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Engineers • Consultants • Inspectors

March 17, 2020

Ms. Janet DiMaggio
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

RE: REMEDIAL DOCUMENTATION REPORT

Speaker Property
6832 US Highway 18
Mount Ida, Wisconsin
BRRTs #: 03-22-178494
PECFA # 53809-9640-32

Dear Ms. DiMaggio:

General Engineering Company has completed this Remedial Documentation Report for the excavation activities performed at the former Speaker Property (Site), located at 6832 U.S. Highway 18 in the Town of Mount Ida, Wisconsin.

Please feel free to contact General Engineering Company with any questions.

Sincerely yours,

GENERAL ENGINEERING COMPANY

A handwritten signature in blue ink that reads "Brian Youngwirth".

Brian Youngwirth
Project Manager

A handwritten signature in blue ink that reads "Beth A. Erdman".

Beth A. Erdman
Project Manager

c: Michael R. Skaife, 6832 Highway 18, Fennimore, Wisconsin 53809

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REMEDIAL DOCUMENTATION REPORT

For

SPEAKER PROPERTY

Located at

**6832 U.S. HIGHWAY 18
TOWM OF MOUNT IDA, WISCONSIN**

March 17, 2020

Prepared by:

GENERAL ENGINEERING COMPANY
916 Silver Lake Drive
Portage, WI 53901
No.0610-133
(608) 742-2169

Client:

Mr. Michael Skaife
6832 U.S. Highway 18
Fennimore, Wisconsin 53809 GEC

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INTRODUCTION

General

This report presents the findings of the remedial excavation of petroleum contaminated soils from the former Speaker Property, located at 6832 U.S. Highway 18 in the Town of Mount Ida, Grant County, Wisconsin (Site). The remedial activities and this report were prepared under the authorization of Mr. Michael Skaife, the responsible party for the release and current owner of the property.

Purpose

This remedial excavation was conducted to excavate and properly dispose of petroleum contaminated soils previously identified near the location of a former tank system known to have included two underground storage tanks (USTs) and two associated dispensers.

Scope

The scope of remedial services included; performance of the remedial excavation of up to 700 tons of petroleum contaminated soils; field and laboratory testing of selected soil samples; and an analysis of the data obtained. The remedial activities were structured specifically to address the presence of petroleum contaminated soils identified during the site investigation activities performed between 2011 and 2019, which are discussed within the background section of the report.

Authorization

This "*Remedial Documentation Report*" has been prepared on behalf of, and exclusively for the use of Mr. Michael Skaife. The information contained in this "*Remedial Documentation Report*" may not be relied upon by any other parties without the written consent of General Engineering Company (GEC).

SITE FEATURES AND BACKGROUND

Site Features

The Site is located at 6832 U.S. Highway 18 in the Town of Mount Ida, Wisconsin. More specifically, the Site is located within the Northwest $\frac{1}{4}$ of the Northwest $\frac{1}{4}$ of Section 29, Township 06 North, Range 03 West, Grant County, Wisconsin. The Site is located within a rural area surrounded by primarily residential properties and wooded land. A Site Location Map is shown in Figure 1, Appendix A.

The Site is currently occupied by a residence on the southwestern portion of the property. The northeastern portion of the house is underlain by an above ground basement/garage on three sides (north, east, and west), and is below grade along the southern wall. The basement is not inhabited and appears to be utilized primarily as a storage garage. Two 500-gallon USTs reportedly containing unleaded gasoline were formerly located approximately 6 feet northwest of the southwest corner of the existing residence. A dispenser island with two dispensers was located just west of the southwest corner of the house. A rock retaining wall was present to the north/northwest of the former tanks, which dropped in elevation to the north/northwest, approximately 2 to 7.5 feet to a driveway. The driveway extends from U.S. Highway 18 toward the northeast and then east to the northwest portion of the house and basement/garage area. The height of the retaining wall increases as the driveway extends toward the basement/garage to a maximum drop of approximately 7.5 feet at the garage door. A site plan is shown on Figure 2, Appendix A.

The surrounding properties are comprised of residential properties to the west; vacant or wooded land to the north; dense wooded land followed by a residential property to the east; and US Highway 18, followed by residential properties to the south and southwest.

The Site is serviced by a potable well located on the southeast side of the house. Five other shared potable wells have also been located within 1,200 feet of the Site. GEC is currently evaluating the presence of other potable wells within 1,200 feet of the Site.

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.

Background

An Underground Storage Tank Removal Documentation Report was provided to GEC by the WDNR on March 21, 2019. According to report, two 500-gallon USTs containing unleaded gasoline were removed from the Site on December 9, 1997, by McCutchin Crane Service. The tanks were reportedly located approximately 6 feet west of the southwest corner of the residence. The dimensions of the excavation of the tanks was 16 feet long by 12 feet wide and extended to a depth of approximately 10 feet. The removed tanks were observed to be in poor condition and obviously contaminated soils were identified near a depth of 4 feet below ground surface (bgs) and extending to the termination depth of the excavation. On December 10, 1997, a soil sample was collected in the center of the excavation at a depth of 11 feet bgs and submitted for laboratory analysis of petroleum volatile organic compounds (PVOCs) and gasoline range organics (GRO). The soil sample reported high concentrations of benzene (28,000 micrograms per kilograms ($\mu\text{g}/\text{kg}$)), ethylbenzene (300,000 $\mu\text{g}/\text{kg}$), toluene (450,000 $\mu\text{g}/\text{kg}$), 1,2,4 trimethylbenzene (880,000 $\mu\text{g}/\text{kg}$), 1,3,5 trimethylbenzene (270,000 $\mu\text{g}/\text{kg}$), xylenes (1,780,000 $\mu\text{g}/\text{kg}$) and GRO (13,000 mg/kg), which exceed each compounds respective Wisconsin Administrative Code (WAC) NR 720 soil to groundwater residual contaminant level (RCL) and cancer (C) RCL, where established. The WDNR was reportedly notified of a release on December 12, 1997 and a responsible party (RP) letter was sent on December 23, 1997. The case remained idle for several years and a push action was taken by the WDNR on December 27, 2004 followed by a deed affidavit for enforcement on March 28, 2005, and an additional push action on October 9, 2009.

GEC was retained in May of 2010 to perform a soil and groundwater investigation at the site. It should be noted that GEC was not aware of the exact location of the source area of the contamination during the majority of the site investigation work performed for this case, until the tank removal information was located by the WDNR in 2019.

The site investigation activities performed to date include the advancement of 21 soil probes (GP-1 to GP-21), the installation of temporary well (TW-1), and the advancement of 11 soil borings (MW-1S to MW-11S), eleven of which were converted to monitoring wells MW-1S to MW-11S. Soil samples were submitted for laboratory analysis for the presence of PVOCs, naphthalene, and/or 1,2 dichloroethane (1,2 DCA). To date, one to fourteen rounds of groundwater samples were collected from the site monitoring wells (MW-1S to MW-11 S and TW-1) and available potable wells (Speaker PW, PW-1, Klar PW, Freymiller PW, and Jeidy PW) and submitted for laboratory analysis for the presence of volatile organic compounds (VOCs)/PVOCs, naphthalene, and/or 1,2 DCA and lead. An ambient air sample (VP-1) was collected from the basement/garage along the wall on the northwestern portion of the home, nearest the former tank locations. The sample was submitted for laboratory analysis of VOCs.

The soil probes were advanced by Kitson Environmental of Hellenville, Wisconsin and On-Site Environmental of Sun Prairie, Wisconsin under the direction of GEC. Soil samples were collected continuously with a truck-mounted or all-terrain geoprobe units by driving a 5-foot plastic sleeve within a metal sampler into undisturbed soils. The soil borings and monitoring wells were advanced by Ground Source of Green Bay, Wisconsin and Soils & Engineering Services, Inc. of Madison, Wisconsin under the direction of GEC. The borings were advanced utilizing truck-mounted or all-terrain drilling rigs and soil samples were collected at selected intervals and locations utilizing a steel split spoon sampler, which was advanced ahead of the augers into undisturbed soils. Air rotary drilling techniques were utilized to advance the borings beyond the refusal depths.

Soil probes GP-1 to GP-6 were advanced on September 23, 2010, northeast of the drive (GP-1 and GP-2), southwest of the residence (GP-3 and GP-4), and southwest of the former dispensers (GP-5 and GP-6). Soil probes GP-7 to GP-13 were advanced on October 14, 2010, north of the retaining wall. Soil probes GP-14 to GP-21 were advanced on April 29, 2019, in the area of the former tanks dispensers and beyond the retaining wall to the northwest. Soil probe GP-14 was converted to temporary monitoring well TW-1. The probes were utilized to define the extent of soil contamination. The locations of the soil probes and temporary monitoring well are shown on Figure 3, Appendix A.

Soil boring MW-1S was advanced on June 3, 2011, on adjoining property to the northwest of the Site (6846 U.S. Highway 18) and converted to monitoring well MW-1S. Two additional soil monitoring wells were installed on September 2, 2011, one on-site, southwest of the residence (MW-2S) and one on the northwestern adjoining property, located at 6846 U.S. Highway 18 (MW-3). Three additional monitoring wells were installed at 6846 U.S. Highway 18 on June 30, 2016 (MW-4S), and October 11, 2016 (MW-5S and MW-6S). Two additional monitoring wells were installed near the southwest corner of the site (MW-7S) and on the southwestern portion of the property at 6846 U.S. Highway 18 (MW-8S) on June 7, 2018. On January 14 to 21 2020, subsequent to the performance of the remedial activities, monitoring wells MW-9S, MW-10S, and MW-11S were installed on the Site within the former tank area, on the southwestern adjoining property, across U.S. Highway 18 (6827 U.S. Highway 18), and on the property two properties northwest of the Site (6858 U.S. Highway 18), respectively. Refusal was encountered at the borings at depths ranging from 8 feet bgs (MW-1S and MW-3S) to 22 feet bgs at MW-4S. Refusal was not encountered to the termination depth of MW-6 at a depth of 26 feet bgs. Auger refusal was encountered on sandstone and limestone/dolomite bedrock. The borings were advanced into bedrock utilizing air rotary drilling techniques (with the exception of MW-6S) to depths ranging from 28.5 feet bgs (MW-8S) to 59 feet (MW-2S). The monitoring wells were installed to depths ranging from 22 feet bgs (MW-6S) to 58 feet bgs (MW-2S). The monitoring wells were utilized to define the relative extent of the groundwater contamination. The locations of the soil borings and monitoring wells are shown on Figure 3, Appendix A.

The soil samples collected from soil probes GP-2, GP-7, GP-8, GP-10, GP-14, GP-15, GP-16, GP-17, and MW-9 reported concentrations of PVOCs and naphthalene exceeding their respective WAC NR 720 soil to groundwater or C RCL standards. The highest concentrations were reported in the soil samples collected from GP-7, GP-14, GP-15, GP-16, GP-17, and MW-9 in the immediate vicinity of the former tanks and dispensers and just beyond them to the northwest. Those soil samples reported maximum concentrations of benzene (70,000 µg/kg), ethylbenzene (154,000 µg/kg), naphthalene (53,000 µg/kg), toluene (440,000 µg/kg), 1,2,4 trimethylbenzene (800,000 µg/kg), 1,3,5 trimethylbenzene (291,000 µg/kg), and xylenes (1,390,000 µg/kg) in MW-9. The samples collected at the remaining locations either did not contain petroleum compounds or did not contain them at levels exceeding their respective adjusted reporting limit or WAC NR 720 RCL standards. None of the collected samples from the direct contact zone (upper 4 feet) contained petroleum compounds at concentrations exceeding their respective standards. The results of the chemical analyses on the soil samples are summarized on Table 1, Appendix B.

One to fourteen rounds of groundwater sampling were performed at the site monitoring wells between July 5, 2011, and February 3, 2020. The groundwater samples collected from on-site monitoring wells TW-1, MW-7S and MW-9S have reported concentrations of PVOCs, naphthalene, and 1,2 DCA exceeding the NR 140 enforcement standard (ES). Groundwater samples collected from off-site monitoring wells MW-1S, MW-3S, MW-5S, MW-6S, and MW-8S have also reported concentrations of PVOCs, naphthalene, and 1,2 DCA exceeding the NR 140 ES. The groundwater samples collected from off-site monitoring well MW-10S (installed on the southwestern adjoining property, across U.S. Highway 18 at 6827 U.S. Highway 18, subsequent to the remedial excavation), has reported benzene at a concentration exceeding the NR 140 preventive action limit (PAL). The groundwater samples collected from MW-2S and MW-4S have not reported concentrations of the tested compounds exceeding the NR 140 PAL.

The groundwater samples collected from temporary well TW-1 (abandoned during remedial excavation) and bedrock monitoring well MW-9, each located near the former tank locations have reported the highest concentrations of PVOCs, naphthalene, 1,2 DCA. At TW-1, maximum concentrations of benzene (26,900

micrograms per liter ($\mu\text{g/L}$), ethylbenzene (9,200 $\mu\text{g/L}$), toluene (66,000 $\mu\text{g/L}$), 1,2,4 trimethylbenzene (15,500 $\mu\text{g/L}$), 1,3,5 trimethylbenzene (4,400 $\mu\text{g/L}$), and xylenes (66,400 $\mu\text{g/L}$) were detected. At MW-9 maximum concentrations of benzene (12,400 micrograms per liter ($\mu\text{g/L}$)), ethylbenzene (1,270 $\mu\text{g/L}$), toluene (15,500 $\mu\text{g/L}$), 1,2,4 trimethylbenzene (1,150 $\mu\text{g/L}$), 1,3,5 trimethylbenzene (292 $\mu\text{g/L}$), and xylenes (9,480 $\mu\text{g/L}$) were detected.

Groundwater contamination appears to extend from the area of the former tanks in the direction of groundwater flow toward the northwest and into the U.S. Highway 18 right-of-way (ROW) and onto the off-site properties located at 6827 and 6858 U.S. Highway 18. It should be noted that an additional leaking underground storage tank case (LUST) case is on-going at the Kreyer Country Store (Lutzen Property), northwest of the site, at 6858 U.S. Highway 18 and the dynamics of the groundwater plumes and whether the releases are co-mingled is still being evaluated. The results of the groundwater analyses are summarized in Table 2 in Appendix B.

With regard to the potable well sampling, the potable well located on the Site (Speaker PW) was recently re-drilled because it was reportedly dry. GEC was not aware the potable well was being re-installed. The well was re-drilled in the location of the previous potable well (southeast of the residence) to a depth of 500 feet on March 11, 2019. The well is cased to a depth of 304 feet. This well will be sampled in the future. The original Speaker PW was sampled on January 14, 2010, prior to the performance of any site investigation activities. The sample did not contain detectable concentrations of PVOCs or naphthalene.

The other known potable wells within 1,200 feet of the Site are shared wells and are identified below along with what properties share the well. An evaluation of other potable wells within 1,200 feet of the site and how each of the wells are shared is on-going.

Well Location – 6827 U.S. Highway 18 – 200 feet south of the Site, across U.S. Highway 18
Shared – 6819 U.S. Highway 18
Shared – 6807 U.S. Highway 18 (Freymiller PW)

Well Location – 6846 U.S. Highway 18 – 300 feet northwest of the Site (Klar PW)
Shared – 6858 U.S. Highway 18 (PW-1)

Well Location – 6875 U.S. Highway 18 – 650 feet northwest of the Site, across U.S. Highway 18
Shared – 6861 U.S. Highway 18 (Jeidy PW)
Shared – 6868 U.S. Highway 18
Shared – 6880 U.S. Highway 18

Well Location – 6770 U.S. Highway 18 – 700 feet southeast of the Site
Shared – 6726 U.S. Highway 18
Possibly Shared – 6804 and 6792 U.S. Highway 18, currently being evaluated

Well Location – 12813 County Highway K – 1,100 feet southeast of the Site, across U.S. Highway 18
Possibly Shared – 12807 and 12821 County Highway K currently being evaluated

Groundwater samples were collected from PW-1 on June 28, 2011, and June 7, 2018, Klar PW on June 7, 2018, and Freymiller PW and Jeidy PW on December 4, 2019. None of the samples reported detectable concentrations of PVOCs, naphthalene, or 1,2 DCA. A groundwater sample was also collected during March of 2020 at 6770 U.S. Highway 18. The results of the sample are not available as of the date of this report. Potable well results are summarized on Table 2, Appendix B.

An ambient vapor sample was collected from the basement/garage area near the northwest wall of the basement nearest the former tank locations on June 7, 2018. The sample reported benzene at a concentration of 1.94J micrograms per cubic meter ($\mu\text{g/m}^3$), which exceeds its residential indoor vapor action level (VAL) of 0.83 $\mu\text{g/m}^3$ but is below its laboratory method adjusted reporting limit indicated by the "J" flag. No other petroleum related compounds were detected above their respective standards. Petroleum products are stored in the

basement/garage area and it appears unlikely that the sample represents vapor associated with the former tanks and contaminated soils. Vapor analytical results are summarized in Table 4 in Appendix B.

As a result of the high concentrations of petroleum contaminants detected within the soil samples collected in the area of the former tanks and dispensers, the remedial activities discussed herein were subsequently performed.

REMEDIAL EXCAVATION FIELD ACTIVITIES

Remedial Excavation Field Activities

On November 18 and 19, 2019, GEC oversaw the excavation of 658.1 tons petroleum contaminated soils. Excavation activities were performed by Wiederholt Enterprises, LLC of Cuba City, Wisconsin. Contaminated soils were transported to La Crosse County Landfill in La Crosse, Wisconsin for proper disposal. Waste disposal documentation is included in Appendix D. Soil samples were periodically field screened, utilizing a photoionization detector (PID). The limits of the remedial soil excavation are shown on Figure 4, Appendix A.

The excavation activities were performed in the area of the two former 500-gallon unleaded gasoline USTs and dispensers and beyond them to the northwest. The eastern limits of the excavation were impeded by the residence on the Site. The excavator was comfortable excavating to within about 5 feet of the house where the excavation sloped away from the house to the eastern limits of the floor of the excavation. The excavation was relatively rectangular in shape and extended approximately 50 feet northeast/southwest and 35 feet northwest and southeast. Obvious contaminated soils remained at the horizontal limits of the eastern end of the excavation below depths of about 5 feet. The depth of the excavation extended to depths of approximately 11 feet to 16 feet bgs where sandstone bedrock was encountered. Monitoring well MW-2 was damaged during the excavation activities and may not be able to be sampled in the future. GEC will further evaluate the status of monitoring well MW-2 during future sampling rounds. Groundwater was not encountered during the excavation activities.

Twenty-one soil samples were collected from the sidewalls and bottom of the excavation, which were submitted for laboratory analysis for the presence of PVOCs, naphthalene, and/or lead. With regard to the soil samples submitted for laboratory analysis, nine soil samples were collected from the sidewalls of the excavation at depths of 4 feet bgs (W-1 to W-9); nine soil samples were collected from the sidewalls of the excavation at depths of 9 to 16 feet bgs (S-1 to S-9); and three soil samples were collected from the bottom of the excavation at depths of 11 to 16 feet bgs (SB-1 to SB-3).

Subsequent to the remedial excavation, Cabeno Environmental Field Services, LLC of New Lenox, Illinois, applied 30-gallons of Oil Spill Eater II diluted in 960-gallons of fresh water in the open excavation along with 2,010 pounds of calcium peroxide (slow release oxygen) and 7.5-gallons of aerobic bacteria for enhanced bioremediation. The effectiveness of the application will be further evaluated during up-coming groundwater sampling rounds.

Subsequent to the application, the excavation was backfilled with compacted granular fill and the retaining wall was rebuilt with rip-rap.

Site Geology

During the soil probing and excavation activities performed in the area of the former tanks and dispensers, the surface of the site consisted of clayey silt and or sparse sand and gravel fill. The near surface fill was generally underlain by brown clayey silt fill with varying amounts of sand and brick extending to depths of 2 feet to 9 feet bgs (area of former tanks). The fill was underlain by natural orangish brown silty clay with varying amounts of gravel extending from depths ranging from 3 feet bgs to up to 12 feet bgs. The clay was underlain by yellowish brown silty sand and traces of sandstone at the refusal depths of 9 feet to 13.5 feet bgs. During the excavation activities, a few of the locations were able to be excavated further into weathered sandstone to maximum depths of 9 feet to 16 feet bgs. Groundwater was not encountered during the excavation activities. Water level data from the on-site monitoring wells is summarized on Table 3, Appendix B.

Volatile Vapor Emission Screening

Soil samples collected from the limits of the remedial excavation were screened for volatile organic vapor emissions with a 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 emission but cannot quantify concentrations of individual compounds. The soil samples collected from the limits of the excavation contained PID readings ranging from 0 to 5000+ instrument units (IU) with the higher reading being observed along the eastern wall and bottom of the excavation.

Soil Sample Collection Procedures

The soil samples for chemical analyses were selected from the excavation limits based upon location, depth, geology, the depth to groundwater, the direct contact zone, and PID results. Selected samples obtained from the excavation were submitted for laboratory analysis of PVOCs, naphthalene, and/or lead.

The soil samples submitted for laboratory analysis for the presence of PVOC and naphthalene were extracted from the soils utilizing a sterile syringe and approximately 10 to 15 grams of soil were transferred into laboratory prepared jar containing approximately 10 milliliters of methanol. The samples collected for laboratory analysis of lead were placed into a laboratory prepared 4 ounce plastic cup until no headspace remained within the container. 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.

EVALUATION AND DISCUSSION

NR 720 Soil Standards

Chapter 720 of the NR700 series code established 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

The soil samples collected from W-5, W-8, S-2, S-4, S-5, SB-1, SB-2, and SB-3 reported concentrations of PVOCs and/or naphthalene at concentrations exceeding the NR 720 soil to groundwater or C RCLs. The concentrations at W-5, W-8, and S-2 were relatively low and near the estimated extent of the limits of soil contamination. Higher concentrations were detected at S-4, S-5, and SB-1 to SB-3 where the excavation was impeded by the residence along the southeastern sidewall and by sandstone bedrock at the bottom. The highest concentrations within the sidewall samples were detected at S-5 at a depth of 16 feet (on the sidewall near the refusal depth, below the location of the former tanks). The sample contained benzene (19,200 µg/kg),

ethylbenzene (94,000 µg/kg), naphthalene (40,000 µg/kg), toluene (181,000 µg/kg), 1,2,4 trimethylbenzene (307,000 µg/kg), 1,3,5 trimethylbenzene 100,000 µg/kg, and xylenes (642,000 µg/kg). The highest concentrations detected within bottom soil samples SB-1 to SB-3 were detected at SB-2 at a depth of 16 feet in the central portion of the excavation toward the west end of the former tank area. The soil sample collected at SB-2 reported concentrations of benzene (18,900 µg/kg), ethylbenzene (127,000 µg/kg), naphthalene (32,000 µg/kg), toluene (240,000 µg/kg), 1,2,4 trimethylbenzene (311,000 µg/kg), 1,3,5 trimethylbenzene (99,000 µg/kg), and xylenes (704,000 µg/kg), which exceed their respective WAC NR 720 soil to groundwater and/or C RCLs. The samples collected at the remaining locations either did not contain detectable concentrations of PVOCs or naphthalene or did not report them at concentrations exceeding their respective standards. None of the soil samples collected from the upper four feet of soil contained PVOCs or naphthalene exceeding their respective WAC NR 720 direct contact standards.

With regard to the lead testing within soil, lead was detected at variable concentrations ranging from 14.7 milligrams per kilogram (mg/kg) to 178 mg/kg within the remedial excavation confirmation samples. The highest concentrations were detected at W-1, W-2, W-3, W-5, S-4, S-7, and SB-1, which reported lead concentrations of 53 mg/kg, 106 mg/kg, 178 mg/kg, 151 mg/kg, 64.1 mg/kg, 84.2 mg/kg, and 52 mg/kg, respectively exceeding its NR 720 soil to groundwater RCL of 27 mg/kg or background threshold level of 52 mg/kg. However, the highest concentrations of lead were generally detected within the soil samples that reported relatively low or non-detectable concentrations of PVOCs and naphthalene. It appears unlikely that the lead concentrations are attributable to the release are indicative of locally high background concentrations.

Soil analytical results for samples collected during the remedial excavation are included in Table 5 in Appendix B and a copy of the analytical results and chain of custody are included in Appendix C. The locations of the remedial excavation soil samples are shown on Figure 4, Appendix A.

CONCLUSIONS

During the remedial excavation, 658.1 tons of highly petroleum contaminated soils were removed from the site and properly disposed. Relatively high concentrations of petroleum contamination remained along the southeastern sidewall of the excavation (S-4 and S-5) where contaminated soils could not be safely removed extending from about 5 feet from the residence and tapering wider downward to the bottom of the excavation. Highly contaminated soils also remained at the bottom of the excavation where sandstone bedrock was encountered at depths of 11 feet to 16 feet bgs (SB-1 to SB-3). Due to the known high concentrations of petroleum contamination near bedrock, a mixture of 30-gallons of Oil Spill Eater II diluted in 960-gallons of fresh water was applied in the open excavation along with 2,010 pounds of calcium peroxide (slow release oxygen) and 7.5-gallons of aerobic bacteria in an attempt to enhance bioremediation.

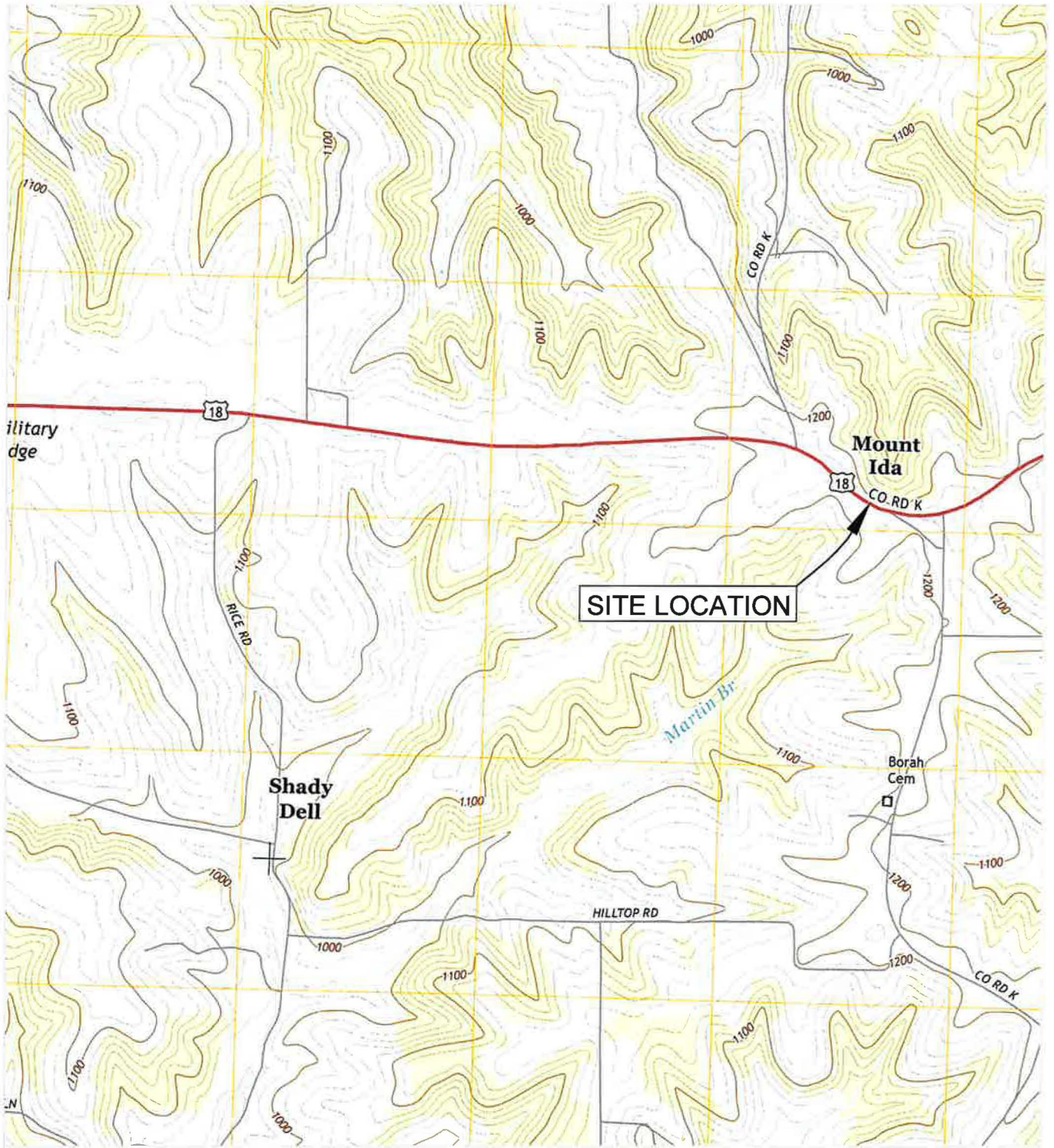
The vast majority of the contaminated unconsolidated soils extending to the bedrock depth have been removed and transported to a landfill for proper disposal with the exception of those that could not be removed safely along the residence. No additional excavation or other remediation is recommended at the present time. Based on the prior site investigation activities, it appears that the extent of soil and groundwater contamination has been adequately defined and that contaminant concentrations are relatively stable. In addition, none of the sampled potable wells appears to have been impacted by the release. It is recommended that the remaining potable wells within 1,200 feet of the site be sampled and that a site investigation report be submitted. It is recommended that quarterly (or an accelerated sampling schedule due to the PECFA sunset date, if approved by the WDNR) be performed to evaluate the effectiveness of the remedial excavation and enhanced bioremediation application, and further evaluate the contaminant concentrations, plume stability, and whether this release is co-mingled with the Kreyer Store case. If the contaminant concentrations remain stable and/or decreasing within the source area monitoring well (MW-9) and other impacted down-gradient monitoring wells (MW-1, MW-3, MW-5, MW-6-if located, MW-7, MW-8, MW-10, and MW-11), it is recommended that a closure request be prepared.

GENERAL COMMENTS

The investigative and remediation 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 have an effect on 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
 608-742-2169 (Office) • 608-742-2592 (Fax)
 www.generalengineering.net

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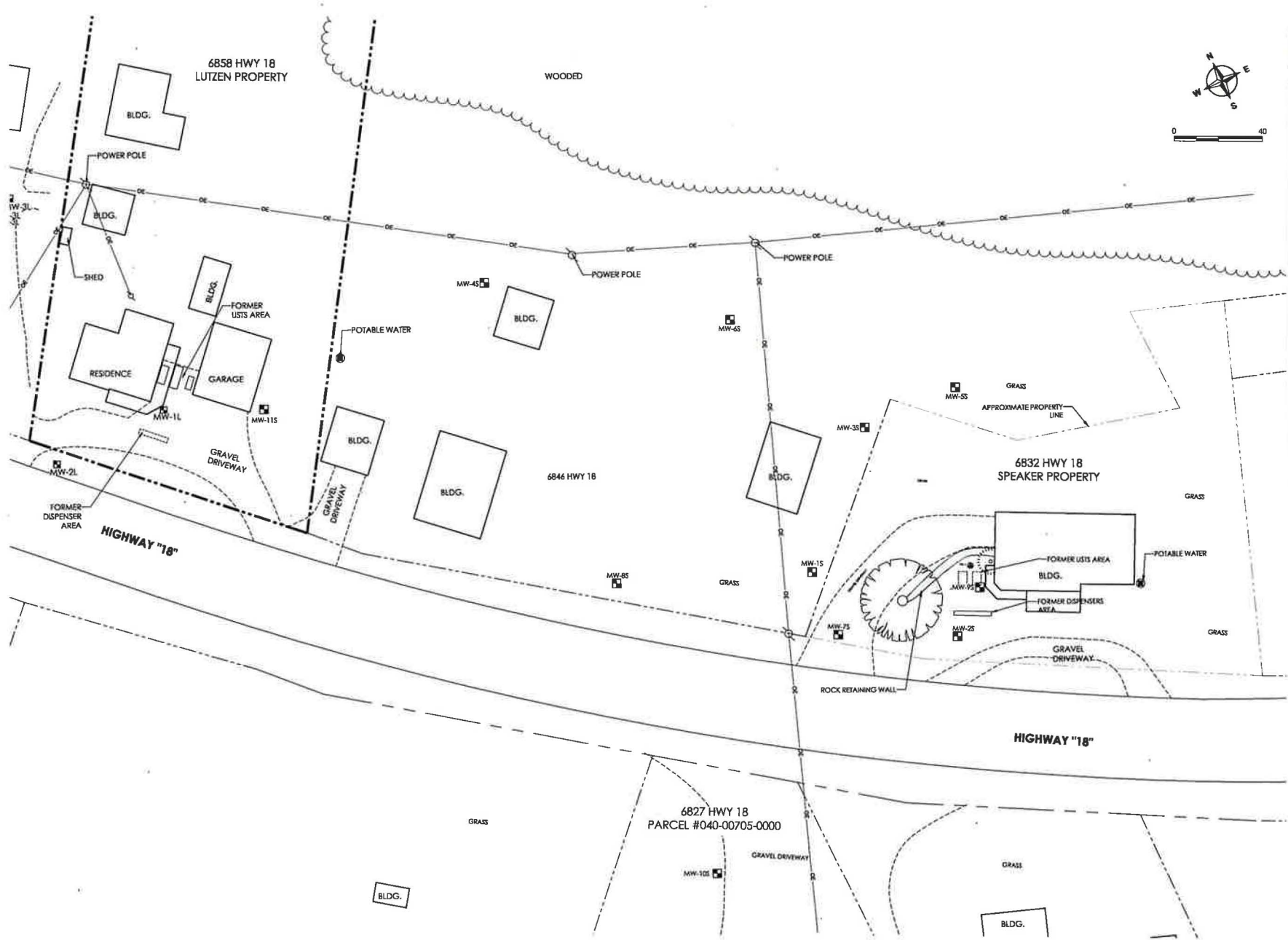
SITE LOCATION MAP

SPEAKER PROPERTY
6832 HWY "18"
 Town of Mount Ida
 Grant County, WI

GEC

DRAWN BY	KP
REVIEWED BY	LMB
ISSUE DATE	DEC 2019
GEC FILE NO.	0610-133
SHEET NO.	

FIGURE 1



GEC
General Engineering Company
 P.O. Box 300 • 918 Silver Lake Dr. • Portage, WI 53071
 800.742.2100 (Toll Free) • 800.742.2100 (Fax)
 www.generaleng.com
 The above location information is advisory, unless otherwise stated. General Engineering Company is not responsible for the accuracy of the information provided.

SITE PLAN
SPEAKER PROPERTY
6832 HWY "18"
TOWN OF MT. IDA
GRANT COUNTY, WI

EXPLANATION

MW-25	MONITORING WELL LOCATION (SPEAKER PROPERTY)
TW-3L	SMALL DIAMETER MONITORING WELL LOCATION
○	POTABLE WELLS
---	APPROXIMATE PROPERTY LINE

DRAWN BY	KSP
REVIEWED BY	LMB
ISSUE DATE	MARCH 2020
DWG FILE NO	0113.118
SHEET NO	

FIGURE 2



General Engineering Company
 P.O. Box 300 • 810 Silver Lake Dr. • Portage, WI 53001
 920.742.2188 (FAX) • 920.742.2825 (FAX)
 www.generaleng.com
 The enclosed drawings constitute a contract. The contractor shall be responsible for obtaining all necessary permits and for obtaining all required approvals. The contractor shall be responsible for obtaining all required approvals. The contractor shall be responsible for obtaining all required approvals.

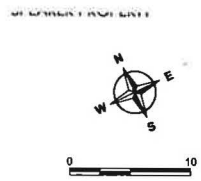
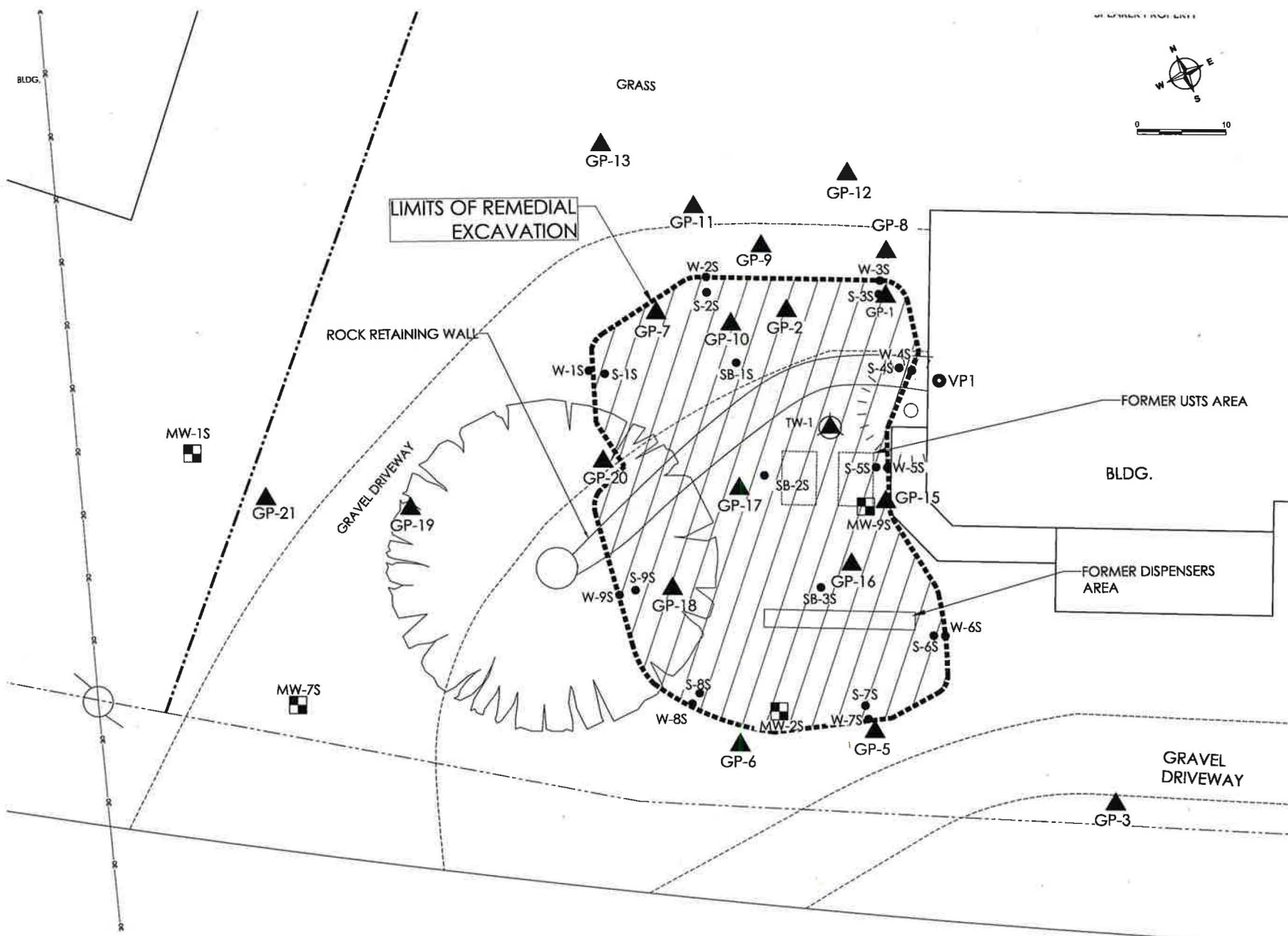
SOIL PROBE, BORINGS, MONITORING WELL & VAPOR TEST LOCATIONS MAP
 6832 HWY "18"
 TOWN OF MT. IDA
 GRANT COUNTY, WI

EXPLANATION

MW-2S	SMALL DIAMETER MONITORING WELL
TH-1	TRIAL HOLE
GP-1	GEOPROBE
GP-1S	VAPOR TEST
GA-1	POTABLE WELLS

DRAWN BY	KSP
REVIEWED BY	LMH
ISSUE DATE	MARCH 2005
DWG FILE NO.	1813-100
SHEET NO.	

FIGURE 3



GEC
 General Engineering Company
 P.O. Box 342 • 818 Silver Lake Dr. • Potosi, WI 53201
 800.742.2180 (Toll Free) • 800.742.2382 (Fax)
 www.generaleng.com
 The Licensed Professional Engineer responsible for the design of this project is located at General Engineering Company, 818 Silver Lake Drive, Potosi, WI 53201.

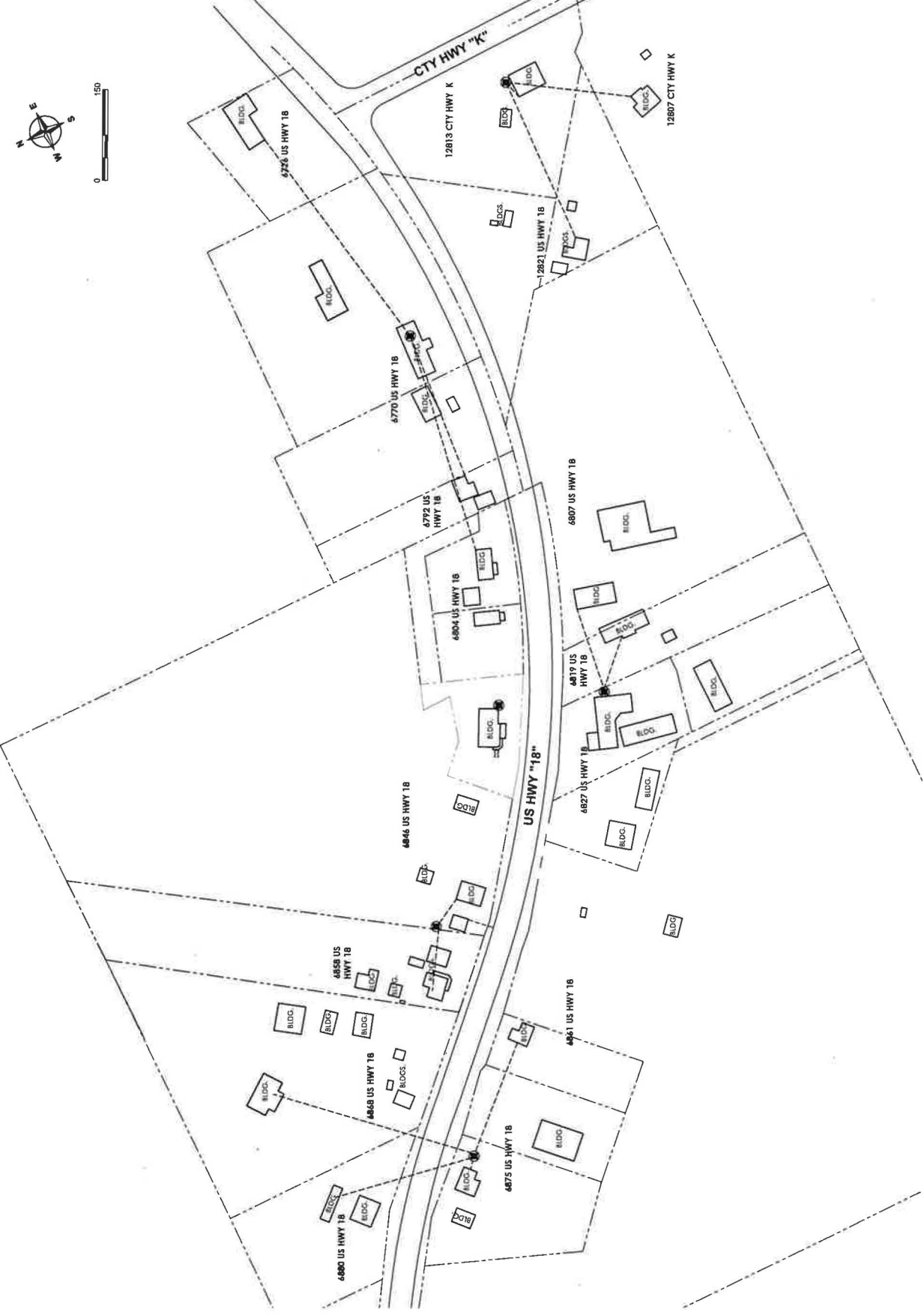
LIMITS OF REMEDIAL EXCAVATION AND SOIL SAMPLE LOCATION MAP
 6832 HWY "18"
 TOWN OF MT. IDA
 GRANT COUNTY, WI

EXPLANATION:

	MW-2S	SOIL BORING & MONITORING POINT
	TW-1	SMALL DIAMETER MONITORING WELL LOCATION
	GP-1	DEEPPILE LOCATION
	VP-1	VAPOR TEST
	S-1S	REMEDIAL EXCAVATION SOIL SAMPLES

DRAWN BY	KSP
REVIEWED BY	LMB
ISSUE DATE	MARCH 2022
GEC FILE NO.	893-133
SHEET NO.	

FIGURE 4



APPENDIX B
TABLES

**TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
SPEAKER PROPERTY
0610-133**

Sample No.	NR 720 NON CANCER RCL (ug/kg)	NR 720 CANCER RCL (ug/kg)	NR 720 Direct Contact RCL (ug/kg)	NR 720 Soil to Groundwater RCL (ug/kg)	HS-1	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-8	GP-9	GP-9	GP-10	GP-11	GP-12	GP-13	MW-7	MW-8			
Sampling Date					12/10/1997	09/23/10	09/23/10	09/23/10	09/23/10	09/23/10	09/23/10	10/14/10	10/14/10	10/14/10	10/14/10	10/14/10	10/14/10	10/14/10	10/14/10	10/14/10	05/21/18	05/21/18	06/07/18		
Sample Depth (feet)					11 (U)	6-7 (U)	9-10 (U)	3-4 (U)	13-14 (U)	11-12 (U)	11-12 (U)	13-14' (U)	3-4 (U)	8-9 (U)	3-4 (U)	8-9 (U)	9-10 (U)	9-10 (U)	9-10 (U)	9-10 (U)	7-9 (U)	11-11.5 (U)	6-8 (U)		
GASOLINE RANGE ORGANICS (GRO), DIESEL RANGE ORGANICS (DRO) (mg/kg)																									
GRO	NE	NE	NE	NE	13,000	<3.6	<3.6	<3.1	<3.5	<3.8	<3.4	1010	<3.1	<3.4	<3.0	<3.0	45.9	<3.1	<3.3	<3.6	NA	NA	NA		
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) PLUS NAPHTHALENE AND 1,2 DICHLOROETHANE (DCA) (ug/kg)																									
Benzene	106,000	1,600	1,600	5.1	28,000	<25	<25	<25	41.3J	<25	<25	1,240	<25	<25	<25	<25	<25	<25	<25	<25	<25	<30	<30	<25	
1,2 Dichloroethane	43,700	652	652	2.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<38	<38	<25	
Ethylbenzene	4,080,000	8,020	8,020	1,570	300,000	<25	<25	<25	<25	<25	<25	27,100	<25	<25	<25	<25	1100	<25	<25	<25	<25	<35	<35	<25	
Methyl tert-butyl ether	22,100,000	63,800	63,800	27	<5,000	<25	<25	<25	<25	<25	<25	<200	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<50	<50	<25
Naphthalene	178,000	5,520	5,520	658.2	NS	<25	5,750	<25	<25	<25	<25	9,300	1,320	<25	<25	61.7J	<25	753	<25	<25	<25	<25	<94	<94	<25
Toluene	5,240,000	NE	818,000	1,107	450,000	<25	<25	<25	38.6J	<25	<25	8,660	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<32	<32	<25
1,2,4-Trimethylbenzene	373,000	NE	219,000	1,382	880,000	<25	<25	<25	<25	<25	<25	63,300	<25	<25	<25	<25	4,600	<25	<25	<25	<25	<25	<25	<25	
1,3,5-Trimethylbenzene	339,000	NE	182,000		270,000	<25	<25	<25	<25	<25	<25	<25	20,900	<25	<25	<25	<25	1,420	<25	<25	<25	<25	<32	<32	<25
Xylenes, -m, -p	818,000	NE	260,000	3,960	1,780,000	<75	<75	<75	<75	<75	<75	127,800	<75	<75	<75	<75	5,154	<75	<75	<75	<75	<116	<116	<75	
Xylenes, -o																									

mg/kg = milligrams per kilogram

ug/kg = micrograms per kilogram

RCL = Residual Contaminant Level

U=Unsaturated

NS = Parameter not analyzed

NE = NR 720 RCL not established

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

Bold indicates analytical results exceed NR 720 RCL

**TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
SPEAKER PROPERTY
0610-133**

Sample No.	NR 720 NON CANCER RCL (ug/kg)	NR 720 CANCER RCL (ug/kg)	NR 720 Direct Contact RCL (ug/kg)	NR 720 Soil to Groundwater RCL (ug/kg)	GP-14		GP-15		GP-16		GP-17		GP-18		GP-19		GP-20		GP-21	
					04/29/19		04/29/19		04/29/19		04/29/19		04/29/19		04/29/19		04/29/19		04/29/19	
					2-4 (U)	12-13.5 (U)	2-4 (U)	12-13.5 (U)	5-7 (U)	10-12 (U)	2-4 (U)	11-13 (U)	5-7 (U)	10-12 (U)	5-7 (U)	10-11 (U)	3-5 (U)	8-9 (U)	3-5 (U)	5-7 (U)
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) PLUS NAPHTHALENE (µg/kg)																				
Benzene	106,000	1,600	1,600	5.1	<25	63,000	90	30,400	10,500	65,000	<25	20,200	<25	<25	<25	<25	<25	<25	<25	<25
Ethylbenzene	4,080,000	8,020	8,020	1,570	<25	135,000	69	77,000	140,000	154,000	<25	101,000	<25	<25	<25	<25	<25	<25	<25	<25
Methyl tert-butyl ether	22,100,000	63,800	63,800	27	<25	<1,250	<25	<1,250	<1,250	<1,250	<25	<1,250	<25	<25	<25	<25	<25	<25	<25	<25
Naphthalene	178,000	5,520	5,520	658.2	293	38,000	122	20,900	53,000	38,000	<25	30,900	<25	<25	<25	<25	<25	<25	<25	<25
Toluene	5,240,000	NE	818,000	1,107	34J	360,000	350	156,000	263,000	440,000	<25	67,000	<25	<25	<25	<25	<25	<25	<25	<25
1,2,4-Trimethylbenzene	373,000	NE	219,000	1,382	83	390,000	430	227,000	800,000	340,000	<25	232,000	<25	<25	<25	<25	<25	<25	<25	<25
1,3,5-Trimethylbenzene	339,000	NE	182,000		48	127,000	171	74,000	291,000	109,000	<25	80,000	<25	<25	<25	<25	<25	<25	<25	<25
Xylenes, -m, -p	818,000	NE	260,000	3,960	114	984,000	980	514,000	1,390,000	840,000	<75	499,000	<75	<75	<75	<75	<75	<75	<75	<75
Xylenes, -o					<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

RCL = Residual Contaminant Level

U=Unsaturated

NS = Parameter not analyzed

NE = NR 720 RCL not established

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

Bold indicates analytical results exceed NR 720 RCL

**TABLE 1
SUMMARY OF SOIL ANALYTICAL RESULTS
SPEAKER PROPERTY
0610-133**

Sample No.	NR 720 NON CANCER RCL (ug/kg)	NR 720 CANCER RCL (ug/kg)	NR 720 Direct Contact RCL (ug/kg)	NR 720 Soil to Groundwater RCL (ug/kg)	MW-9	MW-10
Sampling Date					01/14/20	01/14/20
Sample Depth (feet)					12-13	13-14
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC)(µg/kg)						
Benzene	106,000	1,600	1,600	5.1	70,000	<30
Ethylbenzene	4,080,000	8,020	8,020	1,570	137,000	<35
Methyl tert-butyl ether	22,100,000	63,800	63,800	27	<5000	<50
Naphthalene	178,000	5,520	5,520	658.2	NS	NS
Toluene	5,240,000	NE	818,000	1,107	420,000	<32
1,2,4-Trimethylbenzene	373,000	NE	219,000	1,382	297,000	<25
1,3,5-Trimethylbenzene	339,000	NE	182,000		89,000	<32
Xylenes, -m, -p	818,000	NE	260,000	3,960	786,000	<116
Xylenes, -o						

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

RCL = Residual Contaminant Level

U=Unsaturated

NS = Parameter not analyzed

NE = NR 720 RCL not established

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

Bold indicates analytical results exceed NR 720 RCL

**TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SPEAKER PROPERTY
GEC PROJECT NUMBER 0610-133**

Monitoring Well	NR 140		MW-1													
	ES	PAL	7/5/2011	11/22/2011	6/21/2012	6/4/2013	8/8/2014	2/11/2016	10/17/2016	1/18/2017	8/17/2017	1/30/2018	6/7/2018	12/5/2018	3/27/2019	12/4/2019
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)																
Benzene	5	0.5	2540	1640	2710	1260	2490	1820	2220	1870	890	3800	2670	790	660	184
Ethylbenzene	700	140	1200	1230	454	437	1890	1370	1310	980	680	600	1660	850	690	256
Methyl tert-butyl ether	60	12	<12.2	16.1	<15.2	<7.4	<3.7	<55	<24.5	<41	<41	<14	<14	<14	<14	<14
Toluene	800	160	544	283	428	264	810	750	820	460	287	550	640	246	166	39
1,2,4 -Trimethylbenzene	480	96	973	1380	798	55.2	2870	2680	1570	1160	910	560	1500	980	750	256
1,3,5 -Trimethylbenzene			210	349	225	<7.1	780	700	470	291	248	143	340	197	129	42J
Xylenes, -m, -p	2000	400	4540	4189	4290	792	7720	7390	5180	4090	2740	2480	5940	3300	2219	740
Xylenes, -o																
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)																
Chloromethane	30	3	<4.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NE	NE	<18.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	0.5	163	NA	NA	NA	NA	<24	NA	35J	<22.5	68	42	<12.5	<12.5	<12.5
Isopropylbenzene	NE	NE	49.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Napthalene	100	10	134	207	152	17.8J	430	400	320J	150J	340J	164J	247J	370	133J	<105
n-Propylbenzene	NE	NE	171	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD (µg/L)																
Lead	15	1.5	6.5J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SPEAKER PROPERTY
GEC PROJECT NUMBER 0610-133

Monitoring Well	NR 140		MW-2												
	ES	PAL	11/22/2011	6/21/2012	6/4/2013	8/8/2014	2/11/2016	10/17/2016	1/18/2017	8/17/2017	1/30/2018	6/7/2018	12/5/2018	3/27/2019	12/4/2019
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)															
Benzene	5	0.5	1.3	1.7	<0.34	<0.27	<0.44	<0.46	<0.17	<0.17	<0.22	<0.22	<0.22	<0.22	Well
Ethylbenzene	700	140	<0.54	<0.41	<0.34	<0.82	<0.71	<0.73	<0.2	<0.2	<0.53	<0.53	<0.53	<0.26	Damaged
Methyl tert-butyl ether	60	12	<0.61	<0.38	<0.37	<0.37	<1.1	<0.49	<0.82	<0.82	<0.57	<0.57	<0.57	<0.28	During
Toluene	800	160	<0.67	0.55J	<0.34	<0.8	<0.44	<0.39	<0.67	<0.67	<0.45	<0.45	<0.45	<0.19	Remedial
1,2,4 -Trimethylbenzene	480	96	<0.97	<0.43	<0.33	<0.83	<1.6	<0.68	<1.14	<1.14	<0.73	<0.73	<0.73	<0.8	Excavation
1,3,5 -Trimethylbenzene			<0.83	<0.40	<0.36	<0.86	<1.5	<0.83	<0.91	<0.91	<0.75	<0.75	<0.75	<0.75	<0.63
Xylenes, -m, -p	2000	400	<2.63	<1.25	<1.03	<2.41	<3.1	<2.06	<1.95	<1.95	<1.58	<1.58	<1.58	<0.72	
Xylenes, -o															
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)															
Chloromethane	30	3	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Butylbenzene	NE	NE	<0.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethane	5	0.5	<0.36	NA	NA	NA	<0.48	NA	<0.45	NA	NA	NA	NA	NA	
Isopropylbenzene	NE	NE	<0.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Napthalene	100	10	<0.89	<0.40	<0.37	<1.2	<1.6	<2.6	<2.17	<2.17	NA	NA	NA	NA	
n-Propylbenzene	NE	NE	<0.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
LEAD (µg/L)															
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SPEAKER PROPERTY
GEC PROJECT NUMBER 0610-133

Monitoring Well	NR 140		MW-3												
	ES	PAL	#####	6/21/2012	6/4/2013	8/8/2014	2/11/2016	10/17/2016	1/18/2017	8/17/2017	1/30/2018	6/7/2018	12/5/2018	3/27/2019	12/4/2019
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)															
Benzene	5	0.5	1210	19.9	364	990	660	930	820	420	980	0.46J	297	299	360
Ethylbenzene	700	140	910	8.5	586	840	800	650	600	274	1080	<0.26	234	<2.6	297
Methyl tert-butyl ether	60	12	<15.2	1.2	7.4	<1.85	<11	<4.9	<8.2	<8.2	<2.8	<0.28	<2.8	<2.8	<2.4
Toluene	800	160	164	2.3	95.6	180	130	135	114	62	122	<0.19	39	25.7	59
1,2,4 -Trimethylbenzene	480	96	1170	31.9	1030	1550	1410	1140	1030	620	1290	<0.8	410	450	520
1,3,5 -Trimethylbenzene			241	59.3	296	440	370	307	225	150	360	<0.63	77	115	82
Xylenes, -m, -p	2000	400	3025	114.7	2011	2815	2875	2194	1902	1203	3143	<0.72	787	953	1054
Xylenes, -o															
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)															
Chloromethane	30	3	<6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NE	NE	45.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	0.5	<9.0	NA	NA	NA	27	NA	14.3J	9.5J	11.5	1.24	6.4J	9.3	NA
Isopropylbenzene	NE	NE	63.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Napthalene	100	10	111J	3.3	125	178	183	105	102	67J	67J	<2.1	26.2J	21.6J	62
n-Propylbenzene	NE	NE	224	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD (µg/L)															
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SPEAKER PROPERTY
GEC PROJECT NUMBER 0610-133

Monitoring Well	NR 140		MW-4								MW-5						MW-6										
	ES	PAL	10/17/2016	1/18/2017	8/17/2017	1/30/2018	6/7/2018	12/5/2018	3/27/2019	12/4/2019	10/17/2016	1/18/2017	8/17/2017	1/30/2018	6/7/2018	12/5/2018	3/27/2019	12/4/2019	10/17/2016	1/18/2017	8/17/2017	1/30/2018	6/7/2018	12/5/2018	3/27/2019	12/4/2019	
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)																											
Benzene	5	0.5	0.79J	<0.17	<0.17	<0.22	<0.22	<0.22	<0.22	<0.32	77	0.81	6.6	65	0.81	0.75	<0.22	<0.32	5.8	<0.17	<0.17	0.45J	4.2	276	135	Well	
Ethylbenzene	700	140	<0.73	<0.2	<0.2	<0.53	<0.53	<0.53	<0.26	<0.29	58	0.23J	1	7.2	<0.53	<0.53	<0.26	<0.29	<0.73	<0.2	<0.2	<0.53	<0.53	1.02J	<0.28	Could	
Methyl tert-butyl ether	60	12	<0.49	<0.82	<0.82	<0.57	<0.57	<0.57	<0.28	<0.24	<0.49	<0.82	<0.82	<0.57	<0.57	<0.28	<0.24	<0.49	<0.82	<0.82	<0.57	<0.57	<0.57	<0.57	<0.28	Not Be	
Toluene	800	160	<0.39	<0.67	<0.67	<0.45	<0.45	<0.45	<0.19	<0.29	5.3	<0.67	<0.67	1.82	<0.45	<0.45	<0.19	<0.29	<0.39	<0.67	<0.67	<0.45	<0.45	3.5	0.37J	Located	
1,2,4-Trimethylbenzene	480	96	<0.68	<1.14	<1.14	<0.73	<0.73	<0.73	<0.8	<0.46	31.2	<1.14	<1.14	9.1	<0.73	<0.73	<0.8	<0.46	<0.68	<1.14	<1.14	<0.73	<0.73	2.25J	<0.8		
1,3,5-Trimethylbenzene			<0.83	<0.91	<0.91	<0.75	<0.75	<0.75	<0.63	<0.67	3.5	<0.91	<0.91	1.02J	<0.75	<0.75	<0.63	<0.67	<0.83	<0.91	<0.91	<0.75	<0.75	<0.75	<0.63		
Xylenes -m, p																											
Xylenes -o	2000	400	<2.06	<1.95	<1.95	<1.58	<1.58	<1.58	<0.72	<1.22	52.02	<1.95	<1.95	12.47	<1.58	<1.58	<0.72	<1.22	<2.06	<1.95	<1.95	<1.58	0.92J	9.1	0.41J		
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)																											
Chloromethane	30	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
n-Butylbenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethane	5	0.5	NA	<0.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.45	NA	NA	NA	NA	NA	NA	
Isopropylbenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Napthalene	100	10	<2.6	<2.17	<2.17	NA	NA	NA	NA	NA	<2.6	<2.17	<2.17	<2.17	NA	NA	NA	NA	<2.6	<2.17	<2.17	NA	NA	NA	NA	NA	
n-Propylbenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
LEAD (µg/L)																											
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SPEAKER PROPERTY
GEC PROJECT NUMBER 0610-133

Monitoring Well	NR 140		MW-7				MW-8				TW-1	
Sampling Date	ES	PAL	6/13/2018	12/5/2018	3/27/2019	12/4/2019	6/13/2018	12/5/2018	3/27/2019	12/4/2019	6/11/2019	11/18/2019
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)												
Benzene	5	0.5	7.2	29.8	15.4	19.8	121	560	710	20.8	26,900	2,100
Ethylbenzene	700	140	4.2	5.7	2.73	5.5	72	710	620	4.7	9,200	1,230
Methyl tert-butyl ether	60	12	<0.28	<0.28	<0.28	<0.24	<0.28	<2.8	<2.8	<0.24	<56	<12
Toluene	800	160	0.62	0.42J	0.5J	0.76J	25.8	138	155	0.74J	66,000	7,300
1,2,4 -Trimethylbenzene	480	96	1,82J	1.26J	<0.8	1.26J	104	790	740	9.3	15,500	7,000
1,3,5 -Trimethylbenzene			1.38J	<0.63	<0.63	<0.67	25.7	77	73	<0.67	4,400	2,380
Xylenes, -m, -p	2000	400	5.37	1.54	0.81J	<1.22	233.4	1656	1454	7.6	66,400	19,800
Xylenes, -o												
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)												
Chloromethane	30	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	0.5	0.9	0.52J	NA	NA	1.95	5.9J	NA	NA	610	NA
Isopropylbenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Napthalene	100	10	<2.1	<2.1	NA	NA	10.6	75	NA	NA	1,970	NA
n-Propylbenzene	NE	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LEAD (µg/L)												
Lead	15	1.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SPEAKER PROPERTY
GEC PROJECT NUMBER 0610-133

Monitoring Well	NR 140		MW-9	MW-10		MW-11
Sampling Date	ES	PAL	2/3/2020	1/20/2020	2/3/2020	2/3/2020
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)						
Benzene	5	0.5	12,400	1.14	0.22J	54
Ethylbenzene	700	140	1,270	0.43J	<0.26	26.8
Methyl tert-butyl ether	60	12	<28	<0.28	<0.28	<0.28
Toluene	800	160	15,500	1.17	<0.19	20.8
1,2,4 -Trimethylbenzene	480	96	1,150	<0.8	<0.8	74
1,3,5 -Trimethylbenzene			292	<0.63	<0.63	29.7
Xylenes, -m, -p	2,000	400	9,480	1.24J	<72	77.5
Xylenes, -o						
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)						
Chloromethane	30	3	NA	NA	NA	NA
n-Butylbenzene	NE	NE	NA	NA	NA	NA
1,2-Dichloroethane	5	0.5	263	NA	NA	1.18
Isopropylbenzene	NE	NE	NA	NA	NA	NA
Napthalene	100	10	213J	<2.1	<2.1	6.3J
n-Propylbenzene	NE	NE	NA	NA	NA	NA
LEAD (µg/L)						
Lead	15	1.5	NA	NA	NA	NA

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 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
SPEAKER PROPERTY
GEC PROJECT NUMBER 0610-133

Monitoring Well	NR 140		SPEAKER PW	PW-1		KLAR PW	FREYMILLER PW	JEIDY PW
Sampling Date	ES	PAL	1/14/2010	6/28/2011	6/7/2018	6/7/2018	12/4/2019	12/4/2019
VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)								
Benzene	5	0.5	<0.39	<0.41	<0.22	<0.22	<0.22	<0.22
Ethylbenzene	700	140	<0.41	<0.54	<0.26	<0.26	<0.26	<0.26
Methyl tert-butyl ether	60	12	<0.38	<0.61	<0.28	<0.28	<0.28	<0.28
Toluene	800	160	<0.42	<0.67	<0.19	<0.19	<0.19	<0.19
1,2,4 -Trimethylbenzene	480	96	<0.43	<0.97	<0.8	<0.8	<0.8	<0.8
1,3,5 -Trimethylbenzene			<0.40	<0.83	<0.63	<0.63	<0.63	<0.63
Xylenes, -m, -p	2000	400	<1.25	<2.63	<0.72	<0.72	<0.72	<0.72
Xylenes, -o								
OTHER DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) (µg/L)								
Chloromethane	30	3	NA	NA	NA	NA	NA	NA
n-Butylbenzene	NE	NE	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	0.5	NA	<0.36	<0.25	<0.25	<0.25	<0.25
Isopropylbenzene	NE	NE	NA	NA	NA	NA	NA	NA
Napthalene	100	10	<0.40	<0.89	<2.1	<2.1	<2.1	<2.1
n-Propylbenzene	NE	NE	NA	NA	NA	NA	NA	NA
LEAD (µg/L)								
Lead	15	1.5	NA	NA	NA	NA	NA	NA

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 3
WATER LEVEL DATA
SPEAKER PROPERTY
0610-133**

Monitoring Well Number	Top of Well Casing Elevation	Screen Interval	Date Measured	Depth to Water (Ft.)	Groundwater Elevation (Ft.)
MW-1	1208.77	1187.07	7/5/2011	15.87	1192.90
			11/22/2011	16.60	1192.17
			6/21/2012	18.95	1189.82
		1177.07	6/4/2013	10.98	1197.79
			8/8/2014	15.86	1192.91
			6/9/2015	15.40	1193.37
			2/11/2016	16.38	1192.39
			10/17/2016	16.38	1192.39
			1/18/2017	14.64	1194.13
			8/17/2017	15.89	1192.88
			1/30/2018	21.40	1187.37
			6/7/2018	13.94	1194.83
			12/5/2018	14.81	1193.96
			3/27/2019	14.30	1194.47
12/4/2019	10.68	1198.09			
2/3/2020	17.80	1190.97			
MW-2	1214.56	1171.73	7/5/2011	NA	NA
			11/22/2011	38.22	1176.34
			6/21/2012	40.50	1174.06
		1156.73	6/4/2013	42.72	1171.84
			8/8/2014	42.40	1172.16
			6/9/2015	44.22	1170.34
			2/11/2016	45.65	1168.91
			10/17/2016	48.23	1166.33
			1/18/2017	46.45	1168.11
			8/17/2017	48.15	1166.41
			1/30/2018	41.56	1173.00
			6/7/2018	45.42	1169.14
			12/5/2018	43.47	1171.09
			3/27/2019	43.16	1171.40
12/4/2019	Well Damaged During Excavation Backfilling				
MW-3	1208.17	1180.32	7/5/2011	NA	NA
			11/22/2011	19.29	1188.88
			6/21/2012	21.58	1186.59
		1170.32	6/4/2013	18.51	1189.66
			8/8/2014	21.66	1186.51
			6/9/2015	22.97	1185.20
			2/11/2016	21.24	1186.93
			10/17/2016	18.38	1189.79
			1/18/2017	17.07	1191.10
			8/17/2017	19.17	1189.00
			1/30/2018	27.59	1180.58
			6/7/2018	17.58	1190.59
			12/5/2018	17.49	1190.68
			3/27/2019	15.75	1192.42
12/4/2019	12.43	1195.74			
2/3/2020	18.77	1189.40			
MW-4	1206.61	1179.35	10/17/2016	17.72	1188.89
			1/18/2017	16.74	1189.87
		1164.35	8/17/2017	18.61	1188.00
			1/30/2018	21.93	1184.68
			6/7/2018	17.18	1189.43
			12/5/2018	16.77	1189.84
			3/27/2019	11.65	1194.96
			12/4/2019	12.01	1194.60
2/3/2020	NR	--			
MW-5	1200.52	1187.39	10/17/2016	16.75	1183.77
			1/18/2017	14.25	1186.27
		1172.39	8/17/2017	18.61	1181.91
			1/30/2018	19.82	1180.70
			6/7/2018	14.78	1185.74
			12/5/2018	13.32	1187.20
			3/27/2019	12.14	1188.38
			12/4/2019	10.08	1190.44
2/3/2020	NR	--			

ft = feet
NR=Not recorded
Elevations in feet in reference to Mean Seal Level.

**TABLE 3
WATER LEVEL DATA
SPEAKER PROPERTY
0610-133**

Monitoring Well Number	Top of Well Casing Elevation	Screen Interval	Date Measured	Depth to Water (Ft.)	Groundwater Elevation (Ft.)
MW-6	1200.76	1189.21	10/17/2016	12.51	1188.25
			1/18/2017	11.29	1189.47
			8/17/2017	13.95	1186.81
		1179.21	1/30/2018	17.79	1182.97
			6/7/2018	11.62	1189.14
			12/5/2018	12.13	1188.63
			3/27/2019	11.65	1189.11
			12/4/2019	Well Cannot Be Located Covered In Grass Area By Previous Owner	
MW-7	1214.28	1195.78	6/7/2018	16.07	1198.21
			12/5/2018	17.07	1197.21
			3/27/2019	17.31	1196.97
		1180.78	12/4/2019	14.71	1199.57
			2/3/2020	20.72	1193.56
MW-8	1211.61	1198.11	6/7/2018	17.59	1194.02
			12/5/2018	17.73	1193.88
			3/27/2019	17.21	1194.40
		1183.11	12/4/2019	13.48	1198.13
			2/3/2020	20.64	1190.97
MW-9	1214.35	1198.85	2/3/2020	20.15	1194.20
		1183.85			
MW-10	1216.17	1195.17	2/3/2020	34.35	1181.82
		1180.17			
MW-11	1217.32	1195.32	2/3/2020	23.65	1193.67
		1185.32			

ft = feet
 NR=Not recorded
 Elevations in feet in reference to Mean Seal Level.

TABLE 4
SUMMARY OF BASEMENT/GARAGE AMBIENT VAPOR ANALYTICAL RESULTS
SPEAKER
0610-133

TABLE 1 REGIONAL SCREENING LEVEL SUMMARY		
Sample No.	Residential Indoor Air VAL	VP-1
Sampling Date		06/07/18
	ug/m3	
VOLATILE ORGANIC COMPOUNDS (VOC) (ug/m3)		
Benzene	3.6	1.72
Chloroform	1.2	<0.30
1,1 Dichloroethane	18	<0.187
1,1-Dichloroethene	210	<0.21
cis-1,2-Dichloroethene	NE	<0.197
trans-1,2-Dichloroethene	NE	<0.231
Ethylbenzene	11	10.1
Trichlorofluoromethane	NE	1.18
Dichlorodifluoromethane	100	2.37
Methylene Chloride	630	14.3
Naphthalene	0.83	1.94J
Tetrachloroethylene	42	<0.278
Toluene	5200	20.4
1,1,1-Trichloroethane	5200	<0.249
Trichloroethylene	2.1	<0.237
1,2,4-Trimethylbenzene	7.3	1.86
1,3,5-Trimethylbenzene	NE	<0.232
Vinyl chloride	1.7	<0.148
m&p-Xylene	100	13.4
o-Xylene	100	6.2
TPH (GC/MS)	NE	--

UG/M³ - Micrograms per Cubic Meter of Air

Bold indicates analytical results exceed sub-slab screening level

**TABLE 5
SUMMARY OF SOIL ANALYTICAL RESULTS (REMEDIAL EXCAVATION)
SPEAKER PROPERTY**

Sample No.	NR 720 Non Cancer RCL	NR 720 Direct Contact RCL	NR 720 Cancer RCL Non- Industrial	NR 720 Soil to Groundwater RCL	Background Threshold	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8	W-9	S-1	S-2	S-3	S-4	S-5	
						11/18/19	11/18/19	11/18/19	11/18/19	11/19/19	11/20/19	11/20/19	11/20/19	11/20/19	11/18/19	11/18/19	11/18/19	11/18/19	11/18/19	11/19/19
Sampling Date						4	4	4	4	4	4	4	4	4	9	9	9	9	16	
Sample Depth (feet)						U	U	U	U	U	U	U	U	U	U	U	U	U	U	
Saturated (S)/Unsaturated (U)						U	U	U	U	U	U	U	U	U	U	U	U	U	U	
LEAD (mg/kg)																				
Lead	400	400	NE	27	52	53	106	178	31.7	151	14.7	15.5	NS	NS	21.7	27	33	64.1	24.4	
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/kg)																				
Benzene	106,000	1,600	1,600	5.1	NE	<25	<25	<25	<25	73	<25	<25	25.7J	<25	<25	29.9J	47J	7,100	19,200	
Ethylbenzene	4,080,000	8,020	8,020	1,570	NE	<25	<25	<25	<25	105	<25	<25	<25	<25	<25	29.4J	25.4J	45,000	94,000	
Methyl tert-butyl ether	22,100,000	63,800	63,800	27	NE	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<500	<500	
Naphthalene	178,000	5,520	5,520	658	NE	125	29.3	<25	<25	77	<25	<25	<25	<25	<25	<25	<25	22,500	40,000	
Toluene	5,240,000	NE	818,000	1,107	NE	<25	<25	<25	<25	410	<25	<25	62	<25	<25	79	89	8,000	181,000	
1,2,4-Trimethylbenzene	373,000	NE	219,000	1,382	NE	<25	<25	<25	<25	211	<25	38J	<25	<25	<25	<25	<25	47J	370,000	307,000
1,3,5-Trimethylbenzene	339,000	NE	182,000			<25	<25	<25	<25	<25	99	<25	<25	<25	<25	<25	<25	<25	<25	126,000
Xylenes, -m, -p	818,000	NE	260,000	3,960	NE	<75	<75	<75	<75	676	<75	26J	98J	31.5J	<75	133	151	505,000	642,000	
Xylenes, -o																				

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

RCL = Residual Contaminant Level

NS = Parameter Not Sampled

DCL = Direct Contact Level

NA = Parameter not analyzed

NE = NR 720 RCL not established

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

Bold indicates analytical results exceed NR 720 RCL

**TABLE 5
SUMMARY OF SOIL ANALYTICAL RESULTS (REMEDIAL EXCAVATION)
SPEAKER PROPERTY**

Sample No.	NR 720 Non Cancer RCL Non- Industrial	NR 720 Direct Contact RCL	NR 720 Cancer RCL Non- Industrial	NR 720 Soil to Groundwater RCL	Background Threshold	S-6	S-7	S-8	S-9	SB-1	SB-2	SB-3
Sampling Date						11/20/19	11/20/19	11/20/19	11/20/19	11/19/19	11/20/19	11/20/19
Sample Depth (feet)						13	13	13	11	11-12	16	13
Saturated (S)/Unsaturated (U)						U	U	U	U	S	S	U
LEAD (mg/kg)												
Lead	400	400	NE	27	52	26	84.2	NS	NS	52	20.5	33.2
PETROLEUM VOLATILE ORGANIC COMPOUNDS (PVOC) (µg/kg)												
Benzene	106,000	1,600	1,600	5.1	NE	<25	<25	<25	<25	1,200	18,900	2,700
Ethylbenzene	4,080,000	8,020	8,020	1,570	NE	<25	<25	<25	<25	11,900	127,000	16,100
Methyl tert-butyl ether	22,100,000	63,800	63,800	27	NE	<25	<25	<25	<25	<250	<2,500	<25
Naphthalene	178,000	5,520	5,520	658	NE	<25	<25	<25	<25	7,300	32,000	4,000
Toluene	5,240,000	NE	818,000	1,107	NE	44J	38J	60	30.1J	2,590	240,000	37,000
1,2,4-Trimethylbenzene	373,000	NE	219,000	1,382	NE	62	<25	45J	<25	62,000	311,000	35,000
1,3,5-Trimethylbenzene	339,000	NE	182,000			25.6J	<25	<25	<25	21,000	99,000	11,300
Xylenes, -m, -p	818,000	NE	260,000	3,960	NE	154	78.2J	64J	28.8J	67,300	704,000	82,400
Xylenes, -o												

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

RCL = Residual Contaminant Level

NS = Parameter Not Sampled

DCL = Direct Contact Level

NA = Parameter not analyzed

NE = NR 720 RCL not established

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

Bold indicates analytical results exceed NR 720 RCL

APPENDIX C
REMEDIAL EXCAVATION SOIL ANALYTICAL REPORT
AND CHAIN OF CUSTODY FORM

CHAIN OF CUSTODY RECORD

Synergy

Environmental Lab, Inc.

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

Chain # No 41623

Page 1 of 2

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): *Spokane / Mt Ida*
 Reports To: *Ben Younger*
 Company: *GEC*
 Address: *916 Silver Lake Ave*
 City State Zip: *Portage WI 53901*
 Phone: *608 897 8410*
 Email: *benyoung@seconlineinc.com*

Invoice To: _____
 Company: _____
 Address: *C/O GEC*
 City State Zip: _____
 Phone: _____
 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-PCRA METALS	PID/ FID

Lab I.D.	Sample I.D.		Collection		Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation
			Date	Time				
<i>S08776 A</i>	<i>W-1</i>	<i>4'</i>	<i>11/19/19</i>	<i>AM</i>	<i>N</i>	<i>3</i>	<i>S</i>	<i>in meth 2 days</i>
<i>B</i>	<i>W-2</i>	<i>4'</i>	<i>↓</i>	<i>AM</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>C</i>	<i>W-3</i>	<i>4'</i>	<i>↓</i>	<i>AM</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>D</i>	<i>W-4</i>	<i>4'</i>	<i>↓</i>	<i>AM</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>E</i>	<i>W-5</i>	<i>4'</i>	<i>11/19/19</i>	<i>AM</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>F</i>	<i>W-6</i>	<i>4'</i>	<i>11/20/19</i>	<i>AM</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>G</i>	<i>W-7</i>	<i>4'</i>	<i>↓</i>	<i>AM</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>H</i>	<i>W-8</i>	<i>4'</i>	<i>↓</i>	<i>AM</i>	<i>↓</i>	<i>2</i>	<i>↓</i>	<i>1 meth 1 day</i>
<i>I</i>	<i>W-9</i>	<i>4'</i>	<i>↓</i>	<i>AM</i>	<i>↓</i>	<i>2</i>	<i>↓</i>	<i>↓</i>
<i>J</i>	<i>S-1</i>	<i>9'</i>	<i>11/18/19</i>	<i>AM</i>	<i>↓</i>	<i>3</i>	<i>↓</i>	<i>1 meth 2 days</i>
<i>K</i>	<i>S-2</i>	<i>9'</i>	<i>↓</i>	<i>AM</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>
<i>L</i>	<i>S-3</i>	<i>9'</i>	<i>↓</i>	<i>AM</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.)

Add Lead per B.Y. - CIR 11/25/19

Sample Integrity - To be completed by receiving lab.
 Method of Shipment: *cool*
 Temp. of Temp. Blank: _____ °C On Ice: *X*
 Cooler seal intact upon receipt: *X* Yes ___ No

Relinquished By: (sign) *[Signature]* Time _____ Date *11/21/19*
 Received By: (sign) *[Signature]* Time *9:33* Date *11/21/19*

CHAIN OF STUDY RECORD

Synergy

Environmental Lab, Inc.

Chain # No 41622

Page 2 of 2

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

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): *Sprinkler / Mt. Ida*

Reports To: _____ Invoice To: _____

Company: *Q/SPP* Company: *C/O GSEC*

Address: _____ Address: _____

City State Zip: _____ City State Zip: _____

Phone: _____ Phone: _____

Email: _____ Email: _____

Analysis Requested

Other Analysis

Lab I.D.	Sample I.D.	Collection		Filtered Y/N	No. of Containers	Sample Type (Matrix)*	Preservation	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-FCRA METALS	PID/ FID	
		Date	Time																					
503776 M	S-4 9'	11/18/19	Am	N	3	S	1 metal 2 WWA			X						X								H2O
N	S-5 16'	11/19/19	Am							X														S2O
O	S-6 13'	11/20/19	Am							X														
P	S-7 13'		Am							X														
Q	S-8 13'		Am		2		1 metal 1 WWA																	
R	S-9 11'		Am		2																			
S	SB-1 11-12	11/19/19	Am		3		1 metal 2 WWA			X														S2O
T	SB-2 16'	11/20/19	Am		3					X														
U	SB-3 13'		Am		3					X														
V	TW-1	11/18/19	Am	N	2	GW	H2O									X								

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: *air*

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

Cooler seal intact upon receipt: Yes No

Relinquished By: (sign) *[Signature]*

Time

Date

Received By: (sign) _____

Time

Date

Received in Laboratory By: *[Signature]*

Time: *9:33*

Date: *11/21/19*

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 16-Dec-19

Project Name SPEAKER/MT IDA
Project #

Invoice # E37176

Lab Code 5037176A
Sample ID W-1 4'
Sample Matrix Soil
Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.5	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	53.0	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	0.125	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Project Name SPEAKER/MT IDA

Invoice # E37176

Project #

Lab Code 5037176B

Sample ID W-2 4'

Sample Matrix Soil

Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	74.8	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	106	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	0.0293	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Lab Code 5037176C

Sample ID W-3 4'

Sample Matrix Soil

Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	73.5	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	178	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Project #

Lab Code 5037176D
 Sample ID W-4 4'
 Sample Matrix Soil
 Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	78.2	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	31.7	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Lab Code 5037176E
 Sample ID W-5 4'
 Sample Matrix Soil
 Sample Date 11/19/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	80.3	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	151	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	0.073	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	0.105	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	0.077	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	0.41	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	0.211	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	0.099	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	0.5	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.176	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Project #

Lab Code 5037176F
 Sample ID W-6 4'
 Sample Matrix Soil
 Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	77.5	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	14.7	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Lab Code 5037176G
 Sample ID W-7 4'
 Sample Matrix Soil
 Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	75.9	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	15.5	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	0.038 "J"	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.026 "J"	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Project Name SPEAKER/MT IDA

Invoice # E37176

Project #

Lab Code 5037176H

Sample ID W-8 4'

Sample Matrix Soil

Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.5	%			1	5021		11/22/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	0.0257 "J"	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	0.062	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	0.061 "J"	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.037 "J"	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Lab Code 5037176I

Sample ID S-9 4'

Sample Matrix Soil

Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	77.9	%			1	5021		11/22/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.0315 "J"	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Project Name SPEAKER/MT IDA
Project #

Invoice # E37176

Lab Code 5037176J
Sample ID S-1 9'
Sample Matrix Soil
Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.1	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	21.7	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	< 0.025	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Lab Code 5037176K
Sample ID S-2 9'
Sample Matrix Soil
Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	80.4	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	27.0	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	0.0299 "J"	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	0.0294 "J"	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	0.079	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	0.072 "J"	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.061	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Project Name SPEAKER/MT IDA
Project #

Invoice # E37176

Lab Code 5037176L
Sample ID S-3 9'
Sample Matrix Soil
Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	77.6	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	33.0	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	0.047 "J"	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	0.0254 "J"	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	0.089	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	0.047 "J"	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	0.094	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.057	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Lab Code 5037176M
Sample ID S-4 9'
Sample Matrix Soil
Sample Date 11/18/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	70.7	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	64.1	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	7.1	mg/kg	0.36	1.12	20	GRO95/8021		12/13/2019	CJR	1
Ethylbenzene	45	mg/kg	0.3	0.94	20	GRO95/8021		12/13/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.50	mg/kg	0.28	0.9	20	GRO95/8021		12/13/2019	CJR	1
Naphthalene	22.5	mg/kg	0.5	0.2	20	GRO95/8021		12/13/2019	CJR	1
Toluene	8.0	mg/kg	0.26	1.1	20	GRO95/8021		12/13/2019	CJR	1
1,2,4-Trimethylbenzene	370	mg/kg	0.3	0.96	20	GRO95/8021		12/13/2019	CJR	1
1,3,5-Trimethylbenzene	126	mg/kg	0.22	0.72	20	GRO95/8021		12/13/2019	CJR	1
m&p-Xylene	410	mg/kg	0.52	1.66	20	GRO95/8021		12/13/2019	CJR	1
o-Xylene	95	mg/kg	0.26	1.12	20	GRO95/8021		12/13/2019	CJR	1

Project Name SPEAKER/MT IDA
 Project #

Invoice # E37176

Lab Code 5037176N
 Sample ID S-5 16'
 Sample Matrix Soil
 Sample Date 11/19/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	84.7	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	24.4	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	19.2	mg/kg	0.36	1.12	20	GRO95/8021		12/6/2019	CJR	1
Ethylbenzene	94	mg/kg	0.3	0.94	20	GRO95/8021		12/6/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.50	mg/kg	0.28	0.9	20	GRO95/8021		12/6/2019	CJR	1
Naphthalene	40	mg/kg	0.5	0.2	20	GRO95/8021		12/6/2019	CJR	1
Toluene	181	mg/kg	0.26	1.1	20	GRO95/8021		12/6/2019	CJR	1
1,2,4-Trimethylbenzene	307	mg/kg	0.3	0.96	20	GRO95/8021		12/6/2019	CJR	1
1,3,5-Trimethylbenzene	100	mg/kg	0.22	0.72	20	GRO95/8021		12/6/2019	CJR	1
m&p-Xylene	470	mg/kg	0.52	1.66	20	GRO95/8021		12/6/2019	CJR	1
o-Xylene	172	mg/kg	0.26	1.12	20	GRO95/8021		12/6/2019	CJR	1

Lab Code 5037176O
 Sample ID S-6 13'
 Sample Matrix Soil
 Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	75.7	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	26.0	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	0.044 "J"	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	0.062	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	0.0256 "J"	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	0.102	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.052 "J"	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Project Name SPEAKER/MT IDA
Project #

Invoice # E37176

Lab Code 5037176P
Sample ID S-7 13'
Sample Matrix Soil
Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	67.0	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	84.2	mg/Kg	0.34	1.16	2	6010B		12/10/2019	CWT	149
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/4/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/4/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/4/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/4/2019	CJR	1
Toluene	0.038 "J"	mg/kg	0.013	0.055	1	GRO95/8021		12/4/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/4/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/4/2019	CJR	1
m&p-Xylene	0.05 "J"	mg/kg	0.026	0.083	1	GRO95/8021		12/4/2019	CJR	1
o-Xylene	0.0282 "J"	mg/kg	0.013	0.056	1	GRO95/8021		12/4/2019	CJR	1

Lab Code 5037176Q
Sample ID S-8 13'
Sample Matrix Soil
Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	65.4	%			1	5021		11/22/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/5/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/5/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/5/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/5/2019	CJR	1
Toluene	0.06	mg/kg	0.013	0.055	1	GRO95/8021		12/5/2019	CJR	1
1,2,4-Trimethylbenzene	0.045 "J"	mg/kg	0.015	0.048	1	GRO95/8021		12/5/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/5/2019	CJR	1
m&p-Xylene	0.064 "J"	mg/kg	0.026	0.083	1	GRO95/8021		12/5/2019	CJR	1
o-Xylene	< 0.025	mg/kg	0.013	0.056	1	GRO95/8021		12/5/2019	CJR	1

Project Name SPEAKER/MT IDA
 Project #

Invoice # E37176

Lab Code 5037176R
 Sample ID S-9 11'
 Sample Matrix Soil
 Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	72.6	%			1	5021		11/22/2019	NJC	1
Organic										
PVOC + Naphthalene										
Benzene	< 0.025	mg/kg	0.018	0.056	1	GRO95/8021		12/5/2019	CJR	1
Ethylbenzene	< 0.025	mg/kg	0.015	0.047	1	GRO95/8021		12/5/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/5/2019	CJR	1
Naphthalene	< 0.025	mg/kg	0.025	0.01	1	GRO95/8021		12/5/2019	CJR	1
Toluene	0.0301 "J"	mg/kg	0.013	0.055	1	GRO95/8021		12/5/2019	CJR	1
1,2,4-Trimethylbenzene	< 0.025	mg/kg	0.015	0.048	1	GRO95/8021		12/5/2019	CJR	1
1,3,5-Trimethylbenzene	< 0.025	mg/kg	0.011	0.036	1	GRO95/8021		12/5/2019	CJR	1
m&p-Xylene	< 0.05	mg/kg	0.026	0.083	1	GRO95/8021		12/5/2019	CJR	1
o-Xylene	0.0288 "J"	mg/kg	0.013	0.056	1	GRO95/8021		12/5/2019	CJR	1

Lab Code 5037176S
 Sample ID SB-1 11-12
 Sample Matrix Soil
 Sample Date 11/19/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	68.5	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	52.0	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	1.2	mg/kg	0.18	0.56	10	GRO95/8021		12/7/2019	CJR	1
Ethylbenzene	11.9	mg/kg	0.15	0.47	10	GRO95/8021		12/7/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.25	mg/kg	0.14	0.45	10	GRO95/8021		12/7/2019	CJR	1
Naphthalene	7.3	mg/kg	0.25	0.1	10	GRO95/8021		12/7/2019	CJR	1
Toluene	2.59	mg/kg	0.13	0.55	10	GRO95/8021		12/7/2019	CJR	1
1,2,4-Trimethylbenzene	62	mg/kg	0.15	0.48	10	GRO95/8021		12/7/2019	CJR	1
1,3,5-Trimethylbenzene	21	mg/kg	0.11	0.36	10	GRO95/8021		12/7/2019	CJR	1
m&p-Xylene	52	mg/kg	0.26	0.83	10	GRO95/8021		12/7/2019	CJR	1
o-Xylene	15.3	mg/kg	0.13	0.56	10	GRO95/8021		12/7/2019	CJR	1

Project Name SPEAKER/MT IDA
Project #

Invoice # E37176

Lab Code 5037176T
Sample ID SB-2 16'
Sample Matrix Soil
Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	93.6	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	20.5	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	18.9	mg/kg	1.8	5.6	100	GRO95/8021		12/7/2019	CJR	1
Ethylbenzene	127	mg/kg	1.5	4.7	100	GRO95/8021		12/7/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 2.5	mg/kg	1.4	4.5	100	GRO95/8021		12/7/2019	CJR	1
Naphthalene	32	mg/kg	2.5	1	100	GRO95/8021		12/7/2019	CJR	1
Toluene	240	mg/kg	1.3	5.5	100	GRO95/8021		12/7/2019	CJR	1
1,2,4-Trimethylbenzene	311	mg/kg	1.5	4.8	100	GRO95/8021		12/7/2019	CJR	1
1,3,5-Trimethylbenzene	99	mg/kg	1.1	3.6	100	GRO95/8021		12/7/2019	CJR	1
m&p-Xylene	510	mg/kg	2.6	8.3	100	GRO95/8021		12/7/2019	CJR	1
o-Xylene	194	mg/kg	1.3	5.6	100	GRO95/8021		12/7/2019	CJR	1

Lab Code 5037176U
Sample ID SB-3 13'
Sample Matrix Soil
Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
General										
General										
Solids Percent	79.8	%			1	5021		11/22/2019	NJC	1
Inorganic										
Metals										
Lead, Total	33.2	mg/Kg	0.17	0.58	1	6010B		12/10/2019	CWT	1
Organic										
PVOC + Naphthalene										
Benzene	2.7	mg/kg	0.018	0.056	1	GRO95/8021		12/5/2019	CJR	1
Ethylbenzene	16.1	mg/kg	0.015	0.047	1	GRO95/8021		12/5/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 0.025	mg/kg	0.014	0.045	1	GRO95/8021		12/5/2019	CJR	1
Naphthalene	4.0	mg/kg	0.025	0.01	1	GRO95/8021		12/5/2019	CJR	1
Toluene	37	mg/kg	0.013	0.055	1	GRO95/8021		12/5/2019	CJR	1
1,2,4-Trimethylbenzene	35	mg/kg	0.015	0.048	1	GRO95/8021		12/5/2019	CJR	1
1,3,5-Trimethylbenzene	11.3	mg/kg	0.011	0.036	1	GRO95/8021		12/5/2019	CJR	1
m&p-Xylene	60	mg/kg	0.026	0.083	1	GRO95/8021		12/5/2019	CJR	1
o-Xylene	22.4	mg/kg	0.013	0.056	1	GRO95/8021		12/5/2019	CJR	1

Project Name SPEAKER/MT IDA
Project #

Invoice # E37176

Lab Code 5037176V
Sample ID TW-1
Sample Matrix Water
Sample Date 11/20/2019

	Result	Unit	LOD	LOQ	Dil	Method	Ext Date	Run Date	Analyst	Code
Organic										
PVOC + Naphthalene										
Benzene	2100	ug/l	16	51	50	GRO95/8021		11/27/2019	CJR	1
Ethylbenzene	1230	ug/l	14.5	47	50	GRO95/8021		11/27/2019	CJR	1
Methyl tert-butyl ether (MTBE)	< 12	ug/l	12	39	50	GRO95/8021		11/27/2019	CJR	1
Naphthalene	970	ug/l	65	205	50	GRO95/8021		11/27/2019	CJR	1
Toluene	7300	ug/l	14.5	46.5	50	GRO95/8021		11/27/2019	CJR	1
1,2,4-Trimethylbenzene	7000	ug/l	23	73	50	GRO95/8021		11/27/2019	CJR	1
1,3,5-Trimethylbenzene	2380	ug/l	33.5	107.5	50	GRO95/8021		11/27/2019	CJR	1
m&p-Xylene	13700	ug/l	26	83.5	50	GRO95/8021		11/27/2019	CJR	1
o-Xylene	6100	ug/l	35	112	50	GRO95/8021		11/27/2019	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.

49 Sample diluted to compensate for matrix interference.

CWT denotes sub contract lab - Certification #445126660

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



APPENDIX D
SOIL AND GROUNDWATER DISPOSAL
DOCUMENTATION

Date 12/02/19
 Time 14:17:24

La Crosse County, WI

Page 1

Material Analysis Report by Material

Inbound and outbound materials for the period 11/01/2019 - 12/02/2019

Summary Report for Sites: 1, 2, 99

Accounts 50069 - 50069 Customer Types - Z Materials - ZZZZZZZZZZ Material Types - ZZ

Date	Material	Type	Customer	Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
	ADC			Total	26	0	0	0	(658.10)	658.10	15,794.40
	(Speaker)			Average		0	0	0	25.31	25.31	607.48
	BIOFILE			Total	21	0	0	0	(531.68)	531.68	15,950.40
	(Lutzen)			Average		0	0	0	25.32	25.32	759.54
	PERMITB			Total	9	9	0	0	0.00	0.00	225.00
				Average		1	0	0	0.00	0.00	25.00
				Report Total	56	9	0	0	1189.78	1189.78	31,969.80
				Report Average		0	0	0	21.25	21.25	570.89

(Speaker)
 (Lutzen)

La Crosse County Solid Waste

3200 Berlin Drive
 La Crosse, WI 54601
 Phone: (608) 785-9572

INVOICE

Account #	
50069	
Invoice #	
1760	
Invoice Date	Terms
11/30/2019	Net EOM
Current Charges	Total Due
\$ 31,969.80	\$ 31,969.80

Bill To: General Engineering Company
 916 Silver Lake Drive
 Portage, WI 53901

total ²²⁵ 31,744.80

Date	Ticket	Truck	Reference	Description	Quantity	Amount
				Previous Balance		0.00
11/18/19	01-00043086	SW1019-03	151	ADC Petro Impacted S	27.25	654.00
11/18/19	01-00043086	SW1019-03	151	Permit 3 Day	1.00	25.00
11/18/19	01-00043091	SW1019-03A	110	ADC Petro Impacted S	25.69	616.56
11/18/19	01-00043091	SW1019-03A	110	Permit 3 Day	1.00	25.00
11/18/19	01-00043098	SW1019-03	112	ADC Petro Impacted S	26.16	627.84
11/18/19	01-00043098	SW1019-03	112	Permit 3 Day	1.00	25.00
11/18/19	01-00043099	SW1019-03A	19-01	ADC Petro Impacted S	20.60	494.40
11/18/19	01-00043099	SW1019-03A	19-01	Permit 3 Day	1.00	25.00
11/18/19	01-00043100	SW1019-03B	8	ADC Petro Impacted S	21.37	512.88
11/18/19	01-00043100	SW1019-03B	8	Permit 3 Day	1.00	25.00
11/18/19	01-00043102	SW1019-03C	109	ADC Petro Impacted S	25.62	614.88
11/18/19	01-00043102	SW1019-03C	109	Permit 3 Day	1.00	25.00
11/18/19	01-00043104	SW1019-03D	113	ADC Petro Impacted S	25.70	616.80
11/18/19	01-00043104	SW1019-03D	113	Permit 3 Day	1.00	25.00
11/18/19	01-00043115	SW1019-03	104	ADC Petro Impacted S	23.00	552.00
11/18/19	01-00043115	SW1019-03	104	Permit 3 Day	1.00	25.00
11/18/19	01-00043116	SW1019-03A	115	ADC Petro Impacted S	24.52	588.48
11/18/19	01-00043116	SW1019-03A	115	Permit 3 Day	1.00	25.00
11/18/19	01-00043196	SW1019-03	110	ADC Petro Impacted S	29.09	698.16
11/18/19	01-00043203	SW1019-03A	19-01	ADC Petro Impacted S	24.74	593.76
11/18/19	01-00043213	SW1019-03B	109	ADC Petro Impacted S	25.82	619.68
11/18/19	01-00043221	SW1019-03	113	ADC Petro Impacted S	27.01	648.24
11/19/19	01-00043248	SW1019-03	112	ADC Petro Impacted S	25.62	614.88
11/19/19	01-00043250	SW1019-03A	115	ADC Petro Impacted S	24.89	597.36
11/19/19	01-00043252	SW1019-03B	8	ADC Petro Impacted S	25.24	605.76
11/19/19	01-00043253	SW1019-03C	104	ADC Petro Impacted S	25.75	618.00
11/19/19	01-00043263	SW1019-03	151	ADC Petro Impacted S	26.97	647.28
11/19/19	01-00043273	SW1019-03	19-01	ADC Petro Impacted S	22.13	531.12
11/19/19	01-00043275	SW1019-03A	109	ADC Petro Impacted S	27.11	650.64
11/19/19	01-00043283	SW1019-03B	113	ADC Petro Impacted S	25.29	606.96
11/19/19	01-00043285	SW1019-03	110	ADC Petro Impacted S	24.59	590.16
11/19/19	01-00043327	SW1019-03	112	ADC Petro Impacted S	28.24	677.76
11/19/19	01-00043330	SW1019-03A	115	ADC Petro Impacted S	27.11	650.64
11/19/19	01-00043332	SW1019-03B	104	ADC Petro Impacted S	23.87	572.88
11/19/19	01-00043337	SW1019-03C	8	ADC Petro Impacted S	24.72	593.28
11/19/19	01-00043354	SW1019-02	151	Biopile Pet Impact S	28.61	858.30
11/19/19	01-00043365	SW1019-02A	109	Biopile Pet Impact S	26.13	783.90
11/19/19	01-00043368	SW1019-02	19-01	Biopile Pet Impact S	22.89	686.70
11/19/19	01-00043374	SW1019-02A	113	Biopile Pet Impact S	25.57	767.10

Speaker 658.10 tons @ 24/ton
Lutzner

**La Crosse County Solid Waste
Invoice**

Account #: 50069
 Invoice #: 1760
 Total Due: \$ 31,969.80

Date	Ticket	Truck	Reference	Description	Quantity	Amount
11/19/19	01-00043379	SW1019-02	110	Biopile Pet Impact S	26.95	808.50
11/20/19	01-00043419	SW1019-02	115	Biopile Pet Impact S	27.69	830.70
11/20/19	01-00043420	SW1019-02A	8	Biopile Pet Impact S	25.18	755.40
11/20/19	01-00043421	SW1019-02B	104	Biopile Pet Impact S	25.91	777.30
11/20/19	01-00043433	SW1019-02	112	Biopile Pet Impact S	28.56	856.80
11/20/19	01-00043437	SW1019-02A	151	Biopile Pet Impact S	27.68	830.40
11/20/19	01-00043446	SW1019-02	19-01	Biopile Pet Impact S	24.57	737.10
11/20/19	01-00043451	SW1019-02	109	Biopile Pet Impact S	24.97	749.10
11/20/19	01-00043452	SW1019-02A	113	Biopile Pet Impact S	24.67	740.10
11/20/19	01-00043486	SW1019-02	110	Biopile Pet Impact S	27.53	825.90
11/20/19	01-00043499	SW1019-02	115	Biopile Pet Impact S	25.01	750.30
11/20/19	01-00043507	SW1019-02B	104	Biopile Pet Impact S	22.67	680.10
11/20/19	01-00043520	SW1019-02	8	Biopile Pet Impact S	22.68	680.40
11/20/19	01-00043531	SW1019-02	112	Biopile Pet Impact S	24.51	735.30
11/20/19	01-00043542	SW1019-02A	151	Biopile Pet Impact S	24.94	748.20
11/20/19	01-00043543	SW1019-02B	19-01	Biopile Pet Impact S	22.21	666.30
11/20/19	01-00043551	SW1019-02	109	Biopile Pet Impact S	22.75	682.50

Lutzen 531.68 tons
\$30/ton

Net weight: 1,189.78

Invoice amount excluding Finance charge	\$ 31,969.80
Finance charge	\$ 0.00
Current charges	\$ 31,969.80
Payments received	\$ 0.00
Previous Balance Due	\$ 0.00
Total Amount Due	\$ 31,969.80

0 - 29	30 - 59	60 - 89	Over 90
31,969.80	0.00	0.00	0.00

= 225.⁰⁰

Please reference Account # 50069 and Invoice # 1760 when submitting payment.

APPENDIX E

MONITORING WELL ABANDONMENT FORMS

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and chs. NR 141 and 812, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to DNR Bureau:

Drinking Water Watershed/Wastewater Remediation/Redevelopment

Waste Management Other: _____

1. Well Location Information				2. Facility / Owner Information			
County <u>Grant</u>		WI Unique Well # of Removed Well		Hicap #		Facility Name <u>Speaker Property</u>	
Latitude / Longitude (see instructions)		Format Code		Method Code		Facility ID (FID or PWS) <u>N/A</u>	
N <input type="checkbox"/> W <input type="checkbox"/>		<input type="checkbox"/> DD <input type="checkbox"/> DDM		<input type="checkbox"/> GPS008 <input type="checkbox"/> SCR002 <input type="checkbox"/> OTH001		License/Permit/Monitoring # <u>TW-1</u>	
1/4 1/4 NW or Gov't Lot #		Section <u>29</u>		Township <u>6 N</u>		Range <u>3</u> <input type="checkbox"/> E <input checked="" type="checkbox"/> W	
Well Street Address <u>6832 STN 18</u>				Original Well Owner <u>Sharon Speaker</u>			
Well City, Village or Town <u>Town Mt Ida</u>				Well ZIP Code <u>53809</u>			
Subdivision Name <u>—</u>				Lot # <u>—</u>		Mailing Address of Present Owner <u>6832 STN 18</u>	
Reason for Removal from Service <u>Excavation</u>				WI Unique Well # of Replacement Well			
City of Present Owner <u>Kenosha</u>		State <u>WI</u>		ZIP Code <u>53809</u>			

3. Filled & Sealed Well / Drillhole / Borehole Information				4. Pump, Liner, Screen, Casing & Sealing Material			
<input checked="" type="checkbox"/> Monitoring Well		Original Construction Date (mm/dd/yyyy) <u>04/29/2019</u>		Pump and piping removed?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Water Well		If a Well Construction Report is available, please attach.		Liner(s) removed?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
<input type="checkbox"/> Borehole / Drillhole				Liner(s) perforated?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Construction Type:				Screen removed?			
<input type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			
<input checked="" type="checkbox"/> Other (specify): <u>Geoprobe</u>				Casing left in place?			
Formation Type:				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
<input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock				Was casing cut off below surface?			
Total Well Depth From Ground Surface (ft.) <u>13.5</u>		Casing Diameter (in.) <u>1.25</u>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
Lower Drillhole Diameter (in.) <u>—</u>		Casing Depth (ft.) <u>13.5</u>		Did sealing material rise to surface?			
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
If yes, to what depth (feet)? <u>—</u>		Depth to Water (feet) <u>12</u>		Did material settle after 24 hours?			
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
				If bentonite chips were used, were they hydrated with water from a known safe source?			
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			
				Required Method of Placing Sealing Material			
				<input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped			
				<input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <u>Excavation</u>			
				Sealing Materials			
				<input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Concrete			
				<input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite Chips			
				For Monitoring Wells and Monitoring Well Boreholes Only:			
				<input type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout			
				<input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry			

5. Material Used to Fill Well / Drillhole				From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
<u>Well Removed During Excavation</u>				<u>Surface</u>	<u>13.5</u>		
<u>No Bentonite Used or Necessary</u>							

6. Comments

7. Supervision of Work				DNR Use Only	
Name of Person or Firm Doing Filling & Sealing <u>General Engineering Company</u>		License #	Date of Filling & Sealing or Verification (mm/dd/yyyy)	Date Received	Noted By
Street or Route <u>916 Silver Lake Drive</u>		Telephone Number <u>(608) 742 2169</u>		Comments	
City <u>Portage</u>	State <u>WI</u>	ZIP Code <u>53901</u>	Signature of Person Doing Work 	Date Signed <u>3/13/20</u>	