolate the unit from the electrical supply. It should be near the fan and must be capable of being locked by maintenance personnel while servicing the unit, in accordance with OSHA procedures.

MOVING PARTS

All moving parts must have guards to protect personnel. Safety requirements vary, so the number and type of guards needed to meet company, local and OSHA standards must be determined and specified by the user. Never start a fan without having all safety guards installed. Check regularly for damaged or missing guards and do not operate any fan with guards removed. Fans can also become dangerous because of potential “windmilling”, even though all electrical power is disconnected. Always block the rotating assembly before working on any moving parts.

SOUND

Some fans can generate sound that could be hazardous to exposed personnel. It is the responsibility of the system designer and user to determine sound levels of the system, the degree of personnel exposure, and to comply with applicable safety requirements to protect personnel from excessive noise. Consult **nyb** for fan sound power level ratings.

AIR PRESSURE AND SUCTION

In addition to the normal dangers of rotating machinery, fans present another hazard from the suction created at the fan inlet. This suction can draw materials into the fan where they become high velocity projectiles at the outlet. It can also be extremely dangerous to persons in close proximity to the inlet, as the forces involved can overcome the strength of most individuals. Inlets and outlets that are not ducted should be screened to prevent entry and discharge of solid objects.

ACCESS DOORS

The DANGER decal to the right is placed on all **nyb** cleanout doors. These doors, as well as access doors to the duct system, should never be opened while the fan is in operation. Serious injury could result from the effects of air pressure or suction. Quick-opening doors must have the door handle bolts securely tightened to prevent accidental or unauthorized opening. Bolted doors must be tightened for the same reason.

Danger:
Do not Enter/Confined Space

RECEIVING AND INSPECTION

The fan and accessories should be inspected on receipt for any shipping damage. Turn the wheel by hand to see that it rotates freely and does not bind. If dampers or shutters are provided, check these accessories for free operation of all moving parts. F.O.B. factory shipping terms require that the receiver be responsible for inspecting the equipment upon arrival. Note damage or shortages on the Bill of Lading and file any claims for damage or loss in transit. **nyb** will assist the customer as much as possible; however, claims must be originated at the point of delivery.

HANDLING

Fans should be lifted by the base, mounting supports, or lifting eyes/lugs only. Never lift a fan by the wheel, shaft, motor, motor bracket, housing inlet, outlet, or any fan part not designed for lifting. A spreader should be used to avoid damage.
On direct drive Arrangement 7 or 8 fans, lifting holes are provided in the motor base to assist in handling the fan assembly. These lifting holes should be used in conjunction with the lifting eyes/lugs when lifting and positioning the fan onto its foundation. A heavy round steel bar or appropriate fixture can be passed through the lifting holes to simplify attachment of the lifting device. Be sure to follow all local safety codes when moving heavy equipment.

STORAGE

Whenever possible, fans and accessories should be stored in a clean, dry location to prevent rust and corrosion of steel components. If outdoor storage is necessary, protection should be provided. Cover the inlet and outlet to prevent the accumulation of dirt and moisture in the housing. Cover motors with waterproof material. Remove any fan and motor drain plugs to minimize moisture buildup. Refer to the motor manufacturer's IM manual for further motor storage instructions.

Any stored bearing can be damaged by condensation caused by temperature variations. Therefore, **nyb** fan bearings are filled with grease at the factory to exclude air and moisture. Such protection is adequate for shipment and subsequent immediate installation and operation.
For long term or outdoor storage, mounted bearings should be immediately regreased and wrapped with plastic for protection. Split housed bearings may require additional grease to completely fill the bearing housing cavity. **Rotate the fan wheel and motor shaft by hand at least every two weeks to redistribute grease on internal bearing parts.** Each month the fan and motor bearings should be purged with new grease to remove condensation, since even a filled bearing can accumulate moisture. Use caution when purging, as excessive pressure can damage the seals. Rotate the shaft while slowly adding grease.

For Belt-Driven units, belts should be slackened to prevent damage to shaft, belts, and bearings.

Check shutters for free operation and lubricate moving parts prior to storage. Inspect the stored unit periodically to ensure the above precautionary storage measures are still in tact.

Prior to start-up, split housed bearings should have excess grease removed such that the grease level is level with the bottom of the shaft.

FAN INSTALLATION

nyb wheels are dynamically balanced when fabricated. Fully assembled fans are test run at operating speeds to check the entire assembly for conformance to **nyb** vibration limits. Nevertheless, all units must be adequately supported for smooth operation. **Ductwork or stacks should be independently supported as excess weight may distort the fan housing and cause contact between moving parts. nyb recommends using flexible connectors at the inlet and outlet to prevent vibration transmission from the fan to the system and vice versa.** Flexible connectors also eliminate loading issues temming from thermal expansion in systems with high temperature air systems. Where vibration isolators are used, consult the **nyb** certified drawing for proper location and adjustment.

Slab-Mounted Units

A correctly designed and level concrete foundation provides the best means of installing floor-mounted fans. The mass of the base must maintain the fan/driver alignment, absorb normal vibration, and resist lateral loads. The overall dimensions of the concrete base should extend at least six inches beyond the base of the fan. The weight of the slab should be two to three times the weight of the rotating assembly, including the motor. The foundation requires firmly anchored fasteners such as the anchor bolts shown in Figure 1. Hammer-drilled expansion fasteners can be used in less demanding applications.
Move the fan to the mounting location and lower it over the anchor bolts, leveling and supporting the fan base with shims at each bolt hole location. Fasten the fan securely, ensuring that the fan base is not put into a bind when tightening anchor bolts. This may cause distortion that can be transferred to the bearing housings, causing excessive vibration and premature bearing failure. You should consider grouting in fans sized 40 and larger. When grout is used, shim the fan at least 3/4-inch from the concrete base. Do not rely on grout to support the fan structure. (See Figure 1.) When isolation is used, check the **nyb** certified drawing for installation instructions.

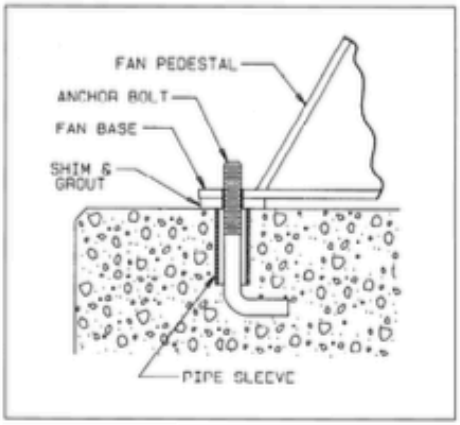


Figure 1

Elevated Units

When an elevated or suspended structural steel platform is used, it must have sufficient bracing to support the unit load and prevent side sway. A poorly designed support structure can experience resonance triggered by the fan operating speed. The platform should be of welded construction to maintain permanent alignment of all members.

START-UP

A start-up checklist is available on nyb's Maintenance manuals page under the support tools menu.
Visit the following link to view the checklist: https://www.nyb.com/pdf/Catalog/landM/NYBStartUpChecklist.pdf
Safe operation and maintenance includes the selection and use of appropriate safety accessories for the specific installation. This is the responsibility of the system designer and requires consideration of equipment location and accessibility as well as adjacent components. All safety accessories must be installed properly prior to start-up.
Safe operating speed is a function of system temperature and wheel design. Do not under any circumstances exceed the maximum safe fan speed published in your **nyb** certified drawing package, which is available from your **nyb** field sales representative.

Procedure

1. If the drive components are not supplied by **nyb**, verify with the manufacturer that the starting torque is adequate for the speed and inertia of the fan.
2. Inspect the installation prior to starting the fan. Check for any loose items or debris that could be drawn into the fan or dislodged by the fan discharge. Check the interior of the fan as well. Turn the wheel by hand to check for binding.
3. Check drive installation and belt tension.
4. Check the tightness of all setscrews, nuts and bolts. Ensure that anchor bolts are also properly torqued. When furnished, tighten hub setscrews with the wheel oriented so that the setscrew is positioned underneath the shaft.
5. Install all remaining safety devices and guards. Verify that the supply voltage is correct and wire the motor.
6. Check to ensure that neither the fan nor motor shaft are rotating.
7. "Bump" the starter to check for proper wheel rotation.
8. Use extreme caution when testing the fan with ducting disconnected. Apply power and check for unusual sounds or excessive vibration. If either exists, see the section on Common Fan Problems. To avoid motor overload, do not run the fan for more than a few seconds if ductwork is not fully installed. Without the ductwork attached, normal operating speed may not be obtained without motor overload. Once ductwork is attached, check for correct fan speed and complete installation. Ductwork and guards must be fully installed for safety.

NOTE: Shut the fan down immediately if there is any sudden increase in fan vibration.

Fan Shutoff for Fans with Elevated Airstream Temperatures (Greater than 200° F)

High temperature, rotating equipment such as fans must be protected from "heat soaking". Fan wheels must be rotating whenever the airstream temperature is above 200°F. to prevent the shaft from "sagging" causing a permanent bend in the shaft. After the airstream temperature has fallen below 200°F, the fan can be shutdown. Start-up and shut down procedures are required to prevent this. If a power failure occurs, rotate the shaft manually if necessary.

If a shaft is bent due to heat soaking or binding a sudden increase in fan vibration will occur. The shaft will need to be removed, checked for straightness and straightened or replaced.

FAN MAINTENANCE

nyb fans are manufactured to high standards with quality materials and components. Proper maintenance will ensure a long and trouble-free service life. **Do not attempt any maintenance on a fan unless the electrical supply has been completely disconnected and locked out.** In many cases, a fan can windmill despite removal of all electrical power. The rotating assembly should be blocked securely before attempting maintenance of any kind.
The key to good fan maintenance is regular and systematic inspection of all fan parts. Inspection frequency is determined by the severity of the application and local conditions. Strict adherence to an inspection schedule is essential.
Regular fan maintenance should include the following:

1. Check the fan wheel for any wear or corrosion, as either can cause catastrophic failures. Check also for the buildup of material which can cause unbalance resulting in vibration, bearing wear and serious safety hazards. Clean or replace the wheel as required.
2. Check the V-belt drive for proper alignment and tension (see section on V-belt drives). If belts are worn, replace them as a set, matched to within manufacturer's tolerances. Lubricate the coupling of direct-drive units and check for alignment (see section on couplings).
3. Lubricate the bearings, but do not over lubricate (see the bearing section for detailed specifications).
4. Ceramic-felt shaft seals require no maintenance, although worn seals should be replaced. When lip-type shaft seals are provided, lubricate them with "NEVER-SEEZ" or other anti-seize compound. Schedule in accordance with the bearing lubrication table.

WARNING: Do not remove or loosen the fan hub from the fan wheel. Removing or loosening the fan hub from the fan wheel will cause imbalance and void the warranty.

5. During any routine maintenance, all setscrews and bolts should be checked for tightness. See the corresponding table for correct torques.

6. When installing a new wheel or cone, the proper wheel-to-inlet cone clearance must be maintained (see Figure 3 for correct wheel dimension).
7. **WARNING:** When installing any new rotating components (wheel, shaft, bearings, coupling, drive components, or motor), it is recommended that the procedures in the Start-Up section are followed. Fan vibration readings should be taken and a trim balance be performed if excessive vibration is experienced.

WHEEL CONE CLEARANCE

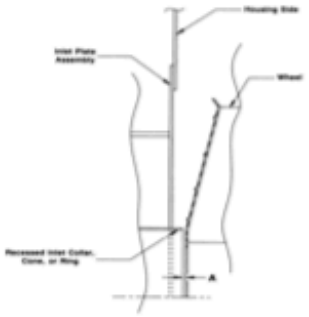


Figure 3 (Dimensions are in inches)

Fan Size	"A" Dim
1606	1/8

WHEEL BALANCE

Airstreams containing particulate or chemicals can cause abrasion or corrosion of the fan parts. This wear is often uneven and can lead to significant wheel imbalance over time. When such wear is discovered, a decision must be made as to whether to rebalance or replace the wheel.

The soundness of all parts should be determined if the original thickness of components is reduced. Be sure there is no hidden structural damage. The airstream components should also be cleaned to remove any build-up of foreign material. Specialized equipment can be used to rebalance a cleaned wheel that is considered structurally sound.

Balance weights should be rigidly attached at a point that will not interfere with the housing nor disrupt airflow. Remember that centrifugal forces can be extremely high at the outer radius of a fan wheel. Welding is the preferred method of balance weight attachment. Be sure to ground the welder directly to the fan wheel. Otherwise, the welding current could pass through the fan bearings and damage them.

GOVERNMENT WARNINGS

Disposal of material should be made in accordance to local government regulations.

California Prop 65 - WARNING: This product contains a chemcial known to the state of California to cause cancer and/or birth defects or other reproductive harm.

COMMON FAN PROBLEMS

Excessive Vibration

A common complaint regarding industrial fans is "excessive vibration". **nyb** is careful to ensure that each unit is precisely balanced prior to shipment; however, there are many other causes of vibration including:

1. Loose mounting bolts, setscrews, bearings or couplings.
2. Misalignment or excessive wear of couplings or bearings.
3. Misaligned or unbalanced motor.
4. Bent shaft due to mishandling or material impact.
5. Accumulation of foreign material on the wheel.
6. Excessive wear or erosion of the wheel.
7. Excessive system pressure or restriction of airflow due to closed dampers.
8. Inadequate structural support, mounting procedures or materials.
9. Externally transmitted vibration.

Premature Component Failure

1. Prolonged or major vibration.
2. Inadequate or improper maintenance.
3. Abrasive or corrosive elements in the airstream or surrounding environment.
4. Misalignment or physical damage to rotating components or bearings.
5. Bearing failure from incorrect or contaminated lubricant or grounding through the bearings while arc welding.
6. Excessive fan speed.
7. Extreme ambient or airstream temperatures.
8. Improper belt tension.
9. Improper tightening of wheel setscrews.

Inadequate Performance

1. Incorrect testing procedures or calculations.
2. Fan running too slowly.
3. Fan wheel rotating in wrong direction or installed backwards on shaft.
4. Wheel not properly centered relative to inlet cone.
5. Damaged or incorrectly installed cut off sheet or diverter.
6. Poor system design, closed dampers, air leaks, clogged filters, or coils.
7. Obstructions or sharp elbows near inlets.
8. Sharp deflection of airstream at fan outlet.

Excessive Noise

1. Fan operating near "stall" due to incorrect system design or installation.
2. Vibration originating elsewhere in the system.
3. System resonance or pulsation.
4. Improper location or orientation of fan intake and discharge.
5. Inadequate or faulty design of supporting structures.
6. Nearby sound reflecting surfaces.
7. Loose accessories or components.
8. Loose drive belts.
9. Worn bearings.

REPLACEMENT PARTS

It is recommended that only factory-supplied replacement parts be used. **nyb** fan parts are built to be fully compatible with the original fan, using specific alloys and tolerances. These parts carry a standard **nyb** warranty.
When ordering replacement parts, specify the part name, **nyb** shop and sequence number, fan size, type, rotation (viewed from drive end), arrangement and bearing size or bore. Most of this information is on the metal nameplate attached to the fan base. For assistance in selecting replacement parts, contact your local **nyb** representative or visit the below link:

https://www.nyb.com/replacement-parts-form/

Order Example (prior to 2013):	Order Example (after to 2013):	Suggested replacement/component parts include:		
Part required: Wheel	Part required: Wheel			
Shop/control number: B-10106-100	Shop number: 2013-XXXXX Wheel	Wheel	-	Damper
Fan description: 33" PLR	Fan description: 36 ACF	Shaft	-	Motor
Clockwise rotation	Year of Manufacture: 2013	Bearings	-	Coupling
Arrangement: 1	Fan Description: ACF SW Fan Class	Shaft Seal	-	Sheaves
Bearing: Link-Belt P335, 2-3/16 Bore	3 Arr-9	Inlet Cone	-	V-Belts

LIMITED PRODUCT WARRANTY

All products are warranted by nyb to be free from defects in materials and workmanship for a period of one (1) year after shipment from its plant, provided buyer demonstrates to satisfaction of nyb that the product was properly installed and maintained in accordance with nyb's instructions and recommendations and that it was used under normal operating conditions.

This warranty is limited to the replacing and/or repairing by nyb of any part or parts which have been returned to with nyb's written authorization and which in nyb's opinion are defective. Parts not manufactured by nyb but installed by nyb in equipment sold to the buyer shall carry the original manufacturer's warranty only. All transportation charges and any and all sales and use taxes, duties, imports or excises for such part or parts shall be paid for by the buyer. nyb shall have the sole right to determine whether defective parts shall be repaired or replaced.

This warranty does not cover any customer labor charges for replacement of parts, adjustments or repairs, or any other work unless such charges shall be assumed or authorized in advance, in writing, by nyb.
This warranty does not cover any product which, in the judgement of nyb, has been subject to misuse or neglect, or which has been repaired or altered outside nyb's plant in any way which may have impaired its safety, operation or efficiency, or any product which has been subject to accident.

This warranty shall be null and void if any part not manufactured or supplied by nyb for use in any of its products shall have been substituted and used in place of a part manufactured or supplied by nyb for such use. There are no warranties, other than those appearing on the acknowledgement form **INCLUDING NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE,** given in connection with the sale of the goods sold hereunder. The buyer agrees that his sole and exclusive remedy, and the limit of nyb's liability for loss from any cause whatsoever, shall be the purchase price of the goods sold hereunder for which a claim is made.

INFORMATION AND WARNINGS ON ALL NYB FANS

Beginning in June 2012, warning signage has been placed on all nyb fans in the form of readily understandable symbols or pictograms, as specified by ISO and recommended by the European Union. The following is a brief description of each pictogram:

General Hazard

Electrical Hazard due to motor

Danger of having hands or fingers cut

Hand Crush / Pinch Point

Possiblity of entaglement of hand or fingers

Hot Surfaces

Hand Crush from above

Entanglement of Hand/Rotating Shaft

Do Not Enter/Confined Space

Mandatory Instructions:

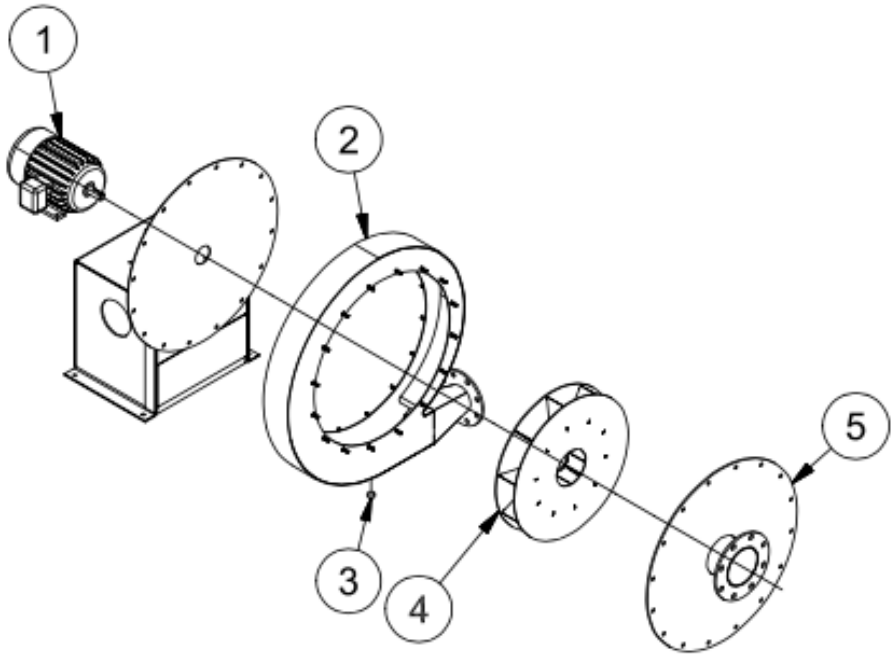
Lock Power Supply in Off Position and wait for shaft to stop rotating prior to opening and servicing

Read Installation, Maintenance, and Operating Manual

Lift Here

WHEEL ROTATION AS VIEWED FROM DRIVE SIDE
(CLOCKWISE)

PB ST
ARROW INDICATES CORRECT ROTATION



File Number: 2020-06025-02
Fan Type: Pressure Blower, Arrangement 4
Size 1606, STL, UB, CW

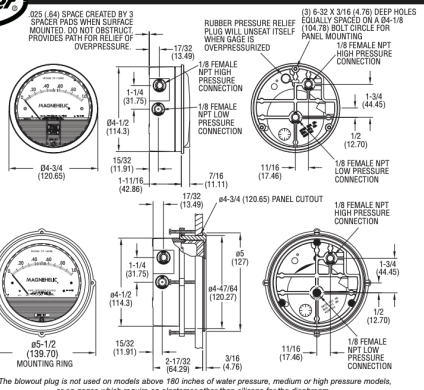
#	REPLACEMENT PARTS
	ITEM TYPE
(1)	MOTOR
(2)	HOUSING
(3)	DRAIN PLUG
(4)	WHEEL
(5)	INLET ASSEMBLY

**NOTE: Actual fan discharge and rotation may be different from pictured fan in the exploded view.

MAGNEHELIC DIFFERENTIAL PRESSURE GUAGE OM&M

Bulletin A-27

Magnehelic® Differential Pressure Gage



**The blowout plug is not used on models above 180 inches of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm.*

STANDARD GAGE ACCESSORIES: Two 1/8" NPT plugs for duplicate pressure taps, two 1/8" pipe thread to rubber tubing adapters and three flush mounting adapters with screws.

MP AND HP GAGE ACCESSORIES: Mounting ring and snap ring retainer substituted for 3 adaptors, 1/4" compression fittings replace 1/8" pipe thread to rubber tubing adaptors.

OVERPRESSURE PROTECTION: Standard Magnehelic® Differential Pressure Gages are rated for a maximum pressure of 15 psig and should not be used where that limit could be exceeded. Models employ a rubber plug on the rear which functions as a relief valve by unseating and venting the gage interior when over pressure reaches approximately 25 psig (excludes MP and HP models). To provide a free path for pressure relief, there are four spacer pads which maintain .023" clearance when gage is surface mounted. Do not obstruct the gap created by these pads.

SPECIFICATIONS

Service: Air and non-combustible, compatible gases. (Natural Gas option available.)
Wetted Materials: Consult factory.
Housing: Die cast aluminum case and bezel, with acrylic cover. (MP model has polycarbonate cover).
Accuracy: 2% of full scale (±3% on -0, -100PA, -125PA, -10MM and ±4% on -00, -60PA, -6MM), throughout range at 70°F (21.1°C); High accuracy version: ±1% on full scale (±1.5% on -0, -100PA, -125PA, -10MM and ±2% on -00, -60PA, -6MM).
Pressure Limits: -20" Hg to 15 psig.† (-0.677 bar to 1.034 bar); MP option: 35 psig (2.41 bar), HP option: 80 psig (5.52 bar).
Enclosure Rating: IP67.
Overpressure: Relief plug opens at approximately 25 psig (1.72 bar), standard gages only. The blowout plug is not used on models above 180 inches of water pressure, medium or high pressure models, or on gages which require an elastomer other than silicone for the diaphragm.
Temperature Limits: 20 to 140°F (-6.67 to 60°C). *Low temperature models available as special option.
Size: 4" (101.6 mm) diameter dial face.
Mounting Orientation: Diaphragm in vertical position. Consult factory for other position orientations.
Process Connections: 1/8" female NPT duplicate high and low pressure taps - one pair side and one pair back.
Weight: 1 lb 2 oz (510 g), MP & HP 2 lb 2 oz (963 g).
Agency Approvals: RoHS.

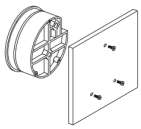
†For applications with high cycle rate within gage total pressure rating, next higher rating is recommended. See Medium and High pressure options.

Note: May be used with hydrogen when ordering Buna-N diaphragm. Pressure must be less than 35 psi.

INSTALLATION

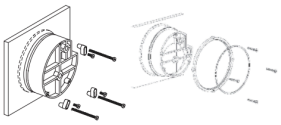
Select a location free from excessive vibration and where the ambient temperature will not exceed 140°F (60°C). Also, avoid direct sunlight which accelerates discoloration of the clear plastic cover. Sensing lines may be run any necessary distance. Long tubing lengths will not affect accuracy but will increase response time slightly. Do not restrict lines. If pulsating pressures or vibration cause excessive pointer oscillation, consult the factory for ways to provide additional damping.
All standard Magnehelic® Differential Pressure Gages are calibrated with the diaphragm vertical and should be used in that position for maximum accuracy. If gages are to be used in other than vertical position, this should be specified on the order. Many higher range gages will perform within tolerance in other positions with only rezeroing. Low range models of 0.5" w.c. plus 0.25" w.c. and metric equivalents must be used in the vertical position only.

SURFACE MOUNTING



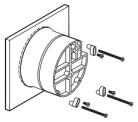
Locate mounting holes, 120° apart on a 4-1/8" dia. circle. Use No. 6-32 machine screws of appropriate length.

FLUSH MOUNTING



Provide a 4-9/16" dia. (116 mm) opening in panel. Provide a 4-3/4" dia. (120 mm) opening for MP and HP models. Insert gage and secure in place with No. 6-32 machine screws of appropriate length, with adapters, firmly secured in place.

FOR -SS BEZEL INSTALLATION



Provide a 4-9/16" opening in panel. Insert gage and secure with supplied mounting hardware.

PIPE MOUNTING

To mount gage on 1-1/4" - 2" pipe, order optional A-610 pipe mounting kit.

TO ZERO GAGE AFTER INSTALLATION

Set the indicating pointer exactly on the zero mark, using the external zero adjust screw on the cover at the bottom. Note that the zero check or adjustment can only be made with the high and low pressure taps both open to atmosphere.

OPERATION

Positive Pressure: Connect tubing from source of pressure to either of the two high pressure ports. Plug the port not used. Vent one or both low pressure ports to atmosphere.
Negative Pressure: Connect tubing from source of vacuum or negative pressure to either of the two low pressure ports. Plug the port not used. Vent one or both high pressure ports to atmosphere.
Differential Pressure: Connect tubing from the greater of two pressure sources to either high pressure port and the lower to either low pressure port. Plug both unused ports.
When one side of the gage is vented in dirty, dusty atmosphere, we suggest an A-331 Filter Vent Plug be installed in the open port to keep inside of gage clean.

A. For portable use of temporary installation use 1/8" pipe thread to rubber tubing adapter and connect to source of pressure with flexible rubber or vinyl tubing.
B. For permanent installation, 1/4" O.D., or larger, copper or aluminum tubing is recommended.

MAINTENANCE

No lubrication or periodic servicing is required. Keep case exterior and cover clean. Occasionally disconnect pressure lines to vent both sides of gage to atmosphere and re-zero. Optional vent valves should be used in permanent installations. The Series 2000 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.

WARNING

Attempted field repair may void your warranty. Recalibration or repair by the user is not recommended.

TROUBLE SHOOTING TIPS

Gage won't indicate or is sluggish.

1. Duplicate pressure port not plugged.
2. Diaphragm ruptured due to overpressure.
3. Fittings or sensing lines blocked, pinched, or leaking.
4. Cover loose or "O"ring damaged, missing.
5. Pressure sensor, (static tips, Pitot tube, etc.) improperly located.
6. Ambient temperature too low. For operation below 20°F (-7°C), order gage with low temperature, (LT) option.

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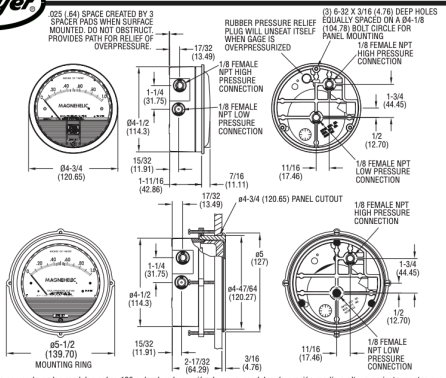
Bulletin A-27

Magnehelic® Differential Pressure Gage
INSTRUCCIONES Y LISTA DE PARTES



(El tapón de goma no es usado en los modelos sobre 180 pulgadas de presión de agua, modelos de presión media o alta, o en instrumentos que requieren un elastizado en cualquier otro material que no sea silicona para el diafragma.)

Accesorios: Tapones 1/8" NPT para las conexiones duplicadas, dos adaptadores de rosca 1/8" NPT a tubo de goma; y tres adaptadores para montaje al ras y tornillos.

Accesorios para Los Modelos MP y HP: El anillo de montaje y el retensor del anillo de presión son substituidos por 3 adaptadores, accesorios de compresión de 1/4" remplazan a los adaptadores de rosca 1/8" a tubo de goma.

Protección Para Sobrepresión: Los Manómetros Diferenciales Magnehelic Estándar están clasificados para una presión máxima de 15 psi y no se deberían de usar donde el límite puede excederse. Los modelos emplean un tapón de goma en el trasero que funciona como una válvula de alivio desmontándose y ventilando el interior del instrumento cuando la sobrepresión alcanza aproximadamente 25 psig. (Los modelos MP y HP son excluidos) Para proveer un camino libre para el alivio de presión, el instrumento viene con rodilleras que mantienen un espacio de .023" cuando el instrumento es montado en superficie. No bloque el espacio creado por estas rodilleras.

† Para aplicaciones con alto ciclo de velocidad dentro de la clasificación de presión total del instrumento, la próxima clasificación mas alta es recomendada. Vea las opciones de media y alta presión.

El instrumento puede ser usado con hidrogeno cuando se ordena con diafragma de Buna-N. La presion tiene que ser menos de 35 psi.

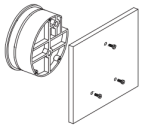
ESPECIFICACIONES

Servicio: aire y gases no combustibles, gases compatibles. (öpcion disponible para uso con gas natural).
Materiales Mojados: Consulte con la fábrica.
Carcasa: Caja y anillo de retención de aluminio fundido a presión con tapadera de acrílico. (El modelo MP tiene la tapadera de policarbonato.)
Exactitud: ±2% de la escala completa (±3% en los márgenes de -0, -100PA, -125PA y -10MM y ±4 % en los márgenes de -00, -60PA y -6MM), en todo el margen a 21.1 °C (70 °F); Versión de alta precisión: ±1% de la escala completa (±1.5% en los márgenes de -0, -100PA, -125PA, -10MM y ±2% en los márgenes de -00, -60PA, -6MM).
Límite de Presión: -20 Hg. a 15 psig. † (-0.677 bar a 1,034 bar); opción MP: 35 psig (2.41 bar), opción HP: 80 psig (5.52 bar).
Clasificación de gabinete: IP67.
Sobrepresión: El tapón de alivio se abre aproximadamente a los 25 psig, modelos estandard únicamente. El tapón de goma no es usado en los modelos sobre 180 pulgadas de presión de agua, modelos de presión media o alta, o en instrumentos que requieren un elastizado en cualquier otro material que no sea silicio para el diafragma.
Límite de Temperatura: -6.67 a 60ºC. * Modelos de baja temperatura disponibles como opción especial.
Dimensiones: diám. 120,65 mm x 55,6 prof.
Orientación de Montaje: El diafragma debe ser usado solo en posición vertical. Consulte con la fábrica para otras orientaciones de posición.
Conexiones: 1/8" NPT para alta y baja presión, duplicadas (atrás, a los lados).
Peso: 510 g, MP y HP 963 g.
Aprobación de la agencia: RoHS.

Instalacion

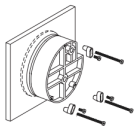
Seleccione un lugar libe de exceso de vibraciones, y donde la temperatura ambiente no supere los 60°C. Evite luz solar directa, para evitar decoloración de la cubierta plástica. Las conexiones de proceso pueden tener cualquier longitud sin afectar la exactitud, pero pueden extender el tiempo de respuesta del instrumento. Si hay pulsación de presión o vibración, consulte a fábrica sobre medios de amortiguación.
Los MAGNEHELIC han sido calibrados con el diafragma vertical, y deben ser usados en esas condiciones. Para otras posiciones, se debe especificar en la orden de provisión. Los de rango elevado pueden ser usados en diversas posiciones, pero se debe reajustar el cero. Los modelos de la serie 2000-00 y equivalentes métricos deben ser usados solo verticalmente.

Montaje en Superficie



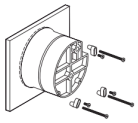
Perfore tres orificios separados 120° sobre una circunferencia de 105 mm de diám. y sostenga el instrumento con tres tornillos 6-32 de long. apropiada.

Montaje alineado



Perfore un circulo de 115 mm de diám. en el panel, y sostenga el instrumento mediante los.

Para instalar el bisel de acero inoxidable



Haga una apertura de 4-9/16 pulgadas en el panel. Inserte el medidor y asegure con los herrajes de montaje provistos.

Montaje Sobre Pipa

Para montar el instrumento sobre pipas de 32 a 50 mm de diám., ordene el adaptador opcional A-610.

Puesta a Cero Después de Instalar

Deje las conexiones de presión abiertas a atmósfera y ajuste a cero desde tornillo del panel frontal.

Operacion

Presión Positiva: Conecte la tubería desde la fuente de presión a cualquiera de las dos conexiones de alta presión (HIGH), bloqueando la no usada; Las conexiones de baja (LOW) presión pueden dejarse uno o los dos abiertos a la atmósfera.
Presión Negativa: Repita el procedimiento anterior, conectado en este caso las conexiones de baja presión (LOW). Deje las otras conexiones abiertas.
Presión diferencial: Conecte el tubo correspondiente a la presión más positiva al cualquiera de los conectores de alta presión (HIGH) bloqueando el no usado, y la más baja presión o presión negativa (vacío) al conector de baja presión (LOW). Puede usarse cualquier conector de cada par, dejando siempre uno bloqueado. Si se deja una conexión abierta a la atmósfera, se recomienda el uso de un filtro tipo A-331 en el lugar correspondiente para mantener limpio el interior del instrumento. Para uso portable, o instalación temporaria, uso adapta dores para rosca de tubo de 1/89 a tubo flexible, y conecte a proceso mediante una tubería de goma, o equivalente. Para instalación permanente, se recomienda el uso de tubo de cobre o aluminio de por lo menos 1/4" de diám. exterior.

No se requiere mantenimiento específico alguno, ni lubricación. Periódicamente, desconecte el instrumento, ventee la presión acumulada, y reajuste el cero. Para instalaciones permanentes, se debe usar un juego de válvulas de montaje permanente para el venteo.
El instrumento de Serie 2000 no puede ser re parado en el campo y debería de ser regresado si reparos son necesarios (Reparos en el campo no deben de ser intentados y pueden cancelar la garantía.). Asegurarse de incluir una descripción breve del problema más cualquier notas pertinentes a la aplicación para devolución de productos antes de enviar el instrumento.

Cuidado! : La recalibración en campo puede invalidar la garantía. No se recomienda la recalibracion por parte del usuario. En caso necesario envie el instrumento con transporte pago a:

Localización De Fallas

• *El instrumento no indica, o es lento en reacción.*
1. Conexión duplicada abierta.
2. Diafragma roto por sobrepresión.
3. Tubería de conexión perforada, con pérdidas o pinchazos.
4. Anillo de retención flojo, u "O " ring dañado.
5. Conexión a proceso indebida o inadecuada.
6. Temperatura muy baja. Para este caso ordene tipos LT (baja temperatura).

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DWYER INSTRUMENTS, INC.
P.O. BOX 373 • MICHIGAN CITY, INDIANA 46360 U.S.A.
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CREDENTIALS AND CONTACT INFORMATION

NRPP™ NATIONAL RADON PROFICIENCY PROGRAM — CERTIFIED RADON PROFESSIONALS

Click for more info

Delafield, WI

(262) 955-5701

Company Website

Contact

Wisconsin

State Radon Office Contact

Jessica Maloney, Program Manager

jessica.maloney@dhs.wisconsin.gov

(608) 267-7199

Radon Office Website

Scott Campbell
Lifetime Radon Solutions, Inc.

Certified for Radon Mitigation

- Certified by the National Radon Proficiency Program **(NRPP)**
- NRPP Certification **#101552-RMT**
- Certified since: July 2, 2013
- Certification Expires: September 30, 2021

Total NRPP Training/Education Credits: 88

- Multi-Family Mitigation Certificate **(MFMT)**

American Association of Radon Scientists and Technologists (AARST)

- AARST Member ID: A2521
- Member since: April 17, 2013
- AARST Advanced Radon Mitigation Professional **(ARP)**

Business Links

- Lifetime Radon Solutions, Inc. Website

NRPP™ NATIONAL RADON PROFICIENCY PROGRAM

CERTIFIED RADON PROFESSIONALS

Click for more info

Delafield, WI

(262) 955-5701

Company Website

Contact

Chad Rogness
Lifetime Radon Solutions, Inc.

Certified for Radon Mitigation

- Certified by the National Radon Proficiency Program **(NRPP)**
- NRPP Certification **#106455-RMT**
- Certified since: November 5, 2013
- Certification Expires: January 31, 2022

Total NRPP Training/Education Credits: 105

- Multi-Family Mitigation Certificate **(MFMT)**

Business Links

- Lifetime Radon Solutions, Inc. Website

Wisconsin

State Radon Office Contact

Jessica Maloney, Program Manager

jessica.maloney@dhs.wisconsin.gov

(608) 267-7199

Radon Office Website

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Contact

Wisconsin

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Jessica Maloney, Program Manager

jessica.maloney@dhs.wisconsin.gov

(608) 267-7199

Radon Office Website

Brian Thompson
Lifetime Radon Solutions, Inc.

Certified for Radon Measurement

- Certified by the National Radon Proficiency Program **(NRPP)**
- NRPP Certification **#109591-RT**
- Certified since: February 5, 2018
- Certification Expires: February 28, 2022
- Certified to provide Analytical Services using the following approved devices:
  * AirThings Corentium Pro

Certified for Radon Mitigation

- Certified by the National Radon Proficiency Program **(NRPP)**
- NRPP Certification **#109619-RMT**
- Certified since: February 6, 2018
- Certification Expires: February 28, 2022

Total NRPP Training/Education Credits: 64

- Multi-Family Mitigation Certificate **(MFMT)**

Business Links

- Lifetime Radon Solutions, Inc. Website

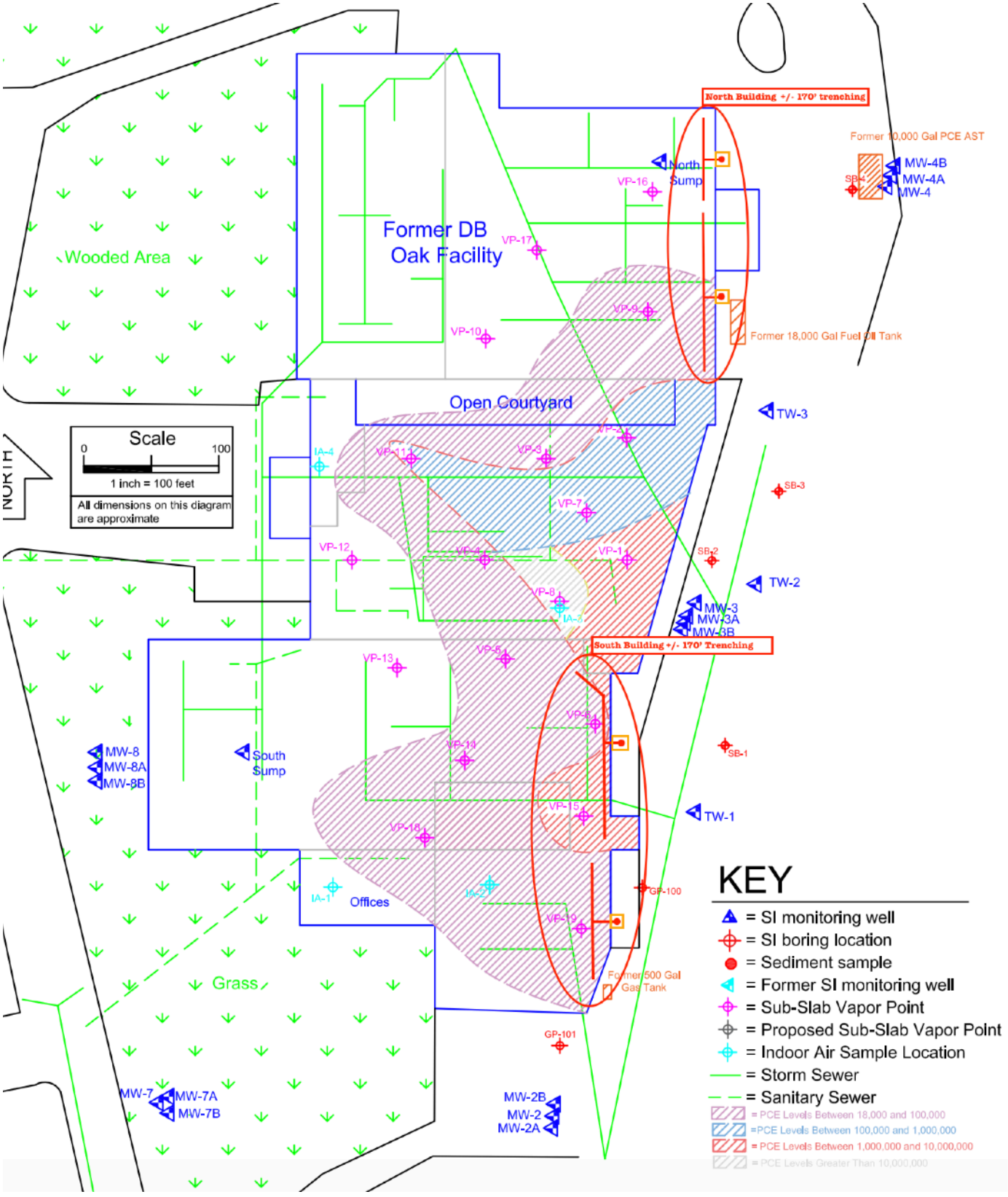
Project Proposal for Soil Vapor Mitigation at 700 Oak St. in Fort Atkinson, WI

Proposal To: Trenton J. Ott
Project Manager
Friess Environmental Consulting, Inc.
office (414) 228-9815
mobile (414) 688-6683

Proposal From: Chad Rogness, Director of Commercial Projects
Lifetime Radon Solutions Inc.
825 Wells St. Delafield WI, 53018
262-955-5701
March / 16 / 2021

Description of work: This particular project will include several phases of work for each system. As each system has a similar design and scope, the following description fits them all appropriately, except that they will be completed individually. The systems will require a long slender saw cut (about 14" wide), demolition and removal of the existing concrete floor. Within that demo'd area trenching and removing of the existing soil beneath to a depth of at least 14" will be required. The disposal of that soil will be handled by Friess Environmental Consulting, Inc. (the primary contractor on site) as it is considered contaminated. Once the soil has been removed a bedding of about 4" deep of 1" washed stone will be laid. After the stone bed is finished, 6" perforated sch 40 PVC will be installed in the trench and then backfilled with 1" washed stone. The stone will completely fill the trench to the bottom of the original existing concrete (at least 8" from finished floor). On top of the stone new concrete will be poured to a depth of about 8" which will be reinforced by 1/2" steal rebar. The rebar will be drilled into the existing slab every 3' at alternating points on both sides of the saw cut which means there is a reinforcement essentially every 18". At the far east side of the building, the end of the trench, a 6" PVC riser will be installed, for each system, that then exits the building and continues to the location of the mitigation Fans. The vent piping has a final exhaust point 12" above the roof.

The system design for this phase has been reduced and simplified with the intent of cutting off the suspected source of contamination. Freiss Environmental has deduced that the likely source is coming from outside the east foundation. Therefore, the designs have been modified to run along the east foundation walls with the intent on collecting the vapors before they continue to percolate there way further into the building. This design does not have the intent to depressurize the entire interior slab, or even all the Vapor Points created by Freiss Environmental. It is intended to reduce the amount of contamination at each vapor point by cutting of the source.



VAPOR MITIGATION SYSTEM MAINTENANCE PLAN

April 1, 2021

Property Located at:

Former DB Oak Property
700-710 Oak Street in Fort Atkinson, Wisconsin

FID No. 128033260
BRRTS No. 02-28-176509

Described as follows:

Legal description attached.

Parcel ID No.

Introduction:

This document is the Maintenance Plan for the vapor mitigation system (VMS) at the above referenced property (the "Property") in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the VMS within specific areas of the Property.

More site-specific information about the Property may be found in:

- The case file in the Wisconsin Department of Natural Resources (DNR) southeast regional office
- BRRTS on the Web (DNR's internet-based data base of contaminated sites): http://botw.dnr.state.wi.us/botw/SetUpBasicSearchForm.do
- GIS Registry PDF file for further information on the nature and extent of contamination: http://dnrmaps.wisconsin.gov/imf/imf.jsp?site=brrts2 and
- The DNR project manager (contact information found on the last page).

Description of Residual Impacts:

The DB Oak property is located at 700-710 Oak Street in Fort Atkinson, Wisconsin. The property is relatively flat at an approximate elevation of 790 feet above mean sea level (MSL). Regional topography near the site slopes to the east and south towards the Rock River. The DB Oak property is bounded by East Cramer Street to the north, Oak Street to the west-southwest, and the Union Pacific (formerly Chicago and Northwest) rail line to the east-southeast. The property consists of an 180,000-square foot building with surrounding driveways and parking lots.

The historic manufacturing process included the use of trichloroethene (TCE). Extensive site investigation activities have been conducted for a release of chlorinated volatile organic compounds (CVOCs) from the above referenced site. An evaluation of vapor intrusion risks was conducted for the building on the site. The results of the sub-slab vapor testing indicated concentrations of tetrachloroethene (PCE) and TCE above the DNR's Industrial Vapor Risk Screening Levels (VRSLs). Based on the results, Phase I of the vapor mitigation system (VMS) was installed on the subject property and became operational in March 2020. Post installation pressure field extension (PFE) testing was conducted which showed excellent coverage from the north and south trenches of the VMS installed in the central portion of the building. The results of the sub-slab vapor monitoring showed significant decreases in the vapor levels because of VMS operations. Phase II of the VMS will be installed on the in the northern and southern portions of the building in 2021.

The Property owner, to maintain the VMS and the integrity of the Cap, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees,

contractors, future Property owners, etc.) for viewing.

VAPOR MITIGATION SYSTEM (VMS) MAINTENANCE PLAN

Description of the VMS to be maintained:

The building foundation and sub-slab depressurization system (SSDS) (these features combined makeup the VMS) that exist on the above-described property in the locations shown on the attached map (Figure 1) serve as a barrier and active system to prevent potential vapor intrusion to affect indoor air quality that might otherwise pose a threat to human health. The building slab consists of 4 to 6 inches of concrete over sand and gravel base course. All floor penetrations and cracks within the foundation were sealed to inhibit vapor intrusion.

Phase I of the SSDS, consists of construction of two subsurface trenches connected to two (2) interior drop points drilled through the foundation with 4-inch solid PVC risers extending upwards and exiting the roof of the building. The vertical solid PVC risers extend at least 10-inches above the roof line to exhaust points. Ventilation fans are located inline with the vertical risers located on the rooftop. The manufacturer's specification sheet for the fans is attached. An electrical on/off switch is present at each fan location. Manometer pressure gauges are also located inline with the vertical exhaust pipes to indicate fan operation and vacuum pressure within the SSDS (readings should indicate pressure readings on the manometer when operating). The manometer gauges are present at the location of each vent stack. The drop point locations are depicted on the attached Figure 1.

VMS Inspection:

The manometer pressure gauges will be inspected twice a year to collect manometer readings to confirm the SSDS is operational and to document any loss of pressure (manometer reading) or SSDS shutdown (zero or negative manometer reading). The inspections will be performed by the Property owner or their designated representative. Readings of 10 to 40 inches of water column are expected on the manometer pressure gauges during normal system operation and may vary slightly due to atmospheric conditions. Manometer pressure gauge readings of 1 or less inches of water column would indicate a malfunction of the system and require system maintenance by the SSDS installation contractor (contact information found on the last page) or similar contractor.

The VMS components, including inspection of the ventilation fans for excessive noise or vibration, will be inspected once a year for deterioration, cracks, separation of the riser pipe from the foundation and other potential problems that can result in vapor intrusion pathways. The annual inspection should consist of observing and documenting the condition of the VMS components and any structural changes or modifications to the building itself and recording manometer readings. Photographs should be taken to document any deterioration of materials, cracks in piping, mounting damage, or other issues that may affect the operation of the VMS. The inspections will be performed by the Property owner or their designated representative. Any area where the integrity is compromised, and vapor intrusion pathways are present or are likely to become present will be documented. A log of the inspections and any repairs will be maintained by the Property owner and is included (Maintenance Inspection Log). The inspection log will include recommendations for necessary repairs of any portion of the VMS found to be deficient. Once repairs are completed, they will also be documented in the inspection log. A copy of the inspection log will be kept at the Subject Property and available for submittal to or inspection by DNR representatives upon their request.

Maintenance Activities:

If problems are noted during the inspections or at any other time during the year, repairs will be scheduled as soon as practical upon discovery. Repairs can include fan replacement, patching the foundation, resealing the foundation or SSDS repairs by the SSDS installation contractor (contact information found on the last page) or similar contractor.

In the event the VMS is replaced, the replacement VMS must be equivalent for the purpose of

minimizing potential vapor intrusion to affect indoor air quality. Any replacement VMS will be subject to the same maintenance and inspection guidelines as outlined in this VMS Maintenance Plan unless indicated otherwise by the DNR or its successor.

Prohibition of Activities and Notification of DNR Prior to Actions Affecting the VMS:

Operation of the VMS is required until such time it is demonstrated that the sub-slab vapor contaminant levels fall below the DNR's vapor risk screening levels. The following activities are prohibited on any portion of the Property where the VMS is required unless prior written approval has been obtained from the DNR: (1) shutdown or removal of the existing VMS; (2) replacement of the VMS; (3) construction or placement of a building or other enclosed structure on the property.

Notification to the DNR is required if any problem is noted to occur for two or more successive inspections.

Amendment or Withdrawal of Maintenance Plan:

This Maintenance Plan can be amended or withdrawn by the Property owner and its successors with the written approval of the DNR.

Contact Information (as of March 2021):

Site Owner and Operator: Gardner Denver, Inc.
Ms. Mary Betsch
222 East Erie Street
Milwaukee, WI 53202
(414) 212-4700

Signature: _____
Ms. Mary Betsch

Consultant: Friess Environmental Consulting, Inc.
Attn: Richard W. Frieseke, P.E.
6635 North Sidney Place
Milwaukee, WI 53209
(414) 228-9815

Signature: Richard W. Frieseke

DNR: Mr. Jeff Ackerman
Hydrogeologist
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711
(608) 275-3323

SSDS Contractor: Lifetime Radon Solutions, Inc.
Mr. Scott Campbell
824 Wells Street
Delafield, WI 53018
(262) 955-5701

APPENDIX E

METHODS OF INVESTIGATION

SOIL SAMPLING PROCEDURES

The actual procedures utilized to collect soil samples at the subject site may vary slightly from FEC's standard procedures, described below, which are in general accordance with applicable industry standards (i.e., standards of the American Society for Testing and Materials {ASTM}) and Wisconsin Department of Natural Resources (DNR) regulations and guidelines).

Split-Barrel Sampling Procedure

The split-barrel sampling procedure as defined in ASTM D-1586 (84) consists of driving a 2-inch outside diameter (O.D.) thick-walled, hollow sampler into the soil a distance of 18 inches with a 140-pound hammer falling 30 inches. The value of Standard Penetration Resistance (N) is obtained by adding the number of blows of the hammer during the final 1 foot. The N value provides a qualitative indication of the relative density of granular soils (silts, sands, and gravel). The samples collected by this procedure provide a general indication of subsurface conditions and general stratigraphic changes; and can be placed into containers for future classification, screening, and/or laboratory analysis.

The downhole drilling equipment was decontaminated prior to conducting the fieldwork to avoid the introduction of contaminants. The decontamination procedure consisted of cleaning the augers and rods with a hot water pressure washer. The driller hand washed the split-barrel samplers prior to each use to avoid cross-contamination. The samplers were scrubbed in an Alconox detergent and municipal water solution, and double-rinsed with municipal water in two separate containers between each use.

Soil Probe Sampling Procedure

The soil probe sampling procedure consists of advancing a 2-inch outside diameter (O.D.), thick-walled, hollow sampler that contains a rigid plastic sheath. The probe sampler is hydraulically advanced into the soil at 4 to 5-foot vertical intervals. As the sampler is advanced, soil is collected in the plastic sheath. The samples collected by this procedure provide a general indication of subsurface conditions and general stratigraphic changes; and can be placed into containers for classification, screening, and/or laboratory analysis.

The downhole soil probe equipment is decontaminated prior to conducting the fieldwork and between each probe advancement to avoid the introduction of contaminants or cross-contamination between locations. The decontamination procedure consisted of washing the downhole equipment in an Alconox detergent and municipal water solution and double rinsing with municipal water in two separate containers between each use.

PID SCREENING PROCEDURE

To evaluate soils for the presence of volatile organic vapors commonly emitted by volatile organic compounds (VOCs), soil samples are screened with a BW Technologies Gas Alert Micro 5 photoionization detector (PID) equipped with at least a 10.6 electron volt (eV) lamp calibrated to isobutylene. The PID provides a qualitative measure of volatile organic vapors with ionization potentials less than 10.6 eV, which include those present in the more volatile petroleum fuels and solvents. PID readings are measured in instrument units (iu).

A representative portion of soil is placed into an 8-ounce glass jar or Ziploc bag until approximately half full. The sample is allowed to warm prior to screening. Following agitation of the container, the container is slightly opened, the PID tip inserted into the headspace and the highest reading on the meter recorded.

To evaluate the significance of PID readings, FEC generally considers PID readings greater than 10 iu as an indication of potential contamination. It should be noted that lower readings do not necessarily indicate the absence of contamination, because nonvolatile contaminants may be present. PID readings are not as meaningful in such cases. In addition, the PID does not identify the types of chemicals present. The screening results should be evaluated by considering the contaminants present, the limitations of the PID meter, and physical observations (soil staining or odors).

Soil Sample Collection Procedure

Selected samples are chosen for laboratory submittal to quantify the degree of contamination based on the PID screening results and the depths from which the samples were collected. In general, the sample from each probehole/boring that exhibited the highest PID readings and was collected closest to the estimated water table depth, and/or that was collected from a deeper interval correlating to the vertical extent of contamination is submitted for laboratory analyses.

Selected soil samples are collected in the appropriate laboratory supplied containers depending on which laboratory parameters are to be analyzed. The soil samples are stored on ice packs in a cooler and submitted to the laboratory within allowable holding times. Chain of Custody procedures are adhered to throughout sample collection, handling, and laboratory submittal as established by the DNR. In addition to the samples collected, a trip blank may be submitted to the laboratory for quality control analyses.

GROUNDWATER SAMPLING PROCEDURES

The actual procedures utilized to sample groundwater at the subject site may vary slightly from FEC's standard procedures, described below, which are in general accordance with Wisconsin Department of Natural Resources (DNR) regulations and guidelines.

Groundwater Monitoring Well Construction Procedure

Groundwater monitoring wells are constructed in general accordance with DNR requirements as presented in Wisconsin Administrative Code Chapter NR 141.

Permanent monitoring wells consist of a 10-foot length of 2.0-inch inside diameter (I.D.), 2.38-inch outside diameter (O.D.), machine-slotted (0.010 inch) polyvinyl chloride (PVC) screen with a threaded-joint solid PVC riser pipe extending from the screened portion of the well to the ground surface. The PVC riser pipe is cut off slightly below the ground surface and fitted with a locking cap for security. The annulus between each PVC pipe and outer wall of the borehole is backfilled with a commercially packaged coarse sand (to serve as a filter pack) from the base of the borehole to an elevation of approximately 1/2 foot above the screened portion of the well. A 1/2-foot layer of fine sand is placed above each filter pack, and a bentonite annular space seal is placed above the fine sand to a depth of 1 foot below the ground surface. The driller embeds a metal protector cover over each well in a concrete surface seal for security. Each protector cover consists of a flush mount, watertight, steel unit 9 inches in diameter and 12 inches in length.

Temporary monitoring wells consist of a 10-foot length of 1.0-inch inside diameter (I.D.), 1.38-inch outside diameter (O.D.), machine-slotted (0.010 inch) polyvinyl chloride (PVC) screen with a threaded-joint solid PVC riser pipe extending from the screened portion of the well to the ground surface. The PVC riser pipe is cut off slightly below the ground surface and fitted with a cap. The annulus between each PVC pipe and outer wall of the probehole is backfilled with a commercially packaged sand filter pack from the base of the probehole to an elevation of approximately 1/2 foot above the screened portion of the well. A 1/2-foot layer of fine sand is placed above each filter pack, and a bentonite annular space seal is placed above the fine sand to a depth of 1 foot below the ground surface. A protective cover may be used, and/or the temporary well is abandoned following sampling.

Well Development and Purging Procedures

Wisconsin Administrative Code Chapter NR 141.21 requires that well development consist of the removal (purging) of water to produce sediment-free water from wells. In accordance with guidance documents, wells that are purged dry are allowed to recover prior to sample collection.

Monitoring wells are developed following construction using low flow techniques with a disposable polyethylene bailer or disposable tubing and a peristaltic pump. Purged water is collected in 5-gallon buckets and properly disposed of.

Groundwater Sample Collection Procedure

Groundwater monitoring wells are allowed to recover following development/purging and prior to sample collection. To reduce the potential for cross-contamination, the wells suspected to be the least contaminated are sampled first during each sampling round.

Following well purging with disposable tubing and a peristaltic pump or a disposable polyethylene bailer, each sample is transferred to the appropriate laboratory supplied containers depending on which laboratory parameters are to be analyzed.

In addition to the samples collected from the monitoring wells, a trip blank may be submitted to the laboratory for quality control analyses for each sampling round. The trip blank is a laboratory-supplied water sample that remains with the groundwater samples. Analysis of a trip blank can identify contamination that may occur because of outside influences (e.g., laboratory contamination).

The water samples are stored on ice packs in a cooler and submitted to the laboratory within allowable holding times.

APPENDIX F

LABORATORY REPORTS

Laboratory results for vapor and groundwater submitted to comply with 10 day notice and submitted with 4400-249 form