

General Engineering Company
P.O. Box 340
916 Silver Lake Drive
Portage, WI 53901



608-742-2169 (Office)
608-742-2592 (Fax)
gec@generalengineering.net
www.generalengineering.net

Engineers • Consultants • Inspectors

January 8, 2020

Ms. Josie Schultz
Wisconsin Department of Natural Resources
2984 Shawano Avenue
Green Bay, Wisconsin 54313

SUBJECT: STATUS UPDATE REPORT
The Solberg Company
1520 Brookfield Avenue
Village of Howard, Wisconsin
GEC Project Number: 2-0919-397
BRRTS Number: 03-05-584180

Dear Ms. Schultz,

Attached is a Status Update for the Site Investigation Activity at The Solberg Company site, located at 1520 Brookfield Avenue in the Village of Howard, Wisconsin.

Sincerely yours,

GENERAL ENGINEERING COMPANY

A handwritten signature in black ink that reads 'Brian Youngwirth' in a cursive script.

Brian Youngwirth
Environmental Project Manager

A handwritten signature in black ink that reads 'Beth A. Erdman' in a cursive script.

Beth Erdman
Environmental Project Manager

c: Mr. Mitch Hubert (Perimeter Solutions)
File

Portage • Black River Falls • La Crosse



Consulting Engineering • Structural Engineering • Building Design • Environmental Services • Building Inspection • GIS Services
Grant Procurement & Administration • Land Surveying • Zoning Administration • Mechanical, Electrical, & Plumbing Services



General Engineering Company
P.O. Box 340
916 Silver Lake Drive
Portage, WI 53901



608-742-2169 (Office)
608-742-2592 (Fax)
gec@generalengineering.net
www.generalengineering.net

Engineers • Consultants • Inspectors

**TABLE OF CONTENTS
THE SOLBERG COMPANY**

	<u>Page</u>
INTRODUCTION	1
• General	
• Purpose	
• Scope	
SITE FEATURES AND BACKGROUND	1-3
• Site Features	
• Background	
FIELD ACTIVITIES AND PROCEDURES	3-4
• Scope Summary	
• Field Exploration	
• Field Volatile Vapor Emission Screening	
• Soil Sample Collection and Preparation	
DESCRIPTION OF SUBSURFACE CONDITIONS	4
• General	
• Soil Conditions	
GROUNDWATER MONITORING ACTIVITIES	4-5
• Well Development	
• Groundwater Sampling	
• Groundwater Well Elevations	
FIELD AND ANALYTICAL TESTING RESULTS	5
• NR 720 Soil Standards	
• Laboratory Soil Results	
• Groundwater Quality Standards	
• Laboratory Groundwater Results	
CONCLUSIONS	5-6
GENERAL COMMENTS	6

General Engineering Company
P.O. Box 340
916 Silver Lake Drive
Portage, WI 53901



608-742-2169 (Office)
608-742-2592 (Fax)
gec@generalengineering.net
www.generalengineering.net

Engineers • Consultants • Inspectors

APPENDICES

APPENDIX A

- Figure 1 – Site Location Map
- Figure 2 – Site Plan Map
- Figure 3 – Soil Boring and Monitoring Well Locations Map
- Figure 4 – Groundwater Flow Direction

APPENDIX B

- Table A.1 – Summary of Groundwater Analytical Results
- Table A.2 – Summary of Soil Analytical Results
- Table A.6 – Water Level Elevations

APPENDIX C

- Soil Boring Logs, Well Construction and Development Forms

APPENDIX D

- Soil and Groundwater Analytical Reports Chain of Custodies

Status Update Report

The Solberg Company

Village of Howard, Wisconsin

Page 1

INTRODUCTION

General

This report presents a summary of the initial spill response and findings and conclusions of the initial subsurface investigation activities performed at The Solberg Company site located at 1520 Brookfield Avenue in the Village of Howard, Brown County, Wisconsin. The activities were performed at the request and authorization of Mr. Mitch Hubert, an authorized representative of Perimeter Solutions (formerly The Solberg Company).

Purpose

The purpose of the investigation was to perform a preliminary evaluation of the degree and extent of petroleum affected soil and/or groundwater from a surface spill that occurred as a result of a failed sump pump removing high groundwater from an oil/water separator tank system. The oil/water separator tank system subsequently failed, filled with water and a surface release of gasoline occurred.

Scope

The scope of the initial investigation activities included: the advancement of 3 soil borings, which were converted to NR 141 monitoring wells; collection of soil samples from the borings and groundwater samples from the monitoring wells and a sump within oil water separator tank basin; well development, surveying, laboratory analysis of selected samples; and preparation of this report. The investigation activities were structured specifically to address the presence of the gasoline associated with the oil/water separator system. The testing should not be considered an all-inclusive search for hazardous substances across the site.

SITE FEATURES AND BACKGROUND

Site Features

The subject site is an approximate 10-acre parcel (Parcel Number VH-3175) of land owned by Perimeter Solutions, LP. The property is located at 1520 Brookfield Avenue in the Village of Howard, Brown County, Wisconsin. The property is located on the east side of Brookfield Avenue, approximately ½ mile south of County Road M (Lineville Road). The property is located within the northwest ¼ of the southeast ¼ of Section 3, Township 24 North, Range 20 East. A Site Location Map is included as Figure 1 in Appendix A.

The site is currently developed with two structures including an office and warehouse on the western portion of the property, a structure utilized to perform fire suppression testing on the east central portion of the site with a small attached mechanical building just east of the testing building. An underground oil/water separator tank system is located just east of the mechanical building. A Site Plan Map is included as Figure 2, Appendix A.

With regard to the fire suppression testing building, subsequent to the fire suppression testing exercises, unused gasoline and fluids are collected in a drain that is piped below grade to the east of the building to a below grade oil/water separator system. The oil/water separator system is comprised of three underground tanks including a central 3 section oil/water tank with weirs to separate petroleum products and water, a northern product collection tank, and a southern water storage tank. The product tank is generally filled annually, and the product is removed and recycled. The water tank is pumped out by AAA Sanitation and hauled to Green Bay Metro Sewage for proper disposal.

The surface of the property is relatively flat and slopes down toward the east/southeast toward Lake Michigan, located approximately 1 mile southeast of the subject site. The surface of the site is covered primarily by grass, with asphalt and parking areas present south of the office building. An asphalt drive also extends from the parking area toward the east/northeast to the south side of the fire suppression testing building. A storm water detention

Portage

• Black River Falls

• La Crosse



Status Update Report

The Solberg Company

Village of Howard, Wisconsin

Page 2

pond is located along the southeastern end of the subject site. Overgrown vegetation is present on the far eastern portion of the subject site.

The property is bordered to the north and east by vacant land and residential properties, to the south by commercial property followed by vacant agricultural land, and to the west by Brookfield Avenue, across which are commercial and residential properties.

There does not appear to be the potential for impacts to threatened or endangered species; sensitive species, habitat, or ecosystems; wetlands; outstanding or exceptional resource waters; or sites of historical or archaeological significance. No immediate or interim actions have been taken, and none appear warranted at this time. GEC will identify potable wells in the relative vicinity of the Subject Site during the next quarterly groundwater monitoring round.

Background

On March 18, 2019 the Wisconsin Department of Natural Resources (WDNR) was notified of a spill at the Solberg Company located at 1520 Brookfield Avenue in the Village of Howard, Brown County, Wisconsin. The spill was the result of flood water from significant rain events flooding the entire eastern portion of the property, causing the sump pump used to remove high groundwater from an oil/water separator underground storage tank (UST) system backfill to fail. As the result the oil/water separator tank system subsequently failed, filled with water and released an estimated 100 gallons of gasoline through the top manway to the surface flood waters surrounding the UST system.

Valley Environmental Response (VER) responded to the spill, surrounded area impacted with gasoline around the UST system with petroleum absorbent boom and pom, and pumped the fluids remaining in the UST system into a frac tank. At that time the use of the compromised UST system was discontinued until repairs could be made.

As the result of the very wet spring, multiple UST backfill dewatering events were conducted to complete the system repairs, with water collected and containerized in on site frac tanks during each event. Final repairs to the UST system and excavation of petroleum impacted soils could not be completed until June 2019. On June 24th, the area around the UST system was dewatered into frac tanks and the final system repairs were made. In total greater than 40,000-gallons of gasoline impacted water was pumped into frac tanks and treated with carbon filters until it could be disposed of at the Green Bay Metro Sewerage District.

Subsequent to the final UST system repairs, VER conducted the excavation of gasoline impacted surface soils surrounding the UST system. On June 25th through 26th excavation of approximately 133 tons of gasoline impacted soil was conducted by VER, with soil disposed of at Waste Management's Ridgeview landfill located in Whitelaw, Wisconsin.

Under the direction of WDNR, excavated soil was field screened using a photoionization detector (PID) at greater than 40 locations to further confirm gasoline impacted soil was removed. Excavation depths ranged from 4 to 12 inches below ground surface (bgs) with the exception of where it was excavated to make the final water UST repair, where the excavation extended to approximately 3 feet. In total, 13 soil samples were collected approximately every 30 feet along the base of the excavation. Soil samples were analyzed for petroleum volatile organic compounds (PVOCs) and naphthalene. Soil sample results did not identify any residual soil exceeding Wisconsin Administrative Code (WAC) NR 720 standards.

Shallow groundwater was present at the site at approximately 16 inches bgs. As the result, as directed by WDNR, three test pits were created just outside the excavation limits on June 25th, 2019. Water samples were collected from the test pits and the UST excavation adjacent to the water tank, prior to backfill, June 26th, 2019. Water samples were analyzed for PVOC and naphthalene. Analytical results from the groundwater samples collected from the test pits did not exceed any WAC NR 140 standards. The water samples collected from the UST backfill near the water tank, contained benzene (95 ug/l), naphthalene (186 J ug/l), toluene (1380 ug/l), total

Status Update Report

The Solberg Company

Village of Howard, Wisconsin

Page 3

trimethylbenzenes (1266 ug/l) and total xylenes (3210 ug/l), all exceeding the WAC NR 140 enforcement standards (ES).

As a result of the impacted water identified in the UST system backfill, the WDNR created a case for the spill, issued a Responsible Party letter, dated August 14, 2019, and the work discussed herein was subsequently performed.

FIELD ACTIVITIES AND PROCEDURES

Scope Summary

The planned scope of services included the performance of 4 soil borings converted to monitoring wells, collection of soil samples from the borings, groundwater samples from the monitoring wells and a tank system sump, well development, surveying, and preparation of this report. One planned soil boring was not performed at the west of the oil/water separator tank system due to unidentifiable utility locations extending from the tank area to the mechanical and fire suppression buildings to the west. The soil samples from the borings were submitted for laboratory analysis for the presence of PVOCs and naphthalene. One round of groundwater sampling from the three installed monitoring wells and the sump was performed. The groundwater samples were submitted for laboratory analysis for the presence of PVOCs and naphthalene.

Field Exploration

Three soil borings (B-1 to B-3) were advanced on the property on November 19, 2019. The borings were converted to NR 141 compliant monitoring wells designated MW-1 to MW-3, respectively. The soil borings were performed by Horizon Construction and Exploration of Fredonia, Wisconsin. The borings were performed with a track-mounted geoprobe unit. Soil samples were collected continuously by driving a 5 foot plastic sleeve into undisturbed soils to depths of approximately 12.5 feet bgs. Subsequent to the soil probing and sampling, borings were advanced to depths of 12.5 feet bgs utilizing 4.25 inch diameter (8-inch borehole) augers. The soil boring and monitoring well locations are shown of Figure 3, Appendix A.

The monitoring well construction consisted of a 10-foot section of 2-inch diameter, machine slotted PVC screen placed at or near the bottom of the borehole. This was surrounded by a properly graded granular filter medium in the annular space, with un-slotted riser pipe extending from the screened section to a few feet above the ground surface. A bentonite seal of approximately 2 feet, was placed above the granular filter medium to the ground surface. The wells are protected by pro top stick up covers. Well construction forms are included in Appendix C.

Field Volatile Vapor Emission Screening

Soil samples collected from the soil borings were screened for volatile organic vapor emissions with a Photovac PID. The soil samples were placed in a plastic bag and permitted to equilibrate to at least 70 degrees Fahrenheit for a period of at least 15 minutes, based upon the ambient outdoor temperature. The screening was then performed by inserting the probe in the bag and measuring the headspace. The PID is an electronic instrument that measures the relative concentration of volatile organic vapor emissions in the headspace of a container. The response of the instrument is dependent upon volatility, temperature, and the ionization potential of the compounds measured. The meter serves as one tool in selecting samples for analytical testing, as it only gives a relative indication of the presence of volatile organic vapor emissions but cannot quantify concentrations of individual compounds. PID readings were not detected within any of the samples collected.

Soil Sample Collection and Preparation

The soil samples for chemical analyses were selected from the borings, based upon visual and olfactory observations, the PID screenings, the direct contact risk, and the depth to groundwater to document the encountered soil conditions. The samples were submitted for laboratory analysis for the presence of PVOCs and naphthalene.

Status Update Report

The Solberg Company

Village of Howard, Wisconsin

Page 4

The samples submitted for laboratory analysis for the presence of PVOCs and naphthalene were extracted from the soils utilizing a sterile syringe and approximately 10 to 15 grams of soil were transferred into a laboratory prepared jar containing approximately 10 milliliters of methanol. The samples were placed on ice, and chain-of-custody procedures were initiated. The samples were then submitted to Synergy Environmental Laboratory in Appleton, Wisconsin, for laboratory analysis.

DESCRIPTION OF SUBSURFACE CONDITIONS

General

A description of the subsurface conditions encountered at the soil probe locations is shown on the soil boring logs included in Appendix C. The lines of demarcation shown on the logs represent an approximate boundary between the various soil classifications, but the transition is likely to be more gradual. It must be recognized that the soil descriptions are considered representative for the specific location, and that variations may occur between and beyond the sampling intervals and probing locations. A summary of the major soil profile components is described in the following paragraphs.

Soil Conditions

The surface at the test locations consisted of 18 inches of topsoil at B-1 and B-2, and 12 inches of sand and gravel at B-3. The surface materials were generally underlain by natural soils consisting of tan or brown silty fine sand to depths of 10 feet to 12.5 feet bgs. As exceptions, reddish brown silty clay soils were encountered at B-1 at depths of 8.5 to 10 feet bgs; at B-2 at depths of 1.5 feet to 2.5 feet bgs and 9 feet to 12.5 feet bgs; and B-3 at depths of 10 to 12.5 feet bgs. Brown sand was also encountered at B-2 at depths ranging from approximately 6.5 feet to 9 feet bgs. Groundwater was encountered at depths of approximately 2 feet to 3 feet bgs.

GROUNDWATER MONITORING ACTIVITIES

Well Development

Monitoring wells MW-1 to MW-3 were developed on November 26, 2019. The monitoring wells were developed by alternately surging and purging with a PVC bailer and pump, respectively. The wells were purged and dried several times until relatively sediment free water was produced. The well development and other pertinent details are shown on the well development forms (Form 4400-113B), included in Appendix C.

Groundwater Sampling

One round of groundwater samples was collected from monitoring wells MW-1 to MW-3 and the tank sump on December 13, 2019. Groundwater samples were submitted for laboratory analysis for the presence of PVOCs and naphthalene.

Samples submitted for PVOC and naphthalene analysis were transferred into a laboratory prepared 40-milliliter vials containing hydrochloric acid preservative. The sample containers were placed on ice and standard chain-of-custody procedures were initiated. The groundwater samples were submitted to Synergy Environmental Laboratory in Appleton, Wisconsin.

Groundwater Well Elevations

Groundwater level measurements were performed at each of the monitoring wells during the well development on November 26, 2019 and prior to groundwater sampling on December 13, 2019. Static groundwater levels have ranged from 2.61 feet below top of casing (TOC) at MW-1 (EL. 588.02) on November 26, 2019, to 3.52 feet below TOC at MW-3 (EL. 587.36) on December 13, 2019. Static groundwater elevations have ranged from EL. 587.36

Status Update Report

The Solberg Company

Village of Howard, Wisconsin

Page 5

at MW-3 on December 13, 2019, to EL. 588.02 at MW-1 on November 26, 2019. Groundwater elevation data is summarized on Table A.6 in Appendix B. Based on the initial groundwater analytical data and preliminary groundwater elevations, the groundwater flow appears to be toward the southwest. Long term monitoring of the groundwater monitoring wells would be necessary to further evaluate the groundwater elevations and flow direction.

FIELD AND ANALYTICAL TESTING RESULTS

NR 720 Soil Standards

Chapter 720 of the NR700 series code established residual contaminant levels (RCLs) for soils intended to be protective of the direct contact (upper 4 feet of soil defined by human exposure to substances in soil through inhalation of particulate matter, dermal absorption, incidental ingestion, or inhalation of vapors from the soil) and soil-to-groundwater pathways. The direct contact levels are dependent on the planned use and zoning of the affected property. Although these individual RCLs have been established for a wide range of compounds, the WDNR requires that the cumulative effects of detected compounds be evaluated through use of a WDNR interactive table where individual concentrations can be entered to evaluate whether the target cancer risk has been exceeded. The individual RCLs provided by the WDNR were developed using standard default exposure assumptions. As an alternative, site specific calculations can be performed utilizing the U.S. EPA Regional Screening Level Web Calculator.

Laboratory Soil Results

Soil samples for laboratory analysis were collected from B-1 to B-3 at depths ranging from 2.5 feet to 5 feet bgs. The soil samples collected did not report detectable concentrations of PVOCs or naphthalene.

The results of the chemical analyses of the soil samples are summarized in Table A.2 included in Appendix B. Laboratory analytical results and chain of custody forms are included in Appendix D.

Groundwater Quality Standards

The ES and PAL are groundwater quality standards, which have been established in NR140 of the Wisconsin Administrative Code. These Standards are referenced when evaluating the need for further study or remedial activities. The PAL is the more stringent guideline, in terms of being lesser in magnitude than the ES but will typically require less response action when exceeded. The required action is determined by DNR regulations, based on various site-specific considerations.

Laboratory Groundwater Results

The groundwater sample collected from the sump at the northwest end of the tank system reported benzene at a concentration of 23.4 micrograms per liter ($\mu\text{g/L}$), which exceeds its WAC NR 140 ES of 5 $\mu\text{g/L}$. The sample also reported concentrations of naphthalene and 1,2,4 trimethylbenzene exceeding the WAC NR 140 preventive action limit (PAL). The sample collected from MW-1 reported benzene at a concentration exceeding its WAC NR 140 PAL. No other PVOCs or naphthalene were detected at concentrations exceeding their respective standards at any of the other test locations.

The results of the chemical analyses of the groundwater samples are summarized in Table A.1 in Appendix B. Laboratory analytical results and chain of custody forms are included in Appendix D.

CONCLUSIONS

Based on the soil and groundwater testing, it appears that the extent of soil and groundwater contamination has been defined and that the remedial excavation has removed contaminated soils in the areas beyond the tank

Status Update Report

The Solberg Company

Village of Howard, Wisconsin

Page 6

system. It is recommended that an additional round of groundwater samples be collected to further evaluate the contaminant trends within the tank bed sump, the extent of groundwater contamination, and the groundwater flow direction. If similar results to the initial sampling round are identified, it is recommended that a site investigation report be submitted.

It does not appear that vapor testing will be necessary at the present time based on the residual contaminant concentrations and their proximity to the existing structures. However, the vapor risk will be further evaluated during the future site investigation activities.

GENERAL COMMENTS

The investigative activities have been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations and opinions contained herein have been promulgated in accordance with generally accepted practice in similar fields. No other representations expressed or implied, and no warranty or guarantee is included or intended in this report.

The conclusions presented in this report were formulated from the data obtained during the course of exploratory work on the site, which may result in a redirection of conclusions and interpretations where new information is obtained. The regulatory climate and interpretation may also influence the outcome of the environmental investigation for this site. The information contained in this report may have an effect on the value of the property and is considered confidential. Copies of this report will be submitted to others only with authorization from the client.

APPENDIX A
FIGURES



General Engineering Company

P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901
 808-742-2189 (Office) • 608-742-2582 (Fax)
www.generalengineering.net

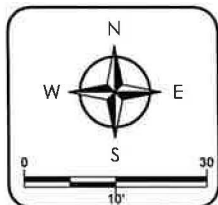
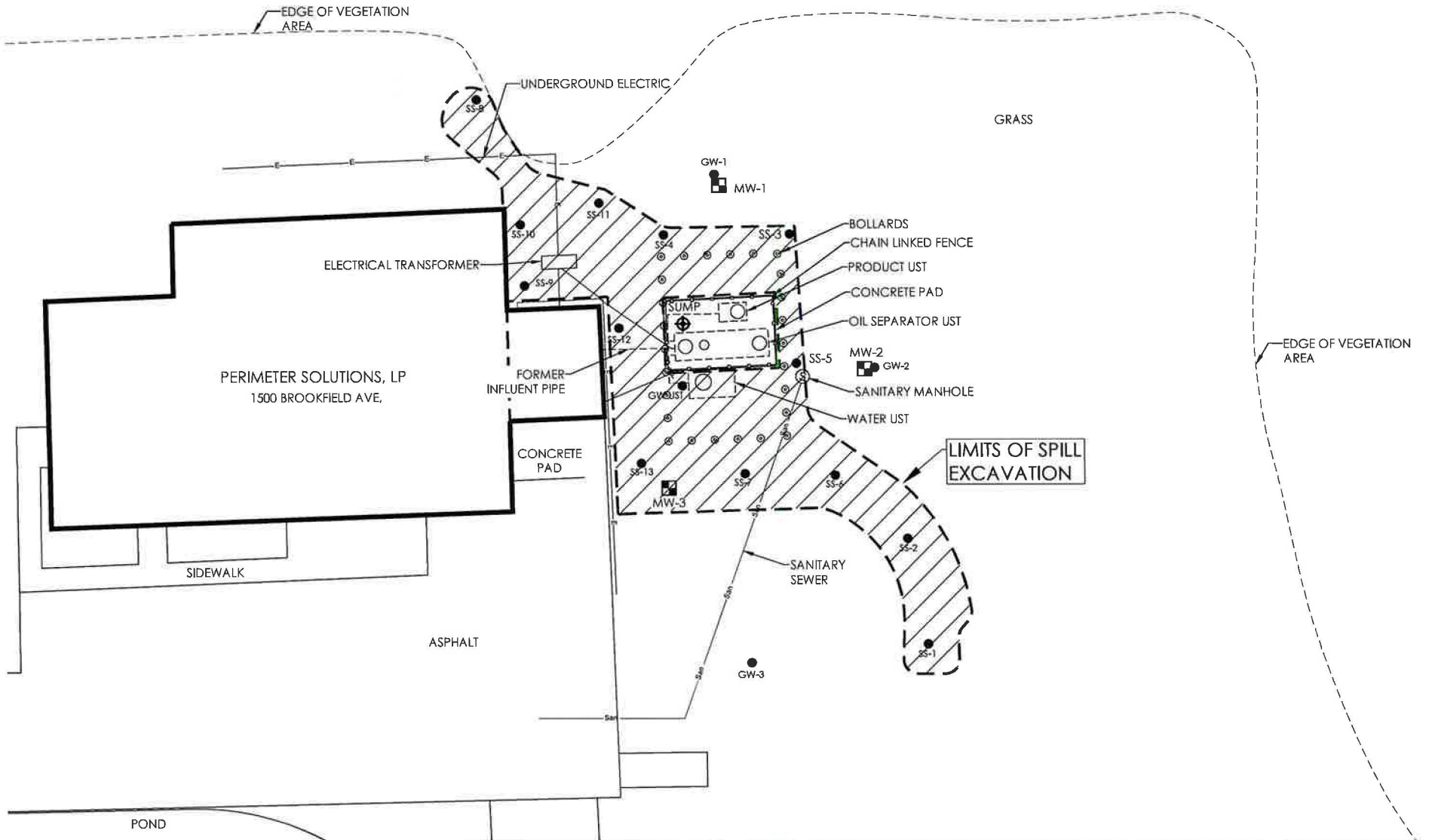
This document contains confidential or proprietary information of General Engineering Company. Neither this document nor the information herein is to be reproduced, distributed, used or disclosed either in whole or in part, except as specifically authorized by General Engineering Company.

SITE LOCATION MAP
PERIMETER SOLUTIONS
SOLBERG COMPANY
1520 BROOKFIELD AVE.
VILLAGE OF HOWARD
BROWN COUNTY, WI



DRAWN BY	LMB
REVIEWED BY	KSP
ISSUE DATE	DEC 2018
GEC FILE NO.	2-0919-387
SHEET NO.	

FIGURE 1



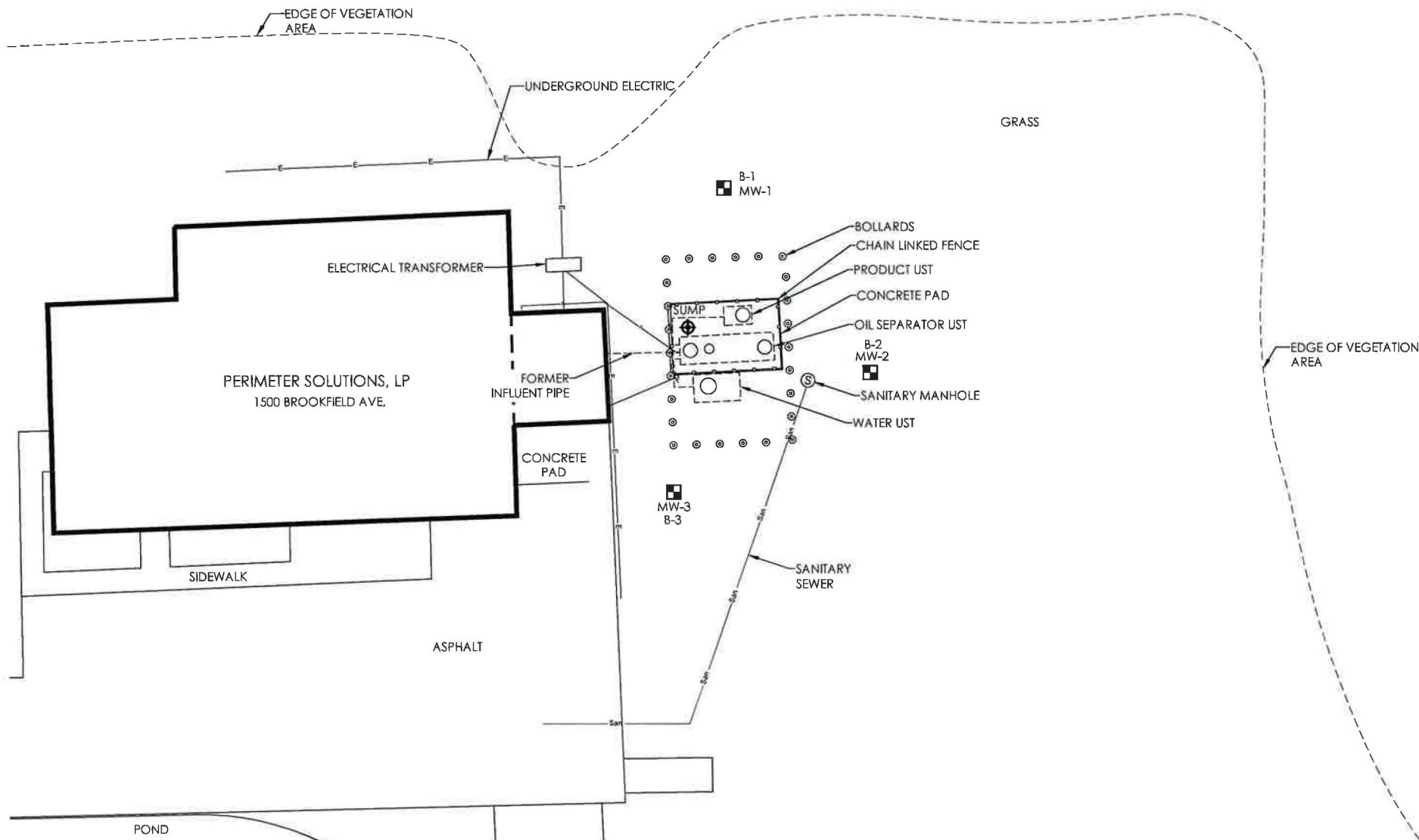
LEGEND	
MW-2	MONITORING WELL LOCATION
CS-8	OVER EXCAVATION SOIL SAMPLE LOCATION
	TANK SUMP
	LIMITS OF UST EXCAVATION

General Engineering Company
 P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901
 608-742-2169 (Office) • 608-742-2592 (Fax)
 www.generalengineering.net

This document contains confidential or proprietary information of General Engineering Company. Neither this document nor the information herein is to be reproduced, distributed, used or disclosed either in whole or in part except as specifically authorized by General Engineering Company.

SITE PLAN, LIMITS OF SPILL EXCAVATION & SOIL SAMPLE LOCATIONS
PERIMETER SOLUTION
1500 BROOKFIELD AVE.
VILLAGE OF HOWARD
BROWN COUNTY, WI

GEC	
DRAWN BY	KSP
REVIEWED BY	LMB
ISSUE DATE	DEC 2019
GEC FILE NO.	2-0919-397
SHEET NO.	
FIGURE 2	



LEGEND	
	SOIL BORING & MONITORING WELL LOCATION
	TANK SUMP

General Engineering Company

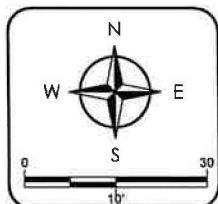
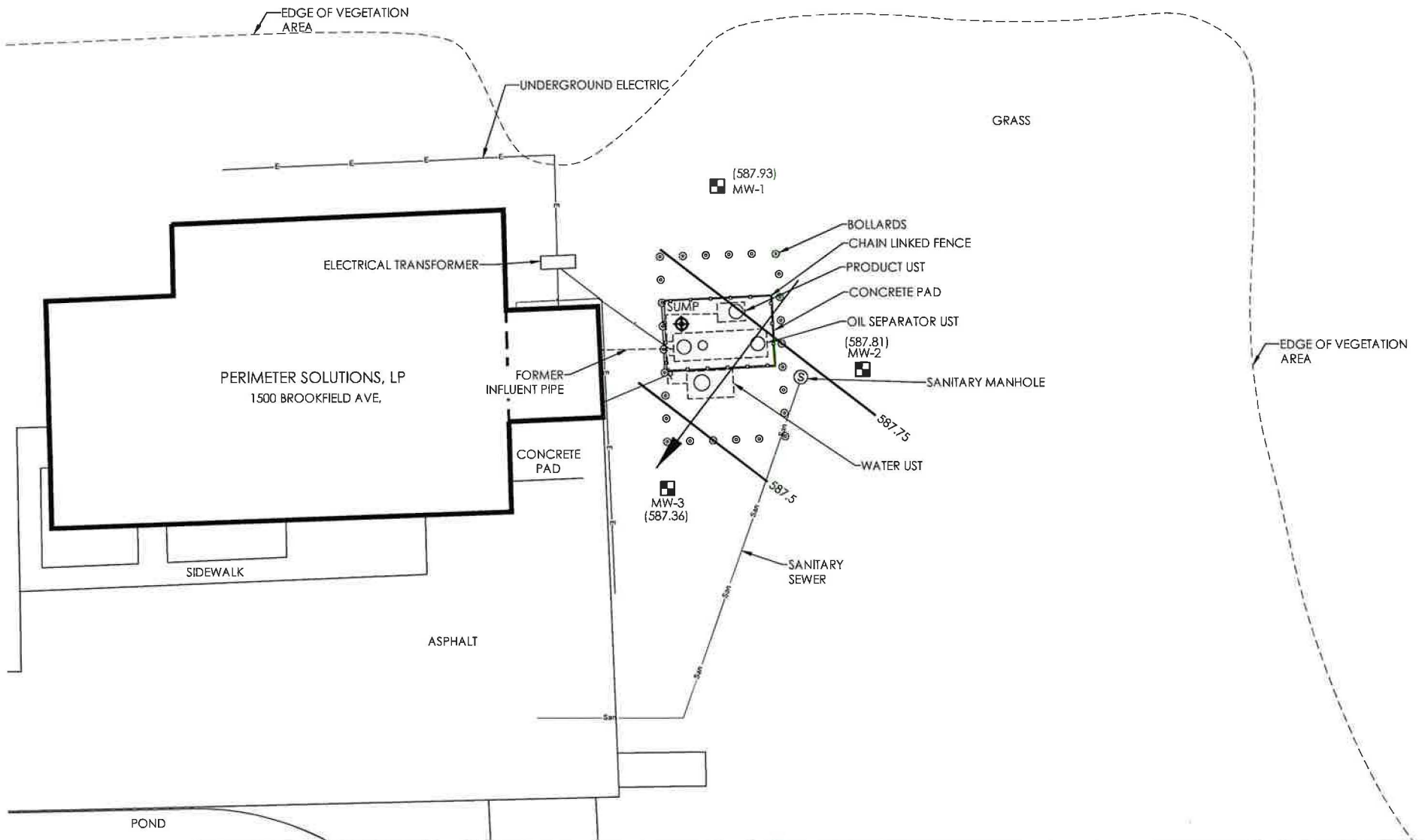
P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901
608-742-2169 (Office) • 608-742-2592 (Fax)
www.generalengineering.net

This document contains confidential or proprietary information of General Engineering Company. Neither this document nor the information herein is to be reproduced, distributed, used or disclosed either in whole or in part except as specifically authorized by General Engineering Company.

SOIL BORING & MONITORING WELL LOCATIONS
PERIMETER SOLUTION

SOLBERG COMPANY
1520 BROOKFIELD AVE.
VILLAGE OF HOWARD
BROWN COUNTY, WI

GEC
DRAWN BY: KSP
REVIEWED BY: LMB
ISSUE DATE: DEC 2019
GEC FILE NO.: 2-0919-397
SHEET NO. FIGURE 3



LEGEND

MW-2
8-2

SOIL BORING & MONITORING WELL LOCATION

TANK SUMP

General Engineering Company

P.O. Box 340 • 816 Silver Lake Dr. • Portage, WI 53901
608-742-2169 (Office) • 608-742-2592 (Fax)
www.generalengineering.net

This document contains confidential or proprietary information of General Engineering Company. Neither this document nor the information herein is to be reproduced, distributed, used or disclosed either in whole or in part except as specifically authorized by General Engineering Company.

GROWNDWATER FLOW DIRECTION
DECEMBER 13, 2019
PERIMETER SOLUTION
1520 BROOKFIELD AVE.
VILLAGE OF HOWARD
BROWN COUNTY, WI

GEC

DRAWN BY KSP
REVIEWED BY LMB
ISSUE DATE DEC 2019
GEC FILE NO. 2-0919-397
SHEET NO.

FIGURE 4

APPENDIX B
TABLES

**TABLE A.1.
GROUNDWATER ANALYTICAL RESULTS
THE SOLBERG COMPANY**

Monitoring Well	NR 140		Water Tank		Sump Above Oil Tank				FRAC 1				FRAC 2				FRAC 3	FRAC 4		
Sampling Date	ES	PAL	3/20/2019	5/31/2019	3/20/2019	4/8/2019	4/26/2019	4/8/2019	4/26/2019	5/14/2019	5/20/2019	5/31/2019	5/31/2019	6/14/2019	6/24/2019	7/8/2019	7/23/2019	5/31/2019	7/8/2019	8/16/2019
FLASHPOINT (degrees Fahrenheit)																				
Flashpoint	NE	NE	100	NA	110	125	NA	>150	NA	>200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/L)																				
Benzene	5	0.5	1510	160	2030	2540	560	1370	420	287	223	51	134	203	111	85	47	10.7	850	450
Ethylbenzene	700	140	400	650	1860	1950	850	690	174	121	103	19.5	0.71 J	32	13.3	12.3	8.4	2.12	660	205
Methyl tert-butyl ether (MTBE)	60	12	<14	<28.5	<14	<28	<28	<14	<5.6	<28.5	<2.8	<5.7	<0.57	<2.8	<2.8	<2.8	<0.28	<0.57	<28	<24
Naphthalene	100	10	<105	289	490	330 J	<210	144 J	45 J	<85	<21	<17	32	22.1 J	<21	<21	5.0J	4.6 J	239J	<130
Toluene	800	160	4800	3600	13,500	16,800	7500	6100	1600	1120	940	187	1240	940	430	380	188	79	4600	1240
1,2,4-Trimethylbenzene			276	1240	2100	1540	770	710	176	118	95	26.2	247	166	50	53	32	6.5	1130	470
1,3,5-Trimethylbenzene	480	96	67 J	330	4600	340	182 J	161	41	<37.5	21.8	9.6J	91	71	14.2J	20.6	13.9	9.5	289	157J
m&p-Xylene			1470	3600	6900	7300	3800	2700	650	460	390	80	1100	700	281	273	160	30.7	2770	820
o-Xylene	2000	400	710	1930	3600	3500	1900	1400	340	252	194	48	690	450	200	186	109	40	1390	470

NE = NR 140 Standard Not Established

J = Analyte detected above laboratory limit of detection but below limit of quantitation.

D = Result not applicable due to sample dilution

Bold indicates analytical results above NR 140 ES

Italics indicates analytical results above NR 140 PAL

NA= Parameter not analyzed

µg/L=micrograms per liter

mg/L=miligrams per liter

TABLE A.1 (Continued)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
THE SOLBERG COMPANY
1520 BROOKFIELD AVENUE, VILLAGE OF HOWARD, WISCONSIN

Monitoring Well	NR 140		GW-1	GW-2	GW-3	GW UST	MW-1	MW-2	MW-3	SUMP
Sampling Date	ES	PAL	6/27/2019	6/26/2019	6/27/2019	6/26/2019	12/13/2019	12/13/2019	12/13/2019	12/13/2019
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/L)										
Benzene	5	0.5	<0.32	<0.32	<0.32	95	1.54	<0.32	<0.32	23.4
Ethylbenzene	700	140	<0.29	<0.29	<0.29	305	<0.29	<0.29	<0.29	35
Methyl tert-butyl ether	60	12	<0.24	<0.24	<0.24	<12	<0.24	<0.24	<0.24	<2.4
Naphthalene	100	10	<1.3	<1.3	<1.3	186J	<1.3	<1.3	<1.3	<i>15.8J</i>
Toluene	800	160	<0.29	<0.29	<0.29	1,380	<0.29	<0.29	0.46J	6.8J
1,2,4 -Trimethylbenzene	480	96	<0.46	<0.46	<0.46	840	<0.46	<0.46	<0.46	133
1,3,5 -Trimethylbenzene			<0.67	<0.67	<0.67	226	<0.67	<0.67	<0.67	23
Xylenes, -m, -p	2,000	400	<1.22	<1.22	<1.22	3,210	<1.22	<1.22	<1.22	101.1
Xylenes, -o										

ES = Enforcement Standard

PAL = Preventive Action Limit

µg/L = micrograms per liter

NA = Parameter not analyzed

NE = NR 140 ES not established

J = Analyte detected above laboratory limit of detection but below limit of quantitation.

Bold indicates analytical results above NR 140 ES

**TABLE A.2
SOIL ANALYTICAL RESULTS TABLE
VALLEY ENVIRONMENTAL RESPONSE - SOLBERG
GEC PROJECT # 2-0119-56L**

Sample No.	WDNR Industrial Direct Contact RCL	WDNR Non-Industrial Direct Contact RCL	WDNR Soil to Groundwater RCL	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10	SS-11	SS-12	SS-13		
				6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/25/2019	6/26/2019	6/26/2019
				6 inches	6 inches	6 inches	6 inches	6 inches	6 inches	6 inches	6 inches	8 inches	4 inches	4 inches	6 inches	6 inches	8 inches	
Saturated/Unsaturated				US	US	US	US	US	US	US	US	US	US	US	US	US		
VOLATILE ORGANIC COMPOUNDS (VOCs) (µg/kg)																		
Benzene	7070	1600	5.1	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		
Ethylbenzene	35400	8020	1570	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		
Methyl tert-butyl ether	282000	63800	27	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		
Naphthalene	24100	5520	658	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		
Toluene	818000	818000	1107	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		
1,2,4-Trimethylbenzene	219000	219000	1382	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		
1,3,5-Trimethylbenzene	NE	182000		<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	27.1 J	<25		
Xylenes, -m, -p	260000	260000	3960	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		
Xylenes, -o				<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25		

J = Analyte detected above laboratory limit of detection but below limit of quantitation.
 Bold indicates analytical results exceed NR 720 RCL.
 RCL = Residual Contaminant Level
 DCL = Direct-Contact Levels
 NA = Parameter not analyzed
 NE = NR 720 RCL not established

TABLE A.2 (CONTINUED)
SOIL ANALYTICAL RESULTS TABLE (SOIL BORINGS)
THE SOLBERG COMPANY
1520 BROOKFIELD AVENUE, VILLAGE OF HOWARD, WISCONSIN

Sample No.	Non Cancer RCL Non- Industrial	Cancer RCL Non- Industrial	WDNR Non- Industrial Direct Contact RCL	WDNR Soil to Groundwater RCL	B-1	B-2	B-3
					11/19/2019	11/19/2019	11/19/2019
Sample Depth (feet)					2.5-5 (U/S)	2.5-5 (U/S)	2.5-5 (U/S)
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOCs) (µg/kg)							
Benzene	106,000	1,600	1,600	5	<25	<25	<25
Ethylbenzene	4,080,000	8,020	8,020	1,570	<25	<25	<25
Methyl tert-butyl ether	22,100,000	63,800	63,800	27	<25	<25	<25
Naphthalene	178,000	5,520	5,520	658	<25	<25	<25
Toluene	5,240,000	NE	818,000	1,107	<25	<25	<25
1,2,4-Trimethylbenzene	373,000	NE	219,000	1,382	<25	<25	<25
1,3,5-Trimethylbenzene	339,000	NE	182,000		<25	<25	<25
Xylenes, -m, -p	818,000	NE	260,000	3,960	<75	<75	<75
Xylenes, -o					<75	<75	<75

U = Analyte detected above laboratory limit of detection but below limit of quantitation.
 Bold indicates analytical results exceed NR 720 RCL
 Italic indicates analytical results exceeds Direct Contact RCL
 S=Saturated U=Unsaturated
 RCL = Residual Contaminant Level
 NE = NR 720 RCL not established

**TABLE A.6
WATER LEVEL ELEVATIONS
THE SOLBERG COMPANY
1520 BROOKFIELD AVENUE, VILLAGE OF HOWARD, WISCONSIN**

Monitoring Well Number	Top of Well Casing Elevation (MSL)	Ground Surface Elevation (MSL)	Screened Interval Elevation (MSL)	Date Measured	Depth To Water Below Top Of Casing (Ft.)	Groundwater Elevation (Ft.) (MSL)
MW-1	590.63	588.80	585.58	11/26/2019	2.61	588.02
				12/13/2019	2.70	587.93
			575.58			
MW-2	590.84	588.96	585.79	11/26/2019	3.01	587.83
				12/13/2019	3.03	587.81
			575.79			
MW-3	590.88	588.95	585.83	11/26/2019	6.97	583.91
				12/13/2019	3.52	587.36
			575.83			

Elevations are referenced to Mean Sea Level (MSL).

ft = feet

APPENDIX C
SOIL BORING LOGS AND ABANDONMENT FORMS

Route To:
 Solid Waste
 Emergency Response
 Wastewater
 Haz. Waste
 Underground Tanks
 Water Resources
 Other

Facility / Project Name Perimeter Solutions (Solberg Co.)		GEC Project No. 2-0919-397	Wis. Unique No. N/A	Boring Number B-1 / MW-1	
Boring Drilled By (Firm name and name of crew chief) Horizons Const. & Exploration Greg & Ben		Drilling Method Direct Push	Borehole Diameter 2"		
Date Drilling Started 11/19/2019	Date Drilling Ended 11/19/2019	Boring Location State Plane N, E NW- SE, Sect. 3, T24N, R20E	WTM91 X 674303 Y 458545		DNR County Code 5
Local Grid Location (if applicable) Feet S Feet W		County Brown	Civil Town / City / Village Village of Howard		

Depth Below Surface/Elev. (ft)	Length All Recovered (ft)	VISUAL SOIL CLASSIFICATION Ground Surface Elevation:	Sample No.	USCS	Graphic Log	Well	Blow Count	N value	Odor	PID (ppm)	Remarks
1 -1.0		Black, Sandy SILT with organics, moist (Topsoil)	SS-1	OL					No	0	
2 -2.0		Tan, Silty Fine SAND, moist to wet							No	0	
3 -3.0		Tan, Silty Fine SAND, wet	SS-2						No	0	Lab sample
4 -4.0				SM							
5 -5.0			SS-3						No	0	
6 -6.0											
7 -7.0											
8 -8.0									No	0	
9 -9.0		Reddish brown, Silty CLAY, wet	SS-4	CL					No	0	
10 -10											
11 -11.0		Tan, Silty Fine SAND, wet	SS-5	SM					No	0	
12 -12.0											
13 -13.0		END OF BORING: 12.5'									
14.0 -14.0											
15 -15											
16.0 -16.0											
17.0 -17.0											
18.0 -18.0											

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

Signature: *Beth A Erdman* Beth Erdman Firm **General Engineering Company**
 916 Silver Lake Dr., P.O. BOX 340
 Portage WI 53901

Lines of demarcation represent approximate boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.

Route To:
 Solid Waste
 Emergency Response
 Wastewater
 Haz. Waste
 Underground Tanks
 Water Resources
 Other

Facility / Project Name Perimeter Solutions (Solberg Co.)		GEC Project No. 2-0919-397	Wis. Unique No. N/A	Boring Number B-2 / MW-2
Boring Drilled By (Firm name and name of crew chief) Horizons Const. & Exploration Greg & Ben		Drilling Method Direct Push	Borehole Diameter 2"	
Date Drilling Started 11/19/2019	Date Drilling Ended 11/19/2019	Boring Location State Plane N, E NW- SE, Sect. 3, T24N, R20E	WTM91 X 674303 Y 458545	DNR County Code 5
Local Grid Location (If applicable) Feet S Feet W		County Brown	Civil Town / City / Village Village of Howard	

Depth Below Surface/Elev. (ft)	Length At. Recovered (in)	VISUAL SOIL CLASSIFICATION Ground Surface Elevation:	Sample No.	USCS	Graphic Log	Well	Blow Count	N value	Odor	PID (ppm)	Remarks
1 -1.0		Black, Sandy SILT with organics, moist (Topsoil)	SS-1	OL					No	0	
2 -2.0		Reddish brown, Silty CLAY, moist to wet		CL					No	0	
3 -3.0		Reddish brown, Silty CLAY, wet									
4 -4.0		Tan, Silty Fine SAND, wet	SS-2	SM					No	0	Lab sample
5 -5.0									No	0	
6 -6.0		Brown, Medium SAND, wet	SS-3						No	0	
7 -7.0				SP					No	0	
8 -8.0									No	0	
9 -9.0		Tan, Silty Fine SAND, wet	SS-4						No	0	
10 -10				SM					No	0	
11 -11.0			SS-5						No	0	
12 -12.0											
13 -13.0		END OF BORING: 12.5'									
14 -14.0											
15 -15											
16 -16.0											
17 -17.0											
18 -18.0											

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

Signature <i>Beth A Erdman</i>	Beth Erdman	Firm General Engineering Company 916 Silver Lake Dr., P.O. BOX 340 Portage WI 53901
-----------------------------------	-------------	---

Lines of demarcation represent approximate boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.

Route To:
 Solid Waste
 Emergency Response
 Wastewater
 Haz. Waste
 Underground Tanks
 Water Resources
 Other

Facility / Project Name Perimeter Solutions (Solberg Co.)		GEC Project No. 2-0919-397	Wis. Unique No. N/A	Boring Number B-3 / MW-3
Boring Drilled By (Firm name and name of crew chief) Horizons Const. & Exploration Greg & Ben		Drilling Method Direct Push	Borehole Diameter 2"	
Date Drilling Started 11/19/2019	Date Drilling Ended 11/19/2019	Boring Location State Plane N, E NW- SE, Sect. 3, T24N, R20E	WTM91 X 674303 Y 458545	DNR County Code 5
Local Grid Location (If applicable) Feet S Feet W		County Brown	Civil Town / City / Village Village of Howard	

Depth Below Surface/Elev. (ft)	Length All Recovered (ft)	VISUAL SOIL CLASSIFICATION Ground Surface Elevation:	Sample No.	USCS	Graphic Log	Well	Blow Count	N value	Odor	PID (ppm)	Remarks
1 -1.0		Brown SAND, trace gravel, damp (Fill)		Fill					No	0	
2 -2.0		Tan, Silty Fine SAND, moist to wet	SS-1						No	0	
3 -3.0		Tan, Silty Fine SAND, wet									
4 -4.0			SS-2						No	0	Lab sample
5 -5.0				SM							
6 -6.0			SS-3						No	0	
7 -7.0											
8 -8.0									No	0	
9 -9.0		Brown, Silty SAND, Wet	SS-4						No	0	
10 -10.0											
11 -11.0		Brown, Silty CLAY, wet	SS-5	CL					No	0	
12 -12.0											
13 -13.0		END OF BORING: 12.5'									
14.0 -14.0											
15 -15.0											
16.0 -16.0											
17.0 -17.0											
18.0 -18.0											

Note: Well was set with Protop

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

Signature: *Beth A. Erdman* Beth Erdman Firm: **General Engineering Company**
 916 Silver Lake Dr., P.O. BOX 340
 Portage WI 53901

Lines of demarcation represent approximate boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.

Route To:
 Solid Waste
 Emergency Response
 Wastewater
 Haz. Waste
 Underground Tanks
 Water Resources
 Other

Facility / Project Name Perimeter Solutions (Solberg Co.)		GEC Project No. 2-0919-397	Wis. Unique No. N/A	Boring Number B-1 / MW-1	
Boring Drilled By (Firm name and name of crew chief) Horizons Const. & Exploration Greg & Ben		Drilling Method Direct Push	Borehole Diameter 2"		
Date Drilling Started 11/19/2019	Date Drilling Ended 11/19/2019	Boring Location State Plane N, E NW- SE, Sect. 3, T24N, R20E	WTM91 X 674303 Y 458545		DNR County Code 5
Local Grid Location (If applicable) Feet S Feet W		County Brown	Civil Town / City / Village Village of Howard		

Depth Below Surface/Elev. (ft)	Length Att. Recovered (in)	VISUAL SOIL CLASSIFICATION Ground Surface Elevation:	Sample No.	USCS	Graphic Log	Well	Blow Count	N value	Odor	PID (ppm)	Remarks
1	-1.0	Black, Sandy SILT with organics, moist (Topsoil)	SS-1	OL					No	0	
2	-2.0	Tan, Silty Fine SAND, moist to wet							No	0	
3	-3.0	Tan, Silty Fine SAND, wet	SS-2						No	0	Lab sample
4	-4.0			SM							
5	-5.0			SS-3					No	0	
6	-6.0										
7	-7.0										
8	-8.0								No	0	
9	-9.0	Reddish brown, Silty CLAY, wet	SS-4	CL					No	0	
10	-10	Tan, Silty Fine SAND, wet									
11	-11.0		SS-5	SM					No	0	
12	-12.0										
13	-13.0	END OF BORING: 12.5'									
14.0	-14.0										
15	-15										
16.0	-16.0										
17.0	-17.0										
18.0	-18.0										

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

Signature: *Beth A Erdman* Beth Erdman Firm: **General Engineering Company**
 916 Silver Lake Dr., P.O. BOX 340
 Portage WI 53901

Lines of demarcation represent approximate boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.

Route To:
 Solid Waste
 Emergency Response
 Wastewater
 Haz. Waste
 Underground Tanks
 Water Resources
 Other

Facility / Project Name Perimeter Solutions (Solberg Co.)		GEC Project No. 2-0919-397	Wis. Unique No. N/A	Boring Number B-2 / MW-2
Boring Drilled By (Firm name and name of crew chief) Horizons Const. & Exploration Greg & Ben		Drilling Method Direct Push	Borehole Diameter 2"	
Date Drilling Started 11/19/2019	Date Drilling Ended 11/19/2019	Boring Location State Plane N, E NW- SE, Sect. 3, T24N, R20E	WTM91 X 674303 Y 458545	DNR County Code 5
Local Grid Location (If applicable) Feet S Feet W		County Brown	Civil Town / City / Village Village of Howard	

Depth Below Surface/Elev. (ft)	Length Alt. Recovered (ft)	VISUAL SOIL CLASSIFICATION Ground Surface Elevation:	Sample No.	USCS	Graphic Log	Well	Blow Count	N value	Odor	PID (ppm)	Remarks	
1	-1.0	Black, Sandy SILT with organics, moist (Topsoil)	SS-1	OL					No	0		
2	-2.0	Reddish brown, Silty CLAY, moist to wet		CL					No	0		
3	-3.0	Reddish brown, Silty CLAY, wet										
4	-4.0	Tan, Silty Fine SAND, wet	SS-2						No	0	Lab sample	
5	-6.0			SM								
6	-6.0		SS-3						No	0		
7	-7.0	Brown, Medium SAND, wet							No	0		
8	-8.0			SP								
9	-9.0		SS-4						No	0		
10	-10	Tan, Silty Fine SAND, wet							No	0		
11	-11.0			SM								
12	-12.0		SS-5						No	0		
13	-13.0	END OF BORING: 12.5'										
14.0	-14.0											
15	-15											
16.0	-16.0											
17.0	-17.0											
18.0	-18.0											

Note: Well was set with Protop

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

Signature <i>Beth A Erdman</i>	Beth Erdman	Firm General Engineering Company 916 Silver Lake Dr., P.O. BOX 340 Portage WI 53901
-----------------------------------	-------------	---

Lines of demarcation represent approximate boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.

Route To:
 Solid Waste
 Emergency Response
 Wastewater
 Haz. Waste
 Underground Tanks
 Water Resources
 Other

Facility / Project Name Perimeter Solutions (Solberg Co.)		GEC Project No. 2-0919-397	Wis. Unique No. N/A	Boring Number B-3 / MW-3	
Boring Drilled By (Firm name and name of crew chief) Horizons Const. & Exploration Greg & Ben		Drilling Method Direct Push	Borehole Diameter 2"		
Date Drilling Started 11/19/2019	Date Drilling Ended 11/19/2019	Boring Location State Plane N, E NW- SE, Sect. 3, T24N, R20E		WTM91 X 674303 Y 458545	
Local Grid Location (If applicable) Feet S Feet W		County Brown	Civil Town / City / Village Village of Howard		
				DNR County Code 5	

Depth Below Surface/Elev. (ft)	Length Att. Recovered (in)	VISUAL SOIL CLASSIFICATION Ground Surface Elevation:	Sample No.	USCS	Graphic Log	Well	Blow Count	N value	Odor	PID (ppm)	Remarks
1	-1.0	Brown SAND, trace gravel, damp (Fill)		Fill					No	0	
2	-2.0	Tan, Silty Fine SAND, moist to wet	SS-1						No	0	
3	-3.0	Tan, Silty Fine SAND, wet									
4	-4.0		SS-2						No	0	Lab sample
5	-5.0			SM							
6	-6.0		SS-3						No	0	
7	-7.0										
8	-8.0								No	0	
9	-9.0	Brown, Silty SAND, Wet	SS-4						No	0	
10	-10										
11	-11.0	Brown, Silty CLAY, wet	SS-5	CL					No	0	
12	-12.0										
13	-13.0	END OF BORING: 12.5'									
14.0	-14.0										
15	-15										
16.0	-16.0										
17.0	-17.0										
18.0	-18.0										

Note: Well was set with Protop

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

Signature: *Beth A. Erdman* Beth Erdman Firm **General Engineering Company**
 916 Silver Lake Dr., P.O. BOX 340
 Portage WI 53901

Lines of demarcation represent approximate boundaries between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual.

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name <u>The Solberg Co</u>	County Name <u>Brown</u>	Well Name <u>MW-1</u>	
Facility License, Permit or Monitoring Number	County Code <u>05</u>	Wis. Unique Well Number	DNR Well ID Number

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 35 min.

4. Depth of well (from top of well casing) 15.05 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 11.3 gal.

7. Volume of water removed from well 20.0 gal.

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

9. Source of water added _____

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

17. Additional comments on development:

11. Depth to Water

(from top of well casing) a. 2.61 ft. _____ ft.

Date b. 11/26/2019 _____

Time c. 9:40 a.m. _____ p.m. 10:15 a.m. _____ p.m.

12. Sediment in well bottom _____ inches _____ inches

13. Water clarity Clear 10 Clear 20
Turbid 15 Turbid 25
(Describe) (Describe)

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

14. Total suspended _____ mg/l _____ mg/l
solids

15. COD _____ mg/l _____ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: _____ Last Name: _____

Firm: _____

Name and Address of Facility Contact/Owner/Responsible Party
First Name: Mitch Last Name: Hubert
Facility/Firm: Perimeter Solutions
Street: 1520 Brookfield Avenue
City/State/Zip: Green Bay, WI 54313

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

Signature: [Signature]

Print Name: Brian Youngworth

Firm: GFC

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name <u>The Solberg Co.</u>	County Name <u>Brown</u>	Well Name <u>MW-2</u>
Facility License, Permit or Monitoring Number	County Code <u>05</u>	Wis. Unique Well Number _____
		DNR Well ID Number _____

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 55 min.
4. Depth of well (from top of well casing) 15.05 ft.
5. Inside diameter of well 2.0 in.
6. Volume of water in filter pack and well casing 10.95 gal.
7. Volume of water removed from well 35.0 gal.
8. Volume of water added (if any) 0 gal.
9. Source of water added _____
10. Analysis performed on water added? Yes No
(If yes, attach results) N/A

11. Depth to Water (from top of well casing)

	<u>Before Development</u>	<u>After Development</u>
a.	<u>3.01</u> ft.	_____ ft.

Date b. 11/26/2019 _____

m m d d y y y y m m d d y y y y

Time c. 8:55 a.m. 9:50 a.m.
 p.m. p.m.

12. Sediment in well bottom _____ inches _____ inches

13. Water clarity

Clear <input type="checkbox"/> 10	Clear <input checked="" type="checkbox"/> 20
Turbid <input checked="" type="checkbox"/> 15	Turbid <input type="checkbox"/> 25

(Describe) _____ (Describe) _____

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

14. Total suspended solids _____ mg/l _____ mg/l

15. COD _____ mg/l _____ mg/l

16. Well developed by: Name (first, last) and Firm

First Name: Brian Last Name: Youngworth

Firm: General Engineering Company (GEC)

17. Additional comments on development:

Name and Address of Facility Contact /Owner/Responsible Party

First Name: Mitch Last Name: Kubert

Facility/Firm: Perimeter Solutions

Street: 1520 Brookfield Avenue

City/State/Zip: Green Bay, WI 54313

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

Signature: [Signature]

Print Name: Brian Youngworth

Firm: GEC

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

Route to: Watershed/Wastewater Waste Management
Remediation/Redevelopment Other

Facility/Project Name <u>The Solberg Co.</u>	County Name <u>Brown</u>	Well Name <u>MW-3</u>
Facility License, Permit or Monitoring Number	County Code <u>05</u>	Wis. Unique Well Number _____
		DNR Well ID Number _____

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 51 min.

4. Depth of well (from top of well casing) 15.05 ft.

5. Inside diameter of well 2.0 in.

6. Volume of water in filter pack and well casing 7.35 gal.

7. Volume of water removed from well 35.0 gal.

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

9. Source of water added _____

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

17. Additional comments on development:

11. Depth to Water Before Development After Development
(from top of well casing) a. 6.97 ft. _____ ft.
Date b. 11/26/2019 _____
m m d d y y y y m m d d y y y y
Time c. 8:44 a.m. 9:35 a.m.
_____ p.m. _____ p.m.

12. Sediment in well _____ inches _____ inches
bottom

13. Water clarity Clear 10 Clear 20
Turbid 15 Turbid 25
(Describe) (Describe)

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

14. Total suspended _____ mg/l _____ mg/l
solids

15. COD _____ mg/l _____ mg/l

16. Well developed by: Name (first, last) and Firm
First Name: Brian Last Name: Youngworth
Firm: General Engineering Company (GEC)

Name and Address of Facility Contact /Owner/Responsible Party
First Name: Mitch Last Name: Hubert
Facility/Firm: Perimeter Solutions
Street: 1520 Brookfield Avenue
City/State/Zip: Green Bay, WI 54313

I hereby certify that the above information is true and correct to the best of my knowledge.
Signature: [Signature]
Print Name: Brian Youngworth
Firm: GEC

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

APPENDIX D
SOIL AND GROUNDWATER ANALYTICAL REPORTS
AND CHAIN OF CUSTODY FORMS

CHAIN OF STUDY RECORD

Synergy

Environmental Lab, Inc.

www.synergy-lab.net
 1990 Prospect Ct. • Appleton, WI 54914
 920-830-2455 • mrsynergy@wi.twcbc.com

Chain # No 41629

Page ___ of ___

Sample Handling Request

Rush Analysis Date Required: _____
 (Rushes accepted only with prior authorization)

Normal Turn Around

Lab I.D. # _____
 QUOTE # : _____
 Project #: _____
 Sampler: (signature) *[Signature]*

Project (Name / Location): *Selkirk / Green Bay*

Reports To: *Brian Youngman* Invoice To: _____
 Company: *GEC* Company: _____
 Address: *916 Silver Lake Dr* Address: *C/O GEC*
 City State Zip: *Portage WI 53901* City State Zip: _____
 Phone: *608 697 8010* Phone: _____
 Email: _____ Email: _____

Analysis Requested											Other Analysis				
DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PYOC (EPA 8021)	PYOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524.2)	VOC (EPA 8260)	VOC AIR (TO - 15)	8-PCRA METALS	PID/ FID

Lab I.D.	Sample I.D.	Collection Date	Collection Time	Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
<i>5037275A</i>	<i>MW-1</i>	<i>12/12/19</i>	<i>AM</i>	<i>N</i>	<i>2</i>	<i>GW</i>	<i>ICE</i>
<i>B</i>	<i>MW-2</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>C</i>	<i>MW-3</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>D</i>	<i>Surf</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

Sample Integrity - To be completed by receiving lab.

Method of Shipment: *Out*

Temp. of Temp. Blank: _____ °C On Ice: *X*

Cooler seal intact upon receipt: *X* Yes ___ No

Relinquished By: (sign) *[Signature]* Time _____ Date _____

Received By: (sign) *[Signature]* Time _____ Date _____

Received in Laboratory By: *[Signature]* Time: *9:17* Date: *12/13/19*

CHAIN OF CUSTODY RECORD

Synergy

Environmental Lab, Inc.

Chain # No 41389

Page ___ of ___

Lab I.D. # _____
 QUOTE # : _____
 Project #: 2-0919-37
 Sampler: (signature) *Beth A Edman*

www.synergy-lab.net
 1990 Prospect Ct. • Appleton, WI 54914
 920-830-2455 • mrsynergy@wi.twcbc.com

Sample Handling Request

Rush Analysis Date Required: _____
 (Rushes accepted only with prior authorization)
 Normal Turn Around _____

Project (Name / Location): *Perimeter Solutions*

Reports To: *Beth Edman* Invoice To: _____
 Company: *GEC* Company: _____
 Address: *916 Silver Lake Dr* Address: *Same*
 City State Zip: *Portage, WI 53901* City State Zip: _____
 Phone: *608-657-8004* Phone: _____
 Email: *bedman@generalengr.com* Email: _____

Analysis Requested												Other Analysis									
DRO (Mod DRO Sep 95)	GRO (Mod GRO Sep 95)	LEAD	NITRATE/NITRITE	OIL & GREASE	PAH (EPA 8270)	PCB	PVOC (EPA 8021)	PVOC + NAPHTHALENE	SULFATE	TOTAL SUSPENDED SOLIDS	VOC DW (EPA 524-2)	VOC (EPA 8260)	VOC AIR (TO - 15)	8-RCRA METALS	PID/ FID						

Lab I.D.	Sample I.D.	Collection		Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
		Date	Time				
5057153A	B-1/mw-1	11/19	9:55	N	2	S	MeOH
	B-2/mw-2	11/19	11:00	N	2	S	MeOH
	B-3/mw-3	11/19	12:00	N	2	S	MeOH

Comments/Special Instructions (*Specify groundwater "GW", Drinking Water "DW", Waste Water "WW", Soil "S", Air "A", Oil, Sludge, etc.)

email results to Beth

Sample Integrity - To be completed by receiving lab. Method of Shipment: <i>Clad</i> Temp. of Temp. Blank: _____ °C On Ice: <input checked="" type="checkbox"/> Cooler seal intact upon receipt: <input checked="" type="checkbox"/> Yes ___ No	Relinquished By: (sign) <i>Beth A Edman</i> Time: <i>3:00</i> Date: <i>11/19/19</i>	Received By: (sign) _____ Time: _____ Date: _____
	Received in Laboratory By: <i>[Signature]</i> Time: <i>15:00</i> Date: <i>11/19/19</i>	

Synergy Environmental Lab, INC

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

BRIAN YOUNGWIRTH
GENERAL ENGINEERING
916 SILVER LAKE DRIVE
PORTAGE, WI 53901

Report Date 23-Dec-19

Project Name SOLBERG/GREEN BAY
Project #

Invoice # E37275

Lab Code 5037275A
Sample ID MW-1
Sample Matrix Water
Sample Date 12/13/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	1.54	ug/l	0.32	1.02	1	GRO95/8021		12/20/2019	CJR	1
Ethylbenzene	< 0.29	ug/l	0.29	0.94	1	GRO95/8021		12/20/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.24	ug/l	0.24	0.78	1	GRO95/8021		12/20/2019	CJR	1
Naphthalene	< 1.3	ug/l	1.3	4.1	1	GRO95/8021		12/20/2019	CJR	1
Toluene	< 0.29	ug/l	0.29	0.93	1	GRO95/8021		12/20/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.46	ug/l	0.46	1.46	1	GRO95/8021		12/20/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.67	ug/l	0.67	2.15	1	GRO95/8021		12/20/2019	CJR	1
m&p-Xylene	< 0.52	ug/l	0.52	1.67	1	GRO95/8021		12/20/2019	CJR	1
o-Xylene	< 0.7	ug/l	0.7	2.24	1	GRO95/8021		12/20/2019	CJR	1

Project Name SOLBERG/GREEN BAY
Project #

Invoice # E37275

Lab Code 5037275B
Sample ID MW-2
Sample Matrix Water
Sample Date 12/13/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	< 0.32	ug/l	0.32	1.02	1	GRO95/8021		12/16/2019	CJR	1
Ethylbenzene	< 0.29	ug/l	0.29	0.94	1	GRO95/8021		12/16/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.24	ug/l	0.24	0.78	1	GRO95/8021		12/16/2019	CJR	1
Naphthalene	< 1.3	ug/l	1.3	4.1	1	GRO95/8021		12/16/2019	CJR	1
Toluene	< 0.29	ug/l	0.29	0.93	1	GRO95/8021		12/16/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.46	ug/l	0.46	1.46	1	GRO95/8021		12/16/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.67	ug/l	0.67	2.15	1	GRO95/8021		12/16/2019	CJR	1
m&p-Xylene	< 0.52	ug/l	0.52	1.67	1	GRO95/8021		12/16/2019	CJR	1
o-Xylene	< 0.7	ug/l	0.7	2.24	1	GRO95/8021		12/16/2019	CJR	1

Lab Code 5037275C
Sample ID MW-3
Sample Matrix Water
Sample Date 12/13/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	< 0.32	ug/l	0.32	1.02	1	GRO95/8021		12/17/2019	CJR	1
Ethylbenzene	< 0.29	ug/l	0.29	0.94	1	GRO95/8021		12/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.24	ug/l	0.24	0.78	1	GRO95/8021		12/17/2019	CJR	1
Naphthalene	< 1.3	ug/l	1.3	4.1	1	GRO95/8021		12/17/2019	CJR	1
Toluene	0.46 "J"	ug/l	0.29	0.93	1	GRO95/8021		12/17/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.46	ug/l	0.46	1.46	1	GRO95/8021		12/17/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.67	ug/l	0.67	2.15	1	GRO95/8021		12/17/2019	CJR	1
m&p-Xylene	< 0.52	ug/l	0.52	1.67	1	GRO95/8021		12/17/2019	CJR	1
o-Xylene	< 0.7	ug/l	0.7	2.24	1	GRO95/8021		12/17/2019	CJR	1

Lab Code 5037275D
Sample ID SUMP
Sample Matrix Water
Sample Date 12/13/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	23.4	ug/l	3.2	10.2	10	GRO95/8021		12/17/2019	CJR	1
Ethylbenzene	35	ug/l	2.9	9.4	10	GRO95/8021		12/17/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 2.4	ug/l	2.4	7.8	10	GRO95/8021		12/17/2019	CJR	1
Naphthalene	15.8 "J"	ug/l	13	41	10	GRO95/8021		12/17/2019	CJR	1
Toluene	6.8 "J"	ug/l	2.9	9.3	10	GRO95/8021		12/17/2019	CJR	1
1,2,4-Trimethylbenzene	133	ug/l	4.6	14.6	10	GRO95/8021		12/17/2019	CJR	1
1,3,5-Trimethylbenzene	23	ug/l	6.7	21.5	10	GRO95/8021		12/17/2019	CJR	1
m&p-Xylene	73	ug/l	5.2	16.7	10	GRO95/8021		12/17/2019	CJR	1
o-Xylene	28.1	ug/l	7	22.4	10	GRO95/8021		12/17/2019	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code ***Comment***

1 Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



A handwritten signature in blue ink, appearing to read "Michael J. Paul", is written over a horizontal line.

Synergy Environmental Lab, INC

1990 Prospect Ct., Appleton, WI 54914 *P 920-830-2455 * F 920-733-0631

BETH ERDMAN
 GENERAL ENGINEERING
 916 SILVER LAKE DRIVE
 PORTAGE, WI 53901

Report Date 21-Nov-19

Project Name PERIMETER SOLUTIONS
Project # 2-0919-37
Lab Code 5037153A
Sample ID B-1/MW-1
Sample Matrix Soil
Sample Date 11/19/2019

Invoice # E37153

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	81.8	%			1	5021		11/20/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		11/20/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		11/20/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		11/20/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		11/20/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		11/20/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		11/20/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		11/20/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		11/20/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		11/20/2019	CJR	1

Project Name PERIMETER SOLUTIONS
Project # 2-0919-37

Invoice # E37153

Lab Code 5037153B
Sample ID B-2/MW-2
Sample Matrix Soil
Sample Date 11/19/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	83.0	%			1	5021		11/20/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		11/20/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		11/20/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		11/20/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		11/20/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		11/20/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		11/20/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		11/20/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		11/20/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		11/20/2019	CJR	1

Lab Code 5037153C
Sample ID B-3/MW-3
Sample Matrix Soil
Sample Date 11/19/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	82.1	%			1	5021		11/20/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		11/21/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		11/21/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		11/21/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		11/21/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		11/21/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		11/21/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		11/21/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		11/21/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		11/21/2019	CJR	1

"J" Flag: Analyte detected between LOD and LOQ

LOD Limit of Detection

LOQ Limit of Quantitation

Code ***Comment***

1 Laboratory QC within limits.

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

Authorized Signature



A handwritten signature in blue ink, appearing to read "Michael J. Paul", is written over a horizontal line.